**Chris Garcia, Mayor**
**Cristian Markovich, Vice Mayor**
**Jack Guerrero, Council Member**
**Diane Oliva, Council Member**
**Baru Sanchez, Council Member**

**CUDAHY CITY**
**COUNCIL CHAMBERS**
5240 Santa Ana Street
Cudahy, Ca, 90201
Phone: (323) 773-5143
Fax: (323) 77102072

# AGENDA

**REGULAR MEETING**
**OF THE CUDAHY CITY COUNCIL**
**Tuesday, September 16, 2014 – 6:30 P.M.**

*"Members of the Public are Advised that all **PAGERS, CELLULAR TELEPHONES** and any **OTHER COMMUNICATION DEVICES** are to be **turned off** upon entering the City Council Chambers." If you need to have a discussion with someone in the audience, kindly step out into the lobby.*

*Written materials distributed to the City Council within 72 hours of the City Council meeting are available for public inspection immediately upon distribution in the City Clerk's office at City Hall located at 5220 Santa Ana Street, Cudahy, CA. 90201.*

*In compliance with the Americans with Disabilities Act (ADA) if you need special assistance to participate in this meeting, you should contact the office of the City Clerk at (323) 773-5143 at least 72 hours in advance of the meeting.*

1. **CALL TO ORDER**

2. **ROLL CALL**

   Council Member Guerrero
   Council Member Oliva
   Council Member Sanchez
   Vice Mayor Markovich
   Mayor Garcia

3. **PLEDGE OF ALLEGIANCE**

4. **INVOCATION**

5. **PRESENTATIONS**

   "Presentation of Cudahy Code of Ethics and Campaign Finance Regulations" by Isabel Birrueta, Assistant City Attorney

## 6. ORAL COMMUNICATONS

(Mayor: This is the time set aside for citizens to address the City Council on matters relating to City Business. Anyone wishing to speak, please fill out the form located at the Council Chambers entrance and submit it to the City Clerk when approaching the podium. Each person will be allowed to speak only once and will be limited to three (3) minutes. When addressing the Council please speak into the microphone and voluntarily state your name and address.)

## 7. CITY COUNCIL COMMENTS

(This is the time for the City Council to comment on any topics related to "City business," including announcements, reflections on city / regional events, response to public comments, suggested discussion topics for future council meetings, general concerns about particular city matters, questions to the staff, and directives to the staff (subject to approval/ consent of the City Council majority members present, regarding staff directives). Each Council Member will be allowed to speak for a period not to exceed three (3) minutes. Notwithstanding the foregoing, the City Council members shall not use this comment period for serial discussions or debate between members on City business matters not properly agendized. The City Attorney shall be responsible for regulating this aspect of the proceeding.)

## 8. CITY MANAGER REPORT (information only)

## 9. WAIVER OF FULL READING OF RESOLUTIONS AND ORDINANCES

Consideration to waive full text reading of all Resolutions and Ordinances by single motion made at the start of each meeting, subject to the ability of the City Council to read the full text of selected resolutions and ordinances when the item is addressed by subsequent motion.

**Recommendation:** It is recommended that the City Council approve the waiver of full reading of Resolutions and Ordinances.

## 10. CONSENT CALENDAR

Items under the Consent Calendar are considered routine and will be enacted by one motion. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Calendar and considered separately.

**A.** Approve Minutes of the City Council Successor Agency Joint Meeting of July 15, 2014.

**Recommendation:** That the City Council/Agency approve the Minutes as submitted, receive and file.

**B.** A request to approve the City Demands and Payroll including Cash and Investment Report for the month of July 2014

*Presented by Finance Department*

**Recommendation:** Approve the City Demands and Payroll including Cash and Investment Report for the month of July 2014.

**CONSENT CALENDAR ITEM 10**(continued)

**C.** A request to approve the Local Agency Investment Fund (LAIF) for the month of July 2014

*Presented by Finance Department*

**Recommendation:** Approve the Local Agency Investment Fund (LAIF) for the month of July 2014.

**11. PUBLIC HEARING -** None

**12. CITY COUNCIL BUSINESS SESSION**

**A.** First reading, Introduction of Ordinance No. 639, ADOPTING THE LOS ANGELES COUNTY BUILDING LAWS AND FIRE CODE

*Presented by Acting Community Development Director*

**Recommendation:** Introduce Ordinance No. 639, Adopting the Los Angeles County Building Laws and Fire Code, as submitted for first reading.

**B.** Report regarding Retainer Agreement with Olivarez Madruga, P.C.

*Presented by Assistant City Attorney*

**Recommendation:** Receive and file.

**13. COUNCIL DISCUSSION** – None

**14. ORAL COMMUNICATIONS** (Closed Session)

(Each person will be allowed to speak only once on closed session items and will be limited to three (3) minutes. When addressing the Council please speak into the microphone and voluntarily state your name and address.)

RECESS TO CLOSED SESSION

**15. CLOSED SESSION**

**A.** Pursuant to Government Code Section 54956.9(d)(2) and 54956.9(e)(1) – Conference with Legal Counsel to Discuss Matter Involving Potential Litigation and/or Significant Exposure to Litigation – One (1) potential matter – This Matter will be heard jointly by the Cudahy City Council and the Cudahy City Council in its capacity as Successor Agency to the Cudahy Redevelopment Agency

**B.** Pursuant to Government Code Sections 54956.9(d)(2) and 54956.9(e)(1) – Conference with Legal Counsel to Discuss Matter Involving Potential Litigation/Significant Exposure to Litigation – One (1) potential matter

**CLOSED SESSION ITEM 15**(continued)

**C.** Closed Session Pursuant to Government Code Section 54956.8 –
Conference with Real Property Negotiator
Location of Property: 4840 Clara Street, APN 6226 025 004
City's Negotiator(s): City Manager Jose E. Pulido and Assistant City Attorney Isabel Birrueta
Party Negotiating With: Emiglia and Chiara Gigliotti
Under Discussion: Discussion of both price and terms of payment as related to purchase of subject property

RECONVENE TO OPEN SESSION

## 16. CLOSED SESSION ANNOUNCEMENT

## 17. ADJOURNMENT

Cudahy City Council will adjourn to a Regular Meeting on Tuesday, October 6, 2014 at 6:30 p.m.

I Donna G. Schwartz, hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda was posted at Cudahy City Hall, Bedwell Hall, and Clara and Lugo Park not less than 72 hours prior to the meeting. A copy of said Agenda is on file in the Office of the City Clerk.

Dated this 12th Day of September 2014

DONNA G. SCHWARTZ, CMC
Interim City Clerk

# MINUTES

CUDAHY CITY COUNCIL and
CITY OF CUDAHY AS SUCCESSOR AGENCY
TO THE CUDAHY DEVELOPMENT COMMISSION
A Joint Meeting held in the City Council Chambers
5240 Santa Ana Street, Cudahy, California
Tuesday, July 15, 2014 – 6:30 P.M.

## 1. CALL TO ORDER

Mayor Garcia called the meeting to order at 6:33 p.m.

## 2. ROLL CALL

PRESENT: Council/Agency Member Guerrero
Council/Agency Member Oliva
Council/Agency Member Sanchez (arrived at 6:52 p.m.)
Vice Mayor/Vice Chair Markovich
Mayor/Chair Garcia

ABSENT: None

## 3. PLEDGE OF ALLEGIANCE – Led by Elizabeth Alcantar

## 4. INVOCATION - None

## 5. PRESENTATIONS - None

## 6. PUBLIC COMMENT

Pamela Murguia spoke in support of Agenda Items 12A and 13A, and asked for decorum and respect amongst Council Members because we live in a democracy.

Carmen Hernandez spoke about the right of Free Speech; would like to be told if taxes would rise to build a pool. She also stated that it is a lack of respect that Council Member Sanchez is never present to listen to citizens.

Elizabeth Alcantar spoke about needed support from the City and Council Members for the City College Fair.

Nelly Blaeker spoke about partisan divisions and the need for Council Members and the City Attorney to control themselves when they speak and not interrupt or yell.

Adelina Garcia expressed gratitude for lending the children who play soccer a room, and stated that a pool should only be built if there is enough money.

Jose Parra commented on changes to the public library hours and a grant he wrote for $5,000 to help students in Cudahy with the SAT.

## 6. PUBLIC COMMENT (continued)

Jose Cortes asked for donations of computers to create a computer lab for children and requested further support at the swap meet.

Gloria Sandoval requested more information on the proposal to establish cameras in the Chambers to increase transparency because she considers it a waste of money stating there are already recordings. She also wanted Council Members, particularly Mayor Garcia, to respect citizens and not scold them.

Speaker expressed concern about the deterioration of the swap meet and increasing competition and requested support.

Evelia Esquivel was concerned about the swap meet and requested support to re-inaugurate it and create more events.

Javier Flores asked that Council Members respect each other. He also requested greater flexibility for people who want to create businesses in Cudahy.

## 7. CITY COUNCIL COMMENTS

City Attorney Birrueta requested Urban Futures meet with them during closed session, after Council Comments

Council Member Guerrero talked about the present danger of mismanagement and challenged the Council to come together and submit an aggressive mediator plan regarding the audit. He stated he would reach out to the Civil Rights Commission and file a civil class action lawsuit in Federal Court in the name of the people to achieve justice.

Council Member Oliva asked to agendize Council Member Guerrero's request. She asked staff to coordinate with Ms. Alcantar to market the college fair. She reported on the 101 Government Workshop and announced that the CERT Class would be held for two more Saturdays in Spanish. She reminded citizens about the Lugo Park Beautification program next Saturday. She requested Clara and Atlantic Street trash be cleaned. She announced the Women Empowerment Class on Friday and the Ballet and Jujitsu classes. She clarified that Council Members cannot raise taxes but suggested to put the item to raise taxes on the ballot. She noted that she supports citizens and that details on the various projects need to be known.

Council Member Sanchez announced that he participated in the NALEO conference and thanked Council Members for the Workshop on a strategic plan to move the City forward through community development, community outreach, and proper staffing.

He stated that the audit reports are being corrected and asked the Director of Finance to give an update.

Steven Dobrenen, Finance Director, spoke about what the reports contain and the effort it takes to produce them.

## 7. CITY COUNCIL COMMENTS (continued)

Council Member Sanchez continued his comments by stating that he takes Council Member Guerrero's statement seriously, but that he hopes instead they can help the city move forward.

Vice Mayor Markovich expressed that he would like Council Members to work together. He asked for permission to form an ad hoc committee to reinforce a Chamber of Commerce.

Mayor Garcia commented on public comment dialogue. He stated that items that come before the agenda should improve the lives of Cudahy residents that decisions need to be made by considering both sides because we live in a democracy.

Council Member Guerrero requested clarification on a procedural point of order with regards to Mayor Garcia's allowed speaking time during city council comments.

City Attorney Birrueta stated that the Mayor has the decision to allow extra time to speak and cautioned that for fairness sake, Council Members should respect the three-minute time allotted.

## 8. CITY MANAGER REPORT (information only)

Michael Allen, Acting City Manager, announced that those interested in opening a business in the city can meet with them. He stated that he is in agreement for an ad hoc Committee for a Chamber of Commerce. He asked Council Members one by one if they had new items to add to next meeting's agenda.

Council Member Guerrero requested that an internal control discussion item be placed on the agenda.

Mayor Garcia noted that he would be adding a resolution on the next meeting's agenda to support the use of sub-city resources to help the church on Clara with its project.

Vice Mayor Markovich would like a discussion item on water quality in the City of Cudahy.

Mayor Garcia requested a Water Awareness Workshop in late August separate from a Town hall meeting.

Council Member Sanchez would like a discussion item on bicycle lanes.

Mr. Allen stated that a workshop would be held to discuss bicycle safety.

## 9. WAIVER OF FULL READING OF RESOLUTIONS AND ORDINANCES

**Motion**: A motion was made by Vice Mayor Markovich, to waive full text reading of all Resolutions and Ordinances by single motion, seconded by Council Member Sanchez. Motion carried (5-0) by the following vote.

ROLL CALL:

| | | |
|---|---|---|
| AYES: | Council Member(s): | Guerrero, Oliva, Sanchez, Vice Mayor Markovich and Mayor Garcia |
| NOES: | Council Member(s): | None |
| ABSTAIN: | Council Member(s): | None |

## 10. PUBLIC HEARINGS - None

## 11. CONSENT CALENDAR

Council Member Guerrero requested to discuss a warrant on page 11 of the check register.

City Attorney Birrueta requested that Council Members pull items from Consent if they had questions.

Mayor Garcia pulled item 11A from the Consent Calendar.

Vice Mayor Markovich pulled item 11K from the Consent Calendar.

Council Member Sanchez pulled item 11J from the Consent Calendar.

City Attorney Birrueta recommended that corrections be made on the minutes.

Mayor Garcia would like to table all the minutes.

Council Member Guerrero requested that check number 3715 on page 11 be properly described.

Council Member Oliva requested that there be a line explanation of costs for check numbers 3715 and 3719 on page 12.

Council Member Oliva and Guerrero questioned check numbers 37189 and 37196.

Henry Garcia, Consultant, clarified that costs were related to a rush printing job and rush mailing to residents and covered graphic design, rush print in full color and gloss print.

Council Member Guerrero asked who authorized the printing and the vendor of the flyers.

Mr. Garcia responded that he authorized the printing and the vendor without a second bid.

**11. CONSENT CALENDAR** (continued)

Council Member Oliva was concerned about the cost and error in the printing and lack of communication after she requested information about the vendor.

Council Member Guerrero requested that it be put on record that the City overpaid $2,500 for a poor quality flyer.

Mayor Garcia would like that all expenses incurred, be made public and discussed at the next meeting.

City Attorney Birrueta asked if a staff report on costs and expenses from the moment the City paid for the audit would be a separate item on next meeting's agenda.

**A.** Approved the City Demands and Payroll for the month of April 2014.

**Motion**: A motion was made by Mayor Garcia, to approve Item 11A with modifications, seconded by Vice Mayor Markovich. Motion carried (4-1) by the following vote.

ROLL CALL:

AYES: Council Member(s): Oliva, Sanchez, Vice Mayor Markovich, and Mayor Garcia
NOES: Council Member(s):
ABSTAIN: Council Member(s): Guerrero

**B**. Approved the City Treasurer's Financial Report (LAIF) for the month of April 2014.
**C**. Approved the Cash and Investment Report for the month of April 2014.

**E**. Approved the City Treasurer's Financial Report (LAIF) for the month of May 2014.

**F**. Approved the Cash and Investment Report for the month of May 2014.

**Motion**: A motion was made by Council Member Guerrero, to approve Items 11B, 11C, 11E and 11F, seconded by Vice Mayor Markovich. Motion carried (5-0) by the following vote.

ROLL CALL:

AYES: Council Member(s): Guerrero, Oliva, Sanchez, Vice Mayor Markovich and Mayor Garcia
NOES: Council Member(s): None
ABSTAIN: Council Member(s): None

## 11. CONSENT CALENDAR (continued)

**D**. Approve the City Demands and Payroll for the month of May 2014.

**Motion**: A motion was made by Mayor Garcia, to approve Item 11D, seconded by Council Member Sanchez. Motion carried (4-1) by the following vote.

ROLL CALL:

| | | |
|---|---|---|
| AYES: | Council Member(s): | Oliva, Sanchez, Vice Mayor Markovich, and Mayor Garcia |
| NOES: | Council Member(s): | |
| ABSTAIN: | Council Member(s): | Guerrero |

**G**. Approve Minutes for the City Council Special Meeting of January 14, 2014.

**H**. Approve Minutes for the City Council Regular Meeting of January 21, 2014.

**I**. Approve Minutes for the City Council Special Meeting of May 13, 2014.

**J**. Approve Minutes for the City Council Special Meeting of June 18, 2014.

**K**. Approve Minutes for the City Council Special Meeting of July 2, 2014.

**Motion**: A motion was made by Oliva, to table items 11G through 11K, seconded by Sanchez. Motion carried (5-0) by the following vote.

ROLL CALL:

| | | |
|---|---|---|
| AYES: | Council Member(s): | Guerrero, Oliva, Sanchez, Vice Mayor Markovich and Mayor Garcia |
| NOES: | Council Member(s): | None |
| ABSTAIN: | Council Member(s): | None |

## 12. BUSINESS SESSION

**A.** Consideration of adoption on second reading of ORDINANCE NO. 629, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CUDAHY ADDING CHAPTER 2.54 OF TITLE 2 OF THE CUDAHY MUNICIPAL CODE ESTABLISHING CITY CAMPAIGN ETHICS REGULATIONS. (COUNCIL) **(Guerrero)**

City Attorney Birrueta highlighted the only change on the reading of the Ordinance, a threshold of $50 was placed under section 2.54.060. She defined what a contribution is since the Ordinance pertains to contributions.

Council Member Guerrero asked for clarification of political campaign contributions.

**12. BUSINESS SESSION** (continued)

City Attorney Birrueta stated the Ordinance only refers to political campaign contributions, and that Section 2.54.060 is not a state requirement but was proposed for Council Members to disclose contributions made by a vendor for political campaigns.

**Motion**: A motion was made by Council Member Guerrero, to Adopt Ordinance No. 629, seconded by Vice Mayor Markovich. Motion carried (3-1-1) by the following vote.

ROLL CALL:

| | | |
|---|---|---|
| AYES: | Council Member(s): | Guerrero, Oliva and Vice Mayor Markovich |
| NOES: | Council Member(s): | Mayor Garcia |
| ABSTAIN: | Council Member(s): | Sanchez |

**B.** Consideration to award a Professional Plan Check Services Agreement for Building Code Services to Transtech Engineers, Inc. for one (1) year with the option to extend. (COUNCIL)

Council Member Oliva asked if she needed to disclose a raffle she won.

City Attorney Birrueta assured Council Member Oliva that she can vote without disclosing raffle information.

Council Member Sanchez asked the kind of methods used to pick the vendor.

Michael Allen, Acting City Manager, gave descriptions of hourly rates for first plan check and second plan check, which are paid by a percentage base.

City Attorney Birrueta clarified from an earlier question that receipt of a raffle prize does not preclude Council Member Oliva from participating in a vote.

**Motion**: A motion was made by Mayor Garcia, to award a Professional Service Agreement (PSA) for Building Code Plan Check Services to Transtech Engineers, Inc. for one (1) year with the option to extend, seconded by Vice Mayor Markovich. Motion carried (5-0) by the following vote.

ROLL CALL:

| | | |
|---|---|---|
| AYES: | Council Member(s): | Guerrero, Oliva, Sanchez, Vice Mayor Markovich and Mayor Garcia |
| NOES: | Council Member(s): | None |
| ABSTAIN: | Council Member(s): | None |

**12. BUSINESS SESSION** (continued)

**C.** Consideration for procurement of a Taxicab Operator's License from the City Council by Futura Taxi. (COUNCIL)

Steven Dobrenen, Finance Director, gave a report stating that the requirements of the Municipal Code have been made pursuant to questions about insurance by Council Members.

Mayor Garcia asked why previous contracts were terminated.

**Motion:** No motion was made to approve their license

City Attorney Birrueta stated that under the Municipal Code a business license should be approved unless they do not meet requirements and not approving the license could create liability for the City.

Vice Mayor Markovich requested to table this item for Closed Session for the next meeting.

City Attorney Birrueta recommended that Council Members approve the item because they do not have cause for a denial.

**Motion**: A motion was made by Council Member Sanchez, to approve a Taxicab Operator's License to Futura Taxi to allow the operation of taxi service within the City, seconded by Vice Mayor Markovich. Motion carried (3-0-2) by the following vote.

ROLL CALL:

AYES: Council Member(s): Oliva, Sanchez and Vice Mayor Markovich
NOES: Council Member(s): None
ABSTAIN: Council Member(s): Guerrero and Mayor Garcia

**D.** Consideration to approve a contract services agreement with Bell Plumbing and Heating for emergency repair of the Los Angeles County Library Air Conditioning Unit. (COUNCIL)

Michael Allen, Acting City Manager, gave a report on how the air conditioner in the Library and City Hall failed; due to the condenser being damaged beyond repair caused by a power shortage in the City. He spoke to a contractor to provide immediate service, costing $6,600.00.

**Motion**: A motion was made by Council Member Oliva to approve the contract Services agreement with Bell Plumbing and Heating, seconded by Mayor Garcia. Motion carried (5-0) by the following vote.

**12. BUSINESS SESSION** (continued)

ROLL CALL:

AYES: Council Member(s): Guerrero, Oliva, Sanchez, Vice Mayor Markovich and Mayor Garcia
NOES: Council Member(s): None
ABSTAIN: Council Member(s): None

**E.** **Continued to August 5, 2014** - Consideration of Resolution No. 14-47, A RESOLUTION OF THE CITY OF CUDAHY, CALIFORNIA, FINDING THE CITY TO BE IN CONFORMANCE WITH THE CONGESTION MANAGEMENT PROGRAM (CMP) AND ADOPTING THE CMP LOCAL DEVELOPMENT REPORT, IN ACCORDANCE WITH CALIFORNIA GOVERNMENT CODE SECTION 65089. (COUNCIL)
**(Community Development)**

**Recommendation**: It is recommended that the City Council conduct a required Public Hearing and approve Resolution No. 14-47.

Michael Allen, Acting City Manager, requested to table item 12E because he did not notice the item, no objections were made, item was tabled to the next meeting.

**F.** Consideration of Resolution No. 14-49, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CUDAHY APPROVING THE CITY ENGINEER'S REPORT AND DECLARING THE INTENTION OF THE CITY COUNCIL TO HOLD A PUBLIC HEARING AND LEVY THE ANNUAL ASSESSMENT TO MAINTAIN THE CITY OF CUDAHY STREET LIGHTING DISTRICT. (COUNCIL)

Aaron Hernandez, Assistant City Engineer, gave a report about the various reports that have been prepared for Cudahy City. He noted that there is no fiscal increase to residents. He discussed deadlines for approval and fiscal impact.

Council Member Oliva requested a process for evaluating the lights.

Mr. Hernandez clarified that the City has a more efficient method to keep track of City lights.

**Motion**: A motion was made by Council Member Sanchez, to adopt Resolution No. 14-19, seconded by Council Member Oliva. Motion carried (5-0) by the following vote.

ROLL CALL:

AYES: Council Member(s): Guerrero, Oliva, Sanchez, Vice Mayor Markovich and Mayor Garcia
NOES: Council Member(s): None
ABSTAIN: Council Member(s): None

**12. BUSINESS SESSION** (continued)

(NOTE: ITEM 12G WAS TAKEN BEFORE ITEM 12A, BUT RECORDED HERE IN AGENDA ORDER.)

**G.** A presentation and discussion of Plaza de Cudahy, and consideration of Cudahy Municipal Code Modifications. (COUNCIL)
**(City Manager)**

Iris Hernandez, Representative for Fenix Corporation, gave an update for Plaza de Cudahy in Spanish. She spoke about the importance of the Plaza and the traditions of a plaza. She stated that the City will create restaurants, shops, fountains, gathering places, and establish events such as mariachi night and various dance presentations. She also explained that various clubs and organizations will have the opportunity to use Plaza de Cudahy and residents of Cudahy will be able to open businesses at the Plaza because the City will advise them through marketing workshops and Wells Fargo will provide them lines of credit.

Mayor Garcia clarified that this is a partnership with a group of investors and asked for clarification on what the Municipal Code does and does not allow.

Michael Allen, Acting City Manager, stated that the Municipal Code does need to be modified; he provided examples such as Pasadena, Santa Monica, Burbank, and San Fernando. He stated that one option is to modify the conditional use permit which is permanent and longstanding, a second option is modify the temporary use permit process, and the third option is to modify the Code to allow such uses on city streets or public property.

City Attorney Birrueta stated that the City needs to go back to planning the kind of area and having the vendors that the City would like to see at Plaza de Cudahy.

Mayor Garcia proposed an ad hoc Committee with himself and Council Member Sanchez and the swap meet community.

Direction was given to formulate an ad hoc Committee with Jose Sanchez and another vendor of his choice, to move the process forward, no objections noted.

**H.** Consideration to award a Community Development Block Grant Contract (Project JADE). (COUNCIL)

Jennifer Hernandez gave report about the cost of parenting classes and informed Council Members that in order to proceed, special services would need to be in place. She informed that the recommendation had been approved by the City Attorney's office and staff recommended that it be approved.

Council Member Oliva inquired about changes in curriculum from last year that need to be corrected.

Ms. Hernandez stated that JADE employees have discussed concerns and have updated the program.

**12. BUSINESS SESSION** (continued)

**Motion**: A motion was made by Council Member Sanchez, to award a contract for Project JADE, seconded by Council Member Oliva. Motion carried (4-0-1) by the following vote.

ROLL CALL:

AYES: Council Member(s): Guerrero, Oliva, Sanchez, and Mayor Garcia
NOES: Council Member(s): None
ABSTAIN: Council Member(s): Vice Mayor Markovich None

**13. COUNCIL BUSINESS**

**A.** Discussion item on Rules of Decorum for Council Members. **(Oliva)**

**Motion**: A motion was made by Mayor Garcia, no second, to table items 13A indefinitely. Motion failed for lack of second.

Council Member Oliva stated that she would like Council Members to consider three issues under this item: Council Members need to commit to meeting schedules, professional demeanor during meetings, public comments time for the citizens and confrontation should be minimized and new item should be added to the agenda under Public Comment Rules. She requested that they provide direction to add specific language to the rules.

Council Member Guerrero agrees with first two recommendations but he would prefer to keep the rules as flexible as possible during Public Comment.

Mayor Garcia stated that Public Comment is not hostile but rather for clarification to funnel democracy and that meetings should move forward.

Council Member Guerrero recommended for Council Member Oliva to draft a recommendation with the City Attorney for the next meeting.

City Attorney Birrueta explained the language that was proposed by Council Member Oliva.

Council Member Guerrero rescinded his vote to abstain from the motion.

**Motion**: A motion was made by Mayor Garcia, to move forward on the agenda and take no action, seconded by Council Member Sanchez. Motion carried (2-1-1) by the following vote.

ROLL CALL:

AYES: Council Member(s): Sanchez and Mayor Garcia
NOES: Council Member(s): Oliva
ABSTAIN: Council Member(s): Markovich

## 13. COUNCIL BUSINESS

**B.** Consideration of RESOLUTION NO. 14-48, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CUDAHY ESTABLISHING RULES FOR THE PLACEMENT OF ITEMS ON CITY COUNCIL AGENDAS AND ORDER OF ITEMS HEARD DURING CITY COUNCIL MEETINGS. (COUNCIL) **(Guerrero)**

Council Member Guerrero explained the importance of his proposal to give Council Members opportunity to speak.

Council Member Oliva clarified that this resolution involves the section of the agenda of Council Business.

Council Member Sanchez stated that Council Member Guerrero should have brought this item at a different time.

Mayor Garcia expressed that this item does nothing to move the City forward.

Council Member Oliva explained that the agenda is divided into sections and that during the Council Meeting Section, Council Members should be able to discuss and address issues regardless of difference of opinion.

**Motion**: A motion was made by Mayor Garcia, to table Item 13B indefinitely, seconded by Council Member Sanchez. Motion failed (2-2-1) by the following vote.

ROLL CALL:

AYES: Council Member(s): Sanchez and Mayor Garcia
NOES: Council Member(s): Guerrero and Oliva
ABSTAIN: Council Member(s): Markovich

Council Member Oliva made a motion to have this item tabled to the next meeting but it was denied.

Council Member Sanchez states that he likes the current system.

**Motion**: A motion was made by Council Member Guerrero, to adopt Resolution No. 14-48, seconded by Council Member Oliva. Motion failed (2-3) by the following vote.

ROLL CALL:

AYES: Council Member(s): Guerrero, Oliva
NOES: Council Member(s): Sanchez, Vice Mayor Markovich and Mayor Garcia
ABSTAIN: Council Member(s): None

## 13. COUNCIL BUSINESS

**C.** **Continued to August 5, 2014** - Discussion item on Planning Department fees, permit applications and practices.
**(Guerrero)**

**Recommendation:** Receive and File

This item was tabled to the next Regular Meeting to be accompanied by a Staff prepared summary of the Fees.

**D.** Discussion item to select a date of Fiscal Year 2014/15 Budget Study Session.
**(Garcia)**

**Recommendation:** It is recommended that Council provide a date to staff for the future 2014-2015 Budget Study Session.

Mayor Garcia spoke about the importance of having a Budget Study Session to increase transparency.

Mayor Garcia announced that the Budget Study Session would be held Tuesday, July 22nd at 6:30 p.m.

**E.** Discussion item regarding prospective City Council consideration and adoption of regulations regarding firearms in the City of Cudahy. (STAFF REPORT INCLUDED) **(Sanchez)**

**Recommendation:** It is recommended that the City Council provides direction as to whether it desires the City Attorney to draft and Ordinance implementing local firearms regulations for the City and, if so, what specific type(s) of firearms regulations it would like to have included in such Ordinance. It is also recommended that City staff provide information to the City Council as to the number of firearms retailers in the City and a breakdown of firearms-related offenses that have occurred in the City within the past 3 years.

Council Member Sanchez detailed his reason for proposing this item and that his resolution is to have very strict gun ordinances near schools and anywhere near children.

City Attorney Birrueta provided the current gun provision in the Municipal Code, and stated that more regulations could be added as long as they are not preempted by state and federal law. She explained that the Sheriff's Department would monitor gun use and the City would enforce penalties.

Mayor Garcia expressed that he is in support of having very strict firearms ordinances.

Direction was given and there was no objection to Item 13E.

## 14. CLOSED SESSION

City Attorney Isabel Birrueta announced that the City Council/Agency would recess to Closed Session to discuss Items A and B on the Closed Session agenda.

**A. Pursuant to Government Code Section 54956.9(d) (2) and 54956.9(e) (1) Conference with Legal Counsel to Discuss Matter Involving Potential Litigation and/or Significant Exposure to Litigation – [One (1) Matter] – This Matter will be heard jointly by the Cudahy City Council and the Cudahy City Council in its capacity as Successor Agency to the Cudahy Redevelopment Agency.**

**B. Pursuant to Government Code 54957(b) (1)**
**Public Employment Name of Position Under Consideration: City Manager**

**City Attorney Report from Closed Session**

City Attorney Isabel Birrueta reported that the City Council/Agency met in Closed Session to discuss Item A on the Closed Session agenda. **(Discussed after Section 7, City Council Comments, before Section 8, City Manager Report)**

In regard to Item A, direction was given, no action was taken.

City Attorney Isabel Birrueta reported that the City Council/Agency met in Closed Session to discuss Item B on the Closed Session agenda and that no action was taken.

## 15. ADJOURNMENT

The City Council/Agency meeting was adjourned at 11:18 p.m.

Respectfully submitted

_____
INTERIM CITY CLERK

Item Number

**10B**

# STAFF REPORT

**Date:** September 16, 2014

**To:** Honorable Mayor & Council Members

**From:** Jose E. Pulido, City Manager
By: Steven Dobrenen, Finance Director

**Subject:** **Demands and Payroll for the Month of July 2014 Including Cash and Investment Report by Fund for the Month of July 2014**

## RECOMMENDATION

The City Council is requested to approve the Demands and Payroll for the month of July 2014 including Cash and Investment Report by Fund for the month of July 2014.

## BACKGROUND

Cudahy Municipal Code Section 3.04.080 indicates "Except as otherwise provided, no warrant shall be drawn or evidence of indebtedness issued unless there shall be at the time sufficient money in the treasury legally applicable to the payment of the same." The attached Check Register Report and Cash and Investment Report by Fund July 2014 indicate that the Cash and Investment balance was sufficient to apply to the disbursements for the month of July 2014. Furthermore, Cudahy Municipal Code Section 3.04.070 indicates "...Budgeted demands paid by warrant prior to audit by the council shall be presented to the council for ratification and approval..."

## ANALYSIS

The following listed demands and payroll have been audited by the Finance Department:

| | |
|---|---|
| Computer warrants | 37362 - 37498 |
| Void checks | 37396 |
| Total amount disbursed | $720,167.95 |

Payroll Warrants including payroll taxes and insurance premiums:

| | July 10, 2014 | July 24, 2014 |
|---|---|---|
| Issued Warrants Number | 18260 - 18327 | 18328 - 18383 |
| Voided Warrants | | |
| | | |
| Issued Warrants Amounts | $ 5,451.11 | $ 4,584.44 |
| Direct Deposits | 70,735.57 | 46,674.50 |
| CalPERS Direct Deposit (a) | 28,357.20 | |
| CalPERS Direct Deposit (b) | 14,267.03 | |
| Payroll taxes (c) | 22,808.02 | 9,716.03 |
| Total Amount | $141,618.93 | $60,974.97 |

Note (a) - Payments for CalPERS medical insurance
Note (b) - Payments for CalPERS retirement contributions
Note (c) - Federal and State payroll taxes

The sufficiency of funds in the treasury is detailed on the attached Cash and Investment Report by Fund.

## CONCLUSION

The Finance Director certifies to the accuracy and availability of funds for payment. A Demand/ Warrant Register has been submitted to the City Council for approval. It is requested the listed demands be ratified and approved for payment and the payment of payroll be ratified and approved.

## FINANCIAL IMPACT

The Cash and Investment Report by Fund on the last page of the attachments indicate how the total disbursements of $923,923.80 were distributed to the Funds of the City.

## ATTACHMENTS

Check Register Report
Cash and Investment Report by Fund July, 2014

# Check Register Report



City of Cudahy

BANK: WELLS FARGO BANK

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37362 | 07/01/2014 | 1778 | ALL CITY MANAGEMENT | 3,103.92 | 3,103.92 |
| | | Printed | CROSSING GUARD MAY 25 - JUNE 7 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25350 | 001-4520-6730.000 | 1,724.40 | 0.00 | 1,724.40 |
| 25357 | 001-4520-6730.000 | 1,379.52 | 0.00 | 1,379.52 |
| | | | Check Amount | 3,103.92 |

| | | | | | |
|---|---|---|---|---|---|
| 37363 | 07/01/2014 | 7995 | AMERICAN CITY PEST CONTROL | 484.00 | 484.00 |
| | | Printed | PEST CONTROL SERV MARCH 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25378 | 001-4025-6758.000 | 101.00 | 0.00 | 101.00 |
| 25379 | 001-4025-6758.000 | 101.00 | 0.00 | 101.00 |
| 25380 | 001-4025-6758.000 | 117.00 | 0.00 | 117.00 |
| 25381 | 001-4025-6758.000 | 101.00 | 0.00 | 101.00 |
| 25382 | 001-4025-6758.000 | 64.00 | 0.00 | 64.00 |
| | | | Check Amount | 484.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37364 | 07/01/2014 | 4686 | AMERICAN RENTALS, INC. | 4,665.00 | 4,665.00 |
| | | Printed | BOOK FAIR RENTAL SUPPLIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25391 | 001-4310-6389.000 | 4,665.00 | 0.00 | 4,665.00 |
| | | | Check Amount | 4,665.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37365 | 07/01/2014 | 0057-1 | AT & T INTERNET SERVICES | 43.00 | 43.00 |
| | | Printed | U-VERSE INTERNET MAY 8 - JUN 7 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25386 | 001-4350-6390.000 | 43.00 | 0.00 | 43.00 |
| | | | Check Amount | 43.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37366 | 07/01/2014 | 9966 | AT & T LONG DISTANCE SERVICE | 56.75 | 56.75 |
| | | Printed | LONG DISTANCE CHARGES EOC | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25346 | 001-4025-6390.000 | 56.75 | 0.00 | 56.75 |
| | | | Check Amount | 56.75 |

| | | | | | |
|---|---|---|---|---|---|
| 37367 | 07/01/2014 | 0057-2 | AT & T PHONE SERVICE | 388.44 | 388.44 |
| | | Printed | LAND LINE LUGO PARK EOC | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25388 | 001-4025-6390.000 | 388.44 | 0.00 | 388.44 |
| | | | Check Amount | 388.44 |

| | | | | | |
|---|---|---|---|---|---|
| 37368 | 07/01/2014 | 10123 | B & V GROUP CORPORATION | 635.48 | 635.48 |
| | | Printed | VEHICLE MAINTENANCE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25402 | 201-4425-6394.000 | 43.52 | 0.00 | 43.52 |
| 25403 | 001-4530-6394.000 | 5.00 | 0.00 | 5.00 |
| 25404 | 001-4530-6394.000 | 241.96 | 0.00 | 241.96 |
| 25405 | 001-4410-6394.000 | 345.00 | 0.00 | 345.00 |
| | | | Check Amount | 635.48 |

# Check Register Report



City of Cudahy

BANK: WELLS FARGO BANK

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37369 | 07/01/2014 | 7019 | BUSINESS CARD | 242.00 | 242.00 |
| | | Printed | CREDIT CARD PAYMENT GC MAY2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25371 | 201-4425-6750.000 | 242.00 | 0.00 | 242.00 |
| | | | Check Amount | 242.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37370 | 07/01/2014 | 9740 | CCMS, INC. | 18,665.00 | 18,665.00 |
| | | Printed | INTERIM STAFFING JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25408 | 001-4008-6720.000 | 8,230.00 | 0.00 | 8,230.00 |
| 25409 | 001-4008-6720.000 | 10,435.00 | 0.00 | 10,435.00 |
| | | | Check Amount | 18,665.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37371 | 07/01/2014 | 10013 | CENTRAL FORD | 42.41 | 42.41 |
| | | Printed | OIL CHANGE CODE VEH 1397507 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25398 | 510-4230-6394.000 | 42.41 | 0.00 | 42.41 |
| | | | Check Amount | 42.41 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37372 | 07/01/2014 | 10122 | CHIQUETE CHRISTIAN | 286.00 | 286.00 |
| | | Printed | UMPIRE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25406 | 001-4350-6590.000 | 286.00 | 0.00 | 286.00 |
| | | | Check Amount | 286.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37373 | 07/01/2014 | 6096 | CLEAN SOURCE INC | 1,370.44 | 1,370.44 |
| | | Printed | CUSTODIAL SUPPLIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25393 | 001-4025-6015.000 | 1,370.44 | 0.00 | 1,370.44 |
| | | | Check Amount | 1,370.44 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37374 | 07/01/2014 | 5189 | COMMUNITY DEVELOPMENT COMM | 500.00 | 500.00 |
| | | Printed | PROGRAM INCOME MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25351 | 001-0000-4909.000 | 500.00 | 0.00 | 500.00 |
| | | | Check Amount | 500.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37375 | 07/01/2014 | 9719 | CSG CONSULTANTS, INC. | 755.42 | 755.42 |
| | | Printed | BUILDING PLAN REVIEW SERV | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25396 | 001-4215-6720.000 | 755.42 | 0.00 | 755.42 |
| | | | Check Amount | 755.42 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37376 | 07/01/2014 | 2167 | DAILY BREEZE PRESS TELEGRAM | 3,153.01 | 3,153.01 |
| | | Printed | CLASSIFIED ADVERTISING MAY'14 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25343 | 001-4212-6310.000 | 3,153.01 | 0.00 | 3,153.01 |
| | | | Check Amount | 3,153.01 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37377 | 07/01/2014 | 10005 | DAPEER, ROSENBLIT & LITVAK | 967.14 | 967.14 |
| | | Printed | MUNI CODE ENFORCEMENT MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25394 | 510-4230-6755.000 | 967.14 | 0.00 | 967.14 |
| | | | Check Amount | 967.14 |

| | | | | | |
|---|---|---|---|---|---|
| 37378 | 07/01/2014 | 2304 | DAVE'S TROPHIES | 82.13 | 82.13 |
| | | Printed | BASKETBALL TROPHIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25339 | 001-4350-6240.000 | 82.13 | 0.00 | 82.13 |
| | | | Check Amount | 82.13 |

| | | | | | |
|---|---|---|---|---|---|
| 37379 | 07/01/2014 | 8017 | DEPARTMENT OF CONSERVATION | 125.61 | 125.61 |
| | | Printed | STRONG MOTION APRIL - MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25337 | 001-4212-6779.000 | 125.61 | 0.00 | 125.61 |
| | | | Check Amount | 125.61 |

| | | | | | |
|---|---|---|---|---|---|
| 37380 | 07/01/2014 | 9998 | DOWNEY SIGN & LIGHTING | 495.00 | 495.00 |
| | | Printed | INSTALLED 16 FLAG POLE BRACKET | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25356 | 001-4310-6585.000 | 495.00 | 0.00 | 495.00 |
| | | | Check Amount | 495.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37381 | 07/01/2014 | 6086 | EWING | 492.54 | 492.54 |
| | | Printed | REPAIRED IRRIGATION CUDAHY PK | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25389 | 001-4410-6765.000 | 49.75 | 0.00 | 49.75 |
| 25392 | 001-4410-6765.000 | 442.79 | 0.00 | 442.79 |
| | | | Check Amount | 492.54 |

| | | | | | |
|---|---|---|---|---|---|
| 37382 | 07/01/2014 | 0569 | FEDERAL EXPRESS SERVICES | 74.66 | 74.66 |
| | | Printed | FEDEX EXPRESS MAIL | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25345 | 001-4020-6385.000 | 74.66 | 0.00 | 74.66 |
| | | | Check Amount | 74.66 |

| | | | | | |
|---|---|---|---|---|---|
| 37383 | 07/01/2014 | 2724 | HOME DEPOT CREDIT SERVICES | 1,580.05 | 1,580.05 |
| | | Printed | HARDWARE &SUPPLIES MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25390 | 201-4425-6150.000 | 86.82 | 0.00 | 86.82 |
| 25390 | 201-4425-6750.000 | 111.33 | 0.00 | 111.33 |
| 25390 | 001-4025-6770.000 | 51.93 | 0.00 | 51.93 |
| 25390 | 001-4410-6140.000 | 423.06 | 0.00 | 423.06 |
| 25390 | 001-4025-6010.000 | 906.91 | 0.00 | 906.91 |
| | | | Check Amount | 1,580.05 |

| | | | | | |
|---|---|---|---|---|---|
| 37384 | 07/01/2014 | 0042 | HUNTINGTON PARK RUBBER STAMP | 402.71 | 402.71 |
| | | Printed | NAME PLATES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25397 | 001-4210-6715.000 | 69.70 | 0.00 | 69.70 |
| | 25397 | 001-4350-6715.000 | 69.70 | 0.00 | 69.70 |
| | 25397 | 001-4502-6715.000 | 69.70 | 0.00 | 69.70 |
| | 25397 | 001-4310-6580.000 | 69.70 | 0.00 | 69.70 |
| | 25400 | 001-4310-6580.000 | 48.79 | 0.00 | 48.79 |
| | 25400 | 001-4210-6715.000 | 48.79 | 0.00 | 48.79 |
| | 25400 | 001-4001-6085.000 | 26.33 | 0.00 | 26.33 |
| | | | | Check Amount | 402.71 |
| 37385 | 07/01/2014 | 9723 | IT SYSTEMHOUSE, INC. | 3,342.50 | 3,342.50 |
| | | Printed | DATA CABLE INSTALLED | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25354 | 001-4020-6910.000 | 3,200.00 | 0.00 | 3,200.00 |
| | 25377 | 001-4020-6910.000 | 142.50 | 0.00 | 142.50 |
| | | | | Check Amount | 3,342.50 |
| 37386 | 07/01/2014 | 4553 | J. V. PRINTING | 229.99 | 229.99 |
| | | Printed | BUS LICENCE DECALS & BUS CARDS | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25348 | 001-4001-6080.000 | 56.68 | 0.00 | 56.68 |
| | 25353 | 001-4160-6080.000 | 173.31 | 0.00 | 173.31 |
| | | | | Check Amount | 229.99 |
| 37387 | 07/01/2014 | 5004-1 | LEGISLATIVE ADVOCACY GROUP INC | 2,000.00 | 2,000.00 |
| | | Printed | LEGISLATIVE SERVICE APRIL 2014 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25355 | 001-4001-6753.000 | 2,000.00 | 0.00 | 2,000.00 |
| | | | | Check Amount | 2,000.00 |
| 37388 | 07/01/2014 | 10085 | MARS ENVIRONMENTAL, INC. | 1,686.95 | 1,686.95 |
| | | Printed | RECYCLED HAZARDOUS WASTE | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25395 | 201-4425-6545.000 | 1,686.95 | 0.00 | 1,686.95 |
| | | | | Check Amount | 1,686.95 |
| 37389 | 07/01/2014 | 10121 | NATIONWIDE GATE SERVICES | 225.00 | 225.00 |
| | | Printed | SERVICED GATE @ LUGO PARK YARD | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25407 | 001-4410-6720.000 | 225.00 | 0.00 | 225.00 |
| | | | | Check Amount | 225.00 |
| 37390 | 07/01/2014 | 10081 | NEOFUNDS BY NEOPOST | 429.00 | 429.00 |
| | | Printed | POSTAGE | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25383 | 001-4020-6385.000 | 429.00 | 0.00 | 429.00 |
| | | | | Check Amount | 429.00 |
| 37391 | 07/01/2014 | 8247 | NETWORK INNOVATION ASSOCIATES | 278.00 | 278.00 |
| | | Printed | SATELLITE NETWORK JUNE 2014 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25358 | 268-4220-6993.000 | 278.00 | 0.00 | 278.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | | | Check Amount | 278.00 | |
| 37392 | 07/01/2014 | 1978 | OFFICE DEPOT BUSINESS | 119.60 | 119.60 |
| | | Printed | COPIES, OFFICE SUPPLIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25372 | 001-4215-6080.000 | 20.71 | 0.00 | 20.71 |
| 25373 | 001-4310-6389.000 | 15.94 | 0.00 | 15.94 |
| 25374 | 001-4020-6080.000 | 11.21 | 0.00 | 11.21 |
| 25375 | 001-4310-6389.000 | 3.71 | 0.00 | 3.71 |
| 25376 | 001-4310-6389.000 | 68.03 | 0.00 | 68.03 |
| | | | Check Amount | 119.60 |

| | | | | | |
|---|---|---|---|---|---|
| 37393 | 07/01/2014 | 1978-1 | OFFICE DEPOT CREDIT PLAN | 341.16 | 341.16 |
| | | Printed | OFFICE SUPPLIES MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25347 | 001-4151-6080.000 | 18.18 | 0.00 | 18.18 |
| 25347 | 001-4160-6080.000 | 15.82 | 0.00 | 15.82 |
| 25347 | 001-4410-6080.000 | 307.16 | 0.00 | 307.16 |
| | | | Check Amount | 341.16 |

| | | | | | |
|---|---|---|---|---|---|
| 37394 | 07/01/2014 | 10041 | QUEZADA, MAX | 68.00 | 68.00 |
| | | Printed | UMPIRE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25338 | 001-4350-6590.000 | 68.00 | 0.00 | 68.00 |
| | | | Check Amount | 68.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37395 | 07/01/2014 | 2802 | SAM'S CLUB | 591.30 | 591.30 |
| | | Printed | SNACK BAR & C.H. SUPPLIES MAY | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25349 | 001-4502-6145.000 | 49.03 | 0.00 | 49.03 |
| 25349 | 710-6010-6013.000 | 262.90 | 0.00 | 262.90 |
| 25349 | 001-4001-6391.000 | 139.62 | 0.00 | 139.62 |
| 25349 | 001-4310-6580.000 | 139.75 | 0.00 | 139.75 |
| | | | Check Amount | 591.30 |

| | | | | | |
|---|---|---|---|---|---|
| 37396 | 07/01/2014 | | | 0.00 | 0.00 |
| | 07/01/2014 | Void | Void Check | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| | | | Check Amount | 0.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37397 | 07/01/2014 | 0069-2 | SIEMENS INDUSTRY, INC. | 9,440.08 | 9,440.08 |
| | | Printed | STR LIGHT MAINT APRIL 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25359 | 201-4420-6771.000 | 674.61 | 0.00 | 674.61 |
| 25360 | 201-4420-6771.000 | 674.61 | 0.00 | 674.61 |
| 25361 | 201-4420-6771.000 | 334.08 | 0.00 | 334.08 |
| 25362 | 201-4420-6771.000 | 674.61 | 0.00 | 674.61 |
| 25363 | 201-4420-6771.000 | 1,599.42 | 0.00 | 1,599.42 |
| 25364 | 350-4430-6775.000 | 783.25 | 0.00 | 783.25 |
| 25365 | 350-4430-6775.000 | 783.25 | 0.00 | 783.25 |
| 25366 | 350-4430-6775.000 | 783.25 | 0.00 | 783.25 |
| 25367 | 350-4430-6775.000 | 783.25 | 0.00 | 783.25 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25368 | 350-4430-6775.000 | 783.25 | 0.00 783.25 | |
| | 25369 | 350-4430-6775.000 | 783.25 | 0.00 783.25 | |
| | 25370 | 350-4430-6775.000 | 783.25 | 0.00 783.25 | |
| | | | | Check Amount 9,440.08 | |
| 37398 | 07/01/2014 | 0070 | SOUTHERN CALIFORNIA EDISON | 15.99 | 15.99 |
| | | Printed | ELECTRICITY BILL | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25387 | 201-4420-6318.000 | 15.99 | 0.00 | 15.99 |
| | | | | Check Amount | 15.99 |
| 37399 | 07/01/2014 | 9626 | THE BANCORP BANK | 1,211.96 | 1,211.96 |
| | | Printed | 2012 FORD FUSION HYBRID (TWO) | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25352 | 257-4780-6990.000 | 1,211.96 | 0.00 | 1,211.96 |
| | | | | Check Amount | 1,211.96 |
| 37400 | 07/01/2014 | 0071 | THE GAS COMPANY | 111.83 | 111.83 |
| | | Printed | GAS CHARGES MAR 18 - APR 16 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25384 | 001-4020-6380.000 | 38.11 | 0.00 | 38.11 |
| | 25385 | 001-4410-6380.000 | 73.72 | 0.00 | 73.72 |
| | | | | Check Amount | 111.83 |
| 37401 | 07/01/2014 | 7015 | THE UPS STORE #5461 | 592.00 | 592.00 |
| | | Printed | LIVE SCAN CITY VOLUNTEERS | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25401 | 001-4015-6320.000 | 592.00 | 0.00 | 592.00 |
| | | | | Check Amount | 592.00 |
| 37402 | 07/01/2014 | 2859 | UNDERGROUND SERVICE ALERT-SC | 37.50 | 37.50 |
| | | Printed | DIG ALERT TICKETS MAY 2014 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25399 | 201-4425-6735.000 | 37.50 | 0.00 | 37.50 |
| | | | | Check Amount | 37.50 |
| 37403 | 07/01/2014 | 9707 | VELOZ ALBERTO | 352.00 | 352.00 |
| | | Printed | UMPIRE | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25341 | 001-4350-6590.000 | 352.00 | 0.00 | 352.00 |
| | | | | Check Amount | 352.00 |
| 37404 | 07/01/2014 | 8316 | VELOZ RAMIRO | 284.00 | 284.00 |
| | | Printed | UMPIRE | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25340 | 001-4350-6590.000 | 284.00 | 0.00 | 284.00 |
| | | | | Check Amount | 284.00 |
| 37405 | 07/01/2014 | 5631 | WELLS LOCK & KEY | 742.20 | 742.20 |
| | | Printed | LOCK & KEY SERVICE @ CITY HALL | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25342 | 001-4025-6010.000 | 439.50 | 0.00 | 439.50 |
| | 25344 | 001-4025-6010.000 | 302.70 | 0.00 | 302.70 |
| | | | | Check Amount | 742.20 |
| 37406 | 07/01/2014 | 4502-1 | PYRO | 6,250.00 | 6,250.00 |
| | | Printed | FINAL PAYMENT FIREWORK SHOW | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25411 | 710-6010-6585.000 | 6,250.00 | 0.00 | 6,250.00 |
| | | | | Check Amount | 6,250.00 |
| 37407 | 07/01/2014 | 10004 | TALAMANTES ROBERT | 350.00 | 350.00 |
| | | Printed | DJ SERVICES FOR 4TH JULY EVENT | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25410 | 710-6010-6585.000 | 350.00 | 0.00 | 350.00 |
| | | | | Check Amount | 350.00 |
| 37408 | 07/09/2014 | 9966 | AT & T LONG DISTANCE SERVICE | 90.74 | 90.74 |
| | | Printed | LONG DISTANCE CHARGES JUNE '14 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25417 | 001-4350-6390.000 | 40.88 | 0.00 | 40.88 |
| | 25417 | 001-4020-6390.000 | 49.86 | 0.00 | 49.86 |
| | | | | Check Amount | 90.74 |
| 37409 | 07/09/2014 | 8021 | AT & T MOBILITY | 609.54 | 609.54 |
| | | Printed | CELLULAR SERVICE MAY 7 - JUN 6 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25416 | 001-4530-6390.000 | 48.06 | 0.00 | 48.06 |
| | 25416 | 001-4410-6390.000 | 167.30 | 0.00 | 167.30 |
| | 25416 | 001-4501-6390.000 | 106.79 | 0.00 | 106.79 |
| | 25416 | 001-4151-6390.000 | 42.69 | 0.00 | 42.69 |
| | 25416 | 001-4018-6390.000 | 52.68 | 0.00 | 52.68 |
| | 25416 | 001-4210-6390.000 | 52.69 | 0.00 | 52.69 |
| | 25416 | 510-4230-6390.000 | 58.24 | 0.00 | 58.24 |
| | 25416 | 001-4011-6390.000 | 10.00 | 0.00 | 10.00 |
| | 25416 | 001-4530-6390.000 | 71.09 | 0.00 | 71.09 |
| | | | | Check Amount | 609.54 |
| 37410 | 07/09/2014 | 0057-2 | AT & T PHONE SERVICE | 1,470.93 | 1,470.93 |
| | | Printed | LAND LINE | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25415 | 001-4025-6390.000 | 855.37 | 0.00 | 855.37 |
| | 25415 | 001-4501-6390.000 | 292.06 | 0.00 | 292.06 |
| | 25415 | 001-4020-6390.000 | 278.70 | 0.00 | 278.70 |
| | 25415 | 001-4350-6390.000 | 44.80 | 0.00 | 44.80 |
| | | | | Check Amount | 1,470.93 |
| 37411 | 07/09/2014 | 0126-1 | GOLDEN STATE WATER COMPANY | 4,666.15 | 4,666.15 |
| | | Printed | WATER SERVICE MAY 20 - JUNE 19 | 0.00 | |
| | Ref# | GL Number | Gross | Discount | Amount |
| | 25414 | 001-4410-6395.000 | 4,634.34 | 0.00 | 4,634.34 |
| | 25418 | 201-4425-6395.000 | 31.81 | 0.00 | 31.81 |
| | | | | Check Amount | 4,666.15 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37412 | 07/09/2014 | 10106 | HR DYNAMICS & PERFORMANCE MGNT | 7,100.00 | 7,100.00 |
| | | Printed | HOTEL REIMBURSEMENTS | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25412 | 001-4001-6720.000 | 6,800.00 | 0.00 | 6,800.00 |
| 25413 | 001-4001-6720.000 | 300.00 | 0.00 | 300.00 |
| | | | Check Amount | 7,100.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37413 | 07/09/2014 | 2378 | ITL, INC. | 2,485.89 | 2,485.89 |
| | | Printed | FUEL MAY & JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25419 | 001-4530-6040.000 | 140.87 | 0.00 | 140.87 |
| 25419 | 001-4530-6040.000 | 285.21 | 0.00 | 285.21 |
| 25419 | 001-4410-6040.000 | 59.35 | 0.00 | 59.35 |
| 25419 | 201-4425-6040.000 | 366.48 | 0.00 | 366.48 |
| 25420 | 001-4020-6040.000 | 40.51 | 0.00 | 40.51 |
| 25420 | 201-4425-6040.000 | 125.50 | 0.00 | 125.50 |
| 25420 | 001-4530-6040.000 | 279.48 | 0.00 | 279.48 |
| 25420 | 001-4410-6040.000 | 175.92 | 0.00 | 175.92 |
| 25421 | 001-4530-6040.000 | 349.68 | 0.00 | 349.68 |
| 25421 | 510-4230-6040.000 | 62.87 | 0.00 | 62.87 |
| 25421 | 201-4425-6040.000 | 97.99 | 0.00 | 97.99 |
| 25421 | 001-4410-6040.000 | 502.03 | 0.00 | 502.03 |
| | | | Check Amount | 2,485.89 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37414 | 07/09/2014 | 0070 | SOUTHERN CALIFORNIA EDISON | 9,954.48 | 9,954.48 |
| | | Printed | ELECTRICITY BILL JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25422 | 350-4430-6318.000 | 88.30 | 0.00 | 88.30 |
| 25422 | 201-4420-6318.000 | 15.26 | 0.00 | 15.26 |
| 25423 | 001-4410-6318.000 | 3,882.35 | 0.00 | 3,882.35 |
| 25423 | 001-4020-6318.000 | 4,894.38 | 0.00 | 4,894.38 |
| 25423 | 201-4420-6318.000 | 1,074.19 | 0.00 | 1,074.19 |
| | | | Check Amount | 9,954.48 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37415 | 07/09/2014 | 10124 | TERRIQUEZ AIDE | 700.00 | 700.00 |
| | | Printed | REFUND FOR CUP APPLICATION | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25424 | 001-0000-4812.000 | 700.00 | 0.00 | 700.00 |
| | | | Check Amount | 700.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37416 | 07/15/2014 | 0001 | AAA BURGLAR ALARM CO, | 1,471.00 | 1,471.00 |
| | | Printed | ALARM MONITOR FEE 3RD QTR | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25434 | 001-4025-6700.000 | 1,471.00 | 0.00 | 1,471.00 |
| | | | Check Amount | 1,471.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37417 | 07/15/2014 | 8059 | ALLIANT INSURANCE SERVICE INC | 957.00 | 957.00 |
| | | Printed | ACIP-ALLIANT CRIME INS FY14/15 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25432 | 001-4020-6420.000 | 957.00 | 0.00 | 957.00 |
| | | | Check Amount | 957.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37418 | 07/15/2014 | 9428 | CALIFORNIA CONTRACT CITIES | 2,740.00 | 2,740.00 |
| | | Printed | ANNUAL MEMBERSHIP FY 2014/2015 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25427 | 001-4001-6312.000 | 2,740.00 | 0.00 | 2,740.00 |
| | | | Check Amount | 2,740.00 |

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|---|---|---|---|---|---|
| 37419 | 07/15/2014 | 4770 | CALIFORNIA JPIA | 190,589.00 | 190,589.00 |
| | | Printed | LIAB & WORKERS COMP 2014-2015 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25425 | 001-4020-6490.000 | 90,039.00 | 0.00 | 90,039.00 |
| 25425 | 001-4020-6420.000 | -19,477.00 | 0.00 | -19,477.00 |
| 25425 | 001-4020-6420.000 | 120,027.00 | 0.00 | 120,027.00 |
| | | | Check Amount | 190,589.00 |

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|---|---|---|---|---|---|
| 37420 | 07/15/2014 | 4402 | GATEWAY CITIES | 20,670.90 | 20,670.90 |
| | | Printed | ANNUAL MEMBERSHIP FY 2014/2015 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25428 | 251-4730-6312.000 | 10,000.00 | 0.00 | 10,000.00 |
| 25429 | 251-4730-6312.000 | 10,670.90 | 0.00 | 10,670.90 |
| | | | Check Amount | 20,670.90 |

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|---|---|---|---|---|---|
| 37421 | 07/15/2014 | 4553 | J. V. PRINTING | 163.50 | 163.50 |
| | | Printed | WINDOW ENVELOPES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25433 | 001-4020-6080.000 | 163.50 | 0.00 | 163.50 |
| | | | Check Amount | 163.50 |

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|---|---|---|---|---|---|
| 37422 | 07/15/2014 | 8057 | KONICA MINOLTA BUSINESS | 209.58 | 209.58 |
| | | Printed | CANON IR5055 SRV JUN 26-JUL 25 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25431 | 001-4350-6370.000 | 209.58 | 0.00 | 209.58 |
| | | | Check Amount | 209.58 |

| | | | | | |
|---|---|---|---|---|---|
| 37423 | 07/15/2014 | 10080 | MAIL FINANCE | 285.61 | 285.61 |
| | | Printed | POSTAGE MACHINE APR 23-JUL 22 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25435 | 001-4020-6385.000 | 285.61 | 0.00 | 285.61 |
| | | | Check Amount | 285.61 |

| | | | | | |
|---|---|---|---|---|---|
| 37424 | 07/15/2014 | 8247 | NETWORK INNOVATION ASSOCIATES | 278.00 | 278.00 |
| | | Printed | SATELLITE NETWORK JULY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25426 | 268-4220-6993.000 | 278.00 | 0.00 | 278.00 |
| | | | Check Amount | 278.00 |

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|---|---|---|---|---|---|
| 37425 | 07/15/2014 | 10125 | SANTELLANES TAHOENGY | 80.00 | 80.00 |
| | | Printed | REFUND FOR 2 SOCCER SIGN UPS | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25438 | 001-0000-4990.000 | 80.00 | 0.00 | 80.00 |
| | | | Check Amount | 80.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37426 | 07/15/2014 | 5617 | SHEILA'S GIFT & FLOWERS | 500.00 | 500.00 |
| | | Printed | FIVE JUMPERS 4TH JULY EVENT | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25436 | 710-6010-6585.000 | 500.00 | 0.00 | 500.00 |
| | | | Check Amount | 500.00 |

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|---|---|---|---|---|---|
| 37427 | 07/15/2014 | 10126 | TRUJILLO MARTA | 30.00 | 30.00 |
| | | Printed | REFUND FOR SOCCER SIGN UP | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25437 | 001-0000-4990.000 | 30.00 | 0.00 | 30.00 |
| | | | Check Amount | 30.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37428 | 07/15/2014 | 2859 | UNDERGROUND SERVICE ALERT-SC | 25.50 | 25.50 |
| | | Printed | DIG ALERT TICKETS | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25430 | 201-4425-6735.000 | 25.50 | 0.00 | 25.50 |
| | | | Check Amount | 25.50 |

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|---|---|---|---|---|---|
| 37429 | 07/15/2014 | 4550 | 235- PRAXAIR DISTRIBUTION INC. | 41.08 | 41.08 |
| | | Printed | CYLINDER RENTAL JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25456 | 201-4425-6150.000 | 41.08 | 0.00 | 41.08 |
| | | | Check Amount | 41.08 |

| | | | | | |
|---|---|---|---|---|---|
| 37430 | 07/15/2014 | 10128 | ALCALA MIKE ALONSO | 150.00 | 150.00 |
| | | Printed | MUSIC SENIOR'S MOTHER'S DAY | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25477 | 001-4365-6145.000 | 150.00 | 0.00 | 150.00 |
| | | | Check Amount | 150.00 |

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|---|---|---|---|---|---|
| 37431 | 07/15/2014 | 9603 | ALLY | 482.90 | 482.90 |
| | | Printed | 2010 GMC SIERRA TRUCK JUNE2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25465 | 257-4780-6393.000 | 482.90 | 0.00 | 482.90 |
| | | | Check Amount | 482.90 |

| | | | | | |
|---|---|---|---|---|---|
| 37432 | 07/15/2014 | 0057-2 | AT & T PHONE SERVICE | 132.78 | 132.78 |
| | | Printed | LAND LINE AND INTERNET JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25457 | 001-4025-6390.000 | 132.78 | 0.00 | 132.78 |
| | | | Check Amount | 132.78 |

| | | | | | |
|---|---|---|---|---|---|
| 37433 | 07/15/2014 | 9428 | CALIFORNIA CONTRACT CITIES | 18.50 | 18.50 |
| | | Printed | CITY MANAGER MTG JUNE 19, 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25472 | 001-4011-6391.000 | 18.50 | 0.00 | 18.50 |
| | | | Check Amount | 18.50 |

| | | | | | |
|---|---|---|---|---|---|
| 37434 | 07/15/2014 | 0136 | CITY OF SOUTH GATE | 75.00 | 75.00 |
| | | Printed | SIGNAL MAINTENANCE JUNE 2014 | 0.00 | |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | | | | | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25475 | 201-4420-6771.000 | 75.00 | 0.00 | 75.00 |
| | | | Check Amount | 75.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37435 | 07/15/2014 | 6096 | CLEAN SOURCE INC | 1,147.31 | 1,147.31 |
| | | Printed | CUSTODIAL SUPPLIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25439 | 001-4025-6015.000 | 1,147.31 | 0.00 | 1,147.31 |
| | | | Check Amount | 1,147.31 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37436 | 07/15/2014 | 0186 | COUNTY OF LOS ANGELES | 6,311.18 | 6,311.18 |
| | | Printed | ANIMAL CARE & CONTROL MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25469 | 001-4510-6703.000 | 6,311.18 | 0.00 | 6,311.18 |
| | | | Check Amount | 6,311.18 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37437 | 07/15/2014 | 2167 | DAILY BREEZE PRESS TELEGRAM | 763.88 | 763.88 |
| | | Printed | CLASSIFIED ADVERTISING JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25473 | 001-4212-6310.000 | 394.25 | 0.00 | 394.25 |
| 25473 | 001-4212-6310.000 | 369.63 | 0.00 | 369.63 |
| | | | Check Amount | 763.88 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37438 | 07/15/2014 | 9998 | DOWNEY SIGN & LIGHTING | 900.00 | 900.00 |
| | | Printed | REMOVED JUNE BANNERS | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25450 | 001-4310-6585.000 | 180.00 | 0.00 | 180.00 |
| 25453 | 001-4310-6585.000 | 540.00 | 0.00 | 540.00 |
| 25454 | 001-4310-6585.000 | 180.00 | 0.00 | 180.00 |
| | | | Check Amount | 900.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37439 | 07/15/2014 | 10127 | FEDERAL SAFETY COMPLIANCE | 298.50 | 298.50 |
| | | Printed | 2014 OSHA/EPA REGULATION KIT | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25476 | 001-4015-6080.000 | 298.50 | 0.00 | 298.50 |
| | | | Check Amount | 298.50 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37440 | 07/15/2014 | 4699 | FIREMASTER DEPT 1019 | 300.00 | 300.00 |
| | | Printed | KITCHEN HOOD SEMI ANNUAL SERV | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25455 | 001-4025-6765.000 | 300.00 | 0.00 | 300.00 |
| | | | Check Amount | 300.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37441 | 07/15/2014 | 6087 | FIRST AMERICAN DATA TREE | 99.00 | 99.00 |
| | | Printed | SERVICE RENDERED JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25442 | 001-4215-6386.000 | 49.50 | 0.00 | 49.50 |
| 25442 | 001-4210-6720.000 | 49.50 | 0.00 | 49.50 |
| | | | Check Amount | 99.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37442 | 07/15/2014 | 10053 | HAULAWAY STORAGE CONTAINERS | 79.50 | 79.50 |
| | | Printed | 21FT STORAGE CONTAINER JUN2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25461 | 001-4020-6323.000 | 79.50 | 0.00 | 79.50 |
| | | | Check Amount | 79.50 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37443 | 07/15/2014 | 9723 | IT SYSTEMHOUSE, INC. | 3,200.00 | 3,200.00 |
| | | Printed | IT OUTSOURCING SERV JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25470 | 001-4020-6910.000 | 3,200.00 | 0.00 | 3,200.00 |
| | | | Check Amount | 3,200.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37444 | 07/15/2014 | 2378 | ITL, INC. | 860.70 | 860.70 |
| | | Printed | FUEL | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25471 | 001-4410-6040.000 | 275.34 | 0.00 | 275.34 |
| 25471 | 001-4530-6040.000 | 475.21 | 0.00 | 475.21 |
| 25471 | 201-4425-6040.000 | 110.15 | 0.00 | 110.15 |
| | | | Check Amount | 860.70 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37445 | 07/15/2014 | 9425 | JK CONSTRUCTION | 7,605.00 | 7,605.00 |
| | | Printed | SINGLE FAM FY 2013-2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25458 | 510-4620-6767.000 | 7,605.00 | 0.00 | 7,605.00 |
| | | | Check Amount | 7,605.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37446 | 07/15/2014 | 9668 | KONICA MINOLTA BUSINESS | 236.38 | 236.38 |
| | | Printed | KONICA MINOLTA COPIER JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25467 | 001-4020-6323.000 | 236.38 | 0.00 | 236.38 |
| | | | Check Amount | 236.38 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37447 | 07/15/2014 | 0197 | LA COUNTY SHERIFF'S DEPARTMENT | 5,641.69 | 5,641.69 |
| | | Printed | LAW ENFORCEMENT SPECIAL EVENT | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25468 | 001-4501-6763.000 | 5,641.69 | 0.00 | 5,641.69 |
| | | | Check Amount | 5,641.69 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37448 | 07/15/2014 | 7014 | NATIONWIDE ENVIRONMENTAL | 9,045.49 | 9,045.49 |
| | | Printed | STREET & PARK SWEEPING JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25440 | 201-4425-6778.000 | 9,045.49 | 0.00 | 9,045.49 |
| | | | Check Amount | 9,045.49 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37449 | 07/15/2014 | 1978 | OFFICE DEPOT BUSINESS | 348.96 | 348.96 |
| | | Printed | 300 IMPRESSIONS | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25444 | 001-4020-6080.000 | 107.63 | 0.00 | 107.63 |
| 25445 | 001-4020-6080.000 | 146.52 | 0.00 | 146.52 |
| 25462 | 001-4020-6080.000 | 32.68 | 0.00 | 32.68 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25463 | 001-4020-6080.000 | 62.13 | 0.00 / 62.13 | |
| | | | | Check Amount 348.96 | |
| 37450 | 07/15/2014 | 5571 | PARAGON PARTNERS | 1,375.00 | 1,375.00 |
| | | Printed | RELOCATION PLAN EXPANSION PARK | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25448 | 001-4212-6720.000 | 1,375.00 | 0.00 | 1,375.00 |
| | | | Check Amount | 1,375.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37451 | 07/15/2014 | 5537 | PSI PRINTING SYSTEM INC. | 158.25 | 158.25 |
| | | Printed | BUSINESS LICENSE - LASER PRINT | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25474 | 001-4160-6080.000 | 158.25 | 0.00 | 158.25 |
| | | | Check Amount | 158.25 |

| | | | | | |
|---|---|---|---|---|---|
| 37452 | 07/15/2014 | 0172 | SMART & FINAL FOOD SERVICE | 140.30 | 140.30 |
| | | Printed | CITY MGR INTERVIEW SUPPLIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25459 | 001-4020-6060.000 | 60.64 | 0.00 | 60.64 |
| 25459 | 001-4350-6585.000 | 79.66 | 0.00 | 79.66 |
| | | | Check Amount | 140.30 |

| | | | | | |
|---|---|---|---|---|---|
| 37453 | 07/15/2014 | 5489 | SOURCE ONE | 107.55 | 107.55 |
| | | Printed | COPIER PAPER CITY HALL OPER | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25446 | 001-4350-6080.000 | 35.85 | 0.00 | 35.85 |
| 25446 | 001-4020-6080.000 | 71.70 | 0.00 | 71.70 |
| | | | Check Amount | 107.55 |

| | | | | | |
|---|---|---|---|---|---|
| 37454 | 07/15/2014 | 5737 | SOUTH COAST A.Q.M.D. | 118.94 | 118.94 |
| | | Printed | CA AIR TOXICS PROGRAM FY 13/14 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25443 | 001-4025-6749.000 | 118.94 | 0.00 | 118.94 |
| | | | Check Amount | 118.94 |

| | | | | | |
|---|---|---|---|---|---|
| 37455 | 07/15/2014 | 4716 | TAB PRODUCT COMPANY | 42.09 | 42.09 |
| | | Printed | FILING FISCAL YEAR LABELS JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25466 | 001-4008-6080.000 | 42.09 | 0.00 | 42.09 |
| | | | Check Amount | 42.09 |

| | | | | | |
|---|---|---|---|---|---|
| 37456 | 07/15/2014 | 0079 | TRACT 180 WATER COMPANY | 5,628.34 | 5,628.34 |
| | | Printed | WATER SERVICE MAY 01 - JUN 30 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25464 | 001-4410-6395.000 | 5,270.28 | 0.00 | 5,270.28 |
| 25464 | 001-4020-6395.000 | 64.03 | 0.00 | 64.03 |
| 25464 | 201-4425-6395.000 | 294.03 | 0.00 | 294.03 |
| | | | Check Amount | 5,628.34 |

| | | | | | |
|---|---|---|---|---|---|
| 37457 | 07/15/2014 | 0078 | TRACT 349 MUTUAL WATER CO | 380.00 | 380.00 |
| | | Printed | WATER SERVICE APR 15 - JUN 15 | 0.00 | |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | | | | | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25460 | 201-4425-6395.000 | 380.00 | 0.00 | 380.00 |
| | | | Check Amount | 380.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37458 | 07/15/2014 | 10099 | TRUJILLO VICTOR | 122.00 | 122.00 |
| | | Printed | UMPIRE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25449 | 001-4350-6590.000 | 122.00 | 0.00 | 122.00 |
| | | | Check Amount | 122.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37459 | 07/15/2014 | 10094 | W.R. SMITH, INC. | 516.02 | 516.02 |
| | | Printed | TURNER HALL KITCHEN REPAIRS | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25451 | 001-4025-6770.000 | 407.17 | 0.00 | 407.17 |
| 25452 | 001-4025-6770.000 | 108.85 | 0.00 | 108.85 |
| | | | Check Amount | 516.02 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37460 | 07/15/2014 | 9951 | WILLDAN | 210.00 | 210.00 |
| | | Printed | BUILDING SERVICES 4/28 - 5/23 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25441 | 001-4216-6720.000 | 210.00 | 0.00 | 210.00 |
| | | | Check Amount | 210.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37461 | 07/15/2014 | 9542 | ZARAGOZA SERGIO | 72.00 | 72.00 |
| | | Printed | UMPIRE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25447 | 001-4350-6590.000 | 72.00 | 0.00 | 72.00 |
| | | | Check Amount | 72.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37462 | 07/23/2014 | 10106 | HR DYNAMICS & PERFORMANCE MGNT | 6,800.00 | 6,800.00 |
| | | Printed | PROFESSIONAL SERVICE 7/06-7/19 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25478 | 001-4001-6720.000 | 6,800.00 | 0.00 | 6,800.00 |
| | | | Check Amount | 6,800.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37463 | 07/29/2014 | 0057-1 | AT & T INTERNET SERVICES | 73.00 | 73.00 |
| | | Printed | U-VERSE INTERNET SERV JUNE2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25488 | 001-4350-6390.000 | 73.00 | 0.00 | 73.00 |
| | | | Check Amount | 73.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37464 | 07/29/2014 | 9966 | AT & T LONG DISTANCE SERVICE | 80.78 | 80.78 |
| | | Printed | LONG DISTANCE PHONE SERVICE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25497 | 001-4025-6390.000 | 80.78 | 0.00 | 80.78 |
| | | | Check Amount | 80.78 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37465 | 07/29/2014 | 0057-2 | AT & T PHONE SERVICE | 2,042.58 | 2,042.58 |
| | | Printed | LAND-LINE & ALARM CIRCUIT JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25483 | 001-4025-6390.000 | 388.44 | 0.00 | 388.44 |
| | 25498 | 001-4501-6390.000 | 292.06 | 0.00 | 292.06 |
| | 25498 | 001-4020-6390.000 | 276.44 | 0.00 | 276.44 |
| | 25498 | 001-4350-6390.000 | 231.20 | 0.00 | 231.20 |
| | 25498 | 001-4025-6390.000 | 854.44 | 0.00 | 854.44 |
| | | | | Check Amount | 2,042.58 |
| 37466 | 07/29/2014 | 10123 | B & V GROUP CORPORATION | 763.44 | 763.44 |
| | | Printed | VEHICLE MAINTENANCE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25493 | 201-4425-6394.000 | 120.00 | 0.00 | 120.00 |
| 25494 | 001-4530-6394.000 | 176.41 | 0.00 | 176.41 |
| 25495 | 201-4425-6394.000 | 467.03 | 0.00 | 467.03 |
| | | | Check Amount | 763.44 |

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|---|---|---|---|---|---|
| 37467 | 07/29/2014 | 7019 | BUSINESS CARD | 9,056.77 | 9,056.77 |
| | | Printed | CREDIT CARD PAYMENT JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25481 | 001-4020-6080.000 | 197.58 | 0.00 | 197.58 |
| 25481 | 710-6010-6585.000 | 199.00 | 0.00 | 199.00 |
| 25481 | 001-4025-6375.000 | 2,610.55 | 0.00 | 2,610.55 |
| 25481 | 001-4502-6145.000 | 246.85 | 0.00 | 246.85 |
| 25481 | 001-4001-6391.000 | 4,220.73 | 0.00 | 4,220.73 |
| 25481 | 001-4020-6396.000 | 375.00 | 0.00 | 375.00 |
| 25481 | 001-4011-6391.000 | 608.48 | 0.00 | 608.48 |
| 25481 | 001-4365-6145.000 | 207.00 | 0.00 | 207.00 |
| 25481 | 001-4310-6585.000 | 391.58 | 0.00 | 391.58 |
| | | | Check Amount | 9,056.77 |

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|---|---|---|---|---|---|
| 37468 | 07/29/2014 | 4546 | CENTRAL BASIN MUNICIPAL WATER | 422.84 | 422.84 |
| | | Printed | RECYCLE WATER SERVICE JUNE2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25487 | 001-4410-6395.000 | 422.84 | 0.00 | 422.84 |
| | | | Check Amount | 422.84 |

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|---|---|---|---|---|---|
| 37469 | 07/29/2014 | 6096 | CLEAN SOURCE INC | 870.61 | 870.61 |
| | | Printed | CUSTODIAL SUPPLIES JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25492 | 001-4025-6015.000 | 870.61 | 0.00 | 870.61 |
| | | | Check Amount | 870.61 |

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|---|---|---|---|---|---|
| 37470 | 07/29/2014 | 10005 | DAPEER, ROSENBLIT & LITVAK | 231.46 | 231.46 |
| | | Printed | PROFESSIONAL SERVICES JUNE2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25480 | 510-4230-6755.000 | 231.46 | 0.00 | 231.46 |
| | | | Check Amount | 231.46 |

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|---|---|---|---|---|---|
| 37471 | 07/29/2014 | 8378 | GELDER WALT | 600.00 | 600.00 |
| | | Printed | CUDAHY SWAPMEET APR MAY JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25479 | 710-6012-6720.000 | 600.00 | 0.00 | 600.00 |
| | | | Check Amount | 600.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| 37472 | 07/29/2014 | 5710 | JADE FAMILY SERVICES | 6,093.14 | 6,093.14 |
| | | Printed | PARENTING CLASSES FEB MAR JUNE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25491 | 510-4643-6720.000 | 6,093.14 | 0.00 | 6,093.14 |
| | | | Check Amount | 6,093.14 |

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|---|---|---|---|---|---|
| 37473 | 07/29/2014 | 0197 | LA COUNTY SHERIFF'S DEPARTMENT | 290,563.16 | 290,563.16 |
| | | Printed | LAW ENFORCEMENT SERV MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25486 | 001-4501-6763.000 | 290,563.16 | 0.00 | 290,563.16 |
| | | | Check Amount | 290,563.16 |

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|---|---|---|---|---|---|
| 37474 | 07/29/2014 | 1978-1 | OFFICE DEPOT CREDIT PLAN | 530.42 | 530.42 |
| | | Printed | OFFICE SUPPLIES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25482 | 001-4018-6080.000 | 34.86 | 0.00 | 34.86 |
| 25482 | 001-4410-6140.000 | 37.27 | 0.00 | 37.27 |
| 25482 | 001-4155-6080.000 | 91.64 | 0.00 | 91.64 |
| 25482 | 001-4530-6080.000 | 36.46 | 0.00 | 36.46 |
| 25482 | 001-4020-6080.000 | 330.19 | 0.00 | 330.19 |
| | | | Check Amount | 530.42 |

| | | | | | |
|---|---|---|---|---|---|
| 37475 | 07/29/2014 | 9717 | PCAM, LLC | 15,136.38 | 15,136.38 |
| | | Printed | SHUTTLE SERVICE MAY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25502 | 251-4740-6780.000 | 15,136.38 | 0.00 | 15,136.38 |
| | | | Check Amount | 15,136.38 |

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|---|---|---|---|---|---|
| 37476 | 07/29/2014 | 2802 | SAM'S CLUB | 1,182.79 | 1,182.79 |
| | | Printed | CYF SNACK BAR SUPPLIES JUN2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25489 | 001-4310-6585.000 | 39.99 | 0.00 | 39.99 |
| 25489 | 001-4502-6520.000 | 48.27 | 0.00 | 48.27 |
| 25489 | 001-4001-6391.000 | 42.10 | 0.00 | 42.10 |
| 25489 | 001-4310-6585.000 | 641.25 | 0.00 | 641.25 |
| 25489 | 001-4365-6145.000 | 61.68 | 0.00 | 61.68 |
| 25489 | 001-4310-6389.000 | 292.13 | 0.00 | 292.13 |
| 25489 | 710-6010-6013.000 | 57.37 | 0.00 | 57.37 |
| | | | Check Amount | 1,182.79 |

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|---|---|---|---|---|---|
| 37477 | 07/29/2014 | 0070 | SOUTHERN CALIFORNIA EDISON | 383.51 | 383.51 |
| | | Printed | ELECTRICITY BILL | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25485 | 201-4420-6318.000 | 89.64 | 0.00 | 89.64 |
| 25485 | 001-4410-6318.000 | 278.14 | 0.00 | 278.14 |
| 25496 | 201-4420-6318.000 | 15.73 | 0.00 | 15.73 |
| | | | Check Amount | 383.51 |

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|---|---|---|---|---|---|
| 37478 | 07/29/2014 | 0071 | THE GAS COMPANY | 67.51 | 67.51 |
| | | Printed | GAS CHARGES JUNE 16 - JULY 16 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25501 | 001-4410-6380.000 | 67.51 | 0.00 | 67.51 |
| | | | | Check Amount | 67.51 |
| 37479 | 07/29/2014 | 7015 | THE UPS STORE #5461 | 148.00 | 148.00 |
| | | Printed | LIVE SCAN VOLUNTEERS JUNE 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25490 | 001-4015-6320.000 | 148.00 | 0.00 | 148.00 |
| | | | Check Amount | 148.00 |

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|---|---|---|---|---|---|
| 37480 | 07/29/2014 | 10026 | TRIMMING LAND COMPANY, INC. | 1,925.00 | 1,925.00 |
| | | Printed | TREE TRIMMING APRIL 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25484 | 201-4425-6785.000 | 1,125.00 | 0.00 | 1,125.00 |
| 25499 | 201-4425-6785.000 | 800.00 | 0.00 | 800.00 |
| | | | Check Amount | 1,925.00 |

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|---|---|---|---|---|---|
| 37481 | 07/29/2014 | 9452-2 | AICPA RENEWAL PROCESSING | 235.00 | 235.00 |
| | | Printed | AICPA MEMBERSHIP FY 2014/2015 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25522 | 001-4151-6386.000 | 235.00 | 0.00 | 235.00 |
| | | | Check Amount | 235.00 |

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|---|---|---|---|---|---|
| 37482 | 07/29/2014 | 9966 | AT & T LONG DISTANCE SERVICE | 86.95 | 86.95 |
| | | Printed | LONG DISTANCE CHARGES | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25516 | 001-4020-6390.000 | 46.39 | 0.00 | 46.39 |
| 25516 | 001-4350-6390.000 | 40.56 | 0.00 | 40.56 |
| | | | Check Amount | 86.95 |

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|---|---|---|---|---|---|
| 37483 | 07/29/2014 | 10123 | B & V GROUP CORPORATION | 160.00 | 160.00 |
| | | Printed | VECHILE MAINTENANCE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25512 | 001-4530-6394.000 | 150.00 | 0.00 | 150.00 |
| 25513 | 001-4530-6394.000 | 10.00 | 0.00 | 10.00 |
| | | | Check Amount | 160.00 |

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|---|---|---|---|---|---|
| 37484 | 07/29/2014 | 7019 | BUSINESS CARD | 33.07 | 33.07 |
| | | Printed | CREDIT CARD PAYMENT JULY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25515 | 201-4425-6750.000 | 33.07 | 0.00 | 33.07 |
| | | | Check Amount | 33.07 |

| | | | | | |
|---|---|---|---|---|---|
| 37485 | 07/29/2014 | 10122 | CHIQUETE CHRISTIAN | 196.00 | 196.00 |
| | | Printed | UMPIRE JULY 1-15, 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25503 | 001-4350-6590.000 | 196.00 | 0.00 | 196.00 |
| | | | Check Amount | 196.00 |

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|---|---|---|---|---|---|
| 37486 | 07/29/2014 | 0136 | CITY OF SOUTH GATE | 75.00 | 75.00 |
| | | Printed | SIGNAL MAINTENANCE JULY 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | 25509 | 253-4425-6150.000 | 75.00 | 0.00 | 75.00 |
| | | | | Check Amount | 75.00 |
| 37487 | 07/29/2014 | 2514-1 | COUNTY OF LOS ANGELES | 261.89 | 261.89 |
| | | Printed | ALLOCATION OF NET OPER COST | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25507 | 001-4020-6375.000 | 261.89 | 0.00 | 261.89 |
| | | | Check Amount | 261.89 |

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|---|---|---|---|---|---|
| 37488 | 07/29/2014 | 10072 | DEPARTMENT OF TOXIC SUBSTANCES | 150.00 | 150.00 |
| | | Printed | ANNUAL FEES HAZARDOUS WASTE | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25510 | 001-4410-6110.000 | 150.00 | 0.00 | 150.00 |
| | | | Check Amount | 150.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37489 | 07/29/2014 | 9980 | FERRER VICTOR | 23.90 | 23.90 |
| | | Printed | REIMBURSEMENT | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25506 | 001-4310-6585.000 | 23.90 | 0.00 | 23.90 |
| | | | Check Amount | 23.90 |

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|---|---|---|---|---|---|
| 37490 | 07/29/2014 | 10130 | GWMA | 5,000.00 | 5,000.00 |
| | | Printed | ANNUAL MEMBERSHIP FY 2014/2015 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25521 | 001-4210-6386.000 | 5,000.00 | 0.00 | 5,000.00 |
| | | | Check Amount | 5,000.00 |

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|---|---|---|---|---|---|
| 37491 | 07/29/2014 | 2378 | ITL, INC. | 1,823.68 | 1,823.68 |
| | | Printed | FUEL | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25517 | 001-4410-6040.000 | 342.35 | 0.00 | 342.35 |
| 25517 | 001-4020-6040.000 | 62.10 | 0.00 | 62.10 |
| 25517 | 001-4530-6040.000 | 488.18 | 0.00 | 488.18 |
| 25517 | 201-4425-6040.000 | 120.59 | 0.00 | 120.59 |
| 25518 | 710-6010-6585.000 | 40.02 | 0.00 | 40.02 |
| 25518 | 001-4530-6040.000 | 254.59 | 0.00 | 254.59 |
| 25518 | 510-4230-6040.000 | 51.36 | 0.00 | 51.36 |
| 25518 | 001-4410-6040.000 | 174.48 | 0.00 | 174.48 |
| 25518 | 201-4425-6040.000 | 290.01 | 0.00 | 290.01 |
| | | | Check Amount | 1,823.68 |

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|---|---|---|---|---|---|
| 37492 | 07/29/2014 | 0392 | LEAGUE OF CALIFORNIA CITIES | 931.50 | 931.50 |
| | | Printed | ANNUAL MEMBERSHIP DUES 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25508 | 001-4001-6312.000 | 931.50 | 0.00 | 931.50 |
| | | | Check Amount | 931.50 |

| | | | | | |
|---|---|---|---|---|---|
| 37493 | 07/29/2014 | 10129 | RODRIGUEZ JUAN RAMON | 200.00 | 200.00 |
| | | Printed | FACE PAINTING 4TH JULY EVENT | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25520 | 710-6010-6585.000 | 200.00 | 0.00 | 200.00 |

| Check Number | Check Date / Void/Stop Date | Vendor# / Status | Vendor Name / Check Description | Gross / Discount | Amount |
|---|---|---|---|---|---|
| | | | Check Amount | 200.00 | |
| 37494 | 07/29/2014 | 0070 | SOUTHERN CALIFORNIA EDISON | 12,977.84 | 12,977.84 |
| | | Printed | ELECTRICITY BILL | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25519 | 201-4420-6318.000 | 169.70 | 0.00 | 169.70 |
| 25519 | 350-4430-6318.000 | 6,723.11 | 0.00 | 6,723.11 |
| 25519 | 001-4410-6318.000 | 6,085.03 | 0.00 | 6,085.03 |
| | | | Check Amount | 12,977.84 |

| | | | | | |
|---|---|---|---|---|---|
| 37495 | 07/29/2014 | 0071 | THE GAS COMPANY | 116.76 | 116.76 |
| | | Printed | GAS CHARGES JUNE 13- JULY 15 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25511 | 001-4020-6380.000 | 35.67 | 0.00 | 35.67 |
| 25514 | 001-4410-6380.000 | 81.09 | 0.00 | 81.09 |
| | | | Check Amount | 116.76 |

| | | | | | |
|---|---|---|---|---|---|
| 37496 | 07/29/2014 | 9707 | VELOZ ALBERTO | 342.00 | 342.00 |
| | | Printed | UMPIRE JULY 1-15, 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25505 | 001-4350-6590.000 | 342.00 | 0.00 | 342.00 |
| | | | Check Amount | 342.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37497 | 07/29/2014 | 8316 | VELOZ RAMIRO | 342.00 | 342.00 |
| | | Printed | UMPIRE JULY 1-15, 2014 | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25504 | 001-4350-6590.000 | 342.00 | 0.00 | 342.00 |
| | | | Check Amount | 342.00 |

| | | | | | |
|---|---|---|---|---|---|
| 37498 | 07/30/2014 | 10131 | L.A. COUNTY REGIONAL PARK | 1,245.04 | 1,245.04 |
| | | Printed | ACQUISITION REFUND -ADMIN COST | 0.00 | |

| Ref# | GL Number | Gross | Discount | Amount |
|---|---|---|---|---|
| 25523 | 280-0000-1133.000 | 1,245.04 | 0.00 | 1,245.04 |
| | | | Check Amount | 1,245.04 |

| | | | |
|---|---|---|---|
| **Total Checks:** | **137** | **Bank Total(excluding void checks):** | **720,167.95** |
| **Total Checks:** | **137** | **Grand Total(excluding void checks):** | **720,167.95** |

CITY OF CUDAHY

Cash and Investment Report by Fund July, 2014

| | | June, 2014 | Receipts | Disbursements | July, 2014 |
|---|---|---|---|---|---|
| 001 | General Fund | 3,913,136.23 | 471,300.02 | 781,449.52 | 3,602,986.73 |
| 040 | Drug Assets Seizure Fund | 40,732.56 | 20.43 | | 40,752.99 |
| 201 | State Gas Tax | 1,045,124.14 | 80,478.89 | 34,654.16 | 1,090,948.87 |
| 240 | Prop 1 B - Local Street Improv. | 464,296.04 | 225.54 | | 464,521.58 |
| 251 | Prop C | 139,059.43 | 25,696.58 | 36,761.67 | 127,994.34 |
| 252 | Prop A | 445,522.81 | 28,840.37 | 882.50 | 473,480.68 |
| 253 | Measure R | 353,152.44 | 17,898.62 | 5,588.91 | 365,462.15 |
| 255 | TDA | 407.45 | | | 407.45 |
| 257 | AQMD | 27,558.03 | 11.52 | 1,694.86 | 25,874.69 |
| 260 | Used Oil | 13,550.96 | 6.58 | | 13,557.54 |
| 261 | California Beverage Container | 6,712.98 | 3.26 | | 6,716.24 |
| 265 | Recycling Grant | 14,194.26 | 6.90 | | 14,201.16 |
| 270 | C.O.P.S | 100,055.70 | 48.60 | | 100,104.30 |
| 280 | County Park Bond | - | | 1,245.04 | (1,245.04) |
| 300 | CAL Home | 88,508.42 | 54.20 | | 88,562.62 |
| 350 | Street Lighting fund | 66,833.12 | 430.61 | 12,294.16 | 54,969.57 |
| 510 | CDBG | (3,135.45) | 14,834.00 | 18,537.92 | (6,839.37) |
| 610 | Successor Agency | 2,788,469.28 | 42,867.70 | 2,325.90 | 2,829,011.08 |
| 710 | Youth Foundation | 36,452.87 | 35,780.02 | 28,489.16 | 43,743.73 |
| 720 | Senior's Account | 407.00 | | | 407.00 |
| 730 | Refuse Assessment | - | 1,986.56 | | 1,986.56 |
| | | 9,541,038.27 | 720,490.40 | 923,923.80 | 9,337,604.87 |
| | LAIF- CITY | 6,406,725.43 | (796,682.76) | | 5,610,042.67 |
| | Wells Fargo | 3,134,312.90 | 1,517,173.16 | 923,923.80 | 3,727,562.26 |
| | TOTAL | 9,541,038.33 | 720,490.40 | 923,923.80 | 9,337,604.93 |

| | |
|---|---|
| Total cash disbursements per July Demand and Payroll Reports | |
| AP disbursements | 720,167.95 |
| Payroll - July 10, 2014 | 141,618.93 |
| Payroll - July 26, 2014 | 60,974.97 |
| Add: Total Bank charges in July, 2014 | 1,010.71 |
| Add: Misc charges paid by credit card | 151.24 |
| Total Cash Disbursements per July Cash & Investment Report | 923,923.80 |

Item Number

**10C**

# STAFF REPORT

**Date:** September 16, 2014

**To:** Honorable Mayor & Council Members

**From:** Jose E. Pulido, City Manager
By: Steven Dobrenen, Finance Director

**Subject:** **Local Agency Investment Fund (LAIF) for the Month of July 2014**

## RECOMMENDATION

The City Council is requested to approve the Local Agency Investment Fund (LAIF) report for the month of July 2014.

**LOCAL AGENCY INVESTMENT FUND**

General Account - City #98-19-225

| | | |
|---|---|---|
| **Beginning Balance as of** | **July 1, 2014** | **$6,406,725.43** |
| **Ending Balance as of** | **July 31, 2014** | **$5,610,042.67** |

## BACKGROUND

The Local Agency Investment Fund (LAIF), is a voluntary program created by statute; began in 1977 as an investment alternative for California's local governments and special districts and it continues today under Treasurer Bill Lockyer's administration. The enabling legislation for the LAIF is Section 16429.1 et seq. of the California Government Code.

This program offers local agencies the opportunity to participate in a major portfolio, which invests hundreds of millions of dollars, using the investment expertise of the State Treasurer's Office investment staff at no additional cost to the taxpayer.

The LAIF is part of the Pooled Money Investment Account (PMIA). The PMIA began in 1955 and oversight is provided by the Pooled Money Investment Board (PMIB) and an in-house Investment Committee. The PMIB members are the State Treasurer, Director of Finance, and State Controller.

All securities are purchased under the authority of Government Code Section 16430 and 16480.4. The State Treasurer's Office takes delivery of all securities purchased on a delivery versus payment basis using a third party custodian.

## ANALYSIS

Cudahy Municipal Code Section 3.04.080 indicates "Except as otherwise provided, no warrant shall be drawn or evidence of indebtedness issued unless there shall be at the time sufficient money in the treasure legally applicable to the payment of the same." This report in conjunction with the Demands and Payroll for the Month of July 2014 including Investment Report by Fund for the Month of July 2014 demonstrate the sufficiency of fund available to pay demands and payroll.

## CONCLUSION

This ending balance in the Local Agency Investment Fund may be relied upon when determining whether or not there is sufficient funds available to pay demand and payroll.

## FINANCIAL IMPACT

None

## ATTACHMENTS

None

Item Number

**12A**

# STAFF REPORT

**Date:** September 16, 2014

**To:** Honorable Mayor & Council Members

**From:** Jose E. Pulido, City Manager
By: Michael Allen, Acting Community Development and Services Director

**Subject:** **ORDINANCE NO. 639 ADOPTING LOS ANGELES COUNTY BUILDING AND FIRE CODES**

## RECOMMENDATION

The City Council is requested to approve the attached Ordinance No. 639 and amendment to the Cudahy Municipal Code (Attachment 1), for first reading, which adopts: the Los Angeles County Titles 26, 27, 28, 29, 30, 31 and 32.

## BACKGROUND

The City of Cudahy (the "City") traditionally adopts the State of California ("State") Building and Fire Codes as modified by Los Angeles County local amendments by reference as its local City regulations. Most recently, the City adopted the 2011 Los Angeles Building and Fire Codes by reference.

Health and Safety Code section 17958 mandates that the California Standards Commission adopt and publish the California Building Standards Code (Title 24 of the California Code of Regulations). This process occurs every three (3) years. The State amended the foundational model building code entitled the "2012 International Building Code" to establish the "2013 California Building Code." The 2013 California Building Code, codified in California Code of Regulations, Title 24, became effective statewide on January 1, 2014. The 2014 Los Angeles County Code has additional requirements for the local region. Health and Safety Code sections 17958.5 and 18941.5 authorize cities and counties to modify the California Building Code by adopting more restrictive standards and modifications if such standards and modifications are accompanied by express findings that

they are reasonably necessary because of the local climactic, geological, or topographical conditions. The following is the basis of the 2014 Los Angeles County Building Codes:

| | |
|---|---|
| 2012 International Building Code | Base Document |
| 2013 California Building Code | State Modification of International Code |
| 2014 Los Angeles County Code | County Amendment to State Code |

The Los Angeles County Board of Supervisors adopted the 2014 Los Angeles County Building, Residential, Plumbing, Mechanical, Electrical, and Green Building Codes amending Titles 26, 27, 28, 29, 30 and 31 of the Los Angeles County Code at its November 26, 2013 meeting. The proposed ordinance would enable the City to adopt the Los Angeles County Building Codes by reference and implement these safer measures as soon as possible.

Similarly, the proposed ordinance would allow the City to adopt the 2014 Consolidated Fire Protection District of Los Angeles County Fire Code ("2014 County Fire Code"), which was adopted by the Los Angeles County Board of Supervisors on March 25, 2014, acting as governing body of the Consolidated Fire Protection District of Los Angeles County. The 2014 County Fire Code adopted, by reference, the 2013 California Fire Code and 2012 International Fire Code, with certain local amendments. The City lies within the jurisdictional boundaries of the Consolidated Fire Protection District of Los Angeles County in the East Region. The following is the basis of the 2014 Los Angeles County Fire Code:

| | |
|---|---|
| 2012 International Fire Code | Base Document |
| 2013 California Fire Code | Amended by the State |
| 2014 Los Angeles Fire Code | Amended by the County |

**ANALYSIS**

Attachment 1 of this report includes all proposed amendments to the Cudahy Municipal Code, as well as all proposed 2014 Los Angeles County amendments to the California 2013 Building, Residential, Plumbing, Mechanical, Electrical, Green Building Standards and Fire Codes. Existing requirements of the Municipal Code are continued except where specifically amended or deleted. The following is a summary of the codes proposed for adoption.

A. 2014 Los Angeles County Title 26 Building Code Amendments to the 2013 California Building Code.

The 2014 Los Angeles County amends the 2013 California Building Code, which is based on the International Building Code, 2012 Edition, as published by the International Code Council.

B. 2014 Los Angeles County Title 30 Residential Code Amendments to the 2013 California Residential Code.

The 2014 Los Angeles County amends the 2013 California Residential Code, which is based on the International Residential Code, 2012 Edition, as published by the International Code Council.

C. 2014 Los Angeles County Title 28 Plumbing Code Amendments to the 2013 California Plumbing Code.

The 2014 Los Angeles County amends the 2013 California Plumbing Code, which is based on the Uniform Plumbing Code, 2012 Edition, as published by the International Association of Plumbing and Mechanical Officials.

D. 2014 Los Angeles County Title 29 Mechanical Code Amendments to the 2013 California Mechanical Code.

The 2014 Los Angeles County amends the 2013 California Mechanical Code, which is based on the Uniform Mechanical Code, 2012 Edition, as published by the International Association of Plumbing and Mechanical Officials.

E. 2014 Los Angeles County Title 27 Electrical Code Amendments to the 2013 California Electrical Code.

The 2014 Los Angeles County amends the 2013 California Electrical Code, which is based on the National Electrical Code, 2011 Edition, as published by the National Fire Protection Association.

F. 2014 Los Angeles County Title 31 Building Code Amendments to the 2013 California Green Building Standards Code.

The 2014 Los Angeles County amends the 2013 California Green Building Standards Code, which is established and published by order of the California Legislature.

G. 2014 Los Angeles County Title 32 Fire Code California Amendments to the 2013 California Fire Code.

The 2014 Los Angeles County amends the 2013 California Fire Code, which is based on the International Fire Code, 2012 Edition as published by the International Code Council.

## CONCLUSION

Pursuant to sections 17922, 17958, 17958.5 and 17958.7 of the Health and Safety Code, the City may adopt the provisions of the California Buildings Standards Code and District Fire Code, with certain amendments to the provisions of the codes which are reasonably necessary to protect the health, wealth and safety of citizens of Cudahy because of local climatic, geological and topographical conditions. Under Health and Safety Code section 13869.7(c), local amendments containing more restrictive building standards are not effective within the jurisdictional boundaries of the City unless ratified by the City Council. Accordingly, the proposed amendment adopts the 2014 Los Angeles County Fire Code and makes appropriate findings substantiating such amendments based upon the City's climatic, geological and topographical conditions.

## FINANCIAL IMPACT

The City Clerk is required to have a complete set of codes available for public review. The cost of a set of codes is approximately $1,200.00 from the General Fund.

## ATTACHMENTS

ATTACHMENT ONE: DRAFT ORDINANCE NO. 639

ATTACHMENT TWO: MANDATORY FINDINGS

# ORDINANCE NO. 639

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CUDAHY ADOPTING BY REFERENCE, PURSUANT TO GOVERNMENT CODE SECTION 50022.2, THE CALIFORNIA BUILDING CODE AS AMENDED BY TITLE 26 OF THE 2014 LOS ANGELES COUNTY CODE, THE CALIFORNIA ELECTRICAL CODE AS AMENDED BY TITLE 27 OF THE 2014 LOS ANGELES COUNTY CODE, THE CALIFORNIA PLUMBING CODE AS AMENDED BY TITLE 28 OF THE 2014 LOS ANGELES COUNTY CODE, THE CALIFORNIA MECHANICAL CODE AS AMENDED BY TITLE 29 OF THE 2014 LOS ANGELES COUNTY CODE, THE CALIFORNIA RESIDENTIAL CODE AS AMENDED BY TITLE 30 OF THE 2014 LOS ANGELES COUNTY CODE, THE CALIFORNIA GREEN BUILDING STANDARDS CODE AS AMENDED BY TITLE 31 OF THE 2014 LOS ANGELES COUNTY CODE, THE CALIFORNIA FIRE CODE AS AMENDED BY TITLE 32 OF THE 2014 LOS ANGELES COUNTY CODE AND ADOPTING LOCAL AMENDMENTS THERETO.**

WHEREAS, Government Code section 50022.9 permits the City of Cudahy (the "City") to adopt, by reference, Los Angeles County codes as the City's codes; and

WHEREAS, the California Building Standards Code (the "California Building Code") establishes statewide codes and regulations for building construction and fire safety and is published every three years by order of the California Legislature; and

WHEREAS, the 2013 California Building Code is based upon the International Code Council's ("ICC") 2012 International Building Code; and

WHEREAS, the 2013 California Building Code was published on July 1, 2013 and became effective on January 1, 2014; and

WHEREAS, California Health & Safety Code, sections 17958.5 and 18941.5 authorize cities and counties to modify the California Building Code by adopting more restrictive standards and modifications if such standards and modifications are accompanied by express findings that they are reasonably necessary because of local climatic, geological or topographical conditions, and

WHEREAS, on November 26, 2013, the Los Angeles County adopted more restrictive standards and modifications to the 2013 California Building Codes, as memorialized in the 2014 Los Angeles County Building Codes (Building Code, Residential Code, Electrical Code, Mechanical, Plumbing Code, and Green Building Code); and

WHEREAS, the City has historically adopted the Los Angeles County Codes with their local amendments in order to establish a uniformity of standards which serve to minimize conflict and confusion in addressing the community's public health needs; and

WHEREAS, the City Council finds that these local climatic, geological, or topographical conditions include, but are not limited to, the following:

1. The City is subject to relatively low amounts of precipitation, very low humidity levels, and extremely high temperatures. These climatic conditions are conducive to the spread of drought conditions and fires;

2. The warm, dry climate in the City is conducive to the construction and maintenance of swimming pools, which create a higher probability of child drownings;

3. The City is proximate to the San Andreas Fault and additional earthquake faults in the area. The height limits on accessory structures are reasonably necessary because such structures are not otherwise subject to a building permit and design review, and as a result they are not subjected review for compliance with the Code's seismic structural building standards.

WHEREAS, on March 25, 2014, the Los Angeles County Board of Supervisors, acting as the governing body of the Consolidated Fire Protection District of Los Angeles County (the "District") adopted amendments to the District Fire Code, by adopting, by reference, the 2013 California Fire Code and the 2012 International Fire Code, with certain changes and amendments;

WHEREAS, the City Council does hereby find that there is a need to enforce the most current editions of the District Fire Code with its more restrictive local amendments;

WHEREAS, the City lies within the jurisdictional boundaries of the District and is required, under its agreement with District for fire protection services, to adopt the District Fire Code;

WHEREAS, pursuant to sections 17922, 17958, 17958.5 and 17958.7 of the Health and Safety Code, the City may adopt the provisions of the California Buildings Standards Code and District Fire Code, with certain amendments to the provisions of the codes which are reasonably necessary to protect the health, wealth and safety of citizens of Cudahy because of local climatic, geological and topographical conditions;

WHEREAS, pursuant to Health and Safety Code section 13869.7(c), local amendments containing more restrictive building standards are not effective within the jurisdictional boundaries of the City unless ratified by the City Council; and

WHEREAS, the City Council finds that the adoption of the District Fire Code will provide building, fire, and planning officials with further clarification of the intent and

applicability of the California Codes when presented with a variety of construction issues.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF CUDAHY DOES ORDAIN AS FOLLOWS:**

**SECTION 1.** Section 15.04.010 of Chapter 15.04 (Building Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.04.010 Adoption of the 2013 California building code as amended by Title 26 of the 2014 Los Angeles County Building Code.**

(1) The 2013 California Building Code as amended by Title 26 of the 2014 Los Angeles County Building Code, together with their appendices, which regulate the erection, construction, enlargements, alteration, repair, moving, removal, conversion, demolition, occupancy, use, equipment, height, area, security, abatement, and maintenance of buildings or structures within the city, provide for the issuance of permits and collection of fees therefor, and provide for penalties for violation thereto, are hereby adopted by reference, and conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with exceptions, deletions, additions, and amendments thereto as set forth in this subchapter.

**SECTION 2.** Section 15.04.020 of Chapter 15.04 (Building Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.04.020 Definitions.**

Whenever any of the names or terms defined in this section are used in the building code adopted in section 15.04.010, each name or term shall be deemed and construed to have the meaning ascribed to it in this section as follows:

(1) "Board of Appeals" shall mean the Planning Commission.

(2) "Building department" shall mean the building division of the City of Cudahy.

(3) "City" shall mean the City of Cudahy.

(4) "County," "County of Los Angeles," or "unincorporated territory of the County of Los Angeles" shall mean the City of Cudahy.

(5) "County engineer" shall mean the City engineer of the City of Cudahy.

(6) “Electrical code” shall mean the electrical code adopted by CMC section 15.08.010.

(7) “Fire code” shall mean the fire code adopted by CMC section 8.08.010.

(8) “General fund” shall mean the city treasury of the City of Cudahy.

(9) “Green building standards code” shall mean the green building standard code adopted by CMC section 15.32.010.

(10) “Health code” or “Los Angeles County Health Code” shall mean the health code adopted by CMC section 8.04.010.

(11) “Mechanical code” shall mean the mechanical code adopted by CMC section 15.16.010.

(12) “Plumbing code” shall mean the plumbing code adopted by CMC section 15.12.010.

(13) “Residential code” shall mean the residential code adopted by CMC section 15.29.010.

**SECTION 3.** Section 15.04.050 of Chapter 15.04 (Building Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.04.050 Penalty.**

Every person violating any provision of the 2013 California Building Code as amended by Title 26 of the 2014 Los Angeles Building Code and appendices, adopted by reference by section 15.04.010 or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars ($1,000.00) or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 4.** Section 15.08.010 of Chapter 15.08 (Electrical Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.08.010. Adoption of the 2013 California Electrical Code as amended by Title 27 of the 2014 Los Angeles County Electrical Code.**

(1) The 2013 California Electrical Code as amended by Title 27 of the 2014 Los Angeles County Electrical Code, which provide minimum requirements and standards for the protection of the public health, safety and welfare by regulating the installation or alteration of electrical wiring, equipment, materials, and workmanship in the city, provides for the issuance of permits and collection of

fees therefor and provides penalties for the violations thereof, with all changes and amendments thereto, is hereby adopted by reference, and all conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with exceptions, deletions, additions, and amendments thereto as set forth in this subchapter.

**SECTION 5.** Section 15.08.050 of Chapter 15.08 (Electrical Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.08.050 Penalty.**

Every person violating any provision of the 2013 California Electrical Code as amended by Title 26 of the 2014 Los Angeles County Electrical Code and appendices, adopted by reference by section 15.08.010, or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 6.** Section 15.12.010 of Chapter 15.12 (Plumbing Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.12.010 Adoption of the 2013 California Plumbing Code as amended by Title 28 of the 2014 Los Angeles County Plumbing Code.**

(1) The 2013 California Plumbing Code as amended by Title 28 of the 2014 Los Angeles County Plumbing Code, which provide minimum requirements and standards for the protection of the public health, safety and welfare by regulating the installation or alteration of plumbing and drainage, materials, venting, wastes, traps, interceptors, water systems, sewers, gas piping, water heaters and other related products, and workmanship in the city, provide for the issuance of permits and collection of fees therefor, and provide for penalties for the violations thereof, with certain changes and amendments thereto, are hereby adopted by reference, and conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to

the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with the exceptions, deletions, additions, and amendments thereto as set forth in this subchapter.

**SECTION 7.** Section 15.12.040 of Chapter 15.12 (Plumbing Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.12.040 Penalty.**

Every person violating any provision of the 2013 California Plumbing Code as amended by Title 28 of the 2014 Los Angeles County Plumbing Code and appendices, adopted by reference by section 15.12.010, or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 8.** Section 15.16.010 of Chapter 15.08 (Mechanical Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.16.010 Adoption of the 2013 California Mechanical Code as amended by Title 29 of the 2014 Los Angeles County Mechanical Code.**

(1) The 2013 California Mechanical Code as amended by Title 29 of the 2014 Los Angeles County Mechanical Code, which regulate and control the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use or maintenance of heating, venting, cooling, refrigeration systems, or other miscellaneous heat-producing appliances in the City, provides for the issuance of permits and collection of fees therefor and provides for penalties for the violation thereof, with certain changes and amendments thereto, is hereby adopted by reference, and all conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with the exceptions, deletions, additions, and amendments thereto as set forth in this subchapter.

**SECTION 9.** Section 15.16.030 of Chapter 15.16 (Mechanical Code) of Title 15 (Buildings and Construction) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.16.030 Penalty.**

Every person violating any provision of the 2013 California Mechanical Code as amended by Title 29 of the 2014 Los Angeles County Mechanical Code and appendices, adopted by reference by section 15.16.010, or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 10.** Section 15.29.10 of Chapter 15.29 (Residential Code) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.29.010 Adoption of the 2013 California Residential Code as amended by Title 30 of the 2014 Los Angeles County Residential Code.**

(1) The 2013 California Residential Code as amended by Title 30 of the 2014 Los Angeles County Residential Code, together with their appendices, which regulate the erection, construction, enlargements, alteration, repair, moving, removal, conversion, demolition, occupancy, use, equipment, height, area, security, abatement, and maintenance of residential buildings or structures within the City, provide for the issuance of permits and collection of fees therefore, and provide for penalties for violation thereto, are hereby adopted by reference, and conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with exceptions, deletions, additions, and amendments thereto as set forth in this subchapter.

**SECTION 11.** Section 15.29,020 of Chapter 15.29 (Residential Code) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.29.020 Definitions.**

Whenever any of the names or terms defined in this section are used in the residential code adopted in section 15.29.010, each name or term shall be deemed and construed to have the meaning ascribed to it this section as follows:

(1) "Board of Appeals" shall mean the Planning Commission.

(2) “Building department” shall mean the building division of the City of Cudahy.

(3) “City” shall mean the City of Cudahy.

(4) “County,” “County of Los Angeles,” or “unincorporated territory of the County of Los Angeles” shall mean the City of Cudahy.

(5) “County engineer” shall mean the City engineer of the City of Cudahy.

(6) “Electrical code” shall mean the electrical adopted by CMC section 15.08.010.

(7) “Fire code” shall mean the fire code adopted by CMC section 8.08.010.

(8) “General fund” shall mean the city treasury of the City of Cudahy.

(9) “Green building standards code” shall mean the green building standard code adopted by CMC section 15.32.010.

(10) “Health code” or “Los Angeles County Health Code” shall mean the health code adopted by CMC section 8.04.010.

(11) “Mechanical code” shall mean the mechanical code adopted by CMC section 15.16.010.

(12) “Plumbing code” shall mean the plumbing code adopted by CMC section 15.12.010.

**SECTION 12.** Section 15.29.030 of Chapter 15.29 (Residential Code) of the Cudahy Municipal Code is hereby amended to read as follows:

Section **15.29.030 Penalty.**

Every person violating any provision of the 2013 California Residential Code as amended by Title 30 of the 2014 Los Angeles County Residential Code and appendices, adopted by reference by section 15.29.010 or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 13.** Section 15.32.010 of Chapter 15.32 (Green Building Code) of the Cudahy Municipal Code hereby amended to read as follows:

**Section 15.32.010 Adoption of the 2013 California Green Building Standards Code as amended by Title 30 of the 2014 Los Angeles County Green Building Standards Code**

(1) The 2013 California Green Building Standards Code as amended by Title 31 of the 2014 Los Angeles County Green Building Standards Code, together with their appendices, which regulate the erection, construction, enlargements, alteration, repair, moving, removal, conversion, demolition, occupancy, use,

equipment, height, area, security, abatement, and maintenance of buildings or structures planning, design, operation, construction, use and occupancy of every newly constructed building or structure within the City, provide for the issuance of permits and collection of fees therefore, and provide for penalties for violation thereto, are hereby adopted by reference, and conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with exceptions, deletions, additions, and amendments thereto as set forth in this subchapter.

**SECTION 14.** Section 15.32.020 of Chapter 15.32 (Green Building Code) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.32.020 Definitions.**

Whenever any of the names or terms defined in this section are used in the residential code adopted in section 15.28.010, each name or term shall be deemed and construed to have the meaning ascribed to it this section as follows:

(1) "Board of Appeals" shall mean the Planning Commission.

(2) "Building department" shall mean the building division of the City of Cudahy.

(3) "City" shall mean the City of Cudahy.

(4) "County," "County of Los Angeles," or "unincorporated territory of the County of Los Angeles" shall mean the City of Cudahy.

(5) "County engineer" shall mean the City engineer of the City of Cudahy.

(6) "Electrical code" shall mean the electrical adopted by CMC section 15.08.010.

(7) "Fire code" shall mean the fire code adopted by CMC section 8.08.010.

(8) "General fund" shall mean the city treasury of the City of Cudahy.

(9) "Health code" or "Los Angeles County Health Code" shall mean the health code adopted by CMC section 8.04.10

(10) "Mechanical code" shall mean the mechanical code adopted by CMC section 15.16.010.

(11) "Plumbing code" shall mean the plumbing code adopted by CMC section 15.12.010

(12) "Residential code" shall mean the residential code adopted by CMC section 15.29.010

**SECTION 15.** Section 15.32.030 of Chapter 15.32 (Green Building Code) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 15.32.030 Penalty.**

Every person violating any provision of the 2013 California Green Building Standards Code as amended by Title 31 of the 2014 Los Angeles Green Building Standards Code and appendices, adopted by reference by section 15.32.010 or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 16.** Section 8.08.010 of Chapter 8.08 (Fire Code) of the Cudahy Municipal Code is hereby amended to read as follows:

Section 8,08010 **Adoption of the 2013 California Fire Code as amended by title 32 of the 2014 Los Angeles County Fire Code.**

(1) The 2013 California Fire Code as amended by Title 32 of the 2014 Los Angeles County Fire Code, together with their appendices, are hereby adopted by reference, and conflicting ordinances are hereby repealed.

(2) All of the regulations, provisions, conditions, and terms of said codes, together with their appendices, one copy of which will be on file and accessible to the public for inspection at the City Clerk's office, are hereby referred to, adopted and made part of this chapter as if fully set forth in this chapter with exceptions, deletions, additions, and amendments thereto as set forth in this subchapter

**SECTION 17.** Section 8.08.040 of Chapter 8.08 (Fire Code) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 8.08.040 Penalty.**

Every person violating any provision of the 2013 California Fire Code as amended by Title 26 of the 2014 Los Angeles Building Code and appendices, adopted by reference by section 8.08.010 or of any permit or license granted thereunder, or any rules or regulations promulgated pursuant thereto, is guilty of a misdemeanor. Upon conviction thereof he or she shall be punishable by a fine not to exceed one thousand dollars ($1,000.00) or imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of such penalty for any violation shall not excuse the violation or permit it to continue. Each day that a violation occurs shall constitute a separate offense.

**SECTION 18.** Section 8.08.050 of Chapter 8.08 (Fire Code) of the Cudahy Municipal Code is hereby amended to read as follows:

**Section 8.08.050 List of Infractions.**

In accordance with section 8.08.010, violations, as set forth Chapter 51 of Title 32 of the Los Angeles Code shall be deemed infractions

**SECTION 19.** Chapter 8.08 (Fire Code) of the Cudahy Municipal Code is amended by the addition of Section 8.08.060, which shall read as follows

**Section 8.8.060 Definitions.**

Whenever any of the names or terms defined in this section are used in the building code adopted in section 8.08.010, each name or term shall be deemed and construed to have the meaning ascribed to it in this section as follows:

(1) "Board of Appeals" shall mean the Planning Commission.

(2) "Building department" shall mean the building division of the City of Cudahy.

(3) "City" shall mean the City of Cudahy.

(4) "County," "County of Los Angeles," or "unincorporated territory of the County of Los Angeles" shall mean the City of Cudahy.

(5) "County engineer" shall mean the City engineer of the City of Cudahy.

(6) "Electrical code" shall mean the electrical code adopted by CMC section 15.08.010.

(7) "Fire code" shall mean the fire code adopted by CMC section 8.08.010.

(8) "General fund" shall mean the city treasury of the City of Cudahy.

(9) "Green building standards code" shall mean the green building standard code adopted by CMC section 15.32.010.

(10) "Health code" or "Los Angeles County Health Code" shall mean the health code adopted by CMC section 8.04.010.

(11) "Mechanical code" shall mean the mechanical code adopted by CMC section 15.16.010.

(12) "Plumbing code" shall mean the plumbing code adopted by CMC section 15.12.010.

(13) "Residential code" shall mean the residential code adopted by CMC section 15.29.010.

**SECTION 20.** The City Council hereby makes each finding of reasonable necessity for modifications as stated separately for each such modification as identified in Los Angeles County Titles 26, 27, 28, 29, 30, 31 and 32. These modifications to the California Building Standards Codes, incorporating the uniform codes, are reasonably necessary due to the local climate, characterized by hot, dry summers and the high potential for seismic activity which make structures particularly vulnerable to rapidly spreading fires and structural damage.

**SECTION 21.** Severability. Should any section, subsection, clause, or provision of this Ordinance for any reason be held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this Ordinance; it being hereby expressly declared that this Ordinance, and each section, subsection, sentence, clause, and phrase hereof would have been prepared, proposed, approved, and ratified irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid or unconstitutional.

**SECTION 22.** This Ordinance shall become effective thirty (30) calendar days from its adoption, and shall apply to all projects submitted for plan check on or after that date.

**SECTION 23.** This Ordinance has been determined to be exempt from the California Environmental Quality Act ("CEQA") in accordance with section 15061(b)(3) of the CEQA Guidelines because this Ordinance merely changes the regulatory framework relating to building and safety, is purely administrative in nature, and has no potential for causing a significant effect on the environment.

**SECTION 24.** The City Clerk shall certify to the passage and adoption of this Ordinance and shall cause it to be posted according to law.

**SECTION 25.** The City Clerk shall file a certified copy of this Ordinance with the California Building Standards Commission.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council of the City of Cudahy on this ___ day of _____, 2014.

_____
Chris Garcia, Mayor

ATTEST

_____
Donna Schwartz
Interim City Clerk

APPROVED AS TO FORM

_____
Isabel Birrueta
Assistant City Attorney

STATE OF CALIFORNIA )
COUNTY OF LOS ANGELES ) SS:
CITY OF CUDAHY )

I, Donna Schwartz, Interim City Clerk of the City of Cudahy, hereby certify that this Ordinance was introduced at a regular meeting of the City Council of the City of Cudahy on _____ day of _____, 2014, and adopted and passed at a regular meeting of the City Council of the City of Cudahy held on the _____day of_____, 2014, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donna Schwartz
Interim City Clerk

## ANALYSIS

This ordinance repeals those provisions of Title 26 - Building Code of the Los Angeles County Code, which had incorporated portions of the 2010 Edition of the California Building Code by reference and replaces them with provisions incorporating portions of the 2013 California Building Code, published by the California Building Standards Commission, by reference, with certain changes and modifications.

State law requires that the County's Building Code contain the same requirements as are contained in the building standards published in the most recent edition of the California Building Code. State law allows the County to change or modify these requirements only if it determines that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions.

The changes and modifications to requirements contained in the building standards published in the 2013 California Building Code which are contained in this ordinance are based upon express findings, contained in the ordinance, that such changes are reasonably necessary due to local climatic, geological, or topographical conditions.

This ordinance also makes certain modifications to the administrative provisions of Title 26 and to certain chapters of Title 26 that relate to subjects not covered by the California Building Code.

JOHN F. KRATTLI
County Counsel

By Carole B. Suzuki
CAROLE B. SUZUKI
Deputy County Counsel
Public Works Division

CBS:gjv

Requested: 07/08/13
Revised: 10/23/13

HOA.991471.2

**ORDINANCE NO. _____**

An ordinance amending Title 26 – Building Code of the Los Angeles County Code, by adopting the 2013 California Building Code, by reference, with certain changes and modifications, and making other revisions thereto.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Sections 119.1.2 through 119.1.14 of Chapter 1, Chapters 2 through 35, and Appendices C, I, and J, which incorporate by reference and modify portions of the 2010 California Building Code, are hereby repealed.

**SECTION 2.** Chapter 1 is hereby amended to read as follows:

**100 ADOPTION BY REFERENCE**

Except as hereinafter changed or modified, Sections 1.2 through 1.14 of Chapter 1 of Division I of that certain building code known and designated as the ~~2010~~2013 California Building Code, as published by the California Building Standards Commission, are adopted by reference and incorporated into this Title 26 of the Los Angeles County Code as if fully set forth below, and shall be known as Sections 119.1.2 through 119.1.14, respectively of Chapter 1 of Title 26 of the Los Angeles County Code.

Except as hereinafter changed or modified, Chapters 2 through 35 ~~(including Chapter 7A)~~, and Appendices C, I, and J of that certain building code known and designated as the ~~2010~~2013 California Building Code, as published by the California Building Standards Commission, are adopted by reference and incorporated into this Title 26 of the Los Angeles County Code as if fully set forth below, and shall be known

as Chapters 2 through 35, and Appendices C, I, and J of Title 26 of the Los Angeles County Code.

A copy of said California Building Code, hereinafter referred to as the CBC, including the above-designated appendices, shall be at all times maintained by the Building Official for use and examination by the public.

. . .

**SECTION 102 UNSAFE BUILDINGS**

. . .

**102.2 Notice of Unsafe Building.**

The Building Official shall examine or cause to be examined every building or structure or portion thereof reported as dangerous or damaged and, if, in the Building Official's opinion, such is found to be an unsafe building as defined in this Chapter, the Building Official shall give to the party concerned written notice stating the defects thereof. This notice may require the owner or person in charge of the building or premises, within 48 hours, to commence either the required repairs or improvements or demolition and removal of the building or structure or portions thereof and all such work shall be completed within 90 days from date of notice, unless otherwise stipulated by the Building Official. If necessary, such notice shall also require the building, structure, or portion thereof to be vacated forthwith and not reoccupied until the required repairs and improvements ~~be~~are completed, inspected and approved by the Building Official.

**. . .102.4 Unsafe Buildings: Hearing.**

. . .

**102.4.5 Hearing by Building Board of Appeals.**

The Building Board of Appeals shall hold a hearing and consider all competent evidence offered by any person pertaining to the matters set forth in the report of the Building Official.

The Building Board of Appeals shall make written findings of fact as to whether or not the building or structure is an unsafe building as defined in this Chapter.

When determined by the Building Official, the Building Rehabilitation Appeals Board shall hold the hearing in lieu of the Building Board of Appeals.

. . .

**102.5 Unsafe Buildings; Demolition or Repair.**

. . .

**102.5.3 Costs.**

. . .

The assessment shall be collected at the same time and in the same manner as ordinary County taxe~~d~~s are collected and shall be subject to the same penalties and the same procedure and sale in case of delinquency as provided for ordinary County taxes. All the laws applicable to the levy, collection and enforcement of County taxes shall be applicable to such special assessment.

**102.5.4 Interference ~~p~~Prohibited.**

A person shall not obstruct, impede, or interfere with the Building Official or any representative of the ~~b~~Building ~~o~~Official, or with any person who owns or holds any estate or interest in any unsafe building which has been ordered by the Building Board

of Appeals to be repaired, vacated and repaired, or vacated and demolished or removed, whenever the Building Official or such owner is engaged in repairing, vacating and repairing, or demolishing any such unsafe building pursuant to this Chapter, or is performing any necessary act preliminary to or incidental to such work, or authorized or directed pursuant hereto.

. . .

**SECTION 104 ORGANIZATION AND ENFORCEMENT**

. . .

**104.2 Powers and Duties of the Building Official.**

. . .

**104.2.8 Alternate Materials, Designs and Methods of Construction.**

The provisions of this Code are not intended to prevent the use of any material, appliance, installation, device, arrangement, design, or method of construction not specifically prescribed by this Code~~, provided any such alternate has been approved~~.

The Building Official may approve on a case by case basis, any such alternate, provided that he or she finds that the material, appliance, installation, device, arrangement, design, or method of construction or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Code in quality, strength, effectiveness, fire resistance, and other life-safety factors, durability, planning and

design, energy, material resource efficiency and conservation, environmental air quality, performance, water, and sanitation.

The ~~b~~Building ~~o~~Official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use.

. . .

**SECTION 105 APPEALS BOARDS**

. . .

**105.5 Fees.**

A fee of $439.20 shall be paid to the ~~b~~Building ~~o~~Official whenever a person requests a hearing or a rehearing before the appeals boards provided for in this Section.

. . .

**SECTION 106 PERMITS**

**106.1 Permits Required.**

No person shall erect, construct, enlarge, alter, repair, move, improve, remove, connect, convert, demolish, or equip any building, structure, or portion thereof, or automatic fire protection system regulated by Chapter 9, perform any grading, or perform landscaping as regulated by Chapter 2.7 of Division 2 of Title 23 of the California Code of Regulations (Model Water Efficient Landscape Ordinance) or perform landscaping on slopes requiring planting in conformance with Section J110, or cause the same to be done, without first obtaining a separate permit for each such building,

structure, automatic fire protection system, grading, or landscaping from the Building Official.

No person shall install, connect, move, remove, or equip any mobilehome, manufactured home, commercial modular, recreational vehicle or multifamily manufactured home subject to Sections 18300(f) or 18551 of the Health and Safety Code without first obtaining a separate permit.

~~**EXCEPTION:** A single permit may be issued for a dwelling and one accessory building of one-story construction, not over 600 square feet in area and on the same property.~~

. . .

**106.3 Work Exempted.**

A building permit shall not be required for the following:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the gross floor area does not exceed 120 square feet (11.15 $m^2$), the ~~plate~~ height does not exceed 12 feet (3.69 m) ~~in height above the grade plane at any point~~, and the maximum roof projection does not exceed 24 inches (610 mm).

2. Fences not over 6 feet (~~1829 mm~~1.8 m) in height which are not used as a barrier to private swimming pools, spas or hot tubs.

. . .

12. Sheds, office or storage buildings, and other structures that are less than 1,500 square feet (139 $m^2$) and incidental to and work authorized by a valid grading or

building permit. Such structures must be removed upon expiration of the permit or completion of the work covered by the permit.

. . .

13.3 It bears the Department of Motor Vehicles, State of California insignia of approval for movement on any highway.

. . .

16. Prefabricated swimming pools and other bodies of water accessory to a Group R-3 Occupancy that are less than 18 inches (0.46 m) deep, or do not exceed 5,000 gallons (18,927 L)~~,~~ and are installed entirely above adjacent grade.

17. Playground equipment accessory to Group R-3 occupancy.

18. One-story buildings or structures used as dog kennels, chicken coops, animal pens, or shade structures provided the gross floor area does not exceed 120 square feet (11.15m$^2$) and the height does not exceed 6 feet (1.8 m).

. . .

**106.4 Application for Permits.**

**106.4.1 Application.**

To obtain a permit, the applicant shall first file an application in writing on a form furnished for that purpose. Every such application shall:

. . .

4. Be accompanied by plans and specifications as required in ~~Subs~~Section ~~106.3.2~~106.4.2;

. . .

**106.4.1.1 Expiration of Application.**

When no permit is issued within one year following the date of the application therefor, the application shall automatically expire. Plans and specifications previously submitted may thereafter be returned to the applicant or destroyed by the Building Official. The Building Official may grant up to two extensions not exceeding 180 days per extension, beyond the initial one-year limit upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken and upon the payment of an extension fee as determined by the Building Official, not to exceed 25 percent of the plan check fee.

Once an application, including ~~and~~ any extension(s) thereof ~~have~~has expired, the applicant shall file a new application, resubmit plans and specifications and pay a new plan checking or review fee.

**106.4.2 Plans and ~~s~~Specifications.**

Within each application for a building permit, and when required by the Building Official for enforcement of any provisions of this Code, two sets of plans and specifications shall be submitted. The Building Official may require plans and specifications to be prepared and designed by an engineer, architect or landscape architect licensed or registered by the state to practice as such. Submittals shall include construction inspection requirements as defined in Section 106.4.5.

**Exception:** When authorized by the Building Official, complete plans and specifications need not be submitted for the following when drawings and data sufficient to determine the nature and scope of the work are submitted for review:

1. One-story buildings of ~~Type V~~ conventional ~~wood-stud~~light-frame construction with a gross floor area not exceeding 600 square feet (55.74 m2);

2. Small and/or minor work.

. . .

**106.4.3 Information on ~~p~~Plans and ~~s~~Specifications.**

~~Plans and specifications shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that it will conform to the provisions of this Code and all relevant laws, ordinances, rules and regulations.~~Construction documents shall be dimensioned and drawn to scale upon suitable material. Electronic media documents are permitted to be submitted when approved by the Building Official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this Code and relevant laws, ordinances, rules, and regulations, as determined by the Building Official. The first sheet of each set of plans shall give the house and street address of the work and the name and address of the owner and persons who prepare them. Plans shall include a plot plan showing the location of the proposed building and of every existing building on the property. 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 ordinances or laws.

Computations, stress diagrams and other data sufficient to show the correctness of the plans~~,~~ shall be submitted when required by the Building Official. ~~Plans for~~

~~buildings more than two stories in height of other than Group R-3 and Group U Occupancies shall indicate how required structural and fire-resistive integrity will be maintained where a penetration will be made for electrical, mechanical, plumbing and communications conduits, pipes and similar systems.~~

. . .

**106.4.4 Architect or e~~E~~ngineer of ~~r~~Record.**

. . .

**106.4.4.2 Deferred ~~s~~Submittals.**

For the purposes of this Section, "deferred submittals" are defined as those portions of the design which are not submitted at the time of the application and which are to be submitted ~~to the Building Official within a specified period~~within a period specified by the Building Official.

. . .

**106.4.5 ~~Construction i~~Inspection Program.**

When special inspection is required by Chapter 17, the architect or engineer of record shall prepare an inspection program which shall be submitted to the Building Official for approval prior to issuance of the building permit. The inspection program shall designate the portions of the work that require special inspection ~~and the name or names of the individuals or firms who are to perform the special inspections,~~ and indicate the duties of the special inspectors.

. . .

**106.5 Permits.**

. . .

**106.5.4 Expiration.**

Every permit issued by the Building Official under the provisions of this Code shall expire by limitation and become null and void, if the building or work authorized by such permit is not commenced within 180 days from the date of such permit, or ~~if~~ the building or work authorized by such permit is suspended or abandoned for a period of 180 days, or the permittee fails to obtain inspection as required by the provisions of Section 108 of this Code ~~at any time after the work is commenced~~ for a period of 180 days~~. Before such work can be commenced or recommenced, a new permit shall be first obtained, and the fee therefor shall be equal to 50 percent of the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and provided, further, that the duration of such failure to commence, suspension or abandonment has not exceeded one year~~.

**Exception:** Permits issued to abate violation(s) in conjunction with a code enforcement action shall expire and become null and void at a date determined by the Building Official.

~~Any permittee holding an unexpired permit may apply for an extension of time within which work may commence under that permit.~~ The Building Official may extend the time for action by the permittee for a period not exceeding 180 days from the date of expiration upon written request from the permittee and payment of a fee in an amount

determined by the Building Official, not to exceed 25 percent of the permit fee. No permit shall be extended more than twice.

~~In order to renew action on a permit after expiration, except as provided for above,~~Once a permit, including any extension(s) thereof, has expired, the permittee shall ~~pay a new full permit fee~~file a new application as specified in Section 106.4.

. . .

**SECTION 107 FEES**

**107.1 Building Permit Fees.**

In addition to a permit issuance fee of $28.30, a fee for each building permit shall be paid to the ~~b~~Building ~~o~~Official as set forth in Table 1-A.

The determination of value or valuation under any of the provisions of this code shall be made by the ~~b~~Building ~~o~~Official. The valuation to be used in computing the permit and plan check fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire protection systems and any other permanent work or permanent equipment.

. . .

**107.2 Plan Checking or Review Fees for Buildings or Structures.**

When an application for a building permit is submitted for review, whether or not plans and specifications are required by Section 106.4.2, a fee shall be paid to the

~~b~~Building ~~o~~Official. Said fee shall be equal to 85 percent of the building permit fee as set forth in Table 1-A, provided, however, the minimum fee shall be $83.70.

In addition to the aforementioned fees, the ~~b~~Building ~~o~~Official may require additional charges for review required by changes, additions or revisions of approved plans or reports, and for services beyond the first and second check due to changes, omissions or errors on the part of the applicant. The payment of said fees shall not exempt any person from compliance with other provisions of this ~~c~~Code.

The fees specified in this ~~s~~Section are separate fees from the permit fees specified in Section 107.1.

**107.3 Standard Plans.**

The ~~b~~Building ~~o~~Official may approve a set of plans for a building or structure as a "standard plan," provided that the applicant has made proper application, submitted complete sets of plans as required by this ~~s~~Section, and paid the plan checking fee required by Section 107.2, or $153.70, whichever is greater.

. . .

**107.5 Grading Permit Fees.**

In addition to a permit issuance fee of $28.30, a fee for each grading permit shall be paid to the ~~b~~Building ~~o~~Official as set forth in Table 1-B.

. . .

**107.12 Refunds.**

In the event that any person shall have obtained a permit and no portion of the work or construction covered by such permit shall have been commenced, and such

permit shall have been canceled either as provided for in ~~Subs~~Section 106.5.4 or ~~Subs~~Section 107.11, the permittee, upon presentation to said Building Official of a request therefor, in writing ~~on a special form~~, shall be entitled to a refund in an amount equal to 80 percent of the fee actually paid for such permit.

~~Upon verification of eligibility, the Building Official shall refund the applicable amount, provided the request has been submitted no later than one year after the expiration of the permit.~~

When approved by the Building Official and upon verification of eligibility, a refund may be processed provided the request has been submitted no later than one year after the expiration date of the permit.

No portion of the plan checking fee shall be refunded, unless no ~~checking~~ review has been performed on a set of plans, in which case 80 percent of the plan checking fee shall be refunded.

**107.13 Investigation Fee for Work without Permit.**

Whenever any work has been commenced without a permit as required by the provisions of Section 106.1 of this ~~c~~Code, a special investigation shall be made prior to the issuance of the permit. An investigation fee shall be collected for each permit so investigated. The investigation fee shall be equal to and in addition to the permit fees specified in Sections 107.1, 107.5, and 107.7, but in no event shall the investigation fee be less than $344.00.

**Exception:** The investigation fee shall be $171.90 when the ~~b~~Building ~~o~~Official has determined that the owner-builder of a one- or two-family dwelling, accessory

building or accessory structure had no knowledge that a permit was necessary and had not previously applied for a permit from the Building and Safety Division of the County of Los Angeles.

. . .

**107.14 Noncompliance Fee.**

If the ~~b~~Building ~~o~~Official or duly authorized board, in the course of enforcing the provisions of this ~~c~~Code or any state law, issues an order to stop work, vacate, or otherwise to a person and that person fails to comply with the order within 15 days following the due date for compliance stated in the order, including any extensions thereof, then the ~~b~~Building ~~o~~Official shall have the authority to collect a noncompliance fee.

. . .

**107.16 Plan Maintenance Fee.**

Before issuing a building permit, the ~~b~~Building ~~o~~Official shall collect a plan maintenance fee for all building plans which are required to be retained by Section 19850 of the Health and Safety Code.

The amount of the plan maintenance fee shall be 2 percent of the building permit fee as set forth in Table 1-A provided, however, that the minimum fee shall be $10.00 and the maximum fee shall be $430.30. A plan maintenance fee shall be collected for each separate plan to be retained by the ~~b~~Building ~~o~~Official.

. . .

**107.17 Annual Review of Fees.**

The fees in this Code shall be reviewed annually by the Director of Public Works. Beginning on July 1, 1992, and thereafter on each succeeding July 1, the amount of each fee in this Code shall be adjusted as follows: Calculate the percentage movement between March of the previous year and March of the current year in the Consumer Price Index (CPI) for all urban consumers in the Los Angeles, Anaheim and Riverside areas, as published by the United States Government Bureau of Labor Statistics. Adjust each fee by said percentage amount and round off to the nearest 10 cents, provided, however, that no adjustment shall decrease any fee and no fee shall exceed the reasonable cost of providing services. When it is determined that the amount reasonably necessary to recover the cost of providing services is in excess of this adjustment, the ~~b~~Building ~~o~~Official may present fee proposals to the Board of Supervisors for approval.

. . .

**107.19 Fee Exemption—Affordable Housing.**

. . .

**BUILDING FEE** shall include plan check, permit and inspection fees required by Titles 26, 27, 28, ~~and~~ 29, 30 and 31 of the Los Angeles County Code.

. . .

**SECTION 108 INSPECTIONS**

**108.1 General.**

. . .

A site inspection may be required prior to plan check of building plans for lots or parcels in areas having slopes of 5 horizontal to 1 vertical (5:1) or steeper when the ~~b~~Building ~~o~~Official finds that a visual inspection of the site is necessary to establish drainage requirements for the protection of property, existing buildings or the proposed construction. The fee for such inspection shall be as set forth in Section 107.9. Such a preinspection shall not be required for a building pad graded under the provisions of Appendix J.

. . .

**108.4 Required Inspections.**

**108.4.1 General.**

Reinforcing steel or structural framework of any part of any building or structure shall not be covered or concealed without first obtaining the approval of the Building Official.

Protection of joints and penetrations in fire-resistive assemblies shall not be concealed from view until inspected and approved.

Upon notification from the permit holder or the permit holder's agent, the ~~b~~Building ~~o~~Official shall make the following inspections.

. . .

**108.6 Special Inspector.**

~~108.6.1~~

Before commencing duties, the special inspector shall be examined and shall obtain a certificate of registration from the ~~b~~Building ~~o~~Official. As to the written portion of the required examination, the ~~b~~Building ~~o~~Official may administer a written examination or the ~~b~~Building ~~o~~Official may require that a special inspector applicant successfully complete an examination administered by the International Code Council (ICC). Applications shall be made in writing and shall be accompanied by a fee of $249.60. When the ~~b~~Building ~~o~~Official requires the ICC Certificate in lieu of administering a written examination, the application shall be accompanied by proof of the required Certificate and a fee of $155.10. A separate application and a separate fee shall be required for each type of work. Applicants failing to pass an examination shall be ineligible for re-examination for a period of 30 days. A new application and fee shall accompany each request for re-examination. Unless sooner revoked, certificates of registration for special inspectors shall expire biennially on June 30, and must be renewed by payment of biennial renewal fee of $103.30.

Upon evidence, satisfactory to the ~~b~~Building ~~o~~Official, of the failure of a special inspector to perform properly and effectively the duties of said office, the ~~b~~Building ~~o~~Official may revoke, suspend or refuse to renew any certificate of registration. Prior to such action, the holder shall be given an opportunity to appear before the ~~b~~Building ~~o~~Official and be heard.

~~108.6.2~~ For special inspections, see Chapter 17.

. . .

**SECTION 109 USE AND OCCUPANCY**

**109.1 General.**

No building or structure or portion thereof shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the Building Official has approved the building or structure or portion thereof for such use or occupancy as evidenced by the issuance of a certificate of occupancy or a temporary certificate of occupancy. A building of Group R-1, R-2, R-2.1, R-3, R-3.1, or R-4 Occupancy, if erected on a site where grading has been performed pursuant to a grading permit issued under provisions of this Code, shall not be occupied, nor shall gas or electric utilities be connected thereto, unless the grading has been completed in accordance with Appendix J or the Building Official has found, should the grading not be so completed, that the site conditions will pose no hazard to health, safety, or welfare of occupants and/or occupants of adjacent properties, and that a temporary certificate of occupancy has been issued.

. . .

**SECTION 110 PROHIBITED USES OF BUILDING SITES**

**110.1 Flood Hazard.**

**110.1.1** Buildings are not permitted in an area determined by the Building Official to be subject to flood hazard by reason of inundation, overflow or erosion.

The placement of the building and other structures (including walls and fences) on the building site shall be such that water or mud flow will not be a hazard to the building or adjacent property. Subject to the conditions of Section 110.1.2, this prohibition shall not apply when provision is made to eliminate such hazard to the satisfaction of the ~~Department of Public Works~~ Building Official by providing adequate drainage facilities by protective walls, suitable fill, raising the floor level of the building, a combination of these methods, or by other means. The ~~Department of Public Works~~ Building Official, in the application of this Section for buildings, structures, and grading located in whole or in part in flood hazard areas, shall enforce, as a minimum, the current Federal Flood Plain Management Regulations defined in Title 44, Code of Federal Regulations, Section 60.3, and may require the applicant or property owner to provide the following information and/or comply with the following provisions:

1. Delineation of flood hazard areas, floodway boundaries and flood zones, and the design flood elevation, as appropriate;

2. The elevation of the proposed lowest floor, including basement, in flood hazard areas ~~of shallow flooding~~ (A~~O~~ Zones), and the height of the proposed lowest floor, including basement, above the highest adjacent grade;

. . .

**110.2 Geotechnical Hazards.**

. . .

**110.2.3.4**

When the proposed work involves an addition or additions to an existing structure but is not a change in use or occupancy and such work does not increase the gross floor area of the structure by more than 25 percent of the area of the structure as it existed on July 6, 1968, and the ~~b~~Building ~~o~~Official determines that the proposed work will not impact a historically active landslide. Before a permit may be issued pursuant to this ~~s~~Section, the owner shall do all of the following:

1. Submit an engineering geology and/or soils engineering report or reports that contain(s), at a minimum, a qualitative and/or a conditional finding that the proposed work complies with the provisions of Section ~~111~~110.2.1.

. . .

**110.2.3.7**

When the proposed work involves a one-story, detached, light-frame accessory structure not intended or used for human occupancy and not exceeding 400 square feet in gross floor area nor 12 feet in height. Before a permit may be issued pursuant to this ~~s~~Section, the owner shall do all of the following:

1. When required by the Building Official, submit an engineering geology and/or soils engineering report or reports that contain, at a minimum, a qualitative and/or conditional finding that the proposed work complies with the provisions of Section 110.2.1.

~~1.~~2. Record in the office of the Department of Registrar-Recorder a statement by the owner acknowledging that the owner is aware that the records of the Building

Official indicate that the property is potentially subject to hazard from landslide, settlement, or slippage.

~~2.~~3. Record in the office of the Department of Registrar-Recorder an agreement relieving the County and all officers and employees thereof of any liability for any damage or loss which may result from issuance of such a permit. This agreement shall provide that it is binding on all successors in interest of the owner and shall continue in effect until the Building Official records in the office of the Department of Registrar-Recorder a statement that the Building Official has determined that such hazard from landslide, settlement, or slippage no longer exists.

**110.2.3.8**

When the Building Official determines that the hazard from landslide, settlement, or slippage is based solely on the fact that the area has been identified as a potentially liquefiable area in a seismic hazard zone (pursuant to Public Resources Code section 2690 et seq.) and a foundation investigation is performed in connection with the work in accordance with Section ~~1806~~1803 of this Code.

. . .

**110.2.3.10**

When the proposed work involves the repair and restoration of a ~~natural (non-graded)~~ slope. Before a permit may be issued pursuant to this ~~s~~Section, the owner shall submit an engineering geology and/or soils engineering report or reports that contain(s) the following:

1. A description and analysis of the existing conditions, including the cause or causes of the failed slope.

2. Recommendations for the repair of the failed slope.

3. A qualitative and/or conditional finding that the proposed work complies with the provisions of Section 110.2.1 of this Code.

4. An analysis demonstrating that future failures originating from the repaired portion of the slope will not impact previously permitted structures.

5. An analysis demonstrating that the proposed work will improve existing slope stability.

**110.3 Fills Containing Decomposable Material.**

Permits shall not be issued for buildings or structures regulated by this Code within (1,000) feet (304.8 m) of fills containing rubbish or other decomposable material unless the fill is isolated by approved natural or artificial protective systems or unless designed according to the recommendation contained in a report prepared by a licensed civil engineer. Such report shall contain a description of the investigation, study and recommendation to minimize the possible intrusion, and to prevent the accumulation of explosive concentrations of decomposition gases within or under enclosed portions of such building or structure. At the time of the final inspection, the civil engineer shall furnish a signed statement attesting that the building or structure has been constructed in accordance with the civil engineer's recommendations as to decomposition gases required herein.

**Exception:** When approved by the Building Official, mitigation of decomposition gases shall not be required for additions to single family dwellings not exceeding 400 square feet in gross floor area and/or alterations to single family dwellings.

. . .

**110.4 Methane Gas Hazards.**

Permits shall not be issued for new buildings or enclosed structures regulated by this Code on, adjacent to, or within ~~25~~300 feet (~~7.62~~91.44 m) of active, abandoned or idle oil or gas well(s) unless designed according to recommendations contained in a report prepared by a registered design professional, such as a licensed civil engineer and/or a licensed petroleum engineer,~~approved by the Building Official. In addition, permits shall not be issued for a building or structure regulated by this Code located between 25 feet (7.62 m) and 200 feet (60.96 m) from active, abandoned or idle oil or gas well(s) unless designed according to the recommendations contained in a report prepared by a licensed civil engineer and approved by the Building Official or all active, abandoned or idle oil or gas well(s) between 25 feet (7.62 m) and 200 feet (60.96 m) from said building or structure are examined by a licensed petroleum engineer~~ to evaluate whether~~, in accordance with the current rules and regulations of the Division of Oil and Gas and Geothermal Resources of the State of California,~~ such wells are being properly operated or maintained, or are abandoned. No permits shall be issued until ~~certification~~documentation of proper operation, maintenance, or abandonment or reabandonment~~, as determined by the Division of Oil and Gas and Geothermal Resources,~~ is submitted to and approved by the Building Official. ~~This requirement is~~

~~not applicable to active, abandoned or idle oil or gas well(s) located more than 200 feet (60.96 m) from the proposed buildings or structures.~~

**Exception**: When approved by the Building Official, mitigation of methane gas hazards shall not be required for additions or alterations to existing buildings or structures located no closer than 200 feet (60.96 m) to active, abandoned or idle oil or gas well(s).

As used in this Section, "well" shall mean any well as defined by Section 3008, Subdivisions (a), (b), and (c) of the California Public Resources Code.

. . .

**SECTION 113 EARTHQUAKE FAULTS**

. . .

**113.5 Construction Limitations.**

. . .

1. When the proposed building is within (50) feet (15.24 m) of that line designated by the ~~b~~Building ~~o~~Official as the assumed location of a known active earthquake fault on the aforementioned maps.

. . .

**SECTION 3.** Chapter 7A is hereby amended to read as follows:

**CHAPTER 7A [SFM]**

**MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE**

Note: This Chapter has been amended by Los Angeles County and is applicable to all occupancy groups.

**SECTION 4.** Section 701A.1 is hereby amended to read as follows:

**701A.1 Scope.**

This ~~c~~Chapter applies to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings ~~located~~, and to additions, alterations, or repairs made to existing buildings, erected, constructed, or moved within a Wildland-Urban Interface Fire Area as defined in Section 702A.

**SECTION 5.** Section 701A.3 is hereby amended to read as follows:

**701A.3 Application.**

New buildings, and any additions, alterations, or repairs made to existing buildings located in or moved within any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Fire Area designated by the ~~enforcing agency~~Los Angeles County Fire Department constructed after the application date shall comply with the provisions of this ~~c~~Chapter.

**Exceptions:**

. . .

~~4. Additions to and remodels of buildings originally constructed prior to the applicable application date.~~

**SECTION 6.** Section 701A.3.1 is hereby amended to read as follows:

**701A.3.1 Application date and where required.**

New buildings for which an application for a building permit is submitted on or

after July 1, 2008, and any additions, alterations, or repairs made to existing buildings for which an application for a building permit is submitted on or after January 1, 2014, located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all ~~s~~Sections of this ~~c~~Chapter, including all of the following areas:

. . .

**Exception:**

1. ~~New b~~Buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all ~~s~~Sections of this ~~c~~Chapter.

2. ~~New b~~Buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Interface Fire Area designated by cities and other local agencies for which an application for a building permit is submitted on or after December 1, 2005, but prior to July 1, 2008, shall only comply with the following ~~s~~Sections of this ~~c~~Chapter:

. . .

**SECTION 7.** Section 701A.4 is hereby amended to read as follows:

**701A.4 Inspection and certification.**

Building permit applications and final completion approvals for buildings within the scope and application of this ~~c~~Chapter shall comply with the following:

1. Building permit issuance. The ~~local b~~Building ~~o~~Official shall, prior to construction, provide the owner or applicant a certification that the building as proposed to be built complies with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this ~~c~~Chapter. Issuance of a building permit by the ~~local b~~Building ~~o~~Official for the proposed building shall be considered as complying with this ~~s~~Section.

2. Building permit final. The ~~local b~~Building ~~o~~Official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this ~~c~~Chapter. Issuance of a certificate of occupancy by the ~~local b~~Building ~~o~~Official for the proposed building shall be considered as complying with this ~~s~~Section.

**SECTION 8.** Section 702A is hereby amended to read as follows:

**702A DEFINITIONS**

. . .

**FIRE PROTECTION PLAN** is a document prepared for a specific project or development proposed for a Wildland-Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

The Fire Protection Plan shall be in accordance with this ~~c~~Chapter and the ~~California~~Title 32 - Fire Code of the Los Angeles County Code, Chapter 49. When required by the enforcing agency for the purposes of granting modifications, a fire

protection plan shall be submitted. ~~Only locally adopted ordinances that have been filed with the California Building Standards Commission or the Department of Housing and Community Development in accordance with Section 1.1.8 shall apply.~~

**FIRE HAZARD SEVERITY ZONES** are geographical areas designated pursuant to California Public Resources Codes Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code ~~S~~sections 51175 through 51189. See ~~California~~Title 32 - Fire Code of the Los Angeles County Code, ~~Article 86~~Chapter 49.

. . .

**WILDLAND-URBAN INTERFACE FIRE AREA** is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code ~~S~~sections 4201 through 4204 and Government Code ~~S~~sections 51175 through 51189, or other areas designated by the ~~enforcing agency~~Los Angeles County Fire Department to be at a significant risk from wildfires.

**SECTION 9.** Section 703A.2 is hereby amended to read as follows:

**703A.2 Qualification by testing.**

Material and material assemblies tested in accordance with the requirements of Section 703A shall be accepted for use when the results and conditions of those tests are met. Product evaluation testing of material and material assemblies shall be approved or listed by the State Fire Marshal, the Building Official, or identified in a current report issued by an approved agency.

**SECTION 10.** Section 703A.3 is hereby amended to read as follows:

**703A.3 Approved agency.**

Product evaluation testing shall be performed by an approved agency as defined in Section 1702. The scope of accreditation for the approved agency shall include building product compliance with this ~~c~~Code.

**SECTION 11.** Section 703A.5.2 is hereby amended to read as follows:

**703A.5.2 Weathering.**

Fire-retardant-treated wood ~~and fire-retardant-treated wood shingles and shakes~~ shall meet the fire test performance requirements of this ~~c~~Chapter after being subjected to the weathering conditions contained in the following standards, as applicable to the materials and the conditions of use.

**SECTION 12.** Section 703A.5.2.2 is hereby deleted in its entirety.

~~**703A.5.2.2 Fire-retardant-treated wood shingles and shakes.**~~

~~Fire-retardant-treated wood shingles and shakes shall be approved and listed by the State Fire Marshal in accordance with Section 208(c), Title 19 California Code of Regulations.~~

**SECTION 13.** Section 703A.6 is hereby amended to read as follows:

**703A.6 Alternates for materials, design, tests, and methods of construction.**

The enforcing agency is permitted to modify the provisions of this ~~c~~Chapter for site-specific conditions in accordance with Chapter 1, Section ~~1.11.2.4~~104.2.7. When required by the ~~enforcing agency~~Building Official for the purposes of granting

modifications, a fire protection plan shall be submitted in accordance with the ~~California~~Title 32 - Fire Code of the Los Angeles County Code, Chapter 49.

**SECTION 14.** Section 704A.3 is hereby amended to read as follows:

**704A.3 Alternative methods for determining ignition-resistant material.**

. . .

~~3. Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in section 1505.6 and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an Ignition-resistant wall covering material when installed over solid sheathing.~~

**SECTION 15.** Section 705A.2 is hereby amended to read as follows:

**705A.2 Roof coverings.**

Roof coverings shall be Class A as specified in Section 1505.2. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be firestopped with approved materials or have one layer of minimum 72 pound (32.4 kg) mineral-surfaced non-perforated cap sheet complying with ASTM D 3909 installed over the combustible decking. Wood shingles and wood shakes are prohibited in any Fire Hazard Severity Zones regardless of classification.

**SECTION 16.** Section 706A.3 is hereby amended to read as follows:

**706A.3 Ventilation openings on the underside of eaves and cornices.**

. . .

**Exceptions:**

1. The ~~enforcing agency~~Building Official may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.

. . .

**SECTION 17.** Section 710A.3.2 is hereby amended to read as follows:

**710A.3.2**

When required by the ~~enforcing agency~~Building Official, detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this ~~s~~Section.

**SECTION 18.** Section 710A.4 is hereby amended to read as follows:

**710A.4 Requirements.**

When required by the ~~enforcing agency~~Building Official, accessory structures shall be constructed of noncombustible or ignition-resistant materials.

**SECTION 19.** Section 1029.4 is hereby amended to read as follows:

**1029.4 Operational constraints.**

. . .

Where security bars (burglar bars) are installed on emergency egress and rescue windows or doors, ~~on or after July 1, 2000,~~ such devices shall comply with California Building Standards Code, Part 12, Chapter 12-3 and other applicable provisions of Part 2.

. . .

**SECTION 20.** Section 1507.3.1 is hereby amended to read as follows:

**1507.3.1 Deck requirements.**

Concrete and clay tile shall be installed only over solid ~~sheathing or spaced~~ structural sheathing boards.

**SECTION 21.** Table 1507.3.7 is hereby amended to read as follows:

**TABLE 1507.3.7**

**CLAY AND CONCRETE TILE ATTACHMENT [a, b, c]**

| GENERAL – CLAY OR CONCRETE ROOF TILE | | | | |
|---|---|---|---|---|
| **Maximum Nominal Design Wind Speed, $V_{asd}$[f] (mph)** | **Mean roof height (feet)** | **Roof slope up to <3:12** | **Roof slope 3:12 and over** | |
| 85 | 0 - 60 | *Minimum slope: 2.5:12* | Two fasteners per tile. ~~Only one fastener on slopes of 7:12 and less for tiles with installed weight exceeding 7.5 lbs/sq. ft. having a width no greater than 16 inches.~~ | |
| 100 | 0 - 40 | ~~One fastener per tile. Flat tile without vertical laps,~~ Two fasteners per tile. | | |
| . . . | . . . | . . . | | |
| **INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS [d, e] (Installations on ~~spaced/~~solid sheathing with battens ~~or spaced sheathing~~)** | | | | |
| **Maximum Nominal Design Wind Speed, $V_{asd}$[f] (mph)** | **Mean roof height (feet)** | **Roof slope up to <5:12** | **Roof slope 5:12<12:12** | **Roof slope 12:12 and over** |
| 85 | 0 - 60 | ~~Fasteners are not required. Tiles with installed weight less than 9 lbs/sq. ft. require a minimum of o~~ Minimum slope is 4:12. ~~O~~ One fastener per tile. | One fastener per tile ~~every other row. All perimeter tiles require one fastener~~. Tiles with installed weight less than 9 lbs/sq.ft. require a minimum of one fastener per tile. | One fastener required for every tile. Tiles with installed weight less than 9 lbs./sq. ft. require a minimum of one fastener per tile. |
| 100 | 0 - 40 | | | |
| . . . | . . . | . . . | | |
| **INTERLOCKING CLAY OR CONCRETE ROOF TILE WITH PROJECTING ANCHOR LUGS (Installations on solid sheathing without battens)** | | | | |
| **Maximum Nominal Design Wind Speed, $V_{asd}$[f] (mph)** | **Mean roof height (feet)** | **~~All~~ Minimum roof slopes 4 units vertical in 12 units horizontal Maximum slope 7 units vertical in 12 units horizontal** | | |
| . . . | . . . | . . . | | |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s, 1 pound per square foot = 4.882 kg/m$^2$.

[a] Minimum fastener size. Hot dipped galvanized ring shank or other ~~C~~corrosion-resistant nails not less than No. 11 gage with $^5/_{16}$-inch head. Fasteners shall be long enough to penetrate into the sheathing 0.75 inch or through the thickness of the sheathing, whichever is less. Attaching wire for clay and concrete tile shall not be smaller than 0.083 inch and shall be copper, brass or stainless steel.

. . .

**SECTION 22.** Section 1613.6 is hereby added to read as follows:

**1613.6 Modifications to ASCE 7**

The text of ASCE 7 shall be modified as indicated in Sections 1613.6.1 through 1613.6.3.

**1613.6.1 ASCE 7, 12.12.3.**

Modify ASCE 7 Equation 12.12-1 of Section 12.12.3 to read as follows:

$$\delta_M = \frac{C_d \delta_{max}}{I}$$

**(Equation 12.12-1)**

**1613.6.2 ASCE 7, 12.2.3.1, Exception 3.**

Modify ASCE 7, Section 12.2.3.1, Exception 3 to read as follows:

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

**1613.6.3 ASCE 7, Section 12.11.2.2.3.**

Modify ASCE 7, Section 12.11.2.2.3, to read as follows:

**12.11.2.2.3 Wood diaphragms.**

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

For structures assigned to Seismic Design Category D, E, or F, wood diaphragms supporting concrete or masonry walls shall comply with the following:

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

2. The maximum diaphragm shear used to determine the depth of the subdiaphragm shall not exceed 75 percent of the maximum diaphragm shear.

**SECTION 23.** Section 1613.7 is hereby added to read as follows:

**1613.7 Seismic design provisions for hillside buildings.**

**1613.7.1 Purpose.**

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

**1613.7.2 Scope.**

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

**Exceptions:**

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

2. Additions to existing buildings that do not exceed 10 percent of the existing floor area provided that the addition is being supported completely by the existing foundation.

**1613.7.3 Definitions.**

For the purposes of this Section certain terms are defined as follows:

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

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

**DOWNHILL DIRECTION** is the descending direction of the slope approximately perpendicular to the slope contours.

**FOUNDATION** is concrete or masonry which supports a building, including footings, stem walls, retaining walls, and grade beams.

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

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

**PRIMARY ANCHORS** are diaphragm anchors designed for and providing a direct connection as described in Sections 1613.7.5 and 1613.7.7.3 between the diaphragm and the uphill foundation.

**SECONDARY ANCHORS** are diaphragm anchors designed for and providing a redundant diaphragm to foundation connection, as described in Sections 1613.7.6 and 1613.7.7.4.

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

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

**1613.7.4 Analysis and design.**

**1613.7.4.1 General.**

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

**1613.7.4.2 Base level diaphragm-downhill direction.**

The following provisions shall apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.

**1613.7.4.2.1 Base for lateral force design defined.**

For seismic forces acting in the downhill direction, the base of the building shall be the floor at, or closest to, the top of the highest level of the foundation.

**1613.7.4.2.2 Base shear.**

In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.

**1613.7.5 Base shear resistance-primary anchors.**

**1613.7.5.1 General.**

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

**1613.7.5.2 Location of primary anchors.**

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

**1613.7.5.3 Design of primary anchors and diaphragm struts.**

Primary anchors and diaphragm struts shall be designed in accordance with the requirements of Section 1613.7.8.

**1613.7.5.4 Limitations.**

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

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

Braced frames designed in accordance with the requirements of Section 2205.2.2 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

**1613.7.6 Base shear resistance-secondary anchors.**

**1613.7.6.1 General.**

In addition to the primary anchors required by Section 1613.7.5, the base shear in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

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

**1613.7.6.2 Secondary anchor capacity and spacing.**

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

**1613.7.6.3 Design.**

Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.7.8.

**1613.7.7 Diaphragms below the base level-downhill direction.**

The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

**1613.7.7.1 Diaphragm defined.**

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

**1613.7.7.2 Design force.**

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

**1613.7.7.3 Design force-resistance-primary anchors.**

The design force described in Section 1613.7.7.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation.

Primary anchors shall be provided and designed in accordance with the requirements and limitations of Section 1613.7.5.

**1613.7.7.4 Design force-resistance-secondary anchors.**

**1613.7.7.4.1 General.**

In addition to the primary anchors required in Section 1613.7.7.3, the design force in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in each diaphragm below the base level.

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

**1613.7.7.4.2 Secondary anchor capacity.**

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

**1613.7.7.4.3 Design.**

Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.7.8.

**1613.7.8 Primary and secondary anchorage and diaphragm strut design.**

Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:

1. Fasteners. All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be minimum 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Nuts shall be tightened to finger tight plus one half (1/2) wrench turn prior to covering the framing.

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

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

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

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

6. Steel Element of Structural Wall Anchorage System. The strength design forces for steel elements of the structural wall anchorage system, with the exception of anchor bolts and reinforcing steel, shall be increased by 1.4 times the forces otherwise required.

7. Primary Anchors. The load path for primary anchors and diaphragm struts shall be fully developed into the diaphragm and into the foundation. The foundation must be shown to be adequate to resist the concentrated loads from the primary anchors.

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

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

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

**1613.7.9 Lateral-force-resisting elements normal to the downhill direction.**

**1613.7.9.1 General.**

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

**1613.7.9.2 Base shear.**

In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems.

**1613.7.9.3 Vertical distribution of seismic forces.**

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

**1613.7.9.4 Drift limitations.**

The story drift below the base level diaphragm shall not exceed 0.007 times the story height at strength design force level. The total drift from the base level diaphragm to the top of the foundation shall not exceed 3/4 inch (19 mm). Where the story height or the height from the base level diaphragm to the top of the foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of horizontal diaphragm stiffness.

**1613.7.9.5 Distribution of lateral forces.**

**1613.7.9.5.1 General.**

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

**1613.7.9.5.2 Wood structural panel sheathed walls.**

The stiffness of a stepped wood structural panel shear wall may be determined

by dividing the wall into adjacent rectangular elements, subject to the same top of wall deflection. Deflections of shear walls may be estimated by AF&PA SDPWS Section 4.3.2. Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be eight feet (2438 mm) and the maximum vertical height of a step shall be two feet, eight inches (813 mm).

**1613.7.9.5.3 Reinforced concrete or masonry shear walls.**

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

**1613.7.9.6 Limitations.**

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

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

Braced frames designed in accordance with the requirements of Section 2205.2.2 of this Code may be designed as lateral-force-resisting elements in the direction normal to the downhill direction, provided lateral forces do not induce flexural stresses in any member of the frame. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

**1613.7.10 Specific design provisions.**

**1613.7.10.1 Footings and grade beams.**

All footings and grade beams shall comply with the following:

1. Grade beams shall extend at least 12 inches (305 mm) below the lowest adjacent grade and provide a minimum 24-inch (610 mm) distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.

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

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

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

**1613.7.10.2 Protection against decay and termites.**

All wood to earth separation shall comply with the following:

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

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

2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) and located within 48 inches (1219 mm) of adjacent grade are

prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.

**1613.7.10.3 Sill plates.**

All sill plates and anchorage shall comply with the following:

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

2. Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.

**1613.7.10.4 Column base plate anchorage.**

The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4000 pounds (17.8 kN) or more and the base plate for a steel column shall comply with the following:

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

2. The base plate anchor bolts or the embedded portion of the post base, and the vertical reinforcing bars for the pedestal, shall be confined with two No. 4 or three No. 3 ties within the top five inches (127 mm) of the concrete or masonry

pedestal. The base plate anchor bolts shall be embedded a minimum of 20 bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases shall be galvanized and each anchor bolt shall have at least two galvanized nuts above the base plate.

**1613.7.10.5 Steel beam to column supports.**

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

**SECTION 24.** Section 1704.2.3 is hereby amended to read as follows:

**1704.2.3 Statement of special inspections.**

The applicant shall submit a statement of *special inspections* in accordance with Section ~~107.1 *Chapter 1, Division II*~~ 106.4, as a condition for permit issuance. This statement shall be in accordance with Section 1704.3.

. . .

**SECTION 25.** Section 1704.5 is hereby amended to read as follows:

**1704.5 Structural observations.**

Where required by the provisions of Section 1704.5.1 or 1704.5.2, the owner shall employ a ~~registered design professional~~structural observer to perform structural observations as defined in Section 1702. The structural observer shall be one of the following individuals:

1. The registered design professional responsible for the structural design, or

2. A registered design professional designated by the registered design professional responsible for the structural design.

Prior to the commencement of observations, the structural observer shall submit to the ~~b~~Building ~~o~~Official a written statement identifying the frequency and extent of structural observations.

~~At the conclusion of the work included in the permit, the structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that, to the best of the structural observer's knowledge, have not been resolved.~~

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

Observed deficiencies shall be reported in writing to the owner or owner's representative, special inspector, contractor, and the Building Official. Upon the form prescribed by the Building Official, the structural observer shall submit to the Building Official a written statement at each significant construction stage stating that the site visits have been made and identifying any reported deficiencies which, to the best of the

structural observer's knowledge, have not been resolved. A final report by the structural observer which states that all observed deficiencies have been resolved is required before acceptance of the work by the Building Official.

**SECTION 26.** Section 1704.5.1 is hereby amended to read as follows:

**1704.5.1 Structural observations for seismic resistance.**

. . .

3. The structure ~~is assigned to Seismic Design Category E,~~ is classified as Risk Category I or II in accordance with Table 1604.5, and ~~is greater than two stories one stories above grade plane~~a lateral design is required for the structure or portion thereof.

**Exception:** One-story wood framed Group R-3 and Group U Occupancies less than 2000 square feet in area, provided the adjacent grade is not steeper than 1 unit ~~vertical in 10 units horizontal (10 percent sloped), assigned to Seismic Design Category D.~~

. . .

**SECTION 27.** Section 1705.3 is hereby amended to read as follows:

**1705.3 Concrete Construction.**

The special inspections and verifications for concrete construction shall be as required by this ~~s~~Section and Table 1705.3.

**Exception:** Special inspection shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock where the structural design of the

footing is based on a specified compressive strength (f'c) not greater than 2,500 pounds per square inch (psi) (17.2 Mpa) regardless of the compressive strength specified in the construction documents or used in the footing construction.

. . .

~~4. Concrete foundation walls constructed in accordance with Table 1807.1.6.2.~~

~~5~~4. Concrete patios, ~~driveways~~ and sidewalks, on grade.

**SECTION 28.** Table 1705.3 is hereby amended to read as follows:

**TABLE 1705.3**

**REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION**

| VERIFICATION AND INSPECTION | CONTINUOUS | PERIODIC | REFERENCE STANDARD[a] | IBC REFERENCE |
|---|---|---|---|---|
| . . . | . . . | . . . | . . . | . . . |
| 3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used. | _ | X | ACI 318: D.9.2 ~~8.1.3, 21.1.8~~ | 1908.5, ~~1909.1~~ |
| 4. Inspection of anchors post-installed in hardened concrete members[b.] | _ | ~~X~~ | ~~ACI 318: 3.8.6, 8.1.3, 21.1.8~~ | ~~1909.1~~ |
| a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads. | X | | ACI 318:D.9.2.4 | _ |
| b. Mechanical anchors and adhesive anchors not defined in 4.a. | | X | ACI 318: D.9.2 | _ |
| . . . | . . . | . . . | . . . | . . . |

. . .

b. Specific requirements for special inspection shall be included in the research report for the anchor issued by an approved source in accordance with ACI 355.2, D.9.2 in ACI 318, or other qualification procedures. Where specific requirements are not provided, special inspection requirements shall be specified by the registered design professional and shall be approved by the ~~b~~Building ~~o~~Official prior to the commencement of the work.

**SECTION 29.** Section 1705.11 is hereby amended to read as follows:

**1705.11 Special inspections for seismic resistance.**

. . .

**Exception:** Special inspections itemized in Sections 1705.11.1 through 1705.11.8 are not required for structures designed and constructed in accordance with one of the following:

. . .

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

. . .

**SECTION 30.** Section 1807.1.4 is hereby amended to read as follows:

**1807.1.4 Permanent wood foundations systems.**

Permanent wood foundation systems shall be designed and installed in accordance with AF&PA PWF. Lumber and plywood shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B and Section 5.2) and shall be identified in accordance with Section 2303.1.8.1. Permanent wood foundation systems shall not be used for structures assigned to Seismic Design Category D, E, or F.

**SECTION 31.** Section 1807.1.6 is hereby amended to read as follows:

**1807.1.6 Prescriptive design of concrete and masonry foundation walls.**

Concrete and masonry foundation walls that are laterally supported at the top and bottom shall be permitted to be designed and constructed in accordance with this ~~s~~Section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E, or F.

**SECTION 32.** Section 1809.3 is hereby amended to read as follows:

**1809.3 Stepped footings.**

. . .

For structures assigned to Seismic Design Category D, E, or F, the stepping requirement shall also apply to the top surface of grade beams supporting walls. Footings shall be reinforced with four 1/2-inch diameter (12.7 mm) deformed reinforcing bars. Two bars shall be placed at the top and bottom of the footings as shown in Figure 1809.3.

**SECTION 33.** Figure 1809.3 is hereby added to read as follows:

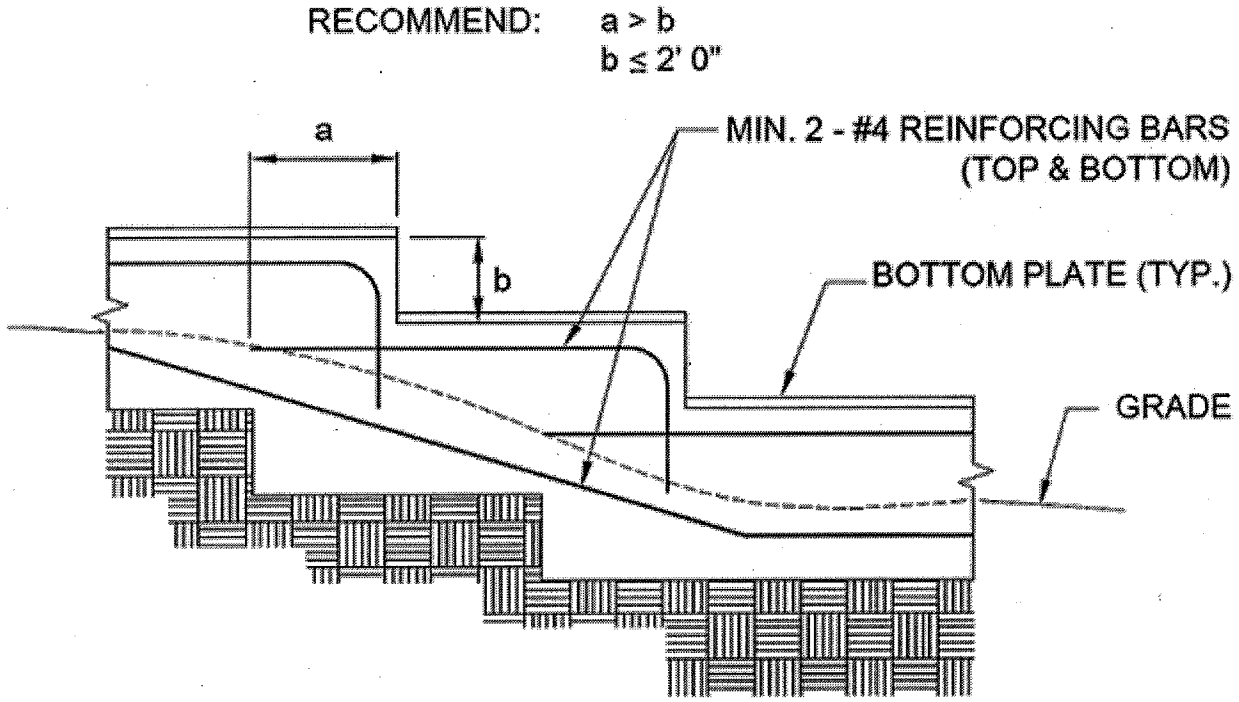



**FIGURE 1809.3**

**STEPPED FOOTING**

**SECTION 34.** Section 1809.7 is hereby amended to read as follows:

**1809.7 Prescriptive footings for light-frame construction.**

Where a specific design is not provided, concrete or masonry-unit footings supporting walls of light-frame construction shall be permitted to be designed in accordance with Table 1809.7. Prescriptive footings in Table 1809.7 shall not exceed one story above grade plane for structures assigned to Seismic Design Category D, E, or F.

**SECTION 35.** Table 1809.7 is hereby amended to read as follows:

**TABLE 1809.7**

**PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF**

**LIGHT-FRAME CONSTRUCTION [a, b, c, d, e]**

| NUMBER OF FLOORS SUPPORTED BY THE FOOTING[f] | WIDTH OF FOOTING (inches) | THICKNESS OF FOOTING (inches) |
|---|---|---|
| 1 | 12 | 6 |
| 2 | 15 | 6 |
| 3 | 18 | 8[g] |

. . .

c. ~~Interior stud-bearing walls shall be permitted to be supported by isolated footings. The footing width and length shall be twice the width shown in this table, and footings shall be spaced not more than 6 feet on center.~~[Reserved].

. . .

~~g. Plain concrete footings for Group R-3 occupancies shall be permitted to be 6 inches thick.~~

**SECTION 36.** Section 1809.12 is hereby amended to read as follows:

**1809.12 Timber footings.**

Timber footings shall be permitted for buildings of Type V construction and as otherwise approved by the ~~b~~Building ~~o~~Official. Such footings shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B). Treated timbers are not required where placed entirely below permanent water level, or where used as capping for wood piles that project above the water level over submerged or marsh lands. The compressive stresses perpendicular to grain in untreated timber

footing supported upon treated piles shall not exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the AF&PA NDS. Timber footings shall not be used in structures assigned to Seismic Design Category D, E, or F.

**SECTION 37.** Section 1905.1 is hereby amended to read as follows:

**1905.1 General.**

The text of ACI 318 shall be modified as indicated in Sections 1905.1.1 through ~~1905.1.10~~1905.1.12.

**SECTION 38.** Section 1905.1.3 is hereby amended to read as follows:

**1905.1.3 ACI 318, Section 21.4.**

. . .

*21.4.5 – ~~Wall piers in Seismic Design Category D, E, or F shall comply with Section 1905.1.4 of the California Building this Code.~~ In structures assigned to Seismic Design Category D, E, or F, intermediate precast wall panels and wall piers shall be designed in accordance with Section 21.9 or 21.13.*

. . .

**SECTION 39.** Section 1905.1.8 is hereby amended to read as follows:

**1905.1.8 ACI 318, Section 22.10.**

Delete ACI 318, Section 22.10, and replace with the following:

. . .

*22.10.1 – Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:*

*(a)* ~~*Structural plain concrete basement, foundation or other walls below the base are permitted in detached one- and two-family dwellings three stories or less in height constructed with stud-bearing walls. In dwellings assigned to Seismic Design Category D or E, the height of the wall shall not exceed 8 feet (2438 mm), the thickness shall not be less than 7½ inches (190 mm), and the wall shall retain no more than 4 feet (1219 mm) of unbalanced fill. Walls shall have reinforcement in accordance with 22.6.6.5.*~~*Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement per cubic yard.*

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

~~*Exception: In detached one- and two-family dwellings three stories or less in height, the projection of the footing beyond the face of the supported member is permitted to exceed the footing thickness.*~~

*(c) Plain concrete footings supporting walls are permitted, provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing.* ~~*For footings that exceed 8 inches (203 mm) in thickness, a*~~*A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.*

~~*Exceptions:*~~

~~*1.*~~ *In Seismic Design Categories A, B and C, detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, plain concrete footings* ~~*without longitudinal reinforcement supporting walls are permitted*~~*with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.*

~~*2. For foundation systems consisting of a plain concrete footing and a plain concrete stemwall, a minimum of one bar shall be provided at the top of the stemwall and at the bottom of the footing.*~~

~~*3. Where a slab on ground is cast monolithically with the footing, one No. 5 bar is permitted to be located at either the top of the slab or bottom of the footing.*~~

**SECTION 40.** Section 1905.1.9 is hereby amended to read as follows:

**1905.1.9 ACI 318, Section D.3.3.**

*These requirements shall be applicable to all buildings. Modify ACI 318 Sections D.3.3.4.2, D.3.3.4.3 (d) and D.3.3.5.2 and replace with the following:*

. . .

**SECTION 41.** Section 1905.1.10 is hereby added to read as follows:

**1905.1.10. ACI 318, Section 21.6.4.1.**

Modify ACI 318, Section 21.6.4, by adding Section 21.6.4.8 and 12.6.4.9 to read as follows:

21.6.4.8 Where the calculated point of contraflexure is not within the middle half of the member clear height, provide transverse reinforcement as specified in ACI 318, Sections 21.6.4.1, Items (a) through (c), over the full height of the member.

21.6.4.9 At any section where the design strength, $\varphi P_n$, of the column is less than the sum of the shears $V_e$ computed in accordance with ACI 318 Sections 21.5.4.1 and 21.6.5.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 21.6.4.1 through 21.6.4.3 shall be provided. For beams framing into opposite sides of the column, the moment components may be assumed to be of opposite sign. For the determination of the design strength, $\varphi P_n$, of the column, these moments may be assumed to result from the deformation of the frame in any one principal axis.

**SECTION 42.** Section 1905.1.11 is hereby added to read as follows:

**1905.1.11. ACI 318, Section 21.9.4.**

Modify ACI 318, Section 21.9.4, by adding Section 21.9.4.6 to read as follows:

21.9.4.6 Walls and portions of walls with $P_u > 0.35P_o$ shall not be considered to contribute to the calculated strength of the structure for resisting earthquake-induced forces. Such walls shall conform to the requirements of ACI 318 Section 21.13.

**SECTION 43.** Section 1905.1.12 is hereby added to read as follows:

**1905.1.12 ACI 318, Section 21.11.6.**

Modify ACI 318, by adding Section 21.11.6.1, to read as follows:

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

**SECTION 44.** Section 2304.9.1 is hereby amended to read as follows:

**2304.9.1 Fastener requirements.**

Connections for wood members shall be designed in accordance with the appropriate methodology in Section 2301.2. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.9.1. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E, or F.

**Exception:** Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the Building Official.

**SECTION 45.** Table 2304.9.1 is hereby amended to read as follows:

**TABLE 2304.9.1**

**FASTENING SCHEDULE[q]**

. . .

q. Staples shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E, or F.

**SECTION 46.** Section 2304.11.7 is hereby amended to read as follows:

**2304.11.7 Wood used in retaining walls and cribs.**

Wood installed in retaining or crib walls shall be preservative treated in accordance with AWPA U1 (Commodity Specifications A or F) for soil and fresh water use. Wood shall not be used in retaining or crib walls for structures assigned to Seismic Design Category D, E, or F.

**SECTION 47.** Section 2305.4 is hereby added to read as follows:

**2305.4 Quality of nails.**

In Seismic Design Category D, E, or F, mechanically driven nails used in wood structural panel shear walls shall meet the same dimensions as that required for hand-driven nails, including diameter, minimum length, and minimum head diameter. Clipped head or box nails are not permitted in new construction. The allowable design value for clipped head nails in existing construction may be taken at no more than the nail-head-area ratio of that of the same size hand-driven nails.

**SECTION 48.** Section 2305.5 is hereby added to read as follows:

**2305.5 Hold-down connectors.**

In Seismic Design Category D, E or F, hold-down connectors shall be designed to resist shear wall overturning moments using 75 percent of the allowable seismic load values. Such values shall be established in a valid research report from approved sources in accordance with Section 104.11.1 or by accepted engineering practice and the provisions of this ~~c~~Code.

**Exception:** Values established by specialized cyclic and dynamic testing may be used when approved by the Building Official in accordance with Section 104.11.2.

Connector bolts into wood framing shall require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Hold-down connectors shall be tightened to finger tight plus one half (1/2) wrench turn just prior to covering the wall framing.

**SECTION 49.** Section 2306.2 is hereby amended to read as follows:

**2306.2 Wood-frame diaphragms.**

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

**Exception:** Allowable shear values where panels are fastened to framing members with staples may be used if such values are substantiated by cyclic testing and approved by the Building Official.

The allowable shear values in Tables 2306.2(1) and 2306.2(2) are permitted to be increased 40 percent for wind design.

**Exception:** [DSA-SS, DSA-SS/CC and OSHPD 1, 2 &4] Wood structural panel diaphragms using staples as fasteners are not permitted by DSA and OSHPD.

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

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

**SECTION 50.** Section 2306.3 is hereby amended to read as follows:

**2306.3 Wood-frame shear walls.**

Wood-frame shear walls shall be designed and constructed in accordance with AF&PA SDPWS. For structures assigned to Seismic Design Category D, E, or F, application of Tables 4.3A and 4.3B of AF&PA SDPWS shall include the following:

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

2. The maximum nominal unit shear capacities for three-ply plywood resisting seismic forces in structures assigned to Seismic Design Category D, E or F is 400 pounds per linear foot (plf).

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

Sections 4.3.6.1 and 4.3.6.4.3 of AF&PA SDPWS for sill plate size and anchorage requirements.

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

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

For structures assigned to Seismic Design Category D, application of Table 4.3C of AF&PA SDPWS shall not be used below the top level in a multi-level building for structures.

Where panels are fastened to framing members with staples, requirements and limitations of AF&PA SDPWS shall be met and the allowable shear values set forth in Table 2306.3(1), 2306.3(2) or 2306.3(3) shall only be permitted for structures assigned to Seismic Design Category A, B, or C.

**Exception:** Allowable shear values where panels are fastened to framing members with staples may be used if such values are substantiated by cyclic testing and approved by the Building Official.

The allowable shear values in Tables 2306.3(1) and 2306.3(2) are permitted to be increased 40 percent for wind design. Panels complying with ANSI/APA PRP-210 shall be permitted to use design values for Plywood Siding in the AF&PA SDPWS.

***Exception: [DSA-SS, DSA-SS/CC and OSHPD 1, 2 &4]*** *Wood structural panel diaphragms using staples as fasteners are not permitted by DSA and OSHPD.*

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

**SECTION 51.** Section 2307.2 is hereby added to read as follows:

**2307.2 Wood-frame panel shear walls.**

Wood-frame shear walls shall be designed and constructed in accordance with Section 2306.3 as applicable.

**SECTION 52.** Section 2308.3.4 is hereby amended to read as follows:

**2308.3.4 Braced wall line support.**

. . .

**Exception**: For structures with a maximum plan dimension not over 50 feet 15,240 mm), continuous foundations are required at exterior walls only for structures assigned to Seismic Design Category A, B, or C.

**SECTION 53.** Section 2308.9.3.1 is hereby amended to read as follows:

**2308.9.3.1 Alternative bracing.**

Any bracing required by Section 2308.9.3 is permitted to be replaced by the following:

1. In one-story buildings, each panel shall have a length of not less than 2 feet 8 inches (813 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be sheathed on one face with 3/8-inch-minimum-thickness (9.5 mm) wood

structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Table 2304.9.1 and blocked at wood structural panel edges. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports. Two anchor bolts installed in accordance with Section 2308.6 shall be provided in each panel. Anchor bolts shall be placed at each panel outside quarter points. Each panel end stud shall have a tie-down device fastened to the foundation, capable of providing an approved uplift capacity of not less than 1,800 pounds (8006 N). The tie-down device shall be installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation or on floor framing supported directly on a foundation that is continuous across the entire length of the braced wall line. This foundation shall be reinforced with not less than one No. 4 bar top and bottom.

. . .

**SECTION 54.** Section 2308.9.3.2 is hereby amended to read as follows:

**2308.9.3.2 Alternate bracing wall panel adjacent to a door or window opening.**

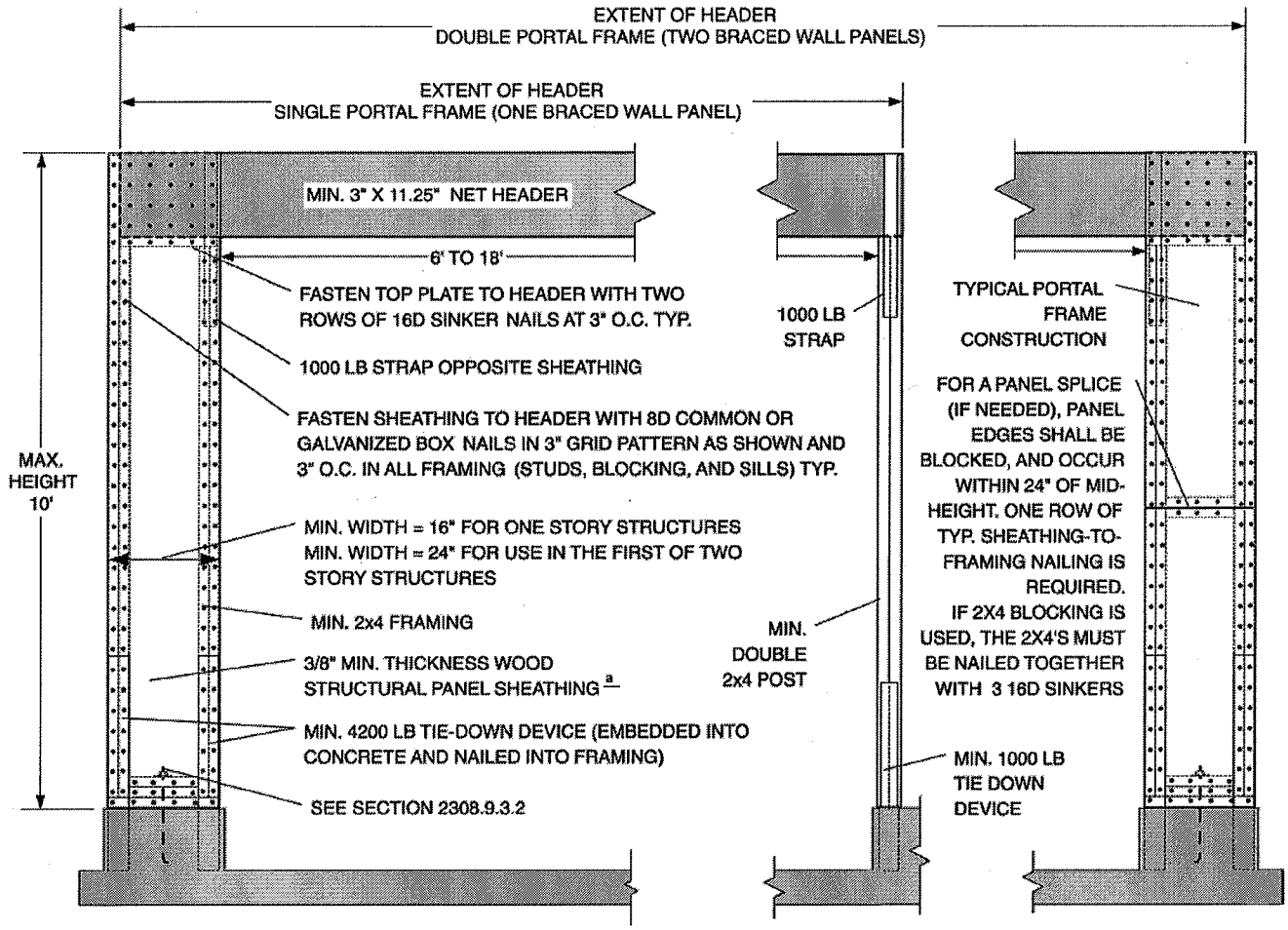
Any bracing required by Section 2308.9.3 is permitted to be replaced by the following when used adjacent to a door or window opening with a full-length header:

1. In one-story buildings, each panel shall have a length of not less than 16 inches (406 mm) and a height of not more than 10 feet (3048 mm). Each panel shall be

sheathed on one face with a single layer of 3/8 inch (9.5 mm) minimum thickness wood structural panel sheathing nailed with 8d common or galvanized box nails in accordance with Figure 2308.9.3.2. For structures assigned to Seismic Design Category D or E, each panel shall be sheathed on one face with 15/32-inch-minimum-thickness (11.9 mm) wood structural panel sheathing nailed with 8d common nails spaced 3 inches on panel edges, 3 inches at intermediate supports and in accordance with Figure 2308.9.3.2. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure 2308.9.3.2. A built-up header consisting of at least two 2 × 12s and fastened in accordance with Item 24 of Table 2304.9.1 shall be permitted to be used. A spacer, if used, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. The clear span of the header between the inner studs of each panel shall be not less than 6 feet (1829 mm) and not more than 18 feet (5486 mm) in length. A strap with an uplift capacity of not less than 1,000 pounds (4,400 N) shall fasten the header to the inner studs opposite the sheathing. One anchor bolt not less than 5/8 inch (15.9 mm) diameter and installed in accordance with Section 2308.6 shall be provided in the center of each sill plate. The studs at each end of the panel shall have a tie-down device fastened to the foundation with an uplift capacity of not less than 4,200 pounds (18 480 N).

. . .

**SECTION 55.** Figure 2308.9.3.2 is hereby amended to read as follows:




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

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

**FIGURE 2308.9.3.2**
**ALTERNATE BRACED WALL PANEL ADJACENT TO A DOOR OR WINDOW OPENING**

**SECTION 56.** Table 2308.12.4 is hereby amended to read as follows:

## TABLE 2308.12.4

## WALL BRACING IN SEISMIC DESIGN CATEGORIES D AND E

## (Minimum Length of Wall Bracing per each 25 Linear Feet of Braced Wall Line [a])

. . .

**SECTION 56.** Table 2308.12.4 is hereby amended to read as follows:

**TABLE 2308.12.4**

**WALL BRACING IN SEISMIC DESIGN CATEGORIES D AND E**

**(Minimum Length of Wall Bracing per each 25 Linear Feet of Braced Wall Line [a])**

. . .

a. Minimum length of panel bracing of one face of the wall for S-W sheathing shall be at least 4'-0" long or both faces of the wall for G-P sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. For S-W panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half the tabulated value but the h/w ratio shall not exceed 2:1 and design for uplift is required.

b. G-P = gypsum board, ~~fiberboard, particleboard, lath and~~portland cement, plaster, or gypsum sheathing boards; S-W = wood structural panels ~~and diagonal wood sheathing~~.

c. Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates and, where occurring, at blocking:

For 1/2-inch gypsum board, 5d (0.113 inch diameter) cooler nails at 7 inches on center;

For 5/8-inch gypsum board, No 11 gage (0.120 inch diameter) cooler nails at 7 inches on center;

For gypsum sheathing board, 1-3/4 inches long by 7/16-inch head, diamond point galvanized nails at 4 inches on center;

For gypsum lath, No. 13 gage (0.092 inch) by 1-1/8 inches long, 19/64-inch head, plasterboard at 5 inches on center;

For Portland cement plaster, No. 11 gage (0.120 inch) by $1^1/_2$ inches long, $^7/_{16}$- inch head at 6 inches on center;

~~For fiberboard and particleboard, No. 11 gage (0.120 inch) by $1^1/_2$ inches long, $^7/_{16}$- inch head, galvanized nails at 3 inches on center.~~

d. S-W sheathing shall be a minimum of 15/32" thick nailed with 8d common nails placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

**SECTION 57.** Section 2308.12.5 is hereby amended to read as follows:

**2308.12.5 Attachment of sheathing.**

Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.12.4 or 2304.9.1. Wall sheathing shall not be attached to framing members by adhesives. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E, or F.

**Exception:** Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the Building Official.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches (6096 mm) on center with four 8d nails per leg (total eight 8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at

maximum 24 inch (6096 mm) intervals along the top plate of discontinuous vertical framing.

**SECTION 58.** Section 3401.10 is hereby added to read as follows:

**3401.10 Parapets and appendages.**

**3401.10.1 General compliance.**

Whenever the Building Official determines by inspection that, as a result of inadequate construction or bracing to resist horizontal forces, an existing parapet or appendage attached to and supported by an exterior wall of a building is likely to become a hazard to life or property in the event of earthquake disturbance, and such parapet or appendage is not an immediate hazard or danger as described in Section 102 of this Code, the Building Official may provide the owner of the building or other person or agent in control of the building where such parapet or other appendage exists, with a written notice specifying the hazards and the inadequacies of construction or bracing. The owner of the building or other person or agent in control of the building shall, within 12 months from the date of such written notice, eliminate the hazard as set forth below. Any person receiving notice as set out in this Section may appeal, in the manner provided by Section 102.4 of this Code, to the building Board of Appeals.

**3401.10.2 Wall anchor.**

The parapet or appendage shall be removed and the remainder of the wall anchored at the roof line, or it shall be reconstructed so that it will conform structurally as near as it is practicable to do so with requirements of Chapter 16 of this Code, or it shall be otherwise braced and strengthened in a manner satisfactory to the Building

Official, so that it will resist a reasonable degree of horizontal forces without becoming dislodged with danger of falling.

**3401.10.3 Inspection of existing condition.**

Where, in the opinion of the Building Official, it is necessary to open a portion of roof, wall, or ceiling of a building in order to determine the structural condition of any parapet or appendage, the Building Official may order the owner to make such opening and the owner shall comply with said order at the owner's sole cost and expense.

**SECTION 59.** Section 3401.11 is hereby added to read as follows:

**3401.11 Existing glass.**

Whenever the Building Official determines by inspection that an existing glass installation in rooms having an occupant load of more than 100 persons or a means of egress serving an occupant load of more than 100 persons, as determined by Chapter 10, is likely to become a hazard in the event of accidental human impact as described in Section 2406.4 and such installation does not comply with the provisions of this Code for glazing in such locations, the Building Official may provide the owner of the building or other person or agent in control of the building where such glazing exists with a written notice of such condition. The owner of the building or other person or agent in control of the building shall, within 90 days after receiving said notice, replace such glass or otherwise cause the installation to conform with the requirements of this Code.

**SECTION 60.** Section 6501 is hereby amended to read as follows:

**SECTION 6501 DEFINITIONS**

. . .

**BUILDING LINE.** For the purpose of this Chapter, a "property line" shall also mean a building line whose boundaries are established by a building line ordinance.

**FACE OF BUILDING.** ~~is t~~The general outer surface, not including cornices, bay windows or other ornamental trim, of any main exterior wall of a building.

**GROUND SIGN.** ~~is a~~A detached sign erected upon or supported by the ground.

**PROJECTING SIGN.** ~~is a~~A sign other than a wall sign suspended from or supported by a building or structure and projecting out therefrom.

**ROOF SIGN.** ~~is a~~A sign erected upon or above a roof or parapet wall of a building or structure.

**SIGN.** ~~is a~~A display board, screen, structure, object or part thereof, used to announce, declare, demonstrate, display or otherwise advertise and attract the attention of the public.

**WALL SIGN.** ~~is a~~A sign attached to or erected against the wall of a building or structure, with the exposed face of the sign in a plane approximately parallel to the plane of said wall.

**SECTION 61.** Section 6502.4 is hereby amended to read as follows:

**6502.4 Design and Construction.**

Sign frames and supporting construction shall be designed and constructed as ~~provided in the Structural Engineering Design Provisions~~ required by Chapters 16 through 23 of this Code.

. . .

**SECTION 62.** Section 6502.5 is hereby amended to read as follows:

**6502.5 Projection and Clearance.**

Signs extending beyond the exterior wall of the building shall comply with Section 705.2 and the following requirements.

. . .

**SECTION 63.** Section 6502.6 is hereby amended to read as follows:

**6502.6 Materials.**

Signs and their supports may be constructed of any material allowed in this Code, unless otherwise specified in this Chapter for the classification and location of sign to be erected.

Glass used in signs shall be of the size, thickness and type given in Table 65-1 of this Chapter and shall comply with the requirements of Chapter 24.

**Exceptions:**

1. Surfaces of signs not more than 55 feet (16764 mm) above grade may be of approved plastic material which has a flame-spread rating of 25 or less when tested in accordance with Standard 8-1, of the Uniform Building Code, 1997 Edition, as published by the International Conference of Building Officials, in the way intended for use.

2. Notwithstanding any other provisions of this Code, plastics which burn at a rate no faster than 2.5 inches per minute (64 mm/s) when tested in accordance with ASTM D 635 shall be deemed approved plastics and can be used as the display

surface material and for the letters, decorations and facing on signs and outdoor display structures.

**SECTION 64.** Section 6502.7 is hereby amended to read as follows:

**6502.7 Prohibited Locations.**

Signs shall not be erected, constructed or maintained so as to obstruct any fire escape or any window or door or opening used as part of the means of egress or as part of the accessible route, except as permitted by Chapters 10, 11A and 11B.

. . .

**SECTION 65.** Section 6504 is hereby amended to read as follows:

**SECTION 6504 PROJECTING SIGNS**

Projecting signs attached to a building shall be of noncombustible materials, or ~~of not less than one-hour fire resistive construction as specified in Chapter 7~~of any material complying with Sections 705.2.1 through 705.2.3. The thickness of any such sign shall not exceed the following:

. . .

**SECTION 66.** Section 6505 is hereby amended to read as follows:

**SECTION 6505 WALL SIGNS**

Wall signs ~~exceeding a height of 15 feet (4572 mm) above grade shall have a surface of noncombustible material, but may have ornamental moldings and lattice work of combustible material~~ attached to a building shall be of noncombustible materials or shall comply with Section 1406. No wall sign shall have a projection over any public street, other public property or building line, as defined herein, greater than 24 inches

(610 mm). No wall sign shall extend above the roof or highest parapet wall immediately adjacent thereto.

**SECTION 67.** Section 6506.3 is hereby amended to read as follows:

**6506.3 Construction.**

Roof signs shall be designed as required in Section 6502.4. They shall be of noncombustible material, except that wood moldings and 2-inch (51 mm)-thick plank walkways may be used.

. . .

**SECTION 68.** Section 6507.1 is hereby amended to read as follows:

**6507.1 Marquee Signs.**

Signs may be placed on, attached to or constructed ~~in a marquee and such signs shall, for the purpose of determining projection, clearance, height and material, be considered a part of and shall meet the requirements for a marquee. Projecting signs attached to a building may also be attached to a marquee.~~ on a marquee that meet the requirements for a marquee as described in Section 3106.

The marquee sign:

1. Shall not project beyond the perimeter of the marquee,
2. Shall not extend more than 6 feet above a marquee,
3. Shall not extend more than 1 foot below a marquee, and
4. Shall not have a vertical dimension greater than 8 feet.

**SECTION 69.** Section 6601.1 is hereby amended to read as follows:

**6601.1 Structures Regulated.**

The provisions of this Chapter are intended to regulate structures not otherwise regulated by this or other Codes, which affect or may affect the physical safety of human beings, and shall include the installation, maintenance and operations of public assembly tents, amusement devices, towers, membrane structures not regulated by Chapter 31, and other structures.

**AMUSEMENT DEVICE OR STRUCTURE** is any device or structure such as rebound tumbling equipment, merry-go-round, ~~ferris wheels,~~ captive air-planes, dark houses and similar devices or structures which the public is invited or permitted to ride or use for the purpose of amusement.

**SECTION 70.** Chapter 67 is hereby re-titled to read as follows:

**CHAPTER 67**

**~~SPECIAL~~SECURITY PROVISIONS**

**SECTION 71.** Section 6704 is hereby amended to read as follows:

**SECTION 6704 ALTERNATE SECURITY PROVISIONS**

The provisions of this Chapter are not intended to prevent the use of any device or method of construction not specifically prescribed by this Code when such alternate provides equivalent security based on a recommendation of the County Sheriff. Any alternate security provisions shall comply with Penal Code Section 14051.

**SECTION 72.** Section 6709 is hereby amended to read as follows:

**SECTION 6709** **DOORS—SWINGING DOORS**

**6709.1** **Swinging Wooden Doors.**

. . .

**6709.1.1** **Solid-core Doors.**

. . .

**6709.1.2** **Wood Panel-type Doors.**

. . .

**6709.1.3** **Hollow-core Doors.**

. . .

**6709.2** **Single Swinging Door, Pair of Doors and Dutch Doors.**

. . .

**EXCEPTIONS:**

. . .

4. In residential occupancies, doors not required by Section 1029 or 1008 may be equipped with security-type hardware which requires a key to release from the interior side of the door if the sleeping rooms are protected with a fire-warning system as set forth in Sections 907.2.11 and an automatic sprinkler system as required by Section 903.2.8.

**6709.3** **Inactive Leaf of a Pair of Door or Upper Leaf of a Dutch Door.**

The inactive leaf of a pair of doors and the upper leaf of Dutch doors shall be equipped with a deadbolt or deadbolts as set forth in ~~Subs~~Section 6709.2

. . .

**6709.4** **Door Stops.**

. . .

**6709.5** **Nonremovable Pins.**

. . .

**6709.6** **Cylinder Guards.**

. . .

**SECTION 73.** Section 6715 is hereby amended to read as follows:

**SECTION 6715** **LIGHTS—LOCKING DEVICES**

**6715.1** **Emergency Egress Windows.**

. . .

**6715.2** **Sliding Glass Windows.**

. . .

**6715.3** **Other Openable Windows.**

. . .

**6715.4** **Special Types of Windows.**

. . .

**SECTION 74.** Section 6717 is hereby amended to read as follows:

**SECTION 6717 HATCHWAYS, SCUTTLES AND SIMILAR OPENINGS**

**6717.1 Wooden Hatchways.**

. . .

**6717.2 Hatchways, Scuttles and Similar Openings.**

The hatchway, scuttle and similar openings shall be secured from the inside with a slide bar, slide bolt, and/or padlock with a hardened steel shackle.

**6717.3 Outside Pin-type Hinges.**

. . .

**6717.4 Other Types of Openings.**

. . .

**SECTION 75.** Section 6902 is hereby amended to read as follows:

**SECTION 6902 WHERE ALLOWED WITHOUT PERMITS**

This Chapter shall not apply to trailer coaches:

1. When the provisions of Part 2 or Part 2.1, Division 13 of the Health and Safety Code, State of California apply.

. . .

**SECTION 76.** Section 6903 is hereby amended to read as follows:

**SECTION 6903 PERMIT REQUIRED**

A trailer coach shall not be used, maintained or occupied contrary to the provisions of this Chapter and the applicable State laws and regulations. Before using a trailer coach for living or sleeping purposes a person shall ~~first~~ obtain a permit to do so

from the Building Official. If the time during which a trailer coach may be so used is limited by the provisions of Title 22 ~~-of the Los Angeles County~~ Planning and Zoning of the Los Angeles County Code, ~~the Planning and Zoning Code~~, then the permit hereunder shall also be so limited. Otherwise the permit is valid until revoked.

**SECTION 77.** Section 9402.1 is hereby amended to read as follows:

**9402.1 Scope.**

The provisions of this Chapter shall apply to all welded steel moment frame buildings constructed, under construction, or for which a building permit was issued prior to July 1, 1999, the effective date of ~~this o~~Ordinance 99-0040, which are:

. . .

**SECTION 78.** Section 9404.2 is hereby amended to read as follows:

**9404.2 Contents of Order.**

The Inspection and Repair Compliance Order shall be in writing and shall be served either personally or by registered mail, postage prepaid, upon the owner of the building as shown on the last equalized assessment. In the event that contact is not made with the owner after a diligent effort by the building official, as a last resort, the Inspection and Repair Compliance Order shall be served by posting on the building. The order shall specify that the building appears to be a welded steel moment frame building within the scope of ~~part~~item 1 or 2 of Section 9402.1 or the geographical areas as set forth in Section 9402.2 and, therefore, is required to meet the minimum structural standards and time limits of Section 9405 and Table 94-A of this Chapter. The order shall also specify the time limits for appeal of and compliance with the order.

**SECTION 79.** Table 94-A is hereby amended to read as follows:

. . .

[1] All dates are measured from the date the inspection and repair compliance order is served pursuant to Section 9404.

[2] For any work required by this Chapter, the time limits shown herein shall supersede the time limits specified in Section 106.5.4.

[3] These time limits may be extended by 12 months at the discretion of the Building Official provided the owner has demonstrated a good faith effort to meet the requirements of this Chapter. A maximum of two such extensions may be granted.

**SECTION 80.** Section 9501 is hereby amended to read as follows:

. . .

This Chapter sets forth minimum standards for structural seismic resistance to reduce the risk of loss of life and injury by the installation of wall anchors and connections to the horizontal diaphragms. Compliance with these standards will not necessarily prevent loss of life or injury, or prevent earthquake damage to rehabilitated buildings. This Chapter does not require existing electrical, plumbing, mechanical or ~~firesafety~~ fire protection systems to be altered.

**SECTION 81.** Section 9503 is hereby amended to read as follows:

**SECTION 9503 DEFINITIONS.**

. . .

**ESSENTIAL FACILITIES** is defined as any building conforming to the definition of essential facilities as set forth in ~~Section 1602.1 of this Code~~Chapter 2.

. . .

**SECTION 82.** Section 9506.2 is hereby amended to read as follows:

**9506.2 Special Requirements for Wall Anchors and Continuity Ties.**

. . .

The strength design specified in Section ~~1912~~1909, using a load factor of 2.0 in lieu of 1.4 for earthquake loading, shall be used for design of embedments in concrete.

. . .

**SECTION 83.** Section 9506.10 is hereby amended to read as follows:

**9506.10 Diaphragms.**

Diaphragms supporting concrete walls shall have continuous ties or struts between diaphragm chords to distribute the anchorage forces specified in Section 12.11 of ASCE 7-10. The spacing of continuous ties shall not exceed 25 feet (7620 mm). Added chords of subdiaphragms may be used to form subdiaphragms to transmit the anchorage forces to the main continuous crossties. The maximum diaphragm shear used to determine the depth of the subdiaphragms shall not exceed 300 pounds per foot (4.38 kN/m). The maximum length-to-width ratio of the wood structural subdiaphragm shall be 2 ½:1.

**SECTION 84.** Table 95-A is hereby amended to read as follows:

. . .

[1] All dates are measured from the date the Earthquake Hazard Reduction Compliance Order is served pursuant to Section 9504.

[2] For any work required by this Chapter, the time limits shown herein shall supersede the time limits specified in Section 106.5.4.

**SECTION 85.** Chapter 96 is hereby amended to read as follows:

**CHAPTER 96**

**EARTHQUAKE HAZARD REDUCTION FOR EXISTING UNREINFORCED MASONRY BEARING WALL BUILDINGS**

**SECTION 9601 PURPOSE**

. . .

**SECTION 9602 SCOPE**

. . .

**SECTION 9603 DEFINITIONS**

For purposes of this Chapter, the applicable definitions contained in this Code, Appendix Chapter A1 of Part 10, Title 24 of the California Code of Regulations, and the following definitions shall apply:

. . .

**SECTION 9604 RATING CLASSIFICATIONS**

. . .

**SECTION 9605 GENERAL REQUIREMENTS**

. . .

**SECTION 9606 ADMINISTRATION**

. . .

**SECTION 9607 HISTORICAL BUILDINGS**

. . .

**9607.2.1** **Dimensions.**

. . .

**9607.2.2** **Foundation.**

. . .

**9607.2.3** **Compressive Strength of Brick and Adobe Brick Masonry.**

. . .

**9607.2.4** **Mortar.**

. . .

**9607.2.5** **Tension Stresses.**

. . .

**9607.3** **Archaic ~~m~~Materials.**

. . .

**9607.4** **Alternative ~~m~~Materials and ~~s~~State ~~h~~Historical ~~b~~Building ~~c~~Code ~~a~~Advisory ~~r~~Review.**

Alternative materials, design, or methods of construction will be considered as set forth in Section 104.2.8. In addition, when a request for an alternative proposed design, material, or method of construction is being considered, the Building Official may file a written request for an opinion to the State Historical Building Code Advisory Board for its consideration, advice or findings in accordance with the State Historical Building Code (Part 8, Title 24 of the California Code of Regulations).

**SECTION 9608 INFORMATION REQUIRED ON PLANS**

. . .

**9608.2 Construction ~~d~~Details.**

**9608.2.1 Anchorage at Roof and Floor Levels.**

. . .

**9608.2.2 Diaphragm Chord.**

. . .

**9608.2.3 Trusses and Beams.**

. . .

**9608.2.4 Parapets and Exterior Walls.**

. . .

**9608.2.5 Mortar Joints.**

. . .

**9608.2.6 Repair Details.**

. . .

**9608.3 Existing Construction.**

. . .

3. The extent and type of parapet corrections which were ~~preformed~~performed in accordance with Chapter 34 of this Code.

. . .

**SECTION 9609 INTERPRETATION OF THIS CHAPTER**

. . .

**SECTION 86.** Table 96-B is hereby amended to read as follows:

. . .

[1] Measured from the date of service of the order.

[2] Measured from the date of building permit issuance.

**SECTION 87.** Section 9814 is hereby amended to read as follows:

**9814 EMERGENCY PROCEDURES**

Whenever ~~either~~ the Los Angeles County District Attorney, Sheriff or the Chief of the Fire Department determines that the conditions described in Section 9803.1 or 9803.2 constitute such an immediate hazard that access to the building, structure, or Special Hazard must be sufficiently removed, secured, closed, covered, fenced, backfilled, or provided with some equivalent protection forthwith or within less than the designated period and the Los Angeles County District Attorney, Sheriff or the Chief of the Fire Department so notifies the Building Official, then the Building Official shall limit access to such building, structure, or Special Hazard through the Director of the Internal Services Department (as provided in Section 9811.1) or Road Maintenance Division (as provided in Section 9811.2) or by contract, or otherwise, after giving such notice to the record owner or the person in charge, or both as the circumstances will permit or without any notice whatever when, in the opinion of the Los Angeles County District Attorney, Sheriff or Chief of the Fire Department, immediate action is necessary.

The provisions of this Chapter providing for hearings shall apply to any person having any right, title, or interest in any building secured pursuant to this Section. Such person may request a hearing as to the necessity and reasonable cost of the work

performed pursuant to Section 9814 within 10 days after the building is secured or within 10 days after receiving notice of such work.

**SECTION 88** Section 9902 is hereby amended to read as follows:

**SECTION 9902 DEFINITIONS**

. . .

~~**9902.3 COMPLETION.** Where a building is found to be substandard due to having been under construction for an unreasonable time, as defined in Section 9903.2, the terms demolition, improvement, removal, repair or rehabilitation," as used in this Chapter shall include "completion."~~

**9902.4~~3~~**

. . .

**9902.~~5~~4 PARTY CONCERNED.**

**9902.~~6~~5 VEHICLE—DEFINED.**

. . .

**9902.~~7~~6 PUBLIC NUISANCE**

. . .

**SECTION 89.** Section 9905.15 is hereby deleted as follows:

~~**9905.15** Grading which does not meet the minimum standards set forth in Appendix J of this Code or which is done in violation of this Code or any other County or State law regulating grading.~~

**SECTION 90.** Section J101 is hereby amended to read as follows:

**J101 GENERAL**

**J101.1 Scope.**

The provisions of this ~~c~~Chapter apply to grading, excavation, and earthwork construction, including fills and embankments and the control of runoff from graded sites, including erosion sediments and construction-related pollutants. ~~Where conflicts occur between the technical requirements of this chapter and the geotechnical report, the geotechnical report shall govern~~. The purpose of this Chapter is to safeguard life, limb, property, and the public welfare by regulating grading on private property.

**J101.2 Flood hazard areas.**

The provisions of this ~~c~~Chapter shall not apply to grading, excavation, and earthwork construction, including fills and embankments, in floodways designated in Chapter 11.60 of Title 11 – Health and Safety of the Los Angeles County Code or in floodways within flood hazard areas established in Section 1612.3 or in flood hazard areas where design flood elevations are specified but floodways have not been designated, unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed work will not result in any increase in the level of the base flood.

**J101.3 General hazards.**

Whenever the Building Official determines that any existing excavation, embankment, or fill on private property has become a hazard to life and limb, or endangers property, or adversely affects the safety, use, or stability of a public way or drainage channel, the Building Official may give written notice thereof to the owner of the property upon which the excavation, embankment, or fill is located, or other person

or agent in control of said property. Upon receipt of said notice, the owner or other person or agent in control of the property shall repair or eliminate such excavation, embankment, or fill so as to eliminate the hazard, in conformance with the requirements of this Code, within the period specified in said notice.

**J101.4 Safety precautions.**

If at any stage of the work the Building Official determines by inspection that further grading as authorized is likely to endanger any public or private property or result in the deposition of debris on any public way or interfere with any existing drainage course, the Building Official may order the work stopped by notice in writing served on any persons engaged in doing or causing such work to be done, and any such person shall immediately stop such work. The Building Official may authorize the work to proceed if the Building Official finds adequate safety precautions can be taken or corrective measures incorporated in the work to avoid likelihood of such danger, deposition, or interference.

If the grading work as done has created or resulted in a hazardous condition, the Building Official shall give written notice requiring correction thereof as specified in Section J101 of this Code.

**J101.5 Protection of utilities.**

Both the permittee and the owner of the property on which the grading is performed shall be responsible for the prevention of damage to any public and/or private utilities or services.

**J101.6 Protection of adjacent property.**

Both the permittee and owner of the property on which the grading is performed shall be responsible for the prevention of damage to adjacent property. No person shall excavate on land sufficiently close to the property line to endanger any adjoining public street, sidewalk, alley, or other public or private property without taking adequate measures to support and protect such property from settling, cracking, or other damage that might result from the proposed work. Any person performing any grading that involves imported or exported materials shall take special precautions, as approved by the Building Official, to prevent such materials from being deposited on adjacent properties, any public way, and/or any drainage course.

**J101.7 Storm water control measures.**

Both the permittee and the owner of the property on which the grading is performed shall put into effect and maintain all precautionary measures necessary to protect adjacent water courses and public or private property from damage by erosion, flooding, and deposition of mud, debris, and construction-related pollutants originating from the site during grading and related construction activities.

**J101.8 Maintenance of protective devices and rodent control.**

All drainage structures and other protective devices and all burrowing rodent control measures, as shown on the grading plans approved by the Building Official, shall be maintained in a good condition and, when necessary, promptly repaired by the permittee or the owner of the property on which grading has been performed or by any other person or agent in control of such property.

**J101.9 Correlation with other sections.**

The provisions of this Chapter are independent of the provisions of Chapter 99 of this Code relating to building and property rehabilitation. This Section may be applied even though the same facts have been used to determine that there is substandard property subject to the provisions of Chapter 99.

**J101.10 Conditions of approval.**

In granting any permit under this Code, the Building Official may include such conditions as may be reasonably necessary to prevent creation of a nuisance or hazard to public or private property. Such conditions may include, but shall not be limited to:

1. Improvement of any existing grading to comply with the standards of this Code.

2. Requirements for fencing of excavations or fills which would otherwise be hazardous.

**SECTION 91.** Section J102.1 is hereby amended to read as follows:

**J102.1 Definitions.**

~~The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of the *California Building* Code for general definitions.~~ For the purposes of this Appendix Chapter, the terms, phrases, and words listed in this Section and their derivatives shall have the indicated meanings.

**APPROVAL.** When the proposed work or completed work conforms to this Chapter, as determined by and to the satisfaction of the Building Official.

**AS-BUILT.** See Section J105.12.

**BEDROCK.** The relatively solid, undisturbed rock in place either at the ground surface or beneath superficial deposits of alluvium, colluvium and/or soil.

**BENCH.** A relatively level step excavated into earth material on which fill is to be placed.

**BEST MANAGEMENT PRACTICE (BMP).** Practices, prohibitions of practices, or other activities to reduce or eliminate the discharge of pollutants to surface waters. BMPs include structural and nonstructural controls, management practices, operation and maintenance procedures, and system, design, and engineering methods that are required to be employed in order to comply with the requirements of the National Pollution Discharge Elimination System (NPDES) permit issued to the County of Los Angeles (see Section 106.4.3 and Title 31 - Green Building Standards Code of the Los Angeles County Code).

**BORROW.** Earth material acquired from an off-site location for use in grading on a site.

**CIVIL ENGINEER.** A professional engineer registered in the State of California to practice in the field of civil works.

**CIVIL ENGINEERING.** The application of the knowledge of the forces of nature, principles of mechanics, and the properties of materials to the evaluation, design, and construction of civil works.

**COMPACTION.** The densification of a fill by mechanical means.

**CUT.** See "Excavation."

**DESILTING BASINS.** Physical structures, constructed for the removal of sediments from surface water runoff.

**DESIGN ENGINEER.** The Civil Engineer responsible for the preparation of the grading plans for the site grading work.

**DOWN DRAIN.** A device for collecting water from a swale or ditch located on or above a slope, and safely delivering it to an approved drainage facility.

**EARTH MATERIAL.** Any rock, natural soil, or fill or any combination thereof.

**ENGINEERING GEOLOGIST.** A geologist experienced and knowledgeable in engineering geology, holding a valid certificate of registration as a geologist in the specialty of engineering geology issued by the State of California under the applicable provisions of the Geologist and Geophysicist Act of the Business and Professions Code.

**ENGINEERING GEOLOGY.** The application of geologic knowledge and principles in the investigation and evaluation of naturally occurring rock and soil for use in the design of civil works.

**EROSION.** The wearing away of the ground surface as a result of the movement of wind, water, or ice.

**EXCAVATION.** The removal of earth material by artificial means, also referred to as a cut.

**FIELD ENGINEER.** The Civil Engineer responsible for performing the functions as set forth in Section J105.3.

**FILL.** Deposition of earth materials by artificial means.

**GEOTECHNICAL ENGINEER.** See "Soils Engineer".

**GEOTECHNICAL HAZARD.** An adverse condition due to landslide, settlement, and/or slippage. These hazards include, but are not limited to, loose debris, slopewash, and mud flows from natural or graded slopes.

**GRADE.** The vertical location of the ground surface.

**GRADE, EXISTING.** The grade prior to grading.

**GRADE, FINAL.** See Section J105.7.

**GRADE, FINISHED.** The grade of the site at the conclusion of all grading efforts.

**GRADE, INITIAL.** See Section J105.7.

**GRADE, ROUGH.** See Section J105.7.

**GRADING.** An excavation or fill or combination thereof.

**KEY.** A compacted fill placed in a trench excavated in earth material beneath the toe of a slope.

**LANDSCAPE ARCHITECT.** A person who holds a certificate to practice landscape architecture in the State of California under the applicable landscape architecture provisions of Division 3, Chapter 3.5 of the Business and Professions Code.

**LINE.** The horizontal location of the ground surface.

**PERMITTEE.** See Section J105.6.

**PRIVATE SEWAGE DISPOSAL SYSTEM.** A septic tank with effluent discharging into a subsurface disposal field, into one or more seepage pits or into a combination of subsurface disposal field and seepage pit or of such other facilities as may be permitted in accordance with the procedures and requirements set forth in

Title 28 - Plumbing Code of the Los Angeles County Code and as required by the Los Angeles County Department of Public Health.

**PROJECT CONSULTANTS.** The professional consultants required by this Code which may consist of the Design Engineer, Field Engineer, Soils Engineer, Engineering Geologist, and Landscape Architect as applicable to this Chapter.

**PROFESSIONAL INSPECTION.** The inspection required by this Code to be performed by the Project Consultants. Such inspections shall be sufficient to form an opinion relating to the conduct of the work.

**QSD.** Qualified SWPPP Developer as defined in the California State Construction General Permit.

**QSP.** Qualified SWPPP Practitioner as defined in the California State Construction General Permit.

**SITE.** A lot or parcel of land or contiguous combination thereof, under the same ownership, where grading is performed or permitted.

**SLOPE.** An inclined surface the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

**SOIL.** Naturally occurring superficial deposits overlying parent bedrock.

**SOILS ENGINEER (GEOTECHNICAL ENGINEER).** A civil engineer experienced and knowledgeable in the practice of soils engineering.

**SOILS ENGINEERING (GEOTECHNICAL ENGINEERING).** The application of the principals of soils mechanics in the investigation, evaluation, and design of civil

works involving the use of earth materials and the inspection or testing of construction thereof.

**STORM DRAIN SYSTEM.** A conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, and man-made channels, designed or used for collecting and conveying storm water.

**STORM WATER POLLUTION PREVENTION PLAN (SWPPP).** A site drawing with details, notes, and related documents that identify the measures proposed by the permittee to: (1) control erosion and prevent sediment and construction-related pollutants from being carried offsite by storm water, and (2) prevent non-storm water discharges from entering the storm drain system.

**SURFACE DRAINAGE.** Flows over the ground surface.

**SOIL TESTING AGENCY.** An agency regularly engaged in the testing of soils and rock under the direction of a Civil Engineer experienced in soil testing.

**TERRACE**. A relatively level step constructed in the face of a graded slope for drainage and maintenance purposes.

**SECTION 92.** Section J103 is hereby amended to read as follows:

**SECTION J103 PERMITS REQUIRED**

**J103.1 Permits required.**

Except as exempted in Section J103.2, no grading shall be performed without first having obtained a permit ~~therefor~~ from the ~~b~~Building ~~o~~Official. A grading permit does not include the construction of retaining walls or other structures. A separate permit shall be obtained for each site and may cover both excavations and fills. Any

engineered grading as described in Section J104.2.3 shall be performed by a contractor licensed by the State of California to perform the work described hereon. Regular Grading less than 5,000 cubic yards may require a licensed contractor if the Building Official determines that special conditions or hazards exist.

**J103.2 Exemptions.**

A grading permit shall not be required for the following:

1. When approved by the Building Official, ~~G~~grading in an isolated, self-contained area, provided there is no danger to the public, and that such grading will not adversely affect adjoining properties or public rights of way.

. . .

7. Exploratory excavations performed under the direction of a ~~registered design professional~~Geotechnical Engineer or Engineering Geologist. This shall not exempt grading of access roads or pads created for exploratory excavations. Exploratory excavations must not create a hazardous condition to adjacent properties or the public in accordance with Section J101.3. A restoration plan must be provided and approved by the Building Official for all grading of access roads or pads. Restoration shall be completed within 90 days after the completion of soils testing unless otherwise approved by the Building Official.

8. An excavation that does not exceed 50 cubic yards (38.3 $m^3$) and complies with one of the following conditions and as shown in Figure J103.2:

(a) Is less than 2 feet (0.6 m) in depth.

(b) Does not create a cut slope greater than 5 feet (1.5 m) measured vertically upward from the cut surface to the surface of the natural grade and is not steeper than 2 units horizontal to 1 unit vertical (50 percent slope).

9. A fill not intended to support a structure that does not obstruct a drainage course and complies with one of the following conditions and as shown in Figure J103.2:

(a) Is less than 1 foot (0.3 m) in depth and is placed on natural terrain with a slope flatter than 5 units horizontal to 1 unit vertical (20 percent slope).

(b) Is less than 3 feet (0.9 m) in depth at its deepest point measured vertically upward from natural grade to the surface of the fill, does not exceed 50 cubic yards, and creates a fill slope no steeper than 2 units horizontal to 1 unit vertical (50 percent slope).

(c) Is less than 5 feet (1.5 m) in depth at its deepest point measured vertically upward from natural grade to the surface of the fill, does not exceed 20 cubic yards, and creates a fill slope no steeper than 2 units horizontal to 1 unit vertical (50 percent slope).

Exemption from the permit requirements of this ~~a~~Appendix Chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this ~~c~~Code or any other laws or ordinances of this jurisdiction.

**J103.3 Unpermitted grading.**

A person shall not own, use, occupy, or maintain any site containing unpermitted grading. For the purposes of this Code, unpermitted grading shall be defined as either

of the following: (1) Grading that was performed, at any point in time, without the required permit(s) having first been obtained from the Building Official, pursuant to Section J103.1; or (2) Grading for which a permit was obtained pursuant to this Section, but which was not completed, pursuant to Section J105, prior to the expiration of the permit, pursuant to Section 106.5.4.

**J103.4 Availability of permit at site.**

No person shall perform any grading that requires a permit under this Chapter unless a copy of the grading permit and approved grading plans are in the possession of a responsible person and available at the site for the Building Official's reference.

**J103.5 Grading fees.**

Fees shall be assessed in accordance with the provisions of this Section. The amount of the fees shall be as specified in Section 107 of this Code.

1. Plan Review Fees. When a plan or other data are required to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. Separate plan review fees shall apply to retaining walls or major drainage structures as required elsewhere in this Code. For excavation and fill on the same site, the fee shall be based on the volume of excavation or fill, whichever is greater.

2. Permit Fees. A fee for each grading permit shall be paid to the Building Official at the time of issuance of the permit. Separate permits and fees shall apply to retaining walls or major drainage structures as required elsewhere in this Code.

3. Site Inspection Fee. When the Building Official finds that a visual inspection of the site is necessary to establish drainage requirements for the protection of property, existing buildings, or the proposed construction, a site inspection shall be made during plan check of grading plans. A fee for such inspection shall be paid to the Building Official at the time of submitting plans and specifications for review.

**J103.6 Compliance with zoning code.**

The Building Official may refuse to issue a grading permit for work on a site if either the proposed grading or the proposed land use for the site shown on the grading plan application does not comply with the provisions of Title 22 – Planning and Zoning of the Los Angeles County Code.

**J103.7 Grading security.**

**J103.7.1 Scope and purpose.**

The Building Official may require a permittee or the owner(s) of the property on which the grading is proposed to occur to provide security, as a condition of the issuance of a grading permit for any grading involving more than 1,000 cubic yards (764.6 $m^3$). Where unusual conditions or special hazards exist, the Building Official may require security for grading involving less than 1,000 cubic yards (764.6 $m^3$). The purpose of the security shall be to guarantee the permittee's obligation to mitigate any hazardous conditions, including flood and geotechnical hazards, that may be created if the grading is not completed in accordance with the approved plans and specifications, and to complete any work that the Building Official determines is necessary to bring the property into compliance with this Chapter.

Security required by this Section may include incidental off-site grading on property contiguous with the site to be developed, provided written consent of the owner of such contiguous property is filed with the Building Official.

The Building Official may waive the requirements for a security for the following:

1. Grading being done by or for a governmental agency.

2. Grading necessary to remove a geotechnical hazard, where such work is covered by an agreement and security posted pursuant to the provisions of Title 21 – Subdivisions of the Los Angeles County Code.

3. Grading on a site, not exceeding a slope of three horizontal to one vertical, provided such grading as determined by the Building Official will not affect drainage from or to adjacent properties.

4. Filling of holes or depressions, provided such grading will not affect the drainage from or to adjacent properties.

**J103.7.2 Form of security.**

The security referred to in Section J103.7.1 shall be in one of the following forms:

1. A bond furnished by a corporate surety authorized to do business in this state.

2. Cash.

3. Savings and loan certificates or shares deposited and assigned to the County as provided in Chapter 4.36 of Title 4 – Revenue and Finance of the Los Angeles County Code.

4. An instrument of credit from a financial institution subject to regulation by the state or federal government and pledging that funds in the amount required by the Building Official are on deposit and guaranteed for payment, or a letter of credit issued by such a financial institution.

**J103.7.3 Amount of security.**

The amount of security shall be based on the number of cubic yards of material in either excavation or fill, whichever is greater, and the cost of all drainage or other protective devices or work necessary to eliminate potential flooding and geotechnical hazards. That portion of the security valuation based on the volume of material in either excavation or fill shall be computed as follows:

100,000 cubic yards or less - 50 percent of the estimated cost of grading work.

Over 100,000 cubic yards - 50 percent of the cost of the first 100,000 cubic yards plus 25 percent of the estimated cost of that portion in excess of 100,000 cubic yards.

When the rough grading has been completed in conformance with the requirements of this Code, the Building Official may, at his or her discretion, consent to a proportionate reduction of the security to an amount estimated to be adequate to ensure completion of the grading work, site development or planting remaining to be performed. The costs referred to in this Section shall be as estimated by the Building Official.

**J103.7.4 Conditions.**

All security shall include the conditions that the principal shall:

1. Comply with all of the provisions of this Code, applicable laws, and ordinances;

2. Comply with all of the terms and conditions of the grading permit; and

3. Complete all of the work authorized by the permit.

**J103.7.5 Term of security.**

The term of each security s-hall begin upon the filing with the Building Official and the security shall remain in effect until the work authorized by the grading permit is completed and approved by the Building Official.

**J103.7.6 Default procedures.**

In the event any grading for which a permit has been issued is not completed in accordance with the approved plans and specifications for said work or with all terms and conditions of the grading permit, the Building Official may declare that a default has occurred. The Building Official shall give notice thereof to the principal and surety or financial institution executing the security, or to the owner in the case of a cash bond or assignment.

The Building Official may thereafter determine the work that is necessary to mitigate any hazardous or unsafe conditions on the site and cause such work to be performed.

Where the security consists of a bond or instrument of credit, the surety or financial institution executing the security shall be responsible for the payment of all costs and expenses incurred by the Building Official in causing such work to be performed, up to the full amount of the security. In the case of cash security or

assignment, the Building Official may pay all costs and expenses incurred in causing such work to be performed from the funds deposited, and return any unused portion of such deposit or funds to the person making said deposit or assignment.

**J103.7.7 Right of entry.**

The Building Official or the authorized representative of any surety company or financial institution furnishing a security shall have access to the premises described in the permit for the purpose of inspecting the work.

In the event of default, as described in Section J103.7.6, the surety or financial institution furnishing the security or the Building Official, or any person employed or engaged on the behalf of any of these parties, shall have the right to go upon the premises to perform the mitigation work, as described in Section J103.7.6.

Neither the permittee, owner, or any other person shall interfere with or obstruct the ingress into or egress from any such premises, of any authorized representative of the surety or financial institution executing the security or the Building Official engaged to perform the mitigation work, as described in Section J103.7.6.

**SECTION 93.** Figure J103.2 is hereby added to read as follows:

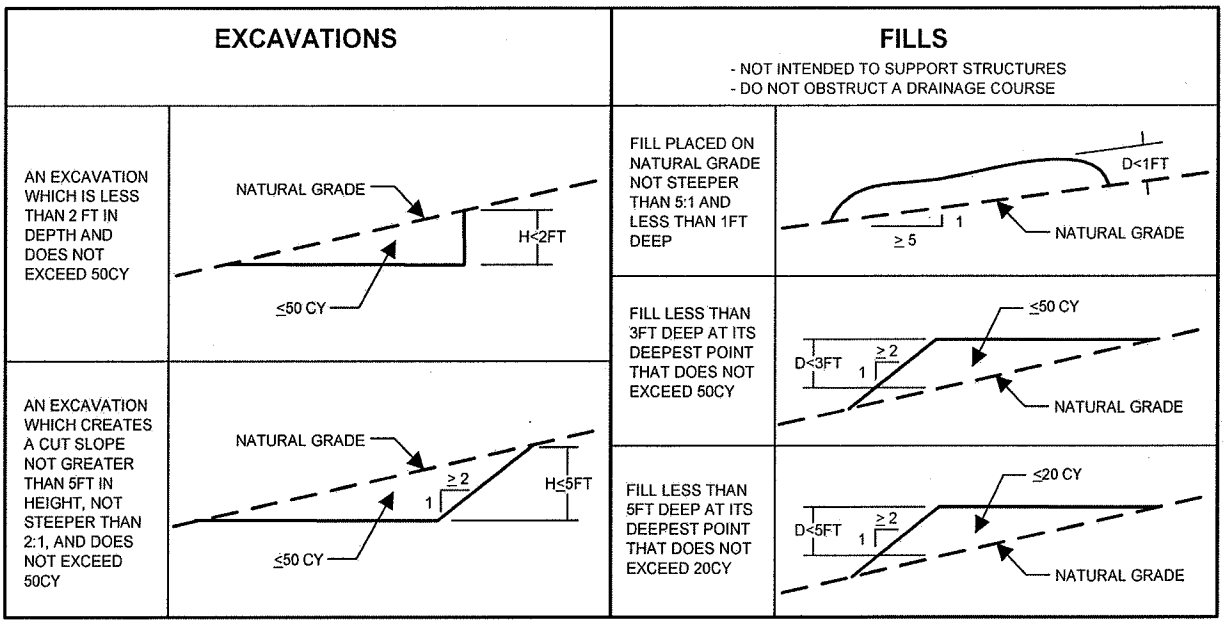



**FIGURE J103.2**

**GRADING EXEMPTION CASES**

**SECTION 94.** Section J104 is hereby amended to read as follows:

**SECTION J104 PERMIT APPLICATION AND SUBMITTALS**

**J104.1 Submittal requirements.**

In addition to the provisions of Section ~~105.3~~106.4, the applicant shall state the ~~estimated quantities of excavation and fill~~following:

1. The estimated quantities of excavation, fill, borrow, removal or combination thereof.

2. The proposed land use for the site on which the grading is to be performed.

**J104.2 Site plan requirements.**

In addition to the provisions of Section ~~107~~106, a grading plan shall show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of this ~~c~~Code. The plans shall show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of this ~~c~~Code.

**J104.2.1 Grading designation.**

Grading in excess of 5,000 cubic yards (3,825 $m^3$) or that is proposed to support any structure shall be designated as "engineered grading." All engineered grading shall be performed in accordance with an approved grading plan and specifications prepared by a Civil Engineer, unless otherwise required by the Building Official.

Grading involving less than 5,000 cubic yards (3,825 $m^3$) and that will not support any structure shall be designated "regular grading" unless the permittee chooses to have the grading be designated as engineered grading, or the Building Official determines that, due to the existence of special conditions or unusual hazards, the grading should be designated as engineered grading.

**J104.2.2 Regular grading requirements.**

In addition to the provisions of Section 106, and Section J104.2, an application for a regular grading permit shall be accompanied by two sets of plans in sufficient clarity to indicate the nature and extent of the work. The plans shall give the location of the work, the name of the owner, and the name of the person who prepared the plan.

The plan shall include the following information:

1. General vicinity of the proposed site.

2. Limits and depths of cut and fill.

3. Location of any buildings or structures where work is to be performed, and the location of any buildings or structures within 15 feet (4.6 m) of the proposed grading.

4. Contours, flow areas, elevations, or slopes which define existing and proposed drainage patterns.

5. Storm water mitigation measures in accordance with the requirements of Section 106.4.3 of this Code. See Section J110.8 for specific requirements.

6. Location of existing and proposed utilities, drainage facilities, and recorded public and private easements and restricted use areas.

7. Location of all recorded floodways as established by Chapter 11.60 of Title 11 – Health and Safety of the Los Angeles County Code.

8. Location of all Special Flood Hazard Areas as designated and defined in Title 44 of the Code of Federal Regulations.

**J104.2.3 Engineered grading requirements.**

In addition to the provisions of Section 106 and Section J104.2, an application for a permit for engineered grading shall be accompanied by four sets of plans and specifications, and supporting data consisting of a geotechnical report and engineering geology report.

Specifications shall contain information covering construction and material requirements. Plans shall be drawn to scale on paper and shall be of sufficient clarity to

indicate the nature and extent of the work proposed and shall show in detail that the proposed work will conform to the provisions of this Code and all relevant laws, ordinances, rules, and regulations. The first sheet of each set of plans shall depict the location of the proposed work, the name and address of the owner, and the person by whom they were prepared.

The plans shall include or be accompanied by the following information:

1. General vicinity of the proposed site.

2. Property limits and accurate contours of existing ground and details of terrain and area drainage.

3. Limiting dimensions, elevations, or finish contours to be achieved by the grading, proposed drainage channels, and related construction.

4. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams, and other protective devices to be constructed with, or as a part of, the proposed work. A map showing the drainage area and the estimated runoff of the area served by any drains shall also be provided.

5. Location of any existing or proposed buildings or structures located on the property on which the work is to be performed and the location of any buildings or structures on adjacent properties that are within 15 feet (4.6 m) of the property or that may be affected by the proposed grading operations.

6. Recommendations in the geotechnical report and the engineering geology report shall be incorporated into the grading plans or specifications. When approved by

the Building Official, specific recommendations contained in the soils engineering report and the engineering geology report, that are applicable to grading, may be included by reference.

7. The dates of the geotechnical and engineering geology reports together with the names, addresses, and phone numbers of the firms or individuals who prepared the reports.

8. A statement of the quantities of material to be excavated and/or filled. Earth work quantities shall include quantities for geotechnical and geological remediation. In addition, a statement of the quantities of material to be imported or exported from the site.

9. A statement of the estimated starting and completion dates for proposed work.

10. A statement signed by the owner, acknowledging that a Field Engineer, Geotechnical Engineer, and Engineering Geologist, when appropriate, will be employed to perform the services required by this Code, when the Building Official requires that such professional persons be so employed. These acknowledgments shall be on a form furnished by the Building Official.

11. Storm water mitigation measures are required to be shown on the grading plan in accordance with the requirement of Section 106.4.3 of this Code. See Section J1110.8 for specific requirements.

12. A drainage plan for those portions of property proposed to be utilized as a building site (building pad), including elevations of floors with respect to finish site grade and locations of proposed stoops, slabs, and fences that may affect drainage.

13. Location and type of any proposed private sewage disposal system, including the location of the expansion area.

14. Location of existing and proposed utilities, drainage facilities, and recorded public and private easements and restricted use areas.

15. Location of all recorded floodways as established by Chapter 11.60 of Title 11 – Health and Safety of the Los Angeles County Code.

16. Location of all Special Flood Hazard Areas as designated and defined in Title 44 of the Code of Federal Regulations.

**J104.3 Geotechnical and engineering geology reports.**

~~A geotechnical report prepared by registered design professionals shall be provided. The report shall contain at least the following:~~

~~1. The nature and distribution of existing soils;~~

~~2. Conclusions and recommendations for grading procedures;~~

~~3. Soil design criteria for any structures or embankments required to accomplish the proposed grading; and~~

~~4. Where necessary, slope stability studies, and recommendations and conclusions regarding site geology.~~

The geotechnical report required by Section J104.2.3 shall include data regarding the nature, distribution, and strength of existing soils, conclusions, and

recommendations for grading procedures and design criteria for corrective measures, including buttress fills, when necessary, and an opinion on the adequacy for the intended use of sites to be developed by the proposed grading as affected by geotechnical factors, including the stability of slopes. All reports shall conform with the requirements of Section 111 and shall be subject to review by the Building Official. Supplemental reports and data may be required as the Building Official may deem necessary. Recommendations included in the reports and approved by the Building Official shall be incorporated in the grading plan or specifications.

The engineering geology report required by Section J104.2.3 shall include an adequate description of the geology of the site, conclusions, and recommendations regarding the effect of geologic conditions on the proposed development, and an opinion on the adequacy for the intended use of sites to be developed by the proposed grading, as affected by geologic factors. The engineering geology report shall include a geologic map and cross sections utilizing the most recent grading plan as a base. All reports shall conform with the requirements of Section 111 and shall be subject to review by the Building Official. Supplemental reports and data may be required as the Building Official may deem necessary. Recommendations included in the reports and approved by the Building Official shall be incorporated in the grading plan or specifications.

**Exception:** A geotechnical or engineering geology report is not required where the ~~b~~Building ~~code o~~Official determines that the nature of the work applied for is such that a report is not necessary.

**J104.4 Liquefaction study.**

For sites with mapped maximum considered earthquake spectral response accelerations at short periods ($S_s$) greater than 0.5g as determined by Section 1613, a study of the liquefaction potential of the site shall be provided, and the recommendations incorporated in the plans. A geotechnical investigation will be required when the proposed work is a "Project" as defined in California Public Resources Code Section 2693, and is located in an area designated as a "Seismic Hazard Zone" as defined in Title 14 of the California Code of Regulations Section 3722 and on Seismic Hazard Zone Maps issued by the State Geologist under Public Resources Code Section 2696.

**Exceptions:**

1. A liquefaction study is not required where the ~~b~~Building ~~o~~Official determines from established local data that the liquefaction potential is low.

~~2. [OSHPD 1, 2, & R] Exception 1 not permitted by OSHPD.~~

**SECTION 95.** Section J105 is hereby amended to read as follows:

**SECTION J105 INSPECTION**

**J105.1 General.**

Grading ~~I~~inspections shall be governed by Section ~~110, Chapter 1, Division II of this code~~108 and as indicated herein. Grading operations for which a permit is required shall be subject to inspection by the Building Official. In addition, professional inspection of grading operations shall be performed by the Field Engineer, Geotechnical

Engineer, and the Engineering Geologist retained to provide such services in accordance with this Section for engineered grading and as required by the Building Official for regular grading.

**J105.2 Special and supplemental inspections.**

The special inspection requirements of Section 1705.6~~1704.7~~ shall apply to work performed under a grading permit where required by the ~~b~~Building ~~o~~Official. In addition to the called inspections specified in Section J105.7, the Building Official may make such other inspections as may be deemed necessary to determine that the work is being performed in conformance with the requirements of this Code. The Building Official may require investigations and reports by an approved soil testing agency, Geotechnical Engineer and/or Engineering Geologist, and Field Engineer. Inspection reports shall be provided when requested in writing by the Building Official.

The Building Official may require continuous inspection of drainage devices by the Field Engineer in accordance with this Section when the Building Official determines that the drainage devices are necessary for the protection of the structures in accordance with Section 110.

**J105.3 Field engineer.**

The Field Engineer shall provide professional inspection of those parts of the grading project within such engineer's area of technical specialty, oversee and coordinate all field surveys, set grade stakes, and provide site inspections during grading operations to ensure the site is graded in accordance with the approved grading plan and the appropriate requirements of this Code. During site grading, and at the

completion of both rough grading and final grading, the Field Engineer shall submit statements and reports as required by Sections J105.11 and J105.12. If revised grading plans are required during the course of the work, they shall be prepared by a Civil Engineer and approved by the Building Official.

**J105.4 Geotechnical engineer.**

The Geotechnical Engineer shall provide professional inspection of those parts of the grading project within such engineer's area of technical specialty, which shall include observation during grading and testing for required compaction. The Geotechnical Engineer shall provide sufficient observation during the preparation of the natural ground and placement and compaction of the fill to verify that such work is being performed in accordance with the conditions of the approved plan and the appropriate requirements of this Chapter. If conditions differing from the approved geotechnical engineering and engineering geology reports are encountered during grading, the Geotechnical Engineer shall provide revised recommendations to the permittee, the Building Official and the Field Engineer.

**J105.5 Engineering geologist.**

The Engineering Geologist shall provide professional inspection of those parts of the grading project within such engineer's area of technical specialty, which shall include professional inspection of the bedrock excavation to determine if conditions encountered are in conformance with the approved report. If conditions differing from the approved engineering geology report are encountered, the Engineering Geologist shall provide revised recommendations to the Geotechnical Engineer.

**J105.6 Permittee.**

The permittee shall be responsible for ensuring that the grading is performed in accordance with the approved plans and specifications and in conformance with the provisions of this Code. The permittee shall engage project consultants, if required under the provisions of this Code, to provide professional inspections on a timely basis. The permittee shall act as a coordinator between the project consultants, the contractor, and the Building Official. In the event of changed conditions, the permittee shall be responsible for informing the Building Official of such change and shall provide revised plans for approval.

**J105.7 Required inspections.**

The permittee shall call for an inspection by the Building Official at the following various stages of work and shall obtain the approval of the Building Official prior to proceeding to the next stage of work:

**Pre-grade.** Before any construction or grading activities occur at the site. Permittee shall schedule a pregrade inspection with the Building Official. The permittee shall ensure that all project consultants are present at the pre-grade inspection.

**Initial grade.** When the site has been cleared of vegetation and unapproved fill and has been scarified, benched, or otherwise prepared for fill. No fill shall have been placed prior to this inspection.

**Rough grade.** When approximate final elevations have been established, drainage terraces, swales, and other drainage devices necessary for the protection of

the building sites from flooding have been installed, berms have been installed at the top of the slopes, and the statements required by Section J105.12 have been received.

**Final grade.** When grading has been completed, all drainage devices necessary to drain the building pad have been installed, slope planting has been established, irrigation systems have been installed, and the as-built plans and required statements and reports have been submitted.

**J105.8 Notification of noncompliance.**

If, in the course of fulfilling their respective duties under this Chapter, the Field Engineer, the Geotechnical Engineer, or the Engineering Geologist determines that the work is not being done in conformance with this Chapter or the approved grading plans, the Field Engineer, Geotechnical Engineer, or the Engineering Geologist shall immediately report, in writing, the discrepancies and the recommended corrective measures to the permittee and to the Building Official.

**J105.9 Transfer of responsibility.**

If the Field Engineer, the Geotechnical Engineer, or the Engineering Geologist of record is changed at any time after the grading plans required pursuant to Section J104.2.2 or J104.2.3 have been approved by the Building Official, the permittee shall immediately provide written notice of such change to the Building Official. The Building Official may stop the grading from commencing or continuing until the permittee has identified a replacement and the replacement has agreed in writing to assume responsibility for those parts of the grading project that are within the replacement's area of technical competence.

**J105.10 Non-inspected grading.**

No person shall own, use, occupy, or maintain any non-inspected grading. For the purposes of this Code, non-inspected grading shall be defined as any grading for which a grading permit was first obtained, pursuant to Section J103, above, but which has progressed beyond any point requiring inspection and approval by the Building Official without such inspection and approval having been obtained.

**J105.11 Routine field inspections and reports.**

Unless otherwise directed by the Building Official, the Field Engineer for all engineered grading projects shall prepare routine inspection reports and shall file these reports with the Building Official as follows:

1. Bi-weekly during all times when grading of 400 cubic yards or more per week is occurring on the site;

2. Monthly, at all other times; and

3. At any time when requested in writing by the Building Official.

Such reports shall certify to the Building Official that the Field Engineer has inspected the grading site and related activities and has found them in compliance with the approved grading plans and specifications, this Code, all grading permit conditions, and all other applicable ordinances and requirements. The reports shall conform to a standard "Report of Grading Activities" form which shall be provided by the Building Official.

**J105.12 Completion of work.**

Upon completion of the rough grading work and at the final completion of the work, the following reports and drawings and supplements thereto are required for engineered grading or when professional inspection is otherwise required by the Building Official:

1. An "As-built" grading plan prepared by the Field Engineer retained to provide such services in accordance with Section J105.3 showing all plan revisions as approved by the Building Official. This shall include original ground surface elevations, as-built ground surface elevations, lot drainage patterns, and the locations and elevations of surface drainage facilities and the outlets of subsurface drains. As-built locations, elevations, and details of subsurface drains shall be shown as reported by the Geotechnical Engineer.

The As-built grading plan shall be accompanied by a certification by the Field Engineer that to the best of his or her knowledge, the work within the Field Engineer's area of responsibility was done in accordance with the final approved grading plan.

2. A report prepared by the Geotechnical Engineer retained to provide such services in accordance with Section J105.4, including locations and elevations of field density tests, summaries of field and laboratory tests, other substantiating data, and comments on any changes made during grading and their effect on the recommendations made in the approved geotechnical engineering investigation report. The report shall include a certification by the Geotechnical Engineer that, to the best of his or her knowledge, the work within the Geotechnical Engineer's area of responsibility

is in accordance with the approved geotechnical engineering report and applicable provisions of this Chapter. The report shall contain a finding regarding the safety of the completed grading and any proposed structures against hazard from landslide, settlement, or slippage.

3. A report prepared by the Engineering Geologist retained to provide such services in accordance with Section J105.5, including a final description of the geology of the site and any new information disclosed during the grading and the effect of such new information, if any, on the recommendations incorporated in the approved grading plan. The report shall contain a certification by the Engineering Geologist that, to the best of his or her knowledge, the work within the Engineering Geologist's area of responsibility is in accordance with the approved engineering geology report and applicable provisions of this Chapter. The report shall contain a finding regarding the safety of the completed grading and any proposed structures against hazard from landslide, settlement, or slippage. The report shall contain a final as-built geologic map and cross-sections depicting all the information collected prior to and during grading.

4. The grading contractor shall certify, on a form prescribed by the Building Official, that the grading conforms to said as-built plan and the approved specifications.

5. When a landscape permit is required by Section 490.1 of the California Department of Water Resources Model Water Efficient Landscape Ordinance, the Landscape Architect shall certify on a form prescribed by the Building Official that the landscaping conforms to approved landscape plans and specifications.

**J105.13 Notification of completion.**

The permittee shall notify the Building Official when the grading operation is ready for final inspection. Final approval shall not be given until all work, including installation of all drainage facilities and their protective devices, and all erosion-control measures have been completed in accordance with the final approved grading plan, and all required reports have been submitted and approved.

**J105.14 Change of ownership.**

Unless otherwise required by the Building Official, when a grading permit has been issued on a site and the owner sells the property prior to final grading approval, the new property owner shall be required to obtain a new grading permit.

**SECTION 96.** Section J106.1 is hereby amended to read as follows:

**J106.1 Maximum cut slope.**

The slope of cut surfaces shall be no steeper than is safe for the intended use, and shall be no steeper than two units horizontal to one unit vertical (50-percent slope) unless the owner or authorized agent furnishes a geotechnical or an engineering geology report, or both justifying a steeper slope. The reports must contain a statement by the Geotechnical Engineer or Engineering Geologist that the site was investigated and an opinion that a steeper slope will be stable and will not create a hazard to public or private property, in conformance with the requirements of Section 111. The Building Official may require the slope of the cut surfaces to be flatter in slope than 2 units horizontal to 1 unit vertical if the Building Official finds it necessary for the stability and safety of the slope.

**Exceptions:**

1. A cut surface may be at a slope of 1.5 units horizontal to one unit vertical (67 percent) provided that all the following are met:

1.1 It is not intended to support structures or surcharges.

1.2 It is adequately protected against erosion.

1.3 It is no more than 8 feet (2438 mm) in height.

1.4 It is approved by the ~~b~~Building ~~code o~~Official.

1.5 Ground water is not encountered.

~~2. A cut surface in bedrock shall be permitted to be at a slope of 1 horizontal to 1 vertical (100 percent).~~

**SECTION 97.** Section J107 is hereby amended to read as follows:

**SECTION J107 FILLS**

**J107.1 General.**

Unless otherwise recommended in the geotechnical report, fills shall comply with the provisions of this ~~s~~Section.

**Exception:** The Building Official may permit a deviation from the provisions of this Chapter for minor fills not intended to support structures, where no geotechnical report has been prepared.

**J107.2 Surface Preparation.**

Fill slopes shall not be constructed on natural slopes steeper than 2 units horizontal to 1 unit vertical (50 percent slope). The ground surface shall be prepared to receive fill by removing vegetation, topsoil and other unsuitable materials (including any

existing fill that does not meet the requirements of this Chapter), and scarifying the ground to provide a bond with the fill material.

Subdrains shall be provided under all fills placed in natural drainage courses and in other locations where seepage is evident, except where the Geotechnical Engineer or Engineering Geologist recommends otherwise. Such sub-drainage systems shall be of a material and design approved by the Geotechnical Engineer and acceptable to the Building Official. The Geotechnical Engineer shall provide continuous inspection during the process of subdrain installations. The location of the subdrains shall be shown on a plan prepared by the Soils Engineer. Excavations for the subdrains shall be inspected by the Engineering Geologist when such subdrains are included in the recommendations of the Engineering Geologist.

**J107.3 Benching.**

Where existing grade is at a slope steeper than five units horizontal to one unit vertical (20-percent) and the depth of the fill exceeds 5 feet (1,524 mm) benching shall be provided into sound bedrock or other competent material as determined by the Geotechnical Engineer. The ground preparation shall be in accordance with Figure J107.3 or as determined by the Geotechnical Engineer. When fill is to be placed over a cut, Aa key shall be provided which is at least 10 feet (3,048 mm) in width and 2 feet (610 mm) in depth. The area beyond the toe of fill shall be sloped for sheet overflow or a paved drain shall be constructed thereon. The Geotechnical Engineer or Engineering Geologist or both shall inspect and approve the cut as being suitable for the foundation and placement of fill material before any fill material is placed on the excavation.

. . .

**J107.4 Fill material.**

Fill material shall not include organic, frozen, or other deleterious materials. Unless approved by the Building Official, ~~N~~no rock or similar irreducible material greater than 12 inches (305 mm) in any dimension shall be included in fills.

**Exception:** The Building Official may permit placement of larger rock when the Geotechnical Engineer properly devises and recommends a method of placement, and continuously inspects the placement and approves the fill stability. The following requirements shall also apply:

1. Prior to issuance of the grading permit, potential rock disposal areas shall be delineated on the grading plan.

2. Rock sizes greater than 12 inches (0.3 m) in maximum dimension shall be 10 feet (3.0 m) or more below grade, measured vertically.

3. Rocks shall be placed so as to assure filling of all voids with well-graded soil.

4. The reports submitted by the Geotechnical Engineer shall acknowledge the placement of the oversized material and whether the work was performed in accordance with the engineer's recommendations and the approved plans.

5. The location of oversized rock dispersal areas shall be shown on the as-built plan.

**J107.5 Compaction.**

All fill material shall be compacted to a minimum of 90 percent of maximum density as determined by ASTM D 1557, Modified Proctor, in lifts not exceeding 12 inches (305 mm) in depth within 40 feet (12.2 m) below finished grade and 93 percent of maximum dry density deeper than 40 feet (12.2 m) below finished grade, unless a lower relative compaction (not less than 90 percent of maximum dry density) is justified by the Geotechnical Engineer and approved by the Building Official. Where ASTM D 1557, Modified Proctor is not applicable, a test acceptable to the Building Official shall be used.

~~[DSA-SS & DSA-SS/CC] This section establishes minimum requirements only.~~

Field density shall be determined by a method acceptable to the Building Official. However, not less than ten percent of the required density tests, uniformly distributed, shall be obtained by the Sand Cone Method.

Fill slopes steeper than 2 units horizontal to 1 unit vertical (50-percent slope) shall be constructed by the placement of soil a sufficient distance beyond the proposed finish slope to allow compaction equipment to operate at the outer surface limits of the final slope surface. The excess fill is to be removed prior to completion or rough grading. Other construction procedures may be utilized when it is first shown to the satisfaction of the Building Official that the angle of slope, construction method, and other factors will comply with the intent of this Section.

**J107.6 Maximum fill slope.**

The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes steeper than two units horizontal to one unit vertical (50-percent slope) shall be justified by ~~a~~ geotechnical reports ~~or engineering data~~conforming to the requirements of Section 111, containing a statement by the Geotechnical Engineer that the site has been investigated and an opinion that a steeper fill slope will be stable and will not create a hazard to public or private property. Substantiating calculations and supporting data may be required where the Building Official determines that such information is necessary to verify the stability and safety of the proposed slope. The Building Official may require the fill slope to be constructed with a face flatter in slope than 2 units horizontal to 1 unit vertical (50-percent slope) if the Building Official finds it necessary for stability and safety of the slope.

**J107.7 Slopes to receive fill.**

Where fill is to be placed above the top of an existing slope steeper than 3 units horizontal to 1 unit vertical (33-percent slope), the toe of the fill shall be set back from the top edge of the existing slope a minimum distance of 6 feet (1.8 m) measured horizontally or such other distance as may be specifically recommended by a Geotechnical Engineer or Engineering Geologist and approved by the Building Official.

**J107.8 Inspection of fill.**

For engineered grading, the Geotechnical Engineer shall provide sufficient inspections during the preparation of the natural ground and the placement and compaction of the fill to ensure that the work is performed in accordance with the

conditions of plan approval and the appropriate requirements of this Chapter. In addition to the above, the Geotechnical Engineer shall provide continuous inspection during the entire fill placement and compaction of fills that will exceed a vertical height or depth of 30 feet (9.1 m) or result in a slope surface steeper than 2 units horizontal to 1 unit vertical (50-percent slope).

**J107.9 Testing of fills.**

Sufficient tests of the fill soils shall be made to determine the density and to verify compliance of the soil properties with the design requirements. This includes soil types and shear strengths in accordance with Section J111 Referenced Standards.

**SECTION 98.** Section J108 is hereby amended to read as follows:

**SECTION J108 SETBACKS**

**J108.1 General.**

Cut and fill slopes shall be set back from the property lines in accordance with this ~~s~~Section. Setback dimensions shall be measured perpendicular to the property line and shall be as shown in Figure J108.1, unless substantiating data is submitted justifying reduced setbacks and reduced setbacks are recommended in a geotechnical engineering and engineering geology report approved by the Building Official.

**J108.2 Top of slope.**

The setback at the top of a cut slope shall not be less than that shown in Figure J108.1, or than is required to accommodate any required interceptor drains, whichever is greater. For graded slopes the property line between adjacent lots shall be at the

apex of the berm at the top of the slope. Property lines between adjacent lots shall not be located on a graded slope steeper than 5 units horizontal to 1 unit vertical (20-percent slope).

**J108.3 Toe of fill sSlope protection.**

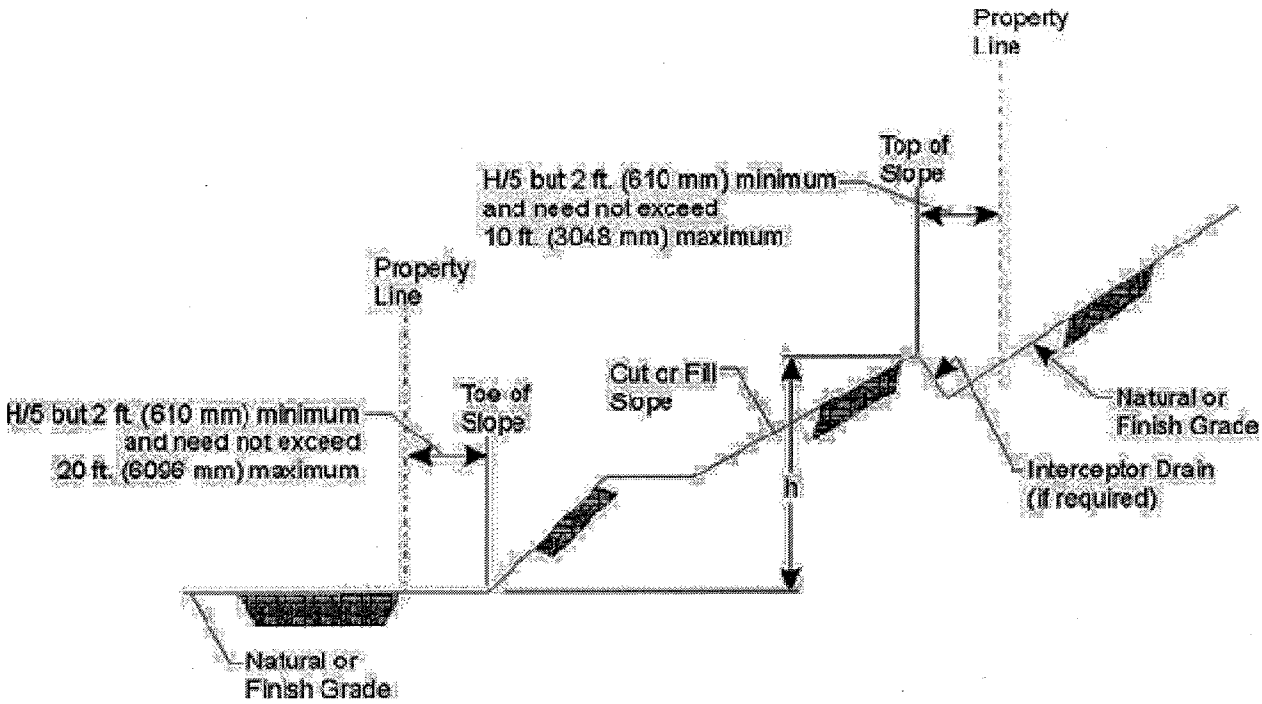
The setback from the toe of a fill slope shall not be less than that shown by figure J108.1. Where required to protect adjacent properties at the toe of a slope from adverse effects of the grading, additional protection, approved by the bBuilding oOfficial, shall be included. Such protection may include but shall not be limited to:

1. Setbacks greater than those required by Figure J108.1.
2. Provisions for retaining walls or similar construction.
3. Erosion protection of the fill slopes.
4. Provision for the control of surface waters.

**J108.4 Alternate setbacks.**

The Building Official may approve alternate setbacks if he or she determines that no hazard to life or property will be created or increased. The Building Official may require an investigation and recommendation by a qualified engineer or Engineering Geologist to justify any proposed alternate setback.

**SECTION 99.** Figure J108.1 is hereby amended to read as follows:




For SI: 1 foot = 304.8 mm.

**FIGURE J108.1**
~~DRAINAGE~~SETBACK DIMENSIONS

**SECTION 100.** Section J109 is hereby amended to read as follows:

**SECTION J109 DRAINAGE AND TERRACING**

**J109.1 General.**

Unless otherwise recommended by a ~~registered design professional~~Civil Engineer and approved by the Building Official, drainage facilities and terracing shall be provided in accordance with the requirements of ~~this~~ ~~s~~Section J109.2 for all cut and fill slopes steeper than 3 units horizontal to 1 unit vertical (33-percent slope).

~~**EXCEPTION:** Drainage facilities and terracing need not be provided where the ground slope is not steeper than 3 horizontal to 1 vertical (33 percent).~~

For slopes flatter than 3 units horizontal to 1 unit vertical (33-percent slope) and steeper than 5 units horizontal to 1 unit vertical (20-percent slope) a paved swale or ditch shall be installed at 30 foot (9.1 m) vertical intervals to control surface drainage and debris. Swales shall be sized based on contributory area and have adequate capacity to convey intercepted waters to the point of disposal as defined in Section J109.5. Swales must be paved with reinforced concrete not less than 3 inches (0.08 m) in thickness, reinforced with 6-inch (0.2 m) by 6-inch (0.2 m) No. 10 by No. 10 welded wire fabric or equivalent reinforcing centered in the concrete slab or an equivalent approved by the Building Official. Swales must have a minimum flow line depth of 1-foot (0.3 m) and a minimum paved width of 18 inches (0.5 m). Swales shall have a minimum gradient of not less than 5 percent. There shall be no reduction in grade along the direction of flow unless the velocity of flow is such that slope debris will remain in suspension on the reduced grade.

**J109.2 Drainage ~~T~~terraces.**

~~Terraces at least 6 feet (1829 mm) in width shall be established at not more than 30 foot (9144 mm) vertical intervals on all cut or fill slopes to control surface drainage and debris. Suitable access shall be provided to allow for cleaning and maintenance.~~

~~Where more than two terraces are required, one terrace, located at approximately mid-height, shall be at least 12 feet (3658 mm) in width.~~

~~Swales or ditches shall be provided on terraces. They shall have a minimum gradient of 20 horizontal to 1 vertical (5 percent) and shall be paved with concrete not less than 3 inches (76 mm) in thickness, or with other materials suitable to the~~

~~application. They shall have a minimum depth of 12 inches (305 mm) and a minimum width of 5 feet (1524 mm).~~

~~A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (1256 m2) (projected) without discharging into a down drain.~~Drainage terraces at least 8 feet (2.4 m) in width shall be established at not more than 30-foot (9.1 m) vertical intervals on all cut or fill slopes to control surface drainage and debris. When only one terrace is required, it shall be at midheight. For cut or fill slopes greater than 100 feet (30.5 m) and up to 120 feet (36.6 m) in vertical height, one terrace at approximately midheight shall be 20 feet (6.1 m) in width. Terrace widths and spacing for cut and fill slopes greater than 120 feet (36.6 m) in height shall be designed by the Civil Engineer and approved by the Building Official. Suitable access shall be provided to permit proper cleaning and maintenance.

Drainage swales on terraces shall have a longitudinal grade of not less than 5 percent nor more than 12 percent and a minimum depth of 1-foot (0.3 m) at the flow line. There shall be no reduction in grade along the direction of flow unless the velocity of flow is such that slope debris will remain in suspension on the reduced grade. Drainage swales must be paved with reinforced concrete not less than 3 inches (0.8 m) in thickness, reinforced with 6-inch (0.2 m) by 6-inch (0.2 m) No. 10 by No. 10 welded wire fabric or equivalent reinforcing centered in the concrete slab or an approved equal paving. Drainage swales shall have a minimum depth at the deepest point of 1 foot (0.3 m) and a minimum paved width of 5 feet (1.5 m). Drainage swales on terraces shall be sized based on contributory area and have adequate capacity to convey intercepted

waters to the point of disposal as defined in Section J109.5. Downdrains or drainage outlets shall be provided at approximately 300-foot (91.4 m) intervals along the drainage terrace or at equivalent locations. Downdrains and drainage outlets shall be of approved materials and of adequate capacity to convey the intercepted waters to the point of disposal as defined in Section J109.5.

**J109.3 Interceptor drains and overflow protection.**

Berms, ~~I~~interceptor drains, swales, or other devices shall be installed along the top of cut slopes ~~receiving drainage from a tributary width greater than 40 feet (12 192 mm), measured horizontally.~~ to prevent surface waters from overflowing onto and damaging the face of a slope. Berms used for slope protection shall not be less than 12 inches (0.3 m) above the level of the pad and shall slope back at least 4 feet (1.2 m) from the top of the slope.

Interceptor drains shall be installed along the top of graded slopes greater than 5 feet in height receiving drainage from a slope with a tributary width greater than 30 feet (9.1 m), measured horizontally. They shall have a minimum depth of 1 foot (305 mm) and a minimum width of 3 feet (915 mm). The slope shall be approved by the ~~b~~Building ~~o~~Official, but shall not be less than 50 units horizontal to 1 unit vertical (2 percent). The drain shall be paved with concrete not less than 3 inches (76mm) in thickness, or by other materials suitable to the application and reinforced as required for drainage terraces. Discharge from the drain shall be accomplished in a manner to prevent erosion and shall be approved by the ~~b~~Building ~~o~~Official.

. . .

**J109.5 Disposal.**

All drainage facilities shall be designed to convey waters to the nearest practicable street, storm drain, or natural watercourse or drainage way approved by the Building Official or other appropriate governmental agency provided that the discharge of such waters at that location will not create or increase a hazard to life or property. Erosion of the ground in the area of discharge shall be prevented by installation of non-erosive down drains or other devices. Desilting basins, filter barriers, or other methods, as approved by the Building Official, shall be utilized to remove sediments from surface waters before such waters are allowed to enter streets, storm drains, or natural watercourses. If the drainage device discharges onto natural ground, riprap, or a similar energy dissipator may be required.

Building pads shall have a minimum drainage gradient of 2 percent toward an approved drainage facility or a public street unless otherwise directed by the Building Official. A lesser slope may be approved by the Building Official for sites graded in relatively flat terrain, or where special drainage provisions are made, when the Building Official finds such modification will not result in a hazard to life or property.

**SECTION 101.** Section J110 is hereby amended to read as follows:

**SECTION J110 SLOPE PLANTING AND EROSION CONTROL**

**J110.1 General.**

The faces of cut and fill slopes shall be prepared and maintained to control erosion. This control shall ~~be permitted to~~ consist of effective planting, erosion control blankets, soil stabilizers, or other means as approved by the Building Official.

**Exception:** Erosion control measures need not be provided on cut slopes not subject to erosion due to the erosion-resistant character of the materials as approved by the Project Consultants, to the satisfaction of the Building Official.

. . .

**J110.3 Planting.**

The surface of all cut slopes more than 5 feet (1.5 m) in height and fill slopes more than 3 feet (.9 m) in height shall be protected against damage from erosion by planting with grass or ground cover plants. Slopes exceeding 15 feet (4.6 m) in vertical height shall also be planted with shrubs, spaced at not to exceed 10 feet (3 m) on centers, or trees, spaced at not to exceed 20 feet (6.1 m) on centers; or a combination of shrubs and trees at an equivalent spacing, in addition to the grass or ground cover plants. The plants selected and planting methods used shall be suitable for the soil and climatic conditions of the site.

Plant material shall be selected which will produce a coverage of permanent planting to effectively control erosion. Consideration shall be given to deep-rooted plant material needing limited watering, maintenance, high root to shoot ratio, wind susceptibility, and fire-retardant characteristics. All plant materials must be approved by the Building Official.

Planting may be modified for the site if specific recommendations are provided by both the Geotechnical Engineer and a Landscape Architect. Specific recommendations must consider soils and climatic conditions, irrigation requirements, planting methods, fire-retardant characteristics, water efficiency, maintenance needs, and other regulatory

requirements. Recommendations must include a finding that the alternative planting will provide a permanent and effective method of erosion control. Modifications to planting must be approved by the Building Official prior to installation.

**J110.4 Irrigation.**

Slopes required to be planted by Section J110.3 shall be provided with an approved system of irrigation that is designed to cover all portions of the slope. Irrigation system plans shall be submitted to and approved by the Building Official prior to installation. A functional test of the system may be required.

For slopes less than 20 feet (6.1 m) in vertical height, hose bibs to permit hand watering will be acceptable if such hose bibs are installed at conveniently accessible locations where a hose no longer than 50 feet (15.2 m) is necessary for irrigation.

Irrigation requirements may be modified for the site if specific recommendations are provided by both the Geotechnical Engineer and a Landscape Architect. Specific recommendations must consider soils and climatic conditions, plant types, planting methods, fire-retardant characteristics, water efficiency, maintenance needs, and other regulatory requirements. Recommendations must include a finding that the alternative irrigation method will sustain the proposed planting and provide a permanent and effective method of erosion control. Modifications for irrigation systems must be approved by the Building Official prior to installation.

**J110.5 Plans and specifications.**

Planting and irrigation plans shall be submitted for slopes which are required to be planted and irrigated pursuant to Sections J110.3 and J110.4. Except as otherwise

required by the Building Official for minor grading, the plans for slopes 20 feet (6.1 m) or more in vertical height shall be prepared and signed by a Civil Engineer or Landscape Architect. If requested by the Building Official, planting and irrigation details shall be included on the grading plan.

**J110.6 Rodent control.**

Fill slopes shall be protected from potential slope damage by a preventative program of rodent control.

**J110.7 Release of security.**

The planting and irrigation systems required by this Section shall be installed as soon as practical after rough grading. Prior to final approval of grading and before the release of the grading security, the planting shall be well established and growing on the slopes and there shall be evidence of an effective rodent control program.

**J110.8 National Pollutant Discharge Elimination System (NPDES) compliance.**

**J110.8.1 General.**

All grading plans and permits and the owner of any property on which such grading is performed shall comply with the provisions of this Section for NPDES compliance.

All best management practices shall be installed before grading begins or as instructed in writing by the Building Official for unpermitted grading as defined by Section J103.3. As grading progresses, all best management practices shall be updated as necessary to prevent erosion and to control construction-related pollutants

from discharging from the site. All best management practices shall be maintained in good working order to the satisfaction of the Building Official until final grading approval has been granted by the Building Official and all permanent drainage and erosion control systems, if required, are in place. Failure to comply with this Section is subject to "Noncompliance Penalties" pursuant to Section J110.8.5. Payment of a penalty shall not relieve any persons from fully complying with the requirements of this Code in the execution of the work.

**J110.8.2 Storm Water Pollution Prevention Plan (SWPPP).**

The Building Official may require a SWPPP. The SWPPP shall contain details of best management practices, including desilting basins or other temporary drainage or control measures, or both, as may be necessary to control construction-related pollutants which originate from the site as a result of construction-related activities. When the Building Official requires a SWPPP, no grading permit shall be issued until the SWPPP has been submitted to and approved by the Building Official.

For unpermitted grading as defined by Section J103.3 upon written request, a SWPPP in compliance with the provisions of this Section and Section 106.4.3 for NPDES compliance shall be submitted to the Building Official. Failure to comply with this Section is subject to "Noncompliance Penalties" per Section J110.8.5. Payment of a penalty shall not relieve any persons from fully complying with the requirements of this Code in the execution of the work.

**J110.8.3 Erosion and Sediment Control Plans (ESCP).**

Where a grading permit is issued and the Building Official determines that the grading will not be completed prior to November 1, the owner of the site on which the grading is being performed shall, on or before October 1, file or cause to be filed with the Building Official a ESCP. The ESCP shall include specific best management practices to minimize the transport of sediment and protect public and private property from the effects of erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. The best management practices shown on the ESCP shall be installed on or before October 15. The plans shall be revised annually or as required by the Building Official to reflect the current site conditions.

The ESCP shall be accompanied by an application for plan checking services and plan-checking fees in an amount determined by the Building Official, up to but not exceeding 10 percent of the original grading permit fee.

Failure to comply with this Section is subject to "Noncompliance Penalties" pursuant to Section J110.8.5. Payment of a penalty shall not relieve any persons from fully complying with the requirements of this Code in the execution of the work.

**J110.8.4 Storm Water Pollution Prevention Plan (SWPPP), effect of noncompliance.**

Should the owner fail to submit the SWPPP or the ESCP as required by Section J110.8 or fails to install the best management practices, it shall be deemed that a default has occurred under the conditions of the grading permit security. The Building Official may thereafter enter the property for the purpose of installing, by County forces

or by other means, the drainage, erosion control, and other devices shown on the approved plans, or if there are no approved plans, as the Building Official may deem necessary to protect adjoining property from the effects of erosion, flooding, or the deposition of mud, debris, or constructed-related pollutants.

The Building Official shall also have the authority to impose and collect the penalties imposed by Section J110.8.5. Payment of a penalty shall not relieve any persons from fully complying with the requirements of this Code in the execution of the work.

**J110.8.5 Noncompliance penalties.**

The amount of the penalties shall be as follows:

1. If a SWPPP or a ESCP is not submitted as prescribed in Sections J110.8.2 and J110.8.3:

| Grading Permit Volume | Penalty |
|---|---|
| 1-10,000 cubic yards (1-7645.5 $m^3$) | $50.00 per day |
| 10,001-100,000 cubic yards (7646.3-76455 $m^3$) | $250.00 per day |
| More than 100,000 cubic yards (76455 $m^3$) | $500.00 per day |

2. If the best management practices for storm water pollution prevention and wet weather erosion control, as approved by the Building Official, are not installed as prescribed in this Section J110.8:

| Grading Permit Volume | Penalty |
|---|---|
| 1-10,000 cubic yards (1-7645.5 $m^3$) | $100.00 per day |
| 10,001-100,000 cubic yards (7646.3-76455 $m^3$) | $250.00 per day |
| More than 100,000 cubic yards (76455 $m^3$) | $500.00 per day |

NOTE: See Section 108 for inspection request requirements.

**SECTION 102.** Section J111 is hereby amended to read as follows:

**SECTION J111 REFERENCED STANDARDS**

| | | |
|---|---|---|
| ~~ASTM D 1557-e01~~ | ~~Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort [56,000 ft-lb/ft3 (2,700kN-m/m3)].~~ | ~~J 107.6~~ |

These regulations establish minimum standards and are not intended to prevent the use of alternate materials, methods, or means of conforming to such standards, provided such alternate has been approved by the Building Official.

The Building Official shall approve such an alternate provided he or she determines that the alternate is, for the purpose intended, at least the equivalent of that prescribed in this Code in quality, strength, effectiveness, durability, and safety.

The Building Official shall require that sufficient evidence or proof be submitted to substantiate any claims regarding the alternate.

The standards listed below are recognized standards. Compliance with these recognized standards shall be prima facie evidence of compliance with the standards set forth in Sections J104 and J107.

| | | |
|---|---|---|
| ASTM D 1557 – Latest Revision | Laboratory Characteristics Compaction of Soil Using Modified Effort | J107.5 |
| ASTM D 1556 – Latest Revision | Density and Unit Weight of Soils In Place by the Sand Cone Method | J104.2.3, J104.3 and J107.9 |
| ASTM D 2167 – Latest Revision | Density and Unit Weight of Soils In Place by the Rubber Balloon Method | J104.2.3 J104.3 and J107.9 |
| ASTM D 2937 – Latest Revision | Density of Soils in Place by the Drive Cylinder Method | J104.2.3 J104.3 and J107.9 |
| ASTM D 2922 – Latest Revision | Density of Soil and Soil Aggregate In Place by Nuclear Methods | J104.2.3 J104.3 and J107.9 |
| ASTM D 3017 – Latest Revision | Water Content of Soil and Rock in Place by Nuclear Methods | J104.2.3, J104.3 and J107.9 |

**SECTION 103.** The provisions of this ordinance contain various changes, modifications, and additions to the 2013 California Building Code. Some of those changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, for topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

**BUILDING CODE AMENDMENTS**

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| 701A.1 | Climatic | Clarifies the application of Chapter 7A to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings. |
| 701A.3 | Climatic | Clarifies the application of Chapter 7A to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings. |
| 701A.3.1 | Climatic | Clarifies the application of Chapter 7A to include additions, alterations, and/or relocated buildings. Many |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings. |
| 703A.5.2 & 703A.5.2.2 | Climatic | Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in high fire severity zones. |
| 704A.3 | Climatic | Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in high fire severity zones. |
| 705A.2 | Climatic | Disallows the use of wood-shingle/wood-shake roofs and requires the use of Class A roof covering due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in high fire severity zones. |
| 1029.4 | Geological | The greater Los Angeles/Long Beach region is a densely populated area having buildings constructed over and near a vast array of earthquake fault systems capable of producing major earthquakes, including but not limited to the recent 1994 Northridge Earthquake. The proposed amendment is intended to prevent occupants from being trapped in a building and to allow rescue workers to easily enter after an earthquake. |
| 1507.3.1 | Geological | Section amended to require concrete and clay tiles to be installed over solid structural sheathing boards only, due to the increased risk of significant earthquakes in the County. The changes in Section 1507.3.1 are needed because there were numerous observations of tile roofs pulling away from wood framed buildings following the 1994 Northridge Earthquake. Where sheathing beneath the tile roofs was not nailed adequately or the nails were not attached on each side of each tile or the nail just pulled out over a period of time because the shank of the nails were smooth. The Structural Engineers Association of Southern California ("SEAOSC") and the Los Angeles City Joint Task Force committee findings indicated significant problems with tile roof due to inadequate design and/or construction. Therefore, the amendment is |

| Code Section | Condition | Explanation of Amendment |
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| | | needed to needed to minimize such occurrences in the event of future significant earthquakes. |
| Table 1507.3.7 | Geological | Table amended to require proper anchorage for clay or concrete tiles from sliding or rotating due to the increased risk of significant earthquakes in the County. Design provisions developed based on detailed study of the 1994 Northridge and the 1971 Sylmar earthquakes need to be incorporated into the local building code. |
| 1613.6 through 1613.6.1 | Geological | The inclusion of the importance factor in this equation has the unintended consequence of reducing the minimum seismic separation distance for important facilities such as hospital, school, police, and fire station, etc., from adjoining structures. The deletion of the importance factor from Equation 16-44 will ensure that a safe seismic separation distance is provided. This amendment is a continuation of an amendment adopted during previous code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1613.6.2 | Geological | Observed damages to one- and two-family dwellings of light frame construction after the Northridge Earthquake may have been partially attributed to vertical irregularities common to this type of occupancy and construction. In an effort to improve quality of construction and incorporate lessons learned from studies after the Northridge Earthquake, the modification to ASCE 7-05 Section 12.2.3.1 by limiting the number of stories and height of the structure to two stories will significantly minimize the impact of vertical irregularities and concentration of inelastic behavior from mixed structural systems. This amendment is a continuation of an amendment adopted during previous code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1613.6.3 | Geological | A SEAOSC and Los Angeles City Joint Task Force investigated the performance of concrete and masonry construction with flexible wood diaphragm failures after the Northridge earthquake. It was concluded at that time that continuous ties are needed at specified spacing to control cross grain tension in the interior of the diaphragm. Additionally, subdiaphragm shears need to be limited to control combined orthogonal stresses within the |

| Code Section | Condition | Explanation of Amendment |
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| | | diaphragm. Recognizing the importance and need to continue the recommendation made by the task force, but also taking into consideration the improved performance and standards for diaphragm construction today, a proposal to increase the continuous tie spacing limit to 40 ft in lieu of 25 ft and to use 75 percent of the allowable code diaphragm shear to determine the depth of the sub-diaphragm in lieu of the 300 plf is deemed appropriate and acceptable. The Los Angeles region is within a very active geological location. The various jurisdictions within this region have taken additional steps to prevent roof or floor diaphragms from pulling away from concrete or masonry walls. This decision was made due to the frequency of this type of failure during the past significant earthquakes. This amendment is a continuation of an amendment adopted during previous Code adoption cycles. |
| 1613.7 | Geological Topographical | Section is added to improve seismic safety of buildings constructed on or into hillsides. Due to the local topographical and geological conditions of the sites within the Los Angeles region and their probabilities for earthquakes, this technical amendment is required to address and clarify special needs for buildings constructed on hillside locations. A SEAOSC and Los Angeles City Joint Task Force investigated the performance of hillside building failures after the Northridge earthquake. Numerous hillside failures resulted in loss of life and millions of dollars in damage. These criteria were developed to minimize the damage to these structures and have been in use by both the City and County of Los Angeles for several years with much success. This amendment is a continuation of an amendment adopted during previous Code adoption cycles. |
| 1704.5 | Geological | The language in Sections 1704.5 of the California Building Code permits the owner to employ any registered design professional to perform structural observations with minimum guidelines. However, it is important to recognize that the registered design professional responsible for the structural design has thorough knowledge of the building he/she designed. By requiring the registered design |

| Code Section | Condition | Explanation of Amendment |
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| | | professional responsible for the structural design or their designee who were involved with the design to observe the construction, the quality of the observation for major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. Additional requirements are provided to help clarify the role and duties of the structural observer and the method of reporting and correcting observed deficiencies to the building official. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1704.5.1 | Geological | With the higher seismic demand placed on buildings and structures in this region, the language in Sections 1704.5.1 Item 3 of the California Building Code would permit many low-rise buildings and structures with complex structural elements to be constructed without the benefit of a structural observation. By requiring a registered design professional to observe the construction, the quality of the observation for major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. An exception is provided to permit simple structures and buildings to be excluded. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1705.3 and Table 1705.3 | Geological | Results from studies after the 1994 Northridge Earthquake indicated that a significant portion of the damages were attributable to lack of quality control during construction resulting in poor performance of the building or structure. Therefore, the amendment restricts the exceptions to the requirement for special inspection. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1705.11 | Geological | In Southern California, very few detached one- or two-family dwellings not exceeding two stories above grade plane are built as "box-type" structures, specially for those |

| Code Section | Condition | Explanation of Amendment |
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| | | in hillside areas and near the oceanfront. Many with steel moment frames or braced frames, and or cantilevered columns can still be shown as "regular" structures by calculations. With the higher seismic demand placed on buildings and structures in this region, the language in Sections 1705.11 Item 3 of the California Building Code would permit many detached one- or two-family dwellings not exceeding two stories above grade plane with complex structural elements to be constructed without the benefit of special inspections. By requiring special inspections, the quality of major structural elements and connections that affect the vertical and lateral load resisting systems of the structure will greatly be increased. The exception should only be allowed for detached one- or two-family dwellings not exceeding two stories above grade plane assigned to Seismic Design category A, B, and C. |
| 1807.1.4 | Climatic Geological | No substantiating data has been provided to show that a wood foundation is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood retaining walls, when they are not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the necessary precautionary steps to reduce or eliminate potential problems that may result by using wood foundations that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1807.1.6 | Geological | With the higher seismic demand placed on buildings and |

| Code Section | Condition | Explanation of Amendment |
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| | | structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result by following prescriptive design provisions that do not take into consideration the surrounding environment. Plain concrete performs poorly in withstanding the cyclic forces resulting from seismic events. In addition, no substantiating data has been provided to show that under-reinforced foundation walls are effective in resisting seismic loads and may potentially lead to a higher risk of failure. It is important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these issues into consideration. This amendment is a continuation of an amendment adopted during previous Code adoption cycles. |
| 1809.3 | Geological | With the higher seismic demand placed on buildings and structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result for under-reinforced footings located on sloped surfaces. Requiring minimum reinforcement for stepped footings is intended to address the problem of poor performance of plain or under-reinforced footings during a seismic event. This amendment is a continuation of an amendment adopted during previous Code adoption cycles. |
| 1809.7 and Table 1809.7 | Geological | No substantiating data has been provided to show that under-reinforced footings are effective in resisting seismic loads and may potentially lead to a higher risk of failure. Therefore, this amendment requires minimum reinforcement in continuous footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. With the higher seismic demand placed on buildings and structures in this region, it is deemed necessary to take precautionary steps to reduce or eliminate potential problems that may result by following prescriptive design provisions for footings that do not take into consideration the surrounding environment. It was important that the benefit and expertise of a registered design professional be obtained to properly analyze the structure and take these factors into consideration. This amendment reflects the |

| Code Section | Condition | Explanation of Amendment |
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| | | recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles. |
| 1809.12 | Climatic Geological | No substantiating data has been provided to show that timber footings are effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effects of constant moisture in the soil and wood-destroying organisms. Timber footings, when they are not properly treated and protected against deterioration, have performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the necessary precautionary steps to reduce or eliminate potential problems that may result by using timber footings that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1905.1 and 1905.1.3 | Geological | The design provision for wall pier detailing was originally introduced by SEAOC in 1987 to legacy Uniform Building Code (UBC) and was included in the 1988 UBC through the 1997 UBC (2002 CBC). The wall pier detailing provision prescribed under Section 1905.1.4 was intended for high seismic zones equivalent to current Seismic Design Category D, E, or F. Section 1905.1.3 was added as a complement of wall pier detailing in Seismic Design Category C (formerly seismic zones 2A and 2B under the legacy model code). ACI 318 Commentary R 21.1.1 emphasized "it is essential that structures assigned to higher Seismic Design Categories possess a higher degree of toughness," and further encourages practitioners to use special structural wall systems in |

| Code Section | Condition | Explanation of Amendment |
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| | | regions of high seismic risk. ASCE 7 Table 12.2-1 permits intermediate precast structural wall system in Seismic Design Category D, E, or F. Current Section 1905.1.3 is not limited to just structures assigned to Seismic Design Category C. The required shear strength under 21.3.3, referenced in Section 21.4.6, is based on $V_u$ under either nominal moment strength or two times the code prescribed earthquake force. The required shear strength in 21.6.5.1, referenced in Section 21.9.8.2 (IBC 1905.1.4), is based on the probable shear strength, $V_e$ under the probable moment strength, $M_{pr}$. In addition, the spacing of required shear reinforcement is 8 inches on center under current Section 21.4.6 instead of 6 inches on center with seismic hooks at both ends under Section 21.9.8.2. Requirement of wall pier under Section 21.9.8.2 would enhance better ductility. The current practice in commercial buildings constructed using precast panel wall systems is to have large window and door openings and/or narrow wall piers. Wall panels varying up to three stories high with openings resembles a wall frame which is not currently recognized under any of the defined seismic-force resisting systems other than consideration of structural wall systems. Conformance to special structural wall system design and detailing of wall piers ensures minimum life safety performance in resisting earthquake forces for structures in Seismic Design Category D, E, or F. The modification separates wall piers designed for structures assigned to Seismic Design Category C from those assigned to Seismic Design Category D, E, or F. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1905.1.8 | Geological | This amendment requires minimum reinforcement in continuous footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. This amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This amendment is a continuation of an amendment |

| Code Section | Condition | Explanation of Amendment |
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| | | adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 1905.1.10 through 1905.1.12 | Geological | This amendment is intended to carry over critical provisions for the design of concrete columns in moment frames from the UBC. Increased confinement is critical to the integrity of such columns and these modifications ensure that it is provided when certain thresholds are exceeded. In addition, this amendment carries over from the UBC a critical provision for the design of concrete shear walls. It essentially limits the use of very highly gravity-loaded walls from being included in the seismic load resisting system, since their failure could have catastrophic effect on the building. Furthermore, this amendment was incorporated in the Code based on observations from the 1994 Northridge Earthquake. Rebar placed in very thin concrete topping slabs has been observed in some instances to have popped out of the slab due to insufficient concrete coverage. This modification ensures that critical boundary and collector rebars are placed in sufficiently thick slabs to prevent buckling of such reinforcements. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2304.9.1 and Table 2304.9.1 | Geological | Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this proposed local amendment limits the use of staple fasteners in resisting or transferring seismic forces. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as nailed wood structural shear panels. The test results of stapled wood structural shear panels appeared much lower in strength and drift than nailed wood structural shear panel test results. Therefore, the use of staples as fasteners to resist or transfer seismic forces shall not be permitted without being substantiated by cyclic testing. This amendment is a continuation of a similar amendment adopted during previous Code |

| Code Section | Condition | Explanation of Amendment |
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| | | adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2304.11.7 | Climatic Geological | No substantiating data has been provided to show that wood used in retaining or crib walls is effective in supporting buildings and structures during a seismic event while being subject to deterioration caused by the combined detrimental effect of constant moisture in the soil and wood-destroying organisms. Wood used in retaining or crib walls, when it is not properly treated and protected against deterioration, has performed very poorly. Most contractors are typically accustomed to construction in dry and temperate weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. The proposed amendment takes the necessary precautionary steps to reduce or eliminate potential problems that may result by using wood in retaining or crib walls that experience relatively rapid decay due to the fact that the region does not experience temperatures cold enough to destroy or retard the growth and proliferation of wood-destroying organisms. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2305.4 | Geological | The overdriving of nails into the structural wood panels still remains a concern when pneumatic nail guns are used for wood structural panel shear wall nailing. Box nails were observed to cause massive and multiple failures of the typical 3/8-inch thick plywood during the 1994 Northridge Earthquake. The use of clipped head nails continues to be restricted from use in wood structural panel shear walls where the minimum nail head size must be maintained in order to minimize nails from pulling through sheathing materials. Clipped or mechanically driven nails used in wood structural panel shear wall construction were found to perform much worse in previous wood structural panel shear wall testing done at the University of California Irvine. The existing test results indicated that, under cyclic loading, the wood structural panel shear walls were less energy absorbent and less |

| Code Section | Condition | Explanation of Amendment |
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| | | ductile. The panels reached ultimate load capacity and failed at substantially less lateral deflection than those using same size hand-driven nails. This amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2305.5 | Geological | Many of the hold-down connectors currently in use do not have any acceptance report based on dynamic testing protocol. This amendment continues to limit the allowable capacity to 75% of the acceptance report value to provide an additional factor of safety for statically tested anchorage devices. Cyclic forces imparted on buildings and structures by seismic activity cause more damage than equivalent forces which are applied in a static manner. Steel plate washers will reduce the additional damage which can result when hold-down connectors are fastened to wood framing members. This amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2306.2 | Geological | The SEAOSC and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with staples are based on monotonic testing and do not take into |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with staples would exhibit the same behavior as wood structural panels fastened with common nails. The test result revealed that wood structural panels fastened with staples appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of staples as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and unincorporated areas within the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the gypsum board. This amendment continues the previous amendment adopted during the 2007 Code adoption cycle. |
| 2306.3 and 2307.2 | Geological | The SEAOSC and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with stapled nails are based on monotonic testing and do not take into consideration that earthquake forces load shear wall or |

| Code Section | Condition | Explanation of Amendment |
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| | | diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with stapled nails would exhibit the same behavior as wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with stapled nails appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of stapled nail as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and unincorporated areas within the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within the thickness of the gypsum board. This amendment continues the previous amendment adopted during the 2007 Code adoption cycle, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2308.3.4 | Geological | With the higher seismic demand placed on buildings and structures in this region, interior walls can easily be called upon to resist over half of the seismic loading imposed on simple buildings or structures. Without a continuous foundation to support the braced wall line, seismic loads would be transferred through other elements such as non-structural concrete slab floors, wood floors, etc. The purpose of this amendment is to limit the use of the exception to structures assigned to Seismic Design Category A, B or C where lower seismic demands are expected. Requiring interior braced walls be supported by continuous foundations is intended to reduce or eliminate the poor performance of buildings or structures. This |

| Code Section | Condition | Explanation of Amendment |
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| | | amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2308.9.3.1, 2308.9.3.2 and Figure 2308.9.3.2 | Geological | The SEAOSC and the Los Angeles City Joint Task Force that investigated the damages to buildings and structures during the 1994 Northridge Earthquake recommended reducing allowable shear values in wood structural panel shear walls or diaphragms that were not substantiated by cyclic testing. That recommendation was consistent with a report to the Governor from the Seismic Safety Commission of the State of California recommending that code requirements be "more thoroughly substantiated with testing." The allowable shear values for wood structural panel shear walls or diaphragms fastened with stapled nails are based on monotonic testing and do not take into consideration that earthquake forces load shear wall or diaphragm in a repeating and fully reversible manner. In September 2007, limited cyclic testing was conducted by a private engineering firm to determine if wood structural panels fastened with stapled nails would exhibit the same behavior as wood structural panels fastened with common nails. The test result revealed that wood structural panel fastened with stapled nails appeared to be much lower in strength and stiffness than wood structural panels fastened with common nails. It was recommended that the use of stapled nail as fasteners for wood structural panel shear walls or diaphragms not be permitted to resist seismic forces in structures assigned to Seismic Design Category D, E and F unless it can be substantiated by cyclic testing. Furthermore, the cities and unincorporated areas within the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of shear walls and diaphragms designed for high levels of seismic forces by requiring wood sheathing be applied directly over the framing members and prohibiting the use of panels placed over gypsum sheathing. This amendment is intended to prevent the undesirable performance of nails when gypsum board softens due to cyclic earthquake displacements and the nail ultimately does not have any engagement in a solid material within |

| Code Section | Condition | Explanation of Amendment |
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| | | the thickness of the gypsum board. |
| Table 2308.12.4 | Geological | This amendment specifies minimum sheathing thickness and nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands placed on buildings or structure in this region. This proposed amendment reflects the recommendations by the SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. This amendment is a continuation of an amendment adopted during previous Code adoption cycles, and is necessary due to the increased risk of significant earthquakes in the County. |
| 2308.12.5 | Geological | Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this amendment limits the use of staple fasteners in resisting or transferring seismic forces. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as nailed wood structural shear panels. The test results of stapled wood structural shear panels appeared much lower in strength and drift than nailed wood structural shear panel test results. Therefore, the use of staples as fasteners to resist or transfer seismic forces shall not be permitted without being substantiated by cyclic testing. This amendment is a continuation of a similar amendment adopted during previous Code adoption cycles. |
| 3401.10.1 to 3401.10.3 | Geological | The greater Los Angeles/Long Beach region is a densely populated area having buildings constructed over and near a vast array of fault systems capable of producing major earthquakes, including but not limited to the recent 1994 Northridge Earthquake. The purpose of the amendments is to prevent inadequate construction or bracing to resist horizontal forces, thus becoming a hazard to life or property in the event of an earthquake. |
| 3401.11 | Geological | The greater Los Angeles/Long Beach region is a densely populated area having buildings constructed over and |

| Code Section | Condition | Explanation of Amendment |
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| | | near a vast array of fault systems capable of producing major earthquakes, including but not limited to the recent 1994 Northridge Earthquake. The purpose of the amendment is to save lives in the event of an earthquake when panics occur and glass shatters. |
| J101.1 | Geological Topographical Climate | This Section is revised to include erosion and sediment control measures to address the complex and diverse set of soil types and geologic conditions that exist in the Los Angeles County region. |
| J103.1 – J103.2 | Geological Topographical Climate | Sections revised to provide adequate control of grading operations typical to the Los Angeles County region due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region. |
| J104.2.1 – J104.4 | Geological Topographical Climate | Sections revised or added to provide adequate control of grading operations typical to the Los Angeles County region due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region. |
| J105.1- J105.14 | Geological Topographical Climate | Sections revised or added to provide adequate control of grading operations typical to the Los Angeles County region due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region. |
| J106.1 | Geological Topographical Climate | Section revised to require more stringent cut slope ratios to address the complex and diverse set of soil types and geologic conditions that exist in the Los Angeles County region. |
| J107.1- J107.7 | Geological Topographical Climate | Sections revised to provide more stringent fill requirements for slope stability, and settlement due to the complex and diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region. |
| J107.8 – J107.9 | Geological Topographical Climate | Sections revised to provide more stringent inspection and testing requirements for fill slope stability due to the complex and diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region. |
| J108.1 – J108.4 | Geological Topographical Climate | Sections revised to provide more stringent slope setback requirements to address the complex and diverse set of soil types, climates, and geologic conditions which exist in |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | the Los Angeles County region. |
| J109.1 – J109.3 | Geological Topographical Climate | Sections revised to provide more stringent drainage and terracing requirements to address the complex and diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region. |
| J109.5 | Geological Topographical Climate | Subsection added to provide for adequate outlet of drainage flows due to the diverse set of soil types, climates, and geologic conditions which exist in the Los Angeles County region. |
| J110 - J110.8.5 | Geological Topographical Climate | Sections revised or added to provide for State requirements of storm water pollution prevention and more stringent slope planting, and slope stability requirements to control erosion due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region. |
| J111 | Geological Topographical Climate | Section revised to reference additional standards for soils testing due to the complex and diverse set of soil types, climates, and geologic conditions that exist in the Los Angeles County region. |

**SECTION 104.** This ordinance shall become operative on January 1, 2014.

[TITLE262013CSCC]

## ANALYSIS

This ordinance repeals and amends certain provisions of Title 32 – Fire Code of the Los Angeles County Code, which had incorporated by reference portions of the 2010 Edition of the California Fire Code, and adopts by reference, with certain changes and amendments, the 2013 Edition of the California Fire Code. This ordinance also adopts by reference, with certain changes and amendments, the 2012 Edition of the International Fire Code, which has been incorporated, with certain changes and amendments, into the 2013 Edition of the California Fire Code.

State law allows the County and Consolidated Fire Protection District of Los Angeles County (District) to adopt more restrictive building standards that are reasonably necessary because of local climatic, geological, or topographical conditions. This ordinance contains findings that all of the amendments that constitute more restrictive building standards are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles. This ordinance further amends Title 32 by making administrative changes and editorial corrections. Unless deleted or modified herein, the previously enacted provisions of Title 32 continue in effect. This ordinance adopts Title 32 as the Fire Code for the District.

JOHN F. KRATTLI
County Counsel

By:
SCOTT KUHN
Principal Deputy County Counsel
Property Division

SK:vn

Requested: 08/22/13

Revised: 01/07/13

**ORDINANCE NO. 2014-0014**

An ordinance repealing and amending Title 32 – Fire Code of the Los Angeles County Code, which had incorporated by reference portions of the 2010 Edition of the California Fire Code, and adopts by reference, with certain changes and amendments, the 2013 Edition of the California Fire Code. This ordinance also adopts by reference, with certain changes and amendments, the 2012 Edition of the International Fire Code, which has been incorporated, with certain changes and amendments, into the 2013 Edition of the California Fire Code, and making other revisions thereto. This ordinance adopts more restrictive building standards that are reasonably necessary because of local climatic, geological, or topographical conditions. Finally, this ordinance adopts Title 32 as the Fire Code for the Consolidated Fire Protection District of Los Angeles County.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** The following Chapters of Title 32 are hereby repealed in their entirety:

Chapter 1 (SCOPE AND ADMINISTRATION)

Chapter 2 (DEFINITIONS)

Chapter 4 (EMERGENCY PLANNING AND PREPAREDNESS)

Chapter 5 (FIRE SERVICE FEATURES)

Chapter 6 (BUILDING SERVICES AND SYSTEMS)

Chapter 7 (FIRE-RESISTANCE-RATED CONSTRUCTION)

Chapter 9 (FIRE PROTECTION SYSTEMS)

Chapter 10 (MEANS OF EGRESS)

Chapter 11 (AVIATION FACILITIES)

Chapter 12 (DRY CLEANING)

Chapter 13 (COMBUSTIBLE DUST-PRODUCING OPERATIONS)

Chapter 14 (FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION)

Chapter 15 (FLAMMABLE FINISHES)

Chapter 16 (FRUIT AND CROP RIPENING)

Chapter 17 (FUMIGATION AND THERMAL INSECTICIDAL FOGGING)

Chapter 18 (SEMICONDUCTOR FABRICATION FACILITIES)

Chapter 19 (LUMBER YARDS AND WOODWORKING FACILITIES)

Chapter 20 (MANUFACTURE OF ORGANIC COATINGS)

Chapter 21 (INDUSTRIAL OVENS)

Chapter 22 (MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES)

Chapter 23 (HIGH-PILED COMBUSTIBLE STORAGE)

Chapter 24 (TENTS AND OTHER MEMBRANE STRUCTURES)

Chapter 25 (TIRE REBUILDING AND TIRE STORAGE)

Chapter 26 (WELDING AND OTHER HOT WORK)

Chapter 27 (HAZARDOUS MATERIALS - GENERAL PROVISIONS)

Chapter 28 (AEROSOLS)

Chapter 29 (COMBUSTIBLE FIBERS)

Chapter 30 (COMPRESSED GASES)

Chapter 31 (CORROSIVE MATERIALS)

Chapter 32 (CRYOGENIC FLUIDS)

Chapter 35 (FLAMMABLE GASES AND FLAMMABLE CRYOGENIC FLUIDS)

Chapter 36 (FLAMMABLE SOLIDS)

Chapter 37 (HIGHLY TOXIC AND TOXIC MATERIALS)

Chapter 38 (LIQUEFIED PETROLEUM GASES)

Chapter 39 (ORGANIC PEROXIDES)

Chapter 40 (OXIDIZERS, OXIDIZING GASES AND OXIDIZING CRYOGENIC FLUIDS)

Chapter 41 (PYROPHORIC MATERIALS)

Chapter 42 (PYROXYLIN (CELLULOSE NITRATE) PLASTICS)

Chapter 43 (UNSTABLE (REACTIVE) MATERIALS)

Chapter 44 (WATER-REACTIVE SOLIDS AND LIQUIDS)

Chapter 45 (MARINAS)

Chapter 46 (CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS)

Chapter 47 (REFERENCED STANDARDS)

Chapter 50 (AUTOMOBILE WRECKING YARDS)

Chapter 51 (INFRACTIONS)

Chapter 52 (CONSOLIDATED FIRE PROTECTION DISTRICT CODE)

APPENDIX B (FIRE-FLOW REQUIREMENTS FOR BUILDINGS)

APPENDIX C (FIRE HYDRANT LOCATIONS AND DISTRIBUTION)

APPENDIX J (EMERGENCY RESPONDER RADIO COVERAGE)

APPENDIX K (ROOF OBSTRUCTIONS)

APPENDIX L (RIFLE RANGE)

APPENDIX M (FIRE HAZARD SEVERITY ZONES – (FHSZ)

**SECTION 2.** The following Sections of Title 32 are hereby repealed in their entirety:

Section 301 (General)

Section 302 (Definitions)

Section 303 (Asphalt Kettles)

Section 304 (Combustible Waste Material)

Section 305 (Ignition Sources)

Section 306 (Motion Picture Projection Rooms and Film)

Section 307 (Open Burning, Recreational Fires and Portable Outdoor Fireplaces)

Section 308 (Open Flames)

Section 309 (Powered Industrial Trucks and Equipment)

Section 310 (Smoking)

Section 311 (Vacant Premises)

Section 312 (Vehicle Impact Protection)

Section 313 (Fueled Equipment)

Section 314 (Indoor Displays)

Section 315 (Miscellaneous Combustible Materials Storage)

Section 316 (Hazards to Fire Fighters)

Section 317 (Laundry Carts)

Section 318 – 323 (Reserved)

Section 324 (Parade Floats)

Section 326 (Activities in Hazardous Fire Areas)

Section 3301.1 (Scope)

Section 3301.2 (Permits)

Section 3301.3 (Fireworks)

Section 3301.4 (Model rockets and experimental high power rockets)

Sections 3302 – 3307 (Reserved)

Section 3308 (Fireworks Display)

Section 3309 (Reserved)

Section 3310 (Seizure of Explosives, Explosive Materials, and Fireworks)

Section 3401 (General)

Section 3402 (Definitions)

Section 3403 (General Requirements)

Section 3404 (Storage)

Section 3405 (Dispensing, Use, Mixing and Handling)

Section 3406.1 (General)

Section 3406.2 (Storage and dispensing of flammable and combustible liquids on farms and construction sites)

Section 3406.2.1 (Combustibles and open flames near tanks)

Section 3406.2.2 (Marking of tanks and containers)

Section 3406.2.3 (Containers for storage and use)

Section 3406.2.4 (Permanent and temporary tanks)

Section 3406.2.4.1 (Fill-opening security)

Section 3406.2.4.2 (Vents)

Section 3406.2.4.3 (Location)

Section 3406.2.4.4 (Locations where above-ground tanks are prohibited)

Section 3406.2.5 (Type of tank)

Section 3406.2.5.1 (Tanks with top openings only)

Section 3406.2.5.1.1 (Pumps and fittings)

Section 3406.2.5.2 (Tanks for gravity discharge)

Section 3406.2.6 (Spill control drainage control and diking)

Section 3406.2.7 (Portable fire extinguishers)

Section 3406.2.8 (Dispensing from tank vehicles)

Section 3406.2.8.1 (Location)

Section 3406.3 (Well drilling and operating)

Section 3406.3.1 (Location)

Section 3406.3.1.1 (Storage tanks and sources of ignition)

Section 3406.3.1.2 (Streets and railways)

Section 3406.3.1.3 (Buildings)

Section 3406.3.1.3.1 (Group A, E, or I buildings)

Section 3406.3.1.3.2 (Existing wells)

Section 3406.3.1.4 (Zoning regulations)

Section 3406.3.2 (Waste control)

Section 3406.3.2.1 (Discharge on a street or water channel)

Section 3406.3.2.2 (Discharge and combustible materials on ground)

Section 3406.3.3 (Sumps)

Section 3406.3.3.1 (Maximum width)

Section 3406.3.3.2 (Backfilling)

Section 3406.3.3.3 (Security)

Section 3406.3.4 (Prevention of blowouts)

Section 3406.3.5 (Storage tanks)

Section 3406.3.6 (Soundproofing)

Section 3406.3.7 (Signs)

Section 3406.3.8 (Field-loading racks)

Section 3406.4 (Bulk plants or terminals)

Section 3406.4.1 (Building construction)

Section 3406.4.2 (Means of egress)

Section 3406.4.3 (Heating)

Section 3406.4.4 (Ventilation)

Section 3406.4.4.1 (Basement and pits)

Section 3406.4.4.2 (Dispensing of Class I liquids)

Section 3406.4.5 (Storage)

Section 3406.4.6 (Overfill protection of Class I and II liquids)

Section 3406.4.7 (Wharves)

Section 3406.4.7.1 (Transferring approvals)

Section 3406.4.7.2 (Transferring location)

Section 3406.4.7.3 (Superstructure and decking material)

Section 3406.4.7.4 (Tanks allowed)

Section 3406.4.7.5 (Transferring equipment)

Section 3406.4.7.6 (Piping, valves and fittings)

Section 3406.4.7.7 (Loading and unloading)

Section 3406.4.7.8 (Mechanical work)

Section 3406.4.8 (Sources of ignition)

Section 3406.4.9 (Drainage control)

Section 3406.4.10 (Fire protection)

Section 3406.4.10.1 (Portable fire extinguishers)

Section 3406.4.10.2 (Fire hoses)

Section 3406.4.10.3 (Obstruction of equipment)

Section 3406.4.10.4 (Fire apparatus access)

Section 3406.5 (Bulk transfer and process transfer operations)

Section 3406.5.1 (General)

Section 3406.5.1.1 (Location)

Section 3406.5.1.2 (Weather protection canopies)

Section 3406.5.1.3 (Ventilation)

Section 3406.5.1.4 (Sources of ignition)

Section 3406.5.1.5 (Spill control and secondary containment)

Section 3406.5.1.6 (Fire protection)

Section 3406.5.1.7 (Static protection)

Section 3406.5.1.8 (Stray current protection)

Section 3406.5.1.9 (Top loading)

Section 3406.5.1.10 (Bottom loading)

Section 3406.5.1.10.1 (Dry disconnect coupling)

Section 3406.5.1.10.2 (Venting)

Section 3406.5.1.10.3 (Vapor-tight connection)

Section 3406.5.1.10.4 (Vapor-processing equipment)

Section 3406.5.1.11 (Switch loading)

Section 3406.5.1.12 (Loading racks)

Section 3406.5.1.13 (Transfer apparatus)

Section 3406.5.1.14 (Inside buildings)

Section 3406.5.1.15 (Tank vehicle and tank car certification)

Section 3406.5.1.16 (Tank vehicle and tank car stability)

Section 3406.5.1.16.1 (Tank vehicles)

Section 3406.5.1.16.2 (Chock blocks)

Section 3406.5.1.16.3 (Tank cars)

Section 3406.5.1.17 (Monitoring)

Section 3406.5.1.18 (Security)

Section 3406.5.2 (Bulk transfer)

Section 3406.5.2.1 (Vehicle motor)

Section 3406.5.3 (Process transfer)

Section 3406.5.3.1 (Piping, valves, hoses and fittings)

Section 3406.5.3.1.1 (Shutoff valves)

Section 3406.5.3.1.2 (Hydrostatic relief)

Section 3406.5.3.1.3 (Antisiphon valves)

Section 3406.5.3.2 (Vents)

Section 3406.5.3.3 (Motive power)

Section 3406.5.4 (Dispensing from tank vehicles and tank cars)

Section 3406.5.4.1 (Marine craft and special equipment)

Section 3406.5.4.2 (Emergency refueling)

Section 3406.5.4.3 (Aircraft fueling)

Section 3406.5.4.4 (Fueling of vehicles at farms, construction sites and similar areas)

Section 3406.5.4.5 (Commercial, industrial, governmental, or manufacturing)

Section 3406.6 (Tank vehicles and vehicle operation)

Section 3406.6.1 (Operation of tank vehicles)

Section 3406.6.1.1 (Vehicle maintenance)

Section 3406.6.1.2 (Leaving vehicle unattended)

Section 3406.6.1.3 (Vehicle motor shutdown)

Section 3406.6.1.4 (Outage)

Section 3406.6.1.5 (Overfill protection)

Section 3406.6.1.6 (Securing hatches)

Section 3406.6.1.7 (Liquid temperature)

Section 3406.6.1.8 (Bonding to underground tanks)

Section 3406.6.1.9 (Smoking)

Section 3406.6.1.10 (Hose connections)

Section 3406.6.1.10.1 (Simultaneous delivery)

Section 3406.6.1.11 (Hose protection)

Section 3406.6.2 (Parking)

Section 3406.6.2.1 (Parking near residential, educational and institutional occupancies and other high-risk areas)

Section 3406.6.2.2 (Parking on thoroughfares)

Section 3406.6.2.3 (Duration exceeding 1 hour)

Section 3406.6.3 (Garaging)

Section 3406.6.4 (Portable fire extinguisher)

Section 3406.7 (Refineries)

Section 3406.7.1 (Corrosion protection)

Section 3406.7.2 (Cleaning of tanks)

Section 3406.7.3 (Storage of heated petroleum products)

Section 3406.8 (Vapor recovery and vapor-processing systems)

Section 3406.8.1 (Over-pressure/vacuum protection)

Section 3406.8.2 (Vent location)

Section 3406.8.3 (Vapor collection systems and overfill protection)

Section 3406.8.4 (Liquid-level monitoring)

Section 3406.8.5 (Overfill protection)

Section 4801 (General)

Section 4802 (Occupancy Classification)

Section 4803.1 (Change In use)

Section 4803.2 (Additional permits)

Section 4803.3 (Live audiences)

Section 4804 (General Requirements)

Section 4805 (Fire-Extinguishing Systems)

Section 4806 (Fire-Detection Equipment)

Section 4807 (Fire Safety Officers)

Section 4808 (Electrical Requirements)

Section 4809 (Mechanical Equipment)

Section 4810 (Design Requirements)

Section 4811 (Production Locations)

Section 4901 (General)

Section 4902 (Definitions)

Section 4903 (Plans – Reserved)

Section 4904 (Fire Hazard Severity Zones)

Section 4905 (Wildfire Protection Building Construction)

Section 4906 (Hazardous Vegetation and Fuel Management)

Section 4907 (Defensible Space)

**SECTION 3.** Section 100 is hereby added to read as follows:

**100 CALIFORNIA FIRE CODE AND INTERNATIONAL FIRE CODE ADOPTION BY REFERENCE:** Except as hereinafter changed and modified, Chapters 1 through 80; and Appendix B, Appendix BB, Appendix C, Appendix CC, and Appendix K of the 2013 Edition of the California Fire Code, including errata and supplements, published by the California Building Standards Commission, and Chapters 1 through 7, Chapters 9 and 10, Chapters 20 through 36, Chapters 50 through 55, Chapters 57 through 67 and Chapter 80 of the 2012 Edition of the International Fire Code, published by the International Code Council, for sections that were not adopted as part of the 2013 California Fire Code are hereby adopted by reference and incorporated into this Title 32 of the Los Angeles County Code as if set forth fully below, and shall be known as Chapters 1 through 80, Appendix B, Appendix BB, Appendix C, Appendix CC, and Appendix K of Title 32 of the Los Angeles County Code.

A copy of the 2013 Edition of the California Fire Code, with errata and supplements, and a copy of the 2012 International Fire Code shall be at all times maintained by the Executive Office of the Board of Supervisors for use and examination by the public.

Unless expressly repealed or amended herein, the previously enacted provisions of Title 32 of the Los Angeles County Code shall remain in full force and effect.

**SECTION 4.** Section 101.1 is hereby amended to read as follows:

**101.1 Title.**

~~These regulations shall be known as the Fire Code of~~ Title 32 of the Los Angeles County Code shall be known as the LOS ANGELES COUNTY FIRE CODE, hereinafter referred to as "this code."

**SECTION 5.** Section 101.2 is hereby amended to read as follows:

**101.2 Scope.**

This code establishes regulations affecting or relating to structures, processes, premises, and safeguards regarding:

. . .

4. Maters related to the construction, extension, repair, alteration or removal of fire suppression or alarm systems;~~ and~~

5. Conditions affecting the safety of the fire fighters and emergency responders during emergency operations~~,~~; and

6. Fire hydrant systems, water supply, fire equipment access, posting of fire equipment access, parking, lot identification, weed abatement, and combustible brush and vegetation that represents an imminent fire hazard, debris abatement, combustible storage abatement including flammable liquid storage, hazardous material storage and use, open-flame and open-burning, and burglar bars at State-regulated mobile home and special occupancy parks within the jurisdiction of the County of Los Angeles Fire Department as per California Health and Safety Code sections 18691 and 18873.5.

**SECTION 6.** Section 101.2.1 is hereby amended to read as follows:

**101.2.1 Appendices.**

Provisions in the appendices shall not apply unless specifically adopted. Only Appendix B, Appendix BB, Appendix C, Appendix CC, and Appendix K from the 2013 California State Fire Code have been incorporated into this code. This code also adopts Appendix L and Appendix M.

**SECTION 7.** Section 101.3 is hereby amended to read as follows:

**101.3 Intent.**

The purpose of this code is to establish the minimum requirements consistent with nationally recognized good practice for providing a reasonable level of life safety and property protection from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety to fire fighters and emergency responders during emergency operations. Consistent with this purpose, the provisions of this code are intended, and have always been intended, to confer a benefit on the community as a whole and are not intended to establish a duty of care toward any particular person.

This code shall not be construed to hold the County, the County of Los Angeles Consolidated Fire Protection District, or any officer, employee, or agent thereof responsible for any damage to persons or property by reason of any inspection authorized herein or by reason of the issuance or non-issuance of any permit authorized herein, and/or for any action or omission in connection with the application and/or enforcement of this code. By adopting the provisions of this code, the County, any

district member city, or the County of Los Angeles Consolidated Fire Protection District, does not intend to impose on itself, its employees, or agents any mandatory duties of care toward persons and property within its jurisdiction so as to provide a basis of civil liability for damages. This section is declaratory of existing law and is not to be construed as suggesting that such was not the purpose and intent of previous code adoptions.

**SECTION 8.** Section 101.6 is hereby added to read as follows:

**101.6 Amendments.**

When reference is made to a portion of this code or other applicable laws or ordinances, the reference applies to all amendments and additions now or hereafter made. Where there is a conflict between amendments, unless otherwise expressly noted, the most recent amendment shall apply.

**SECTION 9.** Section 101.7 is hereby added to read as follows:

**101.7 California Fire Code Errata and Supplements.**

When the California Building Standard Commission approves and publishes errata or supplement to the California Fire Code, Title 24, Part 9, any change made that affects the requirement or meaning of any amendment found in this ordinance shall not necessarily void or alter the requirement of that amendment. The fire code official shall render the interpretation and intent of the amendment with the new language of the errata or supplement as per Section 104.1.

**SECTION 10.** Section 102.5 is hereby amended to read as follows:

**102.5 Application of ~~r~~Residential ~~c~~Code.**

Where structures are designed and constructed in accordance with the California Residential Code, the provisions of this code shall apply as follows:

1. Construction and design provisions: Provisions of this code pertaining to the exterior of the structure shall apply including, but not limited to, premises identification, fire apparatus access, and water supplies. Provisions of this code pertaining to the interior of the structure shall apply when specifically required by this code including, but not limited to, Section 903.1.2. Where interior or exterior systems or devices are installed, construction permits required by Section 105.7 of this code shall also apply.

2. Administrative, operational, and maintenance provisions: All such provisions of this code shall apply.

**SECTION 11.** Section 103.2 is hereby amended to read as follows:

**103.2** ~~**Appointment.** The *fire code official* shall be appointed by the chief appointing authority of the jurisdiction; and the *fire code official* shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.~~**Fire Marshal.** An administrative officer of the prevention services bureau shall be appointed the fire marshal by the chief of the Fire Department from among the chief officers of the Fire Department.

**SECTION 12.** Section 103.2.1 is hereby added to read as follows:

**103.2.1 Health Hazardous Materials Division and Forestry Division Staff.**

The provisions of this code may be enforced by any duly authorized member of the health hazardous materials division or the forestry division of the Fire Department.

**SECTION 13.** Section 103.2.2 is hereby added to read as follows:

**103.2.2 Agricultural Commissioner.**

The provisions of Section 325 of this code may be enforced by the agricultural commissioner of the County of Los Angeles.

**SECTION 14.** Section 103.4 is hereby amended to read as follows:

**103.4 Liability.** The fire code official, member~~s~~ of the ~~board of appeals~~fire code appeals review panel, officer or employee charged with the enforcement of this code, while acting for the jurisdiction, 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 liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

**SECTION 15.** Section 104.1 is hereby amended to read as follows:

**104.1 General.** The fire code official is hereby authorized to enforce the provisions of this code and shall have the authority to render interpretations of this code, and to adopt policies, procedures, rules, and regulations in order to implement its provisions or to clarify the application of its provisions. Such

interpretations, policies, procedures, rules, and regulations shall be ~~in compliance~~consistent with the intent and purpose of this code and shall not have the effect of waiving requirements specifically provided for in this code. A copy of such interpretations, rules, and regulations shall be filed with the Executive Office of the Board of Supervisors and shall be in effect immediately thereafter.

**SECTION 16.** Section 104.1.1 is hereby added to read as follows:

**104.1.1 Enforcement Authority.**

Under the Fire Chief's direction, members of the Fire Department are authorized to enforce all ordinances of the jurisdiction and the laws of the state pertaining to:

1. The prevention of fires.
2. The suppression or extinguishment of dangerous or hazardous fires.
3. The storage, use, and handling of hazardous materials.
4. The installation and maintenance of automatic, manual, and other private fire alarm systems and fire-extinguishing equipment.
5. The maintenance and regulation of fire escapes.
6. The maintenance of fire protection and the elimination of fire hazards on land and in buildings, structures, and other property, including those under construction.
7. The maintenance of means of egress.
8. The investigation of the cause, origin, and circumstances of fire and unauthorized releases of hazardous materials.
9. Brush clearance.
10. All other matters within the scope of this code.

**Note:** For authority related to control and investigation of emergency scenes, see Section 104.11.

**SECTION 17.** Section 104.5.1 is hereby added to read as follows:

**104.5.1 Fire and Law Enforcement Personnel.**

The fire code official and designated representatives of the fire code official may issue citations for violations of this code, of the regulations authorized by this code, and of the standards as set forth in Chapter 82 of this code.

When requested to do so by the fire code official, the chief of any law enforcement agency is authorized to assign such available law enforcement officers as necessary to assist the fire department in enforcing the provisions of this code.

**SECTION 18.** Section 104.9 is hereby amended to read as follows:

**104.9 Alternative ~~m~~Materials and ~~m~~Methods.**

. . .

Requests for approval to use an alternate material, assembly of materials, equipment, method of construction, method of installation of equipment or means of protection shall be made in writing to the fire marshal by the owner or the owner's authorized representative and shall be accompanied by a justification that is supported by evidence to substantiate any claim being made regarding the requested alternative and its compliance with the intent of this code. The fire marshal may require independent tests be performed by an approved testing organization in order to substantiate the proposed alternative.

Approval of a request for use of an alternative material, assembly of materials, equipment, method of construction, method of installation of equipment or means of protection made pursuant to these provisions shall be limited to the particular case covered by the request and shall not be construed as establishing any precedent for any future request.

**SECTION 19.** Section 104.10 is hereby amended to read as follows:

**104.10 Fire ~~i~~Investigations.**

The fire code official~~, the fire department or other responsible authority~~ or authorized personnel shall have the authority to investigate promptly the cause, origin, and circumstances of any fire, hazardous material incident, explosion, or other hazardous condition which is of suspicious origin. The investigator is authorized to take immediate charge of all physical evidence relating to the cause of the incident, and to pursue the investigation to its conclusion under the direction of the fire chief or an authorized deputy fire chief, in cooperation with the appropriate law enforcement agency. Information that could be related to trade secrets or processes shall not be made part of the public record, except as directed by a court of law.

**SECTION 20.** Section 104.11.4 is hereby added to read as follows:

**104.11.4 Private Firefighting Resources.**

Any private firefighting resource must possess a valid operational permit to conduct firefighting operations, provide fire protection operations, or to apply resistive treatment to structures or vegetation in an emergency area.

**SECTION 21.** Section 104.11.4.1 is hereby added to read as follows:

**104.11.4.1 Requirement to Obey Orders.**

Any private firefighting resource must obey all permit requirements, regulations, and legal orders, including evacuation orders, given by the incident commander or incident commander's designee within an emergency area.

**SECTION 22.** Section 104.11.4.2 is hereby added to read as follows:

**104.11.4.2 Required Check-in.**

Upon arriving at the emergency area any private firefighting resource shall check-in with the incident commander or incident commander's designee.

**SECTION 23.** Section 104.11.4.3 is hereby added to read as follows:

**104.11.4.3 Permit Required.**

A valid operational permit shall be obtained by private firefighting resources as set forth in Section 105.6.

**SECTION 24.** Section 104.11.4.4 is hereby added to read as follows:

**104.11.4.4 Permit Display.**

Each private firefighting resource vehicle must display a copy of the valid private firefighting resources permit in clear view from the exterior of the vehicle.

**SECTION 25.** Section 105.4.2 is hereby amended to read as follows:

**105.4.2 Information on ~~c~~Construction ~~d~~Documents.** Construction documents shall be drawn to scale ~~upon suitable material~~on substantial paper. Electronic media documents are allowed to be submitted when approved by the fire code official. Construction documents shall be of sufficient clarity to indicate the

location, nature, and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules, and regulations as determined by the fire code official. The first sheet of each set of plans shall give the street address of the property, the assessor's parcel number, the name and address of the owner, and persons who prepared the plans. Plans shall also include a plot plan showing the location of the proposed building and of every existing building on the property.

**SECTION 26.** Section 105.4.4.2 is hereby added to read as follows:

**105.4.4.2 Expiration of Construction Documents Approval by Fire Code Official When No Building Permit Issued.**

A fire code official construction document approval necessary for a building permit to be issued, for which the building official ultimately does not issue a building permit, shall expire one year after the date of approval by the fire code official. Construction documents including plans, specifications, and computations previously submitted may thereafter be returned to the applicant or destroyed by the fire code official. The fire code official may extend the time for action by the applicant for a period of six months beyond the one-year limit upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No construction or plan approval document shall be extended more than once.

Once a construction document approval and any extension thereof has expired, the applicant shall resubmit construction documents including plans, specifications, and

computations. Construction document approval for which a building permit has been issued and thereafter expired according to the Building Code shall be null and void. In such circumstances, construction documents including plans, specifications, and computations shall be resubmitted for construction document approval.

**SECTION 27.** Section 105.4.6 is hereby amended to read as follows:

**105.4.6 Retention of ~~c~~Construction ~~d~~Documents.** One set of construction documents shall be retained by the fire code official for a period of not less than ~~180~~90 days from date of completion of the permitted work, or as required by ~~state or local laws~~section 19850 of the California Health and Safety Code. One set of approved construction documents 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.

**SECTION 28.** Section 105.6.1.1 is hereby added to read as follows:

**105.6.1.1 Activities in Hazardous Fire Areas.**

An operational permit is required for any of the activities as described in Section 326.2 of this code.

**SECTION 29.** Section 105.6.3.1 is hereby added to read as follows:

**105.6.3.1 Battery System.**

An operational permit is required to install or operate stationary lead-acid battery systems having a liquid capacity of more than 100 gallons (378.5 L). See Chapter 6.

**SECTION 30.** Section 105.6.3.2 is hereby added to read as follows:

**105.6.3.2 Bonfires or Rubbish Fires.**

An operational permit is required to kindle or maintain or authorize the kindling or maintenance of bonfires or rubbish fires. See Chapter 3.

**SECTION 31.** Section 105.6.9 is hereby amended to read as follows:

**105.6.9 Covered and Open ~~m~~Mall ~~b~~Buildings.** An operational permit is required for:

1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods, and similar items in the mall.

2. The display of liquid- or gas-fired equipment in the mall.

3. The use of open-flame or flame-producing equipment in the mall.

4. The use of a mall as a place of assembly.

**SECTION 32.** Section 105.6.14 is hereby amended to read as follows:

**105.6.14 Explosives.** An operational permit is required for the manufacture, storage, handling, sale, or use of any quantity of explosives, explosive materials, fireworks, or pyrotechnic special effects within the scope of Chapter 56 of this code, or when a local permit or approval from the fire chief is required by the California Code of Regulations Title 19, Division 1, Chapter 6 - Fireworks, or Chapter 10 - Explosives.

**Exceptions:** ~~Storage in Group R-3 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with Section 5606.~~

1. Small arms ammunition of .75 caliber or less, cartridges for propellant-actuated power devices and cartridges for industrial guns, 20 pounds or less of smokeless powder, five pounds or less of black sporting powder providing such smokeless or black sporting powder is for the hand loading of small arms or small arms ammunition of .75 caliber or less and that it is for personal use and not for resale.

2. The possession, storage, sales, handling, and use of California State Fire Marshal classified safe and sane fireworks as allowed by State law and local ordinance in accordance with California Health and Safety Code section 12541.1.

3. The possession, storage, sales, handling, and use of California State Fire Marshal classified snap caps or party poppers pyrotechnic devices in accordance with California Code of Regulations Title 19, Public Safety.

**SECTION 33.** Section 105.6.16 is hereby amended to read as follows:

**105.6.16 Flammable and ~~c~~Combustible ~~l~~Liquids.** An operational permit is required:

. . .

6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, including natural gas wells, fuel-dispensing stations, refineries, distilleries, and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed, or used. The applicant is required to pay the permit fee amount shown in Section 3406.3.9 prior to permit issuance for a well.

7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground, or above-ground flammable or combustible liquid tank.

. . .

12. Allow a tank car to remain on a siding at the point of delivery while connected for transfer operations. Transfer operations shall be in accordance with DOT requirements and this code.

**SECTION 34.** Section 105.6.20 is hereby amended to read as follows:

**105.6.20 Hazardous ~~m~~Materials.** An operational permit is required to store, transport on site, dispense, use, or handle hazardous materials in excess of the amount listed in Table 105.6.20. In addition, unified program facility permits required by Chapters 12.50, 12.52, and 12.64 of the County Code and full payment of permit fees shall be obtained prior to the issuance of any fire code permit required by this code.

**SECTION 35.** Section 105.6.22 is hereby amended to read as follows:

**105.6.22 High-piled Combustible ~~s~~Storage.** An operational permit is required to use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 $m^2$). In addition to any of the requirements of Chapter 32 of this code, a letter describing the type and amount of material to be stored and the method of storage, plus a floor plan showing the dimension and location of the stockpiles and aisles shall be submitted with applications for such permits.

**SECTION 36.** Section 105.6.27 is hereby amended to read as follows:

**105.6.27** **LP-gas.** An operational permit is required for:

1. Storage and use of LP-gas.

**Exceptions:** ~~A permit is not required for individual containers with a 500-gallons (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in group R-3.~~

a. A permit is not required for individual non-portable outdoor container with a 500-gallon (1893 L) water capacity or less, or multiple non-portable outdoor containers or outdoor non-portable container systems having an aggregate quantity not exceeding 500 gallons (1893 L) water capacity serving occupancies in group R-3 on one premise.

b. A permit is not required for outdoor portable containers of less than 125-gallon (473.2 L) aggregate water capacity on one premise.

c. A permit is not required for the storage of LP-gas in Department of Transportation specification cylinders with a maximum water capacity of 2 ½ pounds (1Kg) used in completely self-contained hand torches and similar applications stored or displayed at a consumer or retail site and the total aggregate capacity of all LP-gas containers does not exceed 200 pounds allowed as per Section 6109.9.

2. Operation of cargo tankers that transport LP-gas.

**SECTION 37.** Section 105.6.29.1 is hereby added to read as follows:

**105.6.29.1 Model Rockets.**

An operational permit is required to operate a model rocket motor or an experimental high-powered rocket motor as defined in Title 19 California Code of Regulations, Section 980.

**SECTION 38.** Section 105.6.33.1 is hereby added to read as follows:

**105.6.33.1 Pallet Yards.**

An operational permit is required to store, manufacture, refurbish, or otherwise handle greater than 200 $ft^3$ of combustible plastic or wood pallets in an outdoor yard.

**SECTION 39.** Section 105.6.33.2 is hereby added to read as follows:

**105.6.33.2 Parade Floats.**

An operational permit is required to use a parade float for public performance, presentation, spectacle, entertainment, or parade. See Section 324.

**SECTION 40.** Section 105.6.34.1 is hereby added to read as follows:

**105.6.34.1 Private Fire Fighting Resources.**

An operational permit is required for any private firefighting resource to conduct firefighting operations, provide fire protection operations, or to apply fire resistive treatment to structures or vegetation in an emergency area.

**SECTION 41.** Section 105.6.36 is hereby amended to read as follows:

**105.6.36 Pyrotechnic ~~s~~Special e~~E~~ffects ~~m~~Material.**

An operational permit is required for use and handling of pyrotechnic special effects material. For pyrotechnic and special effects used for motion picture, television, and commercial productions, see Section 105.6.47 (2).

**SECTION 42.** Section 105.6.37.1 is hereby added to read as follows:

**105.6.37.1 Recreational Fire.**

An operational permit is required for an outdoor fire burning materials other than rubbish, where the fuel is not contained as described in Chapter 3.

**SECTION 43.** Section 105.6.39.1 is hereby added to read as follows:

**105.6.39.1 Rifle Range.**

An operational permit is required to establish, maintain, or operate a rifle range.

**SECTION 44.** Section 105.6.43.1 is hereby added to read as follows:

**105.6.43.1 Temporary Sales Lots.**

An operational permit is required prior to operating a Christmas tree or pumpkin sales lot.

**SECTION 45.** Section 105.6.47 is hereby amended to read as follows:

**105.6.47 Additional ~~p~~Permits.**

In addition to the permits required by Section 105.6, the following permits shall be obtained from the ~~Bureau of~~ fire prevention division prior to engaging in the following activities, operations, practices, or functions:

1. **Production ~~f~~Facilities**. To change use or occupancy, or allow the attendance of a live audience, or for wrap parties.

2. **Motion Picture, Television, Commercial, and Related Production Filming–Pyrotechnicals and ~~s~~Special ~~e~~Effects.** To use pyrotechnic special effects, open flame, hotwork, use of flammable or combustible liquids and gases, dust, welding, and the parking of motor vehicles in any building or location used for the purpose of motion picture, television, and commercial production. The applicant is required to pay the permit fee amount shown in Section 4803.4 prior to permit issuance.

3. **Live ~~a~~Audiences.** To install seating arrangements for live audiences in approved production facilities, production studios, and sound stages. See Chapter 48.

4. **Motion Picture, Television, Commercial, and Related Production Filming.**

An operational permit is required to conduct motion picture, television, commercials, and related productions outside of an approved production facility. The applicant is required to pay the permit fee amount shown in Section 4803.4 prior to permit issuance.

5. **Motion Picture, Television, Commercial, and Related Production Filming–Fuel-dispensing Trucks and Vehicles.**

An annual operational permit is required to dispense flammable or combustible liquids, liquefied petroleum gases, or compressed natural gas from trucks or vehicles to equipment and vehicles on motion picture, television, and commercial production

locations. The applicant is required to pay the annual permit fee amount shown in Section 4803.4 prior to permit issuance.

6. **Commercial Still Photography Production with On-site Cast and Crew Numbering Fifteen (15) or More Persons.**

An operational permit is required to take still photographs for commercial purposes outside of an approved production facility and where the on-site cast and crew numbers fifteen (15) or more persons. The applicant is required to pay the permit fee amount shown in Section 4803.4 prior to permit issuance.

**SECTION 46.** Section 105.7.8.1 is hereby added to read as follows:

**105.7.8.1 Fuel Modification Plan Review.**

When required by this code, by other laws, or by other regulating agencies, fire code official review is required prior to the installation of fire resistive landscaping.

**SECTION 47.** Section 105.7.10.1 is hereby added to read as follows:

**105.7.10.1 Land Development Plan Review.**

When required by law or other agencies, fire code official review and approval is required prior to final approval of the following applications: tract maps, parcel maps, final maps, planned unit developments, conditional use permits, design overlay reviews, environmental impact reviews, road vacations, zone changes, water plan reviews, and gate design review for land development projects.

**SECTION 48.** Section 105.7.11 is hereby amended to read as follows:

**105.7.11 LP-~~g~~Gas.**

A construction permit is required for installation of or modification to an LP-gas system. Also see Section 6101.3.

**SECTION 49.** Section 105.7.12.1 is hereby added to read as follows:

**105.7.12.1 Roof Gardens and Landscaped Roofs.**

The fire code official shall review and approve in installation or modification of a roof garden, or a landscaped roof.

**SECTION 50.** Section 105.7.13 is hereby amended to read as follows:

**105.7.13 Solar ~~p~~Photovoltaic ~~p~~Power ~~s~~Systems.**

~~A construction permit is required to install or modify~~The fire code official shall review and approve the installation or modification of roof solar photovoltaic power systems.

**SECTION 51.** Section 107.6 is hereby added to read as follows:

**107.6 Occupant Count.**

When required by the fire code official, the permittee holding a place of assembly operational permit shall use an approved method to maintain an accurate count of the number of occupants present in a place of an assembly room including any accessory areas. If at any time the fire code official determines that an accurate count of occupants is not being maintained by the permittee, the assembly room and accessory areas shall be cleared of occupants until an accurate occupant count can be made.

**SECTION 52.** Section 108 is hereby amended to read as follows:

**108** **~~BOARD OF~~APPEALS**

**SECTION 53.** Section 108.1 is hereby amended to read as follows:

**108.1** **~~Board of appeals established~~Appeals Process.** ~~In order to hear and decide appeals of orders, decisions or determinations made by the *fire code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The *fire code official* shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *fire code official*.~~When an applicant seeking an approval from the fire code official disagrees with the decision of the fire code official regarding the conditions, methods of construction, equipment, or operations regulated by this code, the applicant may file a written appeal to the assistant fire chief of the fire prevention division (fire marshal) pursuant to Section 108.2 of this code. A written appeal must be submitted no later than 30 days after the applicant has notice of the decision being appealed. The fire marshal, after considering all the facts presented, including any communication from the general public regarding the matter appealed, shall provide a written decision responding to the appeal. If the applicant is not satisfied with the decision of the fire marshal, the applicant shall, within 10 days of receipt of the fire marshal's decision, request in writing that the decision be reviewed by a fire code appeals review panel, a three-person panel

consisting of the following individuals: the deputy chief of prevention, the deputy chief of operations, and the County's superintendant of building. The fire code appeals review panel shall transmit its written decision on the appeal to the applicant. The fire code appeals review panel shall be the final authority in the appeals process.

**SECTION 54.** Section 108.2 is hereby amended to read as follows:

**108.2 Limitations on a~~A~~uthority.** An ~~application~~applicant's ~~for~~ appeal shall be based on a claim that the intent of this code or the ~~rules legally~~regulations adopted hereunder have been incorrectly interpreted, that the provisions of this code do not ~~fully~~ apply, or that an equivalent method of protection or safety ~~is~~was proposed by the applicant and was denied by the fire code official. The ~~board shall have no authority~~appeals process shall not be used to waive requirements of this code.

For an appeal regarding fuel modification plan requirements, an applicant must use the appeals process as per Section 4908.2.

**SECTION 55.** Section 108.3 is hereby amended to read as follows:

**108.3 Qualifications.** The ~~board of~~fire code appeals review panel shall consist of ~~members who are qualified by experience and training to pass on matters pertaining to hazards of fire explosions, hazardous conditions, or fire protection systems and are not employees of the jurisdiction~~the deputy chief of prevention, the deputy chief of operations, and the County's superintendant of building.

**SECTION 56.** Section 109.4 is hereby amended to read as follows:

**109.4 Violation ~~p~~Penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof, or who shall erect, install, alter, repair, or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor unless such violation is declared to be an infraction by Chapter 82 of this code, punishable by a fine of not more than $1,000 or by imprisonment not exceeding six months, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense. For the purposes of this section, a forfeiture of bail shall be equivalent to a conviction.

**SECTION 57.** Section 109.4.1 is hereby amended to read as follows:

**109.4.1 Abatement of ~~v~~Violation.** In addition to the imposition of penalties herein described, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct, or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business, or occupancy of a structure on or about any premises.

The owner of any parcel upon which a nuisance is found to exist may, as provided for by State, County, and local law, be liable for all costs of abatement of the nuisance.

**SECTION 58.** Section 109.5 is hereby added to read as follows:

**109.5 Responsibility for Fire Suppression and Related Costs.**

Any person: (1) who negligently, or in violation of the law, sets a fire, allows a fire to be set, or allows a fire kindled or attended by him to escape onto any public or private property; (2) other than a mortgagee, who, being in actual possession of a structure, fails or refuses to correct, within the time allotted for correction, despite having the right to do so, a fire hazard prohibited by law, for which a public agency properly has issued a notice of violation respecting the hazard; or (3) including a mortgagee, who, having an obligation under other provisions of law to correct a fire hazard prohibited by law, for which a public agency has properly issued a notice of violation respecting the hazard, fails or refuses to correct the hazard within the time allotted for correction, despite having the right to do so, is liable for the fire suppression costs incurred in fighting the fire, for the cost of providing rescue or emergency medical services, for the cost of investigating and making any reports with respect to the fire, and for the costs relating to accounting for that fire and the collection of any funds pursuant to State or local law, including but not limited to, administrative costs of operating a fire suppression cost recovery program to the fullest extent authorized by law. All of these costs shall be a charge against that person, shall constitute a debt of that person, and is collectible by the person, or by the federal, State, County, public, or private agency, incurring those costs in the same manner as in the case of an obligation under a contract, expressed or implied.

**SECTION 59.** Section 109.5.1 is hereby added to read as follows:

**109.5.1 Responsibility for Costs for Emergency Response Related to Hazardous Substances.**

All expenses of an emergency response necessary to protect the public from a real and imminent threat to health and safety by a public agency to confine, prevent, or mitigate the release, escape, or burning of hazardous substances are a charge against any person whose negligence causes the incident to the fullest extent authorized by law, if either of the following occurs:

1. Evacuation beyond the property where the incident originates is necessary to prevent loss of life or injury.

2. The incident results in the spread of hazardous substances or fire posing a real and imminent threat to public health and safety beyond the property of origin.

Expenses reimbursable to the County or Fire District pursuant to this section are a debt of the person liable therefore, and shall be collectible in the same manner as in the case of an obligation under contract, express or implied. The charge created against the person related to hazardous substances by this section is also a charge against the person's employer if the negligence causing the incident occurs in the course of the person's employment.

**SECTION 60.** Section 110.1.1 is hereby amended to read as follows:

**110.1.1 Unsafe ~~c~~Conditions.** Structures or existing equipment that are or hereafter become unsafe or deficient because of inadequate means of egress or which constitute a fire hazard, or are otherwise dangerous to human life or the public

welfare, or which involve illegal or improper occupancy or inadequate maintenance, dilapidation, obsolescence, hazardous material contamination, disaster damage, or abandonment as specified in this code shall be deemed an unsafe condition. A vacant structure which is not secured against unauthorized entry as required by Section 311 shall be deemed unsafe.

**SECTION 61.** Section 111.1 is hereby amended to read as follows:

**111.1** **Order.** Whenever the fire code official finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the fire code official is authorized to issue a stop work order. The fire code official is authorized to order the work, the operation, or the use stopped or the evacuation of any premises, building, or vehicle or portion thereof which has or is a condition hazardous to life or property.

**SECTION 62.** Section 111.4 is hereby amended to read as follows:

**111.4** **Failure to ~~c~~Comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable ~~to a fine of not less than [AMOUNT] dollars or more than [AMOUNT] dollars~~for administrative fines and subject to prosecution as allowed by Title 1, Section 1.25 of the County Code or other applicable laws or regulations.

**SECTION 63.** Section 202 is hereby amended to add in alphabetical order as follows:

**202 GENERAL DEFINITIONS**

. . .

**AREA OF FIRE FIGHTING OPERATIONS.** Those portions of the fire apparatus access road in which the structure's exterior walls face the required fire apparatus access road. The area of fire fighting operations also include the area in between such portions of the fire apparatus roads and the structure.

. . .

**ASSESS.** Shall mean any activity taken to determine health and safety risks to the general public or the environment.

. . .

**CONSOLIDATED CONTINGENCY PLAN.** Shall mean a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous substance, which could threaten human health or the environment.

. . .

**DEPARTMENT OF TOXIC SUBSTANCE CONTROL (DTSC).** Shall mean the Department of the California Environmental Protection Agency that is responsible for implementing hazardous waste regulations in California.

. . .

**EMERGENCY AREA.** The geographical area where the fire code official, exercising authority pursuant to Section 104.11 at the scene of a fire or other emergency involving the protection of life or property, has declared there is an immediate risk to health, life, property, or the environment within that area.

. . .

**EPA ID NUMBER.** Shall mean a number issued by DTSC and used to track hazardous waste from point of origin to its final disposal. Provisional numbers are issued for special circumstances such as a spill if the facility does not have a permanent number.

. . .

**FIRE APPARATUS ACCESS ROAD.** A road that provides fire apparatus access from a fire station to a facility, building, or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, private driveway, parking lot lane, and access roadway.

. . .

**FIRE- FLOW.** See Appendix B, Section B 102.

**FIRE HAZARD SEVERITY ZONES.** See Section 4902.1.

. . .

**FIRE WATCH.** A temporary measure intended to ensure continuous and systematic surveillance of a premise, building or portion thereof by one or more qualified individuals for the sole purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

. . .

**FLOATING LUMINARY** is an unpiloted floating air borne device containing open flaming or smoldering material capable of causing ignition to combustibles it may come in contact with. Floating luminaries may also be referred to as sky lanterns, flying lanterns, sky candles, and wish lanterns.

. . .

**FUEL MODIFICATION** shall mean any modification or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.

**FUMIGATOR.** Shall mean any person licensed by the Structural Pest Control Act as an operator or as a structural pest control field representative who shall have been qualified by the State of California Structural Pest Control Board in the category of Pest Control.

. . .

**GOVERNING BODY** shall mean the official board or council elected to rule the municipality or other public agency.

. . .

**HAZARDOUS MATERIALS.** Those chemicals or substances which are physical hazards or health hazards as defined and classified in this chapter, whether the materials are in usable or waste condition. Hazardous materials mixtures are those substances that contain one percent or more of a hazardous ingredient, or one tenth of one percent of a carcinogen. This definition includes, but is not limited to, those

hazardous wastes, hazardous materials, and extremely hazardous wastes listed in the California Code of Regulations, Title 22, Section 66261.126, Appendix X.

. . .

**HAZARDOUS WASTE.** Shall mean a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics poses a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

**HAZARDOUS WASTE CONTROL LAW.** Shall mean the State law which implements a cradle to grave management system found in the California Health and Safety Code.

. . .

**HEALTH HAZARDOUS MATERIALS DIVISION (HHMD).** Shall mean a part of the Consolidated Fire Protection District of Los Angeles County (District) or Los Angeles County Fire Department, Prevention Services Bureau, that is responsible for regulating hazardous materials business plans and chemical inventories, hazardous waste generators, on-site treatment of hazardous waste, risk management plans for responding with hazardous materials squads to emergency incidents involving hazardous materials, supervising clean up of on-site and containment facilities, and for declaring emergency response scenes safe for re-entry.

. . .

**MALIBU-SANTA MONICA MOUNTAIN OR SAN GABRIEL SOUTHFACE AREAS.** See Appendix M, Section M103.

. . .

**MOTOR VEHICLE FLUIDS** are liquids which are flammable, combustible, or hazardous materials, such as crankcase fluids, fuel, brake fluids, transmission fluids, radiator fluids, and gear oil. This definition does not include liquids which are permanently sealed, such as hydraulic fluid within shock absorbers.

. . .

**PRIVATE FIREFIGHTING RESOURCE.** Any person, organization, association, company, or corporation that provides or conducts firefighting operations, provides fire protection operations, or applies fire-resistive treatment to structures or vegetation within the jurisdiction of the Consolidated Fire Protection District of Los Angeles County (District), unless that person, organization, association, company, or corporation is formally under contract with the District to provide such services or is an employee or contractor of a local, State, or federal fire fighting agency while in the performance of those duties. Nothing in this definition is intended to prohibit conduct which is authorized, or for which immunity is granted, under the California Good Samaritan statutes or the California State Government Volunteers Act.

. . .

**TRAINED CROWD MANAGER.** Standby personnel, usually security or usher personnel, who are trained in the proper procedure to exit people from a tent or other place of public assemblage in an orderly and calm fashion in the event of an emergency.

. . .

**UNAUTHORIZED DISCHARGE.** A release or emission of materials in a manner which does not conform to the provisions of this code or applicable public health and safety regulations. This shall mean any spilling, leaking, releasing, leaching, emptying, dumping, or disposing of a hazardous material/waste into the environment, unless permitted by a regulatory agency.

**UNIFIED PROGRAM.** Consolidates six environmental programs regarding the management of hazardous waste, hazardous materials, and underground storage tanks under one management system.

**UNIFIED PROGRAM FACILITY PERMIT.** A consolidated permit issued pursuant to section 25284 of the Health and Safety Code and Division 4 of Title 11 of the County Code relating to the underground storage of hazardous materials; Chapter 12.52 of the County Code relating to the generation or handling of hazardous waste or extremely hazardous waste; Chapter 12.64 of the County Code relating to handling of hazardous materials or acutely hazardous materials; and those city codes or resolutions related to the unified program elements administered by those cities as participating agencies to the Los Angeles County Certified Unified Program Agency.

. . .

**WASTE.** A material that has been used or for whatever reason can or will no longer be used for its intended purpose, or has been discarded and not specially excluded by Health and Safety Code, Division 20, Chapter 6.5.

**WATER UTILITY.** An organization that provides water utility within a geographic service area and the water utility is recognized by the County of Los Angeles Fire Department.

**WATER UTILITY SERVICE AREA.** A geographic area in which a water utility could provide the required fire flow from approved fire hydrants for fire fighting purposes.

. . .

**SECTION 64.** Section 301.2 is hereby amended to read as follows:

**301.2** **Permits.** Permits shall be required as set forth in Section 105.6 for the activities or uses regulated by Sections 306, 307, 308, ~~and~~ 315, 324, 326, and 328.

**SECTION 65.** Section 304.1.1 is hereby amended to read as follows:

**304.1.1** **Waste Material.**

Accumulations of wastepaper, wood, hay, straw, weeds, litter or combustible or flammable waste or rubbish of any type shall not be permitted to remain on a roof, or ground-mounted photovoltaic array, or in any court, yard, vacant lot, alley, parking lot, open space, or beneath a grandstand, bleacher, pier, wharf, manufactured home, recreational vehicle or other similar structure.

**SECTION 66.** Section 304.1.2 is hereby amended to read as follows:

**304.1.2** **Vegetation.** Weeds, grass, vines, or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in urban-

wildland interface areas shall be in accordance with ~~the International Wildland–Urban Interface Code~~Section 325 and Chapter 49 of this code.

**SECTION 67.** Section 304.2.1 is hereby added to read as follows:

**304.2.1 Removal.**

Combustible rubbish stored in containers outside of noncombustible vaults or rooms shall be removed from buildings at least once each working day or at intervals specified by the fire code official. The storage or accumulation of combustible waste matter within any building in such a quantity or location as to constitute a fire hazard is prohibited.

**SECTION 68.** Section 306.2.1 is hereby added to read as follows:

**306.2.1 Fire Extinguishers.**

Two approved fire extinguishers with an approved water or water solution extinguisher with a minimum 10-B:C rating shall be installed and maintained ready for use in projection rooms, in accordance with NFPA 40.

**SECTION 69.** Section 306.2.2 is hereby added to read as follows:

**306.2.2 Smoking.**

Smoking and other sources of ignition shall be prohibited within projection rooms in which cellulose nitrate film is allowed. Conspicuous NO SMOKING signs shall be posted in the room.

**SECTION 70.** Section 306.2.3 is hereby added to read as follows:

**306.2.3 Projection Equipment.**

Projection equipment or film which is in a hazardous condition shall not be used.

**SECTION 71.** Section 307.2.1 is hereby amended to read as follows:

**307.2.1 Authorization.** Where required by ~~s~~State or local law or regulations, open burning shall only be permitted with prior approval from the fire code official, a United States Forest Service Officer having jurisdiction, or the ~~s~~State or local air and water quality management authority, provided that all conditions specified in the authorization are followed.

**SECTION 72.** Section 307.6 is hereby added to read as follows:

**307.6 Open Fires.**

A person shall not build, light, maintain, or cause or permit to be built, lighted, or maintained, any open outdoor fire or use or cause or permit to be used, any open outdoor fire for any purpose except:

1. When such fire is set or permission for such fire is given in the performance of the official duty of any public officer, and the fire, in the opinion of such public officer, is necessary for:

(i) The purpose of the prevention of a fire hazard which cannot be abated by any other means; or

(ii) The instruction of public employees in the methods of fighting fire;

2. When such fire is set pursuant to permit on property used for industrial or institutional purposes for the purpose of instruction of employees in methods of fighting fire.

3. When such fire is set in the course of any agricultural operation in the growing of crops or raising of fowl or animals.

4. On a public beach area owned, managed, or controlled by the County, otherwise permitted by this code.

5. In a County-owned park or recreation camp as otherwise permitted by this code.

6. Bonfires permitted by the fire code official.

7. For cooking, recreational, or ceremonial fires on private property with a maximum fire area of nine square feet, in locations outside of hazardous fire areas.

**SECTION 73.** Section 307.7 is hereby added to read as follows:

**307.7 Designated Open Fire Areas.**

The fire code official is authorized to designate places on private property, with the permission of the owner thereof, or upon any public road, or within any public park, or upon any public land, where open fires may be built.

The fire code official may place or cause to be placed uniform signs or posters on or at such premises indicating the place or limits where such fires may be built and maintained without further permission; however, it shall be unlawful to leave, or cause or permit to be left unattended, any fire burning in such place.

**SECTION 74.** Section 308.1.4 is hereby deleted as follows:

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

~~Exceptions:~~

~~1. One- and two family dwellings.~~

~~2. Where buildings, balconies and decks are protected by an automatic sprinkler system.~~

~~3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2 ½ pounds [nominal 1 pound (0.454 kg) LP-gas capacity].~~

**SECTION 75.** Section 308.1.6.1.1 is hereby added to read as follows:

**308.1.6.1.1 Floating Luminary Use.**

The use or release of a floating luminary is prohibited.

Exception: When a permit is issued by the fire code official for use or release of a floating luminary for ceremonial, educational, or research purposes and where safeguards approved by the fire code official are used to prevent unintended ignition of combustibles. Floating luminary use or release shall be allowed only at a specific location and during prescribed weather conditions.

**SECTION 76.** Section 311.5 is hereby amended to read as follows:

**311.5 Placards.** When required by the fire code official, ~~A~~any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards shall be marked as required by Sections 311.5.1 through 311.5.5.

**SECTION 77.** Section 315.3.2.1 is hereby added to read as follows:

**315.3.2.1 Storage Under Stairways.**

Combustible storage is prohibited under interior or exterior exit stairways.

**Exception:** When the stairway is not within an exit enclosure and enclosure under the stairway is provided as per Sections 1009.9.3 and 1009.9.4.

**SECTION 78.** Section 316.6.1 is hereby amended to read as follows:

**316.6.1. Structures.**

Structures shall not be constructed within the utility easement beneath high-voltage transmission lines.

**Exceptions:** Restrooms and unoccupied telecommunications structures of noncombustible construction less than 15 feet in height provided that they are grounded and bonded in accordance with California Code of Regulations Title 24, Part 3, Article 250, ANSI/IEEE 142-1991, Recommended Practice for Grounding of Industrial and Commercial Power Systems, and fully bonded from roof to foundation and connected to the structure's grounding system. Additionally, signs approved by the fire code official, that read "CAUTION – HIGH VOLTAGE LINES OVERHEAD" shall be provided at all entrances leading to the restrooms and unoccupied structures.

**SECTION 79.** Sections 319 - 323 are hereby reserved to read as follows:

SECTIONS 319 – 323 of Title 32 of the Los Angeles County Code are reserved.

**SECTION 80.** Section 324 is hereby added to read as follows:

**324 PARADE FLOATS**

**324.1 Permit.**

An operational permit is required to operate a parade float for a public performance, presentation, spectacle, entertainment, or parade.

**324.2 Decorative Material.**

Decorative material on parade floats shall be noncombustible, made flame retardant by application of a California State Fire Marshal listed treatment, or meet the flame resistive requirements of the fire code official.

**324.3 Fire Protection.**

Motorized parade floats and towing apparatus shall be provided with a minimum 2-A, 10-B: C-rated portable fire extinguisher readily accessible to the operator.

**SECTION 81.** Section 326 is hereby added to read as follows:

**326 ACTIVITIES IN HAZARDOUS FIRE AREAS**

**326.1 Intent.**

The unrestricted use of grass, grain, brush, or forest-covered land, in certain hazardous fire portions of the jurisdictional area due to conditions tending to cause or allow the rapid spread of fires which may occur on such lands, or because of the inaccessible character of such lands, is a potential menace to life and property from fire. Therefore, it is the intent of this section to provide necessary safeguards to prevent the occurrence of fires and to control the spread of fires which might be caused by recreational, commercial, industrial, or other activities carried on in any hazardous fire area.

**326.2 Permit Required.**

No person shall establish or conduct any of the following or similar activities in a hazardous fire area without first securing a permit:

1. Recreational activities including, but not limited to, rifle ranges, carnivals and fairs, public assembly events, fireworks, and open burning.

2. Temporary or permanent activities including, but not limited to, stands for cooking or other activities which could provide a source of ignition.

**326.3 Permit Request.**

A request of an issuance of a permit for any such activity shall be made to the fire code official not less than 15 days prior to the starting date of such activity.

**326.4 Fire Protection Survey.**

Upon receiving a request for issuance of a permit, the fire code official shall survey the buildings, premises, and facilities proposed for such use prior to issuance of the permit to determine the fire protection equipment and safeguards necessary to conduct such activity without unduly increasing the potential fire hazard to the area.

**326.5 Notification.**

The applicant shall be notified by the fire code official of those facilities and all fire protection safeguards necessary, and a permit shall not be issued until all such facilities and safeguards have been provided.

**326.6 Permit Stipulations.**

The permit shall stipulate the conditions, precautions, limitations, and safeguards necessary to conduct such activity with a reasonable degree of fire safety and failure to comply with any condition, precaution, limitation, or safeguard stipulated shall be cause of immediate revocation of the permit and cessation of the activity.

## 326.7 Fire Protection Facilities Required.

Fire protection facilities required and conditions or limitations necessary to maintain reasonable fire safety may include, but are not limited to, the following:

1. Adequate water supply, pumps, hydrants, and hose.

2. Firebreaks as necessary to prevent a fire on the premises from spreading to adjacent brush or grass-covered areas.

3. Posting of "NO SMOKING" signs.

4. Removal of dry grass and weeds from around buildings, along roadways and automobile parking areas, and other areas accessible to the public or participants of the activity.

5. Provision of approved, competent fire safety officers or advisors to act as fire guards or fire watchers to patrol the area when such activity is taking place. See also Section 3104.20.

6. Provision of adequate access roads and parking facilities to prevent congestion of public roads, to permit adequate means of egress for evacuation of the public or participants in event of emergency, and to permit movement of fire apparatus and equipment.

7. Restriction or prohibition of activities during periods of high-fire hazard weather conditions.

8. Such fencing as is necessary to control the activity.

9. Such other conditions, limitations, or provisions necessary to maintain reasonable fire safety.

**326.8 Restricted Entry on National Forest Land.**

A person shall not enter or be on any lands within the boundaries of the National Forest within Los Angeles County which have been closed to entry by the U.S. Forest Service, except by a valid special entry permit issued by a U.S. Forest Service official.

**326.9 Closure of Public or Private Lands.**

Any portion of public or private lands in any hazardous fire area may be closed to the public by the fire code official at the request of the owners of such public or private lands, when in the opinion of the fire code official such closure is necessary for the prevention of fires. Notice of such closure shall be made by the fire code official by public announcement and such closure shall be in effect until, in the opinion of the fire code official, such closure is no longer necessary for the protection of property against fire and such closure is lifted by public announcement.

**326.10 Restricted Entry on Closed Lands.**

A person shall not enter or be upon any public or private lands closed to the public by the fire code official during the period such closure is in effect, except that the closure of private lands shall not prohibit the use or entry upon such lands by the owner, owner's guests, or invitees, provided that such guests or invitees have written permission from the owner of such lands to enter upon the same. Such written permit shall be presented upon the demand of any public officer when such person is within any closed area.

**326.11 Posting of Lands Closed to Entry.**

Lands closed to entry shall be posted by the fire protection agency having jurisdiction.

**326.12 Spark Arresters Required.**

**326.12.1 Equipment.**

No person shall use or operate in, upon, or within any hazardous fire area, any tractor, construction equipment, engine, machinery, or any steam, oil, or gasoline-operated stationary or mobile equipment, from which a spark or fire may originate unless such equipment is provided with a qualified device or spark arrester installed in or attached to the exhaust pipe which will prevent the escape of fire or sparks. Said qualified device or spark arrester shall meet the requirements of the current version of the United States Forest Service "Standard for Spark Arresters for Internal Combustion Engines" (Standard 5100-1). For the purpose of this section, any registered motor vehicle operated on a road or highway and which is equipped with a muffler in good condition, as required by the California Vehicle Code, shall be deemed to be in compliance with this section.

**326.12.2 Chimneys.**

Each chimney used in conjunction with any fireplace, barbecue, incinerator, or any heating appliance in which solid or liquid fuel is used, upon any building, structure, or premises located within any hazardous fire area, shall be maintained with a spark arrester constructed with heavy wire mesh or other noncombustible material with openings not to exceed one-half inch.

**326.13 Open Flame Device.**

No person shall operate or use any device, machine, or process such as a welding torch, tar pot, decorative torch, or any other device liable to start or cause fire in or upon any hazardous fire area, except by the authority of a written permit from the fire code official. However, no permit will be required if such use is within inhabited premises or a designated camp site, and such use is a minimum of 30 feet from any grass, grain, brush, or forest covered lands.

**326.14 Roadway Clearance.**

1. Clearance of brush or vegetative growth from roadways shall be in accordance with Section 325.10 of this code.

2. If the fire code official determines in any specific case that difficult terrain, danger of erosion, or other unusual circumstances make strict compliance with the provisions of the code undesirable or impractical, the fire code official may suspend enforcement thereof and require reasonable alternative measures.

**326.15 Illegal Dumping.**

No person shall place, deposit, or dump any garbage, cans, bottles, papers, ashes, refuse, trash, rubbish, or combustible waste material in or upon any hazardous fire area. No person shall dump such material in, upon, or along any trail, roadway, or highway in any hazardous fire area. Dumping in areas approved by the Fire Department for this use shall not be deemed to be in violation of this section. This section may be enforced by the commissioner.

**326.16 Disposal of Ashes.**

No person shall place, deposit, or dump any ashes or coals in or upon any hazardous fire area except in the hearth of an established fire pit, camp stove, or fireplace, or in a noncombustible container with a tight-fitting lid which is kept or maintained in a safe location not less than 10 feet from any combustible vegetation or structure, or where such ashes or coals are buried and covered with one foot of mineral earth not less than 25 feet from any combustible vegetation or structure.

**326.17 Fire Roads and Firebreaks.**

1. No person, except public officers acting within the scope of their duties, shall travel upon or drive or park any motorcycle, motor scooter, or motor vehicle upon any fire road or firebreak beyond the point where travel is restricted by a cable, gate, or sign, without the permission of the property owner or owners involved.

2. No person shall park any vehicle so as to obstruct the entrance to any fire road or firebreak.

3. No person shall install or maintain a radio or television aerial, or guy wire thereto, or any other obstruction on any fire road or firebreak, which is less than 16 feet above such fire road or firebreak.

**326.18 Use of Motorcycle, Motor Scooter, and Motor Vehicles.**

No person shall operate any motorcycle, motor scooter, or motor vehicle, except upon clearly established public or private roads, within any hazardous fire area without first having secured a permit to do so from the fire code official. No such permit shall be issued unless written permission from the property owner is first presented.

**326.19 Hazardous Warning Lights.**

It shall be unlawful to maintain any torch or lantern utilizing an open flame along any excavation, road, or any place where the dislodgment of such torch or lantern might permit same to roll, fall, or slide on to any forest or brush-covered land, or any land containing flammable material.

**SECTION 82.** Section 403.4 is hereby added to read as follows:

**403.4 Fire Safety Officers and Advisors.**

When in the opinion of the fire code official, it is necessary for the preservation of life or property, due to the hazardous nature of an event, production, operation, or function, the fire code official shall require the owner or lessee to employ or cause the employment of one or more approved fire safety officers or advisors to be on duty at such place during the hazardous activity.

**SECTION 83.** Section 403.5 is hereby added to read as follows:

**403.5 Ground Seats.**

When more than 200 loose chairs are used in close proximity to, and in connection with, a public assemblage event, the chairs shall be fastened together in groups of not less than three.

**Exceptions:**

1. The bonding of chairs shall not be required when tables are provided with the chairs for dining use or similar purposes.

2. The bonding of chairs shall not be required when the placement and location of such chairs will not obstruct any required exit or any line of egress toward

any required exit and will not constitute a fire hazard as approved by the fire code official.

**SECTION 84.** Section 404.3.2 is hereby amended to read as follows:

**404.3.2 Fire ~~s~~Safety ~~p~~Plans.**

Fire safety plans shall include the following:

. . .

4. Floor plans identifying the locations of the following:

. . .

4.10. Fire alarm, control panel, and fire alarm annunciators and controls.

4.11. Location of limited access devices, including key boxes and key switches.

. . .

**SECTION 85.** Section 404.3.2.1 is hereby added to read as follows:

**404.3.2.1 Implementation.**

In the event a fire is detected in a building or a fire alarm activates, the fire evacuation plan and fire safety plan shall both be implemented.

**SECTION 86.** Section 405.10 is hereby added to read as follows:

**405.10 Fire Drill.**

In accordance with Table 405.2 of this code, a fire drill shall be conducted by the fire safety director, or designee using the fire alarm system. The following announcement shall be made over the public address system prior to and following the test of the actual alarm system: "This is a test of the fire alarm system. No evacuation

from this floor or building is required." This announcement shall be repeated twice after the fire alarm testing has been concluded.

**SECTION 87.** Section 408.2.2.1 is hereby added to read as follows:

**408.2.2.1 Emergency Notification.**

When required by the fire code official, places of assembly shall be provided with a method for notifying the fire department in the event of an emergency. This may be a telephone or other method approved by the fire code official. Methods of notifying the Fire Department shall be readily available to the public.

**SECTION 88.** Section 408.7.5 is hereby added to read as follows:

**408.7.5 Emergency Plan.**

Additional information provided in emergency plans shall include procedures for use of alarms, notification of occupants and emergency responders in the event of alarm system malfunctions, isolating the fire, evacuating each fire area and the building, and relocating non-ambulatory persons. Copies of the plan shall be given to all supervisory personnel and a copy shall be available on the premises to all personnel at all times.

**SECTION 89.** Section 502.1 is hereby amended to read as follows:

**502.1** **Definitions.** The following terms are defined in Chapter 2.

. . .

**AREA OF FIRE FIGHTING OPERATIONS.**

. . .

**WATER UTILITY.**

**WATER UTILITY SERVICE AREA.**

**SECTION 90.** Section 503.1.2 is hereby amended to read as follows:

**503.1.2 Additional aAccess.**

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access. Such additional access must comply with Title 21 of the Los Angeles County Code.

**SECTION 91.** Section 503.2.1. is hereby amended to read as follows:

**503.2.1 Dimensions.**

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance ~~of not less than 13 feet 6 inches (4115 mm)~~clear to the sky.

**Exception:** A minimum vertical clearance of 13 feet 6 inches may be allowed for protected tree species adjacent to access roads. Any applicable tree-trimming permit from the appropriate agency is required.

**SECTION 92.** Section 503.2.2.1 is hereby added to read as follows:

**503.2.2.1 Dimensions Maintained.**

The dimensions of approved fire apparatus roads shall be maintained as originally approved by the fire code official.

**SECTION 93.** Section 503.2.5 is hereby amended to read as follows:

**503.2.5 Dead-ends.**

Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus.

**Exception:** For dead-end fire apparatus access roads between 151 feet and 300 feet in length, the fire code official may determine that the approved area for turning around the fire apparatus can be met by requiring more stringent width, turning radius, and grade specifications as per Sections 104.8, 503.2, 503.2.4, and 503.2.7 of this code and when, in the opinion of the fire chief, fire fighting, or rescue operations would not be impaired.

**SECTION 94.** Section 503.2.9 is hereby added to read as follows:

**503.2.9 Area of Fire Fighting Operations.**

The area of fire fighting operations shall not be located underneath high-voltage transmission lines.

**SECTION 95.** Section 503.3 is hereby amended to read as follows:

**503.3 Marking.**

Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING -- FIRE LANE shall be provided for fire apparatus access roads to identify such roads, to clearly indicate the entrance to such road or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. A no parking

designation shall meet the requirements of California Vehicle Code section 22500.1 and approved by the fire code official.

**SECTION 96.** Section 503.3.1 is hereby added to read as follows:

**503.3.1 Marking Overhead High-Voltage Transmission Lines.**

When required by the fire code official, fire apparatus access roads and structures located near high-voltage transmission lines shall be posted with signs, approved by the fire code official, that include the words CAUTION OVERHEAD HIGH-VOLTAGE TRANSMISSION LINES.

**SECTION 97.** Section 503.4 is hereby amended to read as follows:

**503.4 Obstruction of ~~f~~Fire a~~A~~pparatus a~~A~~ccess ~~r~~Roads.**

Fire apparatus access roads shall not be obstructed in any manner, including by the parking of vehicles or the use of traffic calming devices, including but not limited to, speed bumps or speed humps. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

**SECTION 98.** Section 503.4.1 is hereby amended to read as follows:

**503.4.1 Traffic ~~c~~Calming ~~d~~Devices.**

Traffic calming devices, including but not limited to, speed bumps and speed humps, shall be prohibited unless approved by the fire code official.

**SECTION 99.** Section 503.7 is hereby added to read as follows:

**503.7 Fire Apparatus Access Roads in Recreational Vehicle, Mobile Home, and Manufactured Housing Sales Lots and Storage Lots.**

Recreational vehicle, mobile home, and manufactured housing sales lots and storage lots shall provide and maintain fire apparatus access roads in accordance with Section 503.

**SECTION 100.** Section 503.7.1 is hereby added to read as follows:

**503.7.1 Fire Apparatus Access Roads in Mobile Home Parks and Special Occupancy Parks.**

The enforcing agency for California Code of Regulation Title 25, Division 1, Chapters 2 and 2.2 shall have authority for approval of roadways in mobile home parks and special occupancy parks. Mobile home parks roadway requirements are found in Title 25, Division 1, Chapter 2, Article 2, Section 1106, and roadway requirements for special occupancy parks are found in Title 25, Division 1, Chapter 2.2, Article 2, Section 2106.

**SECTION 101.** Section 504.5 is hereby added to read as follows:

**504.5 Roof Top Barriers and Parapets.**

No person shall install any security barrier, visual barrier screen, or other obstruction on the roof of any building in such a manner as to obstruct firefighter ingress or egress in the event of fire or other emergency. Parapets shall not exceed 48 inches on at least two sides of the building.

**SECTION 102.** Section 505.3 is hereby added to read as follows:

**505.3 Multiple Residential and Commercial Units.**

Multiple residential and commercial units having entrance doors not visible from the street or road shall have, in addition to the requirements of Section 505.1 above, approved numbers grouped for all units within each structure and positioned to be plainly visible from the street or road. Said numbers may be grouped on the wall of the structure or on a mounting post independent of the structure.

**SECTION 103.** Section 505.4 is hereby added to read as follows:

**505.4 High-Rise Buildings.**

Approved numbers or street addresses shall be placed and maintained on the roof tops of all new and existing high-rise buildings, as defined in California Health and Safety Code section 13210, having floors used for human occupancy located more than 75 feet (22.86 m) above the lowest floor level having access to the building. All approved numbers shall be plainly visible and legible from the air at an elevation of 500 feet (152.4 m) above roof top level and shall contrast with their background.

**SECTION 104.** Section 506.1 is hereby amended to read as follows:

**506.1 Where ~~r~~Required.**

Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with

UL 1037, and shall contain keys to gain necessary access as required by the fire code official.

**Exception:** A key box is not required for access to the interior of a sleeping unit or dwelling unit.

**SECTION 105.** Section 507.1.1 is hereby added to read as follows:

**507.1.1 Water Certificate.**

Except as otherwise provided by this section, every application for a building permit shall be accompanied by:

1. Evidence indicating to the fire code official that the proposed structure will be provided with a reliable water supply. The fire code official may accept as sufficient evidence a certificate from a water utility that it can supply water to the proposed structure in compliance with Title 20 of the Los Angeles County Code, except that if the fire code official knows that such water utility cannot so supply water, the fire code official may reject such certificate; or

2. A certificate from the Fire Department that there exists, or is under construction, a private water supply which, in the fire code official's opinion, is adequate for fire protection.

**Exception:** A certificate is not required for new or existing U occupancies with less than 1,000 square feet of aggregate floor area.

**SECTION 106.** Section 507.2 is hereby amended to read as follows:

**507.2 Type of ~~w~~Water ~~s~~Supply.**

A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains, or other fixed systems capable of reliably providing the required fire flow. Facilities, buildings, or portions of buildings that are hereafter constructed or moved into or within the jurisdiction that are located within a water district's or water utility's service area and that receive a will-serve letter from the applicable water district or water utility shall obtain their water supply from that water district's or water utility's system.

**SECTION 107.** Section 507.3.1 is hereby added to read as follows:

**507.3.1 Fire Protection Water Supplies in Sales or Storage Lots of Recreational Vehicles, Mobilehomes, or Manufactured Housing, or in Mobilehome Parks or Special Occupancy Parks.**

New, or additions to existing, sales or storage lots of recreational vehicles, mobilehomes, or manufactured housing, mobilehome parks, and special occupancy parks, shall be provided with an approved fire protection water supply in accordance with Section 507.

**Exception:** Special occupancy parks located in remote areas shall have a fire protection water supply as required by the fire code official, which shall not be less than the requirements of the California Code of Regulations Title 25, Special Occupancy Parks, Chapter 2.2, Section 2300, et seq.

**SECTION 108.** Section 507.4.1 is hereby added to read as follows:

**507.4.1 Private Fire Hydrant Test and Certification in Mobilehome Parks and Special Occupancy Parks.**

Private fire hydrants in mobilehome parks and special occupancy parks shall be tested and certified as required by California Code of Regulations Title 25, Division 1, Chapter 2, Article 6, section 1317 for mobilehome parks and Division 1, Chapter 2.2, Article 6, section 2317 for special occupancy parks. Certification of such tests shall be completed by the local water supplier, a licensed C-16 fire protection contractor, or a licensed fire protection engineer as required by Title 25.

**SECTION 109.** Section 507.5.1.2 is hereby added to read as follows:

**507.5.1.2 Pool Draft System in Fire Hazard Severity Zones.**

New swimming pools and spas, 5,000 gallon (18925 L) or greater capacity, constructed or installed in a Fire Hazard Severity Zone shall have a drain and discharge line connected to a draft hydrant in accordance with the Los Angeles County Plumbing Code Title 28.

**Exceptions:**

1. Swimming pools constructed or installed with the bottom of the pool more than 15 feet below the proposed draft hydrant connection elevation, measured vertically, need not be provided with a draft hydrant system.

2. Properties that are adequately served by access roads that comply with fire department regulations, and have a properly spaced fire hydrant capable of flowing a minimum of 1,250 Gallons per Minute (GPM) for 2 hours, may be exempted.

3. For residential properties built before August 13, 1995, where, in the opinion of the fire code official, there are practical geographic difficulties, the requirement may be modified.

**SECTION 110.** Section 507.5.5 is hereby amended to read as follows:

**507.5.5 Clear ~~s~~Space ~~a~~Around ~~h~~Hydrants.** A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved. Vehicles parking near fire hydrants must also comply with California Vehicle Code section 22514.

**SECTION 111.** Section 507.5.7 is hereby added to read as follows:

**507.5.7 Fire Fighting Water Source Marker.**

When required by the fire code official, a fire hydrant and other fire fighting water source shall be identified by the installation of a blue raised reflective pavement marker or identified by other approved means.

**SECTION 112.** Section 507.5.8 is hereby added to read as follows:

**507.5.8 Private Fire Hydrant Identification.**

A private service fire hydrant shall be painted red in color. The valve stem, coupling threads, or portions of the hydrant where the application of paint would violate the listing of the hydrant or hinder its operation shall not be painted.

**SECTION 113.** Section 507.5.9 is hereby added to read as follows:

**507.5.9 Private Fire Hydrant Caps or Plugs.**

A private service fire hydrant hose coupling shall be provided with a protective thread cap or plug. Missing or damaged caps or plugs shall be replaced.

**SECTION 114.** Section 507.5.10 is hereby added to read as follows:

**507.5.10 Draft System Identification Sign.**

New or existing swimming pools and spas constructed or located in a fire hazard severity zone with a capacity of 5,000 or more gallons equipped with draft hydrants shall be identified with a permanent sign. The sign and its location shall be approved by the fire code official.

**SECTION 115.** Section 507.6 is hereby added to read as follows:

**507.6 Above-ground Water Control Valves Requirements.**

See Section 901.6.3 for requirements.

**SECTION 116.** Section 511 is hereby added to read as follows:

**511 DESTRUCTION OF SIGNS**

**511.1 Destruction of Signs.**

No person shall mutilate or remove or destroy any sign or notice posted or required to be posted by the fire code official or a duly authorized representative.

**SECTION 117.** Section 605.11.2.1 is hereby added to read as follows:

**605.11.2.1 Remote Electrical Disconnect.**

Photovoltaic circuits shall be equipped with a means for remote electrical disconnect located downstream from the photovoltaic array at the point where the photovoltaic circuit first enters the structure, or at another approved location. The manual control to operate the remote electrical disconnect shall be located within five feet of the building's main electrical panel. The remote electrical disconnect shall be listed and meet the requirements of the California Electrical Code.

**Exceptions:**

1. Photovoltaic circuits contained in rigid or electrical metallic tubing running between the array combiner box and the main electrical panel which are entirely exterior to the building need not be equipped with a means of remote electrical disconnect other than the disconnects intrinsic to the system.

2. Photovoltaic circuits contained in rigid or electrical metallic tubing running between the array combiner box and the main electrical panel that run through the interior of the building need not be equipped with a means of remote electrical disconnect when installed a minimum of 18 inches below the roof assembly when measured parallel to the surface of the roof.

**SECTION 118.** Section 901.6 is hereby amended to read as follows:

**901.6 Inspection, ~~t~~Testing, and ~~m~~Maintenance.**

Fire detection, alarm, ~~and~~ extinguishing systems, mechanical smoke exhaust systems, and smoke and heat vents shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired fire protection systems and equipment shall be inspected, tested, and maintained or removed.

Fire protection system equipment, including initiating devices, alarm notification appliances, and annunciators shall not be concealed from view, obstructed, or impaired in any manner.

. . .

**SECTION 119.** Section 901.6.3 is hereby added to read as follows:

**901.6.3 Above-Ground Water Control Valves.**

**SECTION 120.** Section 901.6.3.1 is hereby added to read as follows:

**901.6.3.1 Above-Ground Water Control Valve Signs.**

Above-ground water control valves used for water based fire protection systems, including private fire hydrant systems, shall have a permanent sign identifying areas or systems controlled. Signs shall be metal, painted white with red letters a minimum of one-inch high with 3/16 inch stroke, and shall be permanently banded to the valve or permanently affixed to a wall.

**SECTION 121.** Section 901.6.3.2 is hereby added to read as follows:

**901.6.3.2 Above-Ground Water Control Valve Supervision.**

Above-ground water control valves used for water based fire protection systems, including private service mains and appurtenances, shall be mechanically supervised by locking the valve in the fully open position using a cable or chain and a non-case hardened lock, or by other approved means, when the valve is not electrically supervised. Detachable wrenches for post indicator valves shall be secured in place by the use of a non-case hardened lock.

**SECTION 122.** Section 901.6.3.3 is hereby added to read as follows:

**901.6.3.3 Above-Ground Water Control Valve Identification.**

Above-ground water control valves used for water based fire protection systems, including valves that are part of private service mains and appurtenances, shall be painted red on any exposed surfaces subject to rust or corrosion. Valve stems, coupling threads, operating mechanisms, sight windows, components, or portions of the

valve where the application of paint would violate the listing of the valve or hinder its operation shall not be painted.

**SECTION 123.** Section 901.6.3.4 is hereby added to read as follows:

**901.6.3.4 Clear Space Around Above-Ground Water Control Valves.**

A 3-foot (914 mm) clear space shall be maintained around the circumference of above-ground water control valves used for water based fire protection systems, including private fire hydrant systems, except as otherwise required or approved.

**SECTION 124.** Section 901.7.4 is hereby amended to read as follows:

**901.7.4 Preplanned ~~i~~Impairment ~~p~~Programs.**

Preplanned impairments shall be authorized by the impairment coordinator. Before authorization is given, a designated individual shall be responsible for verifying that all of the following procedures have been implemented:

. . .

9. When alteration requires modification of a portion of a fire-protection system, the remainder of the system shall be kept in service.

10. When it is necessary to take a fire-protection system, or portion thereof, out of service for repair, the repair shall be completed immediately and the system returned to full service.

**SECTION 125.** Section 903.2.11.3 is hereby amended to read as follows:

**903.2.11.3 Buildings ~~55 feet or more~~Over Three Stories in ~~h~~Height.**

An automatic sprinkler system shall be installed throughout buildings with a floor level ~~having an occupant load of 30 or more that is located 55 feet (16 764 mm) or~~ more than three stories above the lowest level of fire department vehicle access.

**Exceptions:**

1. Airport control towers.

2. ~~Open parking structures~~Buildings used exclusively as open parking structures.

3. Occupancies in Group F-2.

**SECTION 126.** Section 903.2.11.7 is added to read as follows:

**903.2.11.7 Occupancies in Fire Hazard Severity Zones and Within the Malibu-Santa Monica Mountains or San Gabriel Southface Areas.**

An automatic fire sprinkler system shall be installed in every occupancy which is newly constructed or which is modified, reconstructed, or remodeled by adding 50 percent or more of the floor area of the existing occupancy, within any 12-month period, where the occupancy is located in a Fire Hazard Severity Zone and within the Malibu-Santa Monica Mountains or the San Gabriel Mountains Southface Areas, as defined in Appendix M.

**Exceptions:**

1. Occupancies located in the San Gabriel Mountains Southface Area and which are located three miles or less from the closest existing or planned Los Angeles

County Fire Station capable of supporting firefighting resources are exempt from the fire sprinkler requirement. Travel distances shall be measured by the most direct route on streets or roads accessible to fire department apparatus.

2. Occupancies modified, reconstructed, or remodeled by adding 50 percent or more of the floor area of the existing occupancy, where the total floor area of the occupancy after the modification, reconstruction, or remodel is less than 5,000 square feet (465 m 2), are exempt from the fire sprinkler requirement.

3. Detached private garages, sheds, and agricultural buildings less than 200 square feet (19 square meters) in area and separated from other structures by a minimum of 6 feet (1829 mm), are exempt from the fire sprinkler requirement.

4. Detached gazebos, pergolas, and carports open on two or more sides, that are separated from other structures by a minimum of six feet (1829 mm) are exempt from the fire sprinkler requirement.

5. Detached U occupancies, separated from other structures by a minimum of six feet (1829 mm), built entirely out of non-combustible materials, and with no combustible storage, are exempt from the fire sprinkler requirement.

For the purposes of this subsection, "planned Los Angeles County Fire Station" means a fire station, approved by the Consolidated Fire Protection District of Los Angeles County that will be developed within five years from the date of building permit application for the subject development.

The Board of Supervisors finds it necessary to impose these requirements upon the issuance of a building permit because a failure to do so would place the residents of

the subdivision or the immediate community, or both, in a condition perilous to their health or safety, or both.

**SECTION 127.** Section 903.4.2 is hereby amended to read as follows:

**903.4.2 Alarms.**

One exterior approved audible device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. One approved exterior alarm visual device, located on the exterior of the building in an approved location, shall be provided to indicate to emergency responders the general location of an alarm annunciator. Where a building fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. Other ~~V~~visible alarm notification appliances shall not be required except when required by Section 907.

**SECTION 128.** Section 903.7 is hereby added to read as follows:

**903.7 Buildings Four or More Stories.**

In multi-story buildings that are four or more stories, including any basement levels, the following devices shall be provided for the automatic fire sprinkler system at each floor level within an exit stairway enclosure:

1. Indicating control valve.
2. Water flow detector with an alarm bell.
3. Drain valve.
4. Inspector's test valve with sight gauge.

**SECTION 129.** Section 905.2.1 is hereby added to read as follows:

**905.2.1 Class I Standpipes.**

**SECTION 130.** Section 905.2.1.1 is hereby added to read as follows:

**905.2.1.1 Construction.**

Materials and devices shall be of sufficient strength to withstand not less than 200 pounds per square inch of water pressure when ready for service. All Class I standpipes shall be tested hydrostatically to withstand not less than 200 pounds per square inch of pressure for two hours, but in no case shall the pressure be less than 50 pounds per square inch above the maximum working pressure.

**SECTION 131.** Section 905.2.1.2 is hereby added to read as follows:

**905.2.1.2 Fire Department Connection.**

Standpipes shall be equipped with a listed four-way fire department connection. Systems with three or more standpipes shall be provided with a sufficient number of inlets as required by the fire code official. All fire department connections shall be located on the building address street front, not less than 24 inches nor more than 42 inches above grade and shall be equipped with an approved straight-way check valve and substantial plugs or caps. All fire department connections shall be visible, accessible, and clearly marked with approved signage. More than one fire department connection may be required.

**SECTION 132.** Section 905.2.1.3 is hereby added to read as follows:

**905.2.1.3 Outlets.**

Each standpipe shall be equipped with an approved 2 1/2-inch outlet not less than 2 feet nor more than 4 feet above the floor level of each story. Standpipe outlets in stairway enclosures or smokeproof enclosures shall be so located that the exit doors do not interfere with the use of the outlet, and located on the main stair landing. All outlets shall be equipped with an approved valve, cap, and chains.

No point within a non-sprinklered building requiring standpipes shall be more than 130 feet travel distance from a standpipe outlet connection.

**SECTION 133.** Section 905.4 is hereby amended to read as follows:

**905.4 Location of Class I ~~s~~Standpipe ~~h~~Hose ~~c~~Connections.**

Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at ~~an intermediate floor level~~the main stair landing ~~between floors~~, unless otherwise approved by the fire code official. See Section 909.20.3.2 of the California Building Code for additional provisions in smokeproof enclosures.

. . .

**SECTION 134.** Section 905.5.3 is hereby amended to read as follows:

**905.5.3 Class II ~~s~~System 1<u>1/2</u>-inch ~~h~~<u>H</u>ose.**

A minimum 1-inch (25 mm) hose shall be allowed to be used for hose stations in light-hazard occupancies where investigated and listed for this service and where approved by the fire code official. <u>Class II interior wet standpipes shall be equipped with a 1½-inch valve, no more than 100 feet of lined hose, and an approved fog nozzle in each story, including the basement or cellar of the building, and located not less than 3 feet nor more than 5 feet above the floor. Where combination standpipes are installed, the 1½-inch outlet system may be supplied from the combination system with a 2-inch connecting line.</u>

**SECTION 135.** Section 905.6.1 is hereby amended to read as follows:

**905.6.1 Protection.**

Risers and laterals of Class III standpipe systems shall be protected as required for Class I systems in accordance with Section 905.4.1.

**<u>Exceptions:</u>**

<u>1. In buildings equipped with an approved automatic sprinkler system, risers and laterals which are not located within an enclosed stairway or pressurized enclosure need not be enclosed within fire-resistive construction.</u>

<u>2. Laterals for Class II outlets on Class III systems need not be protected.</u>

**SECTION 136.** Section 905.6.1.1 is hereby added to read as follows:

**<u>905.6.1.1 Size.</u>**

Class III standpipe systems shall be not less than 6 inches in diameter.

**SECTION 137.** Section 905.9 is hereby amended as follows:

**905.9** **Riser Shutoff Valve sSupervision and Drain.**

Each individual riser must be equipped with an indicating valve at its base and an approved valve for draining. Valves controlling water supplies shall be supervised in the open position so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Section 903.4. Where a fire alarm system is provided, a signal shall also be transmitted to the control unit.

. . .

**SECTION 138.** Section 905.12 is hereby added to read as follows:

**905.12** **Basement Pipe Inlets.**

**SECTION 139.** Section 905.12.1 is hereby added to read as follows:

**905.12.1** **General.**

All basement pipe inlets shall be installed in accordance with the requirements of this section.

**SECTION 140.** Section 905.12.2 is hereby added to read as follows:

**905.12.2** **Where Required.**

Basement pipe inlets shall be installed in the first floor of every store, warehouse, or factory having basements.

**Exception:** Where the basement is equipped with an automatic fire-extinguishing system.

**SECTION 141.** Section 905.12.3 is hereby added to read as follows:

**905.12.3 Location.**

The location of basement pipe inlets shall be as required by the Fire Department.

**SECTION 142.** Section 905.12.4 is hereby added to read as follows:

**905.12.4 Detailed Requirements.**

All basement pipe inlets shall be of cast iron, steel, brass, or bronze with lids of cast iron or bronze.

The basement pipe inlet shall consist of a sleeve of not less than 8-inch inside diameter extending through the floor and terminating flush with or through the basement ceiling and shall have a top flange recessed with an inside shoulder to receive the lid. The top flange shall be installed flush with finish floor surface. The lid shall be a solid casting and have a lift recessed in the top. This lid shall be provided with a cast-in sign reading FIRE DEPARTMENT ONLY--DO NOT COVER. The lid shall be installed in such a manner as to permit its easy removal from the flange shoulder.

**SECTION 143.** Section 906.1 is hereby amended to read as follows:

**906.1 Where ~~r~~Required.**

Portable fire extinguishers shall be installed in the following locations.

1. In new and existing Group A, B, E, F, H, I, L, M, R-1, R-2, R-2.1, R-3.1, R-4, and S occupancies.

**Exception:** ~~In~~When approved by the fire code official for Group R-2 occupancies, portable fire extinguishers shall be required only in locations specified in

Items 2 through 6 where each dwelling unit is provided with a portable fire extinguisher having a minimum rating of 1-A:10-B:C.

. . .

**SECTION 144.** Section 907.5.2.3.6 is hereby added to read as follows:

**907.5.2.3.6 Exterior Alarm Notification.**

One approved exterior alarm visual device, located on the exterior of the building in an approved location, shall be provided to indicate to emergency responders the general location of an alarm annunciator.

**SECTION 145.** Section 910.1 is hereby amended to read as follows:

**910.1 General.**

Where required by this code or otherwise installed, smoke and heat vents or mechanical smoke exhaust systems and draft curtains shall conform to the requirements of this section.

**Exceptions:**

~~1.~~ Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.

~~2. Automatic smoke and heat vents or mechanical smoke exhaust systems are not required within areas of buildings equipped with early suppression fast-response (ESFR) sprinklers unless any of the following conditions exist:~~

~~2.1. The building is a state institution,~~

~~2.2. The building is a state-owned or state-occupied building,~~

~~2.3. The building is any of the applications listed in Section 1.11 regulated by the Office of the State Fire Marshal, or~~

~~2.4. The area of a Group F-1 or S-1 occupancy protected with the early suppression fast-response (ESFR) sprinklers has an exit access travel distance of more than 250 feet (76 200 mm).~~

**SECTION 146.** Section 910.2.1.1 is hereby added to read as follows:

**910.2.1.1 Group S-2.**

Buildings and portions thereof containing a basement level enclosed parking garage exceeding 12,000 square feet (1108 m sq.).

**SECTION 147.** Section 910.4 is hereby amended to read as follows:

**910.4 Mechanical ~~s~~Smoke ~~e~~Exhaust.**

Engineered mechanical smoke exhaust systems shall be an acceptable alternative to smoke and heat vents. Mechanical smoke exhaust systems provided for basement level enclosed parking garages shall meet the performance criteria required by the fire code official.

**SECTION 148.** Section 912.2.1 is hereby amended to read as follows:

**912.2.1 Visible ~~l~~Location.**

Fire Department connections shall be located on the street address side of buildings, within 150 feet (via vehicular access) of an accessible public fire hydrant, and as close to the street curb face as possible, fully visible, and recognizable from the street or nearest point of fire department vehicle access or as otherwise approved by the fire chief. Fire department connections shall be located a minimum of 25 feet from

the structure. When this distance cannot be achieved, a minimum two-hour, fire-resistive wall shall be provided for the structure with no openings in the wall, 25 feet in either direction from the fire department connection.

**SECTION 149.** Section 912.4 is hereby amended to read as follows:

**912.4 Signs.**

A metal sign with raised letters at least 1 inch (25 mm) in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes, or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STAND PIPES or TEST CONNECTION or a combination thereof as applicable. The sign shall indicate the street addresses of buildings the fire department connection serves. Where the fire department connection does not serve the entire building, ~~a~~ signs shall be provided indicating the portions of the building served. For a system where the required pumping pressure is greater than 150 psi, the sign shall indicate the required pumping pressure.

**SECTION 150.** Section 912.7 is hereby added to read as follows:

**912.7 Identification.**

Fire department connections shall be painted red on any exposed surfaces subject to rust or corrosion. Coupling threads, operating mechanisms, sight windows, components, or portions of the valve where the application of paint would violate the listing of the valve or hinder its operation shall not be painted.

**SECTION 151.** Section 912.8 is hereby added to read as follows:

**912.8 Breakable Caps or Plugs.**

A fire hose coupling that is part of a fire department connection shall be provided with a protective breakable cap or plug. Missing or damaged breakable caps or plugs shall be replaced.

**SECTION 152.** Section 914.9.1 is hereby added to read as follows:

**914.9.1 Spray Booths.**

Spray booths shall be provided with automatic fire sprinkler system protection when the spray booth is located in a portion of a building that is protected with an automatic fire sprinkler system.

**SECTION 153.** Section 1007.9.1 is hereby added to read as follows:

**1007.9.1 Signage for High-Rise Buildings.**

Signs shall be posted in a conspicuous place on every floor of the high-rise building and elsewhere as required by the fire department. Such signs shall include the heading: "IN CASE OF FIRE OR EMERGENCY DO NOT USE ELEVATORS" and give directions to all emergency fire exits from that floor. If fire safety refuge areas are provided on that floor, the signs shall give directions to that area. All such lettering shall be in letters at least one-inch-high and contrasting color.

**Exception:** Occupant evacuation elevators installed in accordance with section 403.6.2 of the Building Code.

**SECTION 154.** Section 1103.2 is hereby added to read as follows:

**1103.2 Emergency Responder Radio Coverage in Existing Buildings.**

Existing buildings that do not have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building, shall be equipped with such coverage according to one of the following:

1. Whenever an existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section 510.1, Exception 1.

2. Within a time frame established by the fire code official.

**Exception**: Where it is determined by the fire code official that the radio coverage system is not needed.

**SECTION 155.** Section 1104.16.7 is hereby added to read as follows:

**1104.16.7 Maintenance.**

Fire escapes shall be kept clear and unobstructed at all times and shall be maintained in good working order.

**SECTION 156.** Section 1105.1 is hereby added to read as follows:

**1105.1 Tire Storage Yards.**

Existing tire storage yards shall be provided with fire apparatus access roads in accordance with Sections 1105.1.1 and 1105.1.2.

**SECTION 157.** Section 1105.1.1 is hereby added to read as follows:

**1105.1.1 Access to Piles.**

Access roadways shall be within 150 feet (45,720 mm) of any point in the storage yard where storage piles are located, at least 20 feet (6,096 mm) from any storage pile.

**SECTION 158.** Section 1105.1.2 is hereby added to read as follows:

**1105.1.2 Location Within Piles.**

Fire apparatus access roads shall be located within all pile clearances identified in Section 3405.4 and within all fire breaks required in Section 3405.5.

**SECTION 159.** Section 2007.9. is hereby added to read as follows:

**2007.9 Helistops for High-Rise Buildings.**

An approved helistop shall be provided on the roof of any high-rise building hereinafter constructed. It shall be designed and constructed in accordance with the Los Angeles County Building Code and Title 24 of the California Code of Regulations.

**SECTION 160.** Section 2007.10 is hereby added to read as follows:

**2007.10 Helistops in Fire Hazard Severity Zones.**

**SECTION 161.** Section 2007.10.1 is hereby added to read as follows:

**2007.10.1 Surface.**

When required by the fire code official, a graded 100-foot x 100-foot pad shall be covered with reinforced concrete, with a minimum depth of 6 inches, capable of supporting 42,000 pounds.

**SECTION 162.** Section 2007.10.2 is hereby added to read as follows:

**2007.10.2 Hydrant.**

When required by the fire code official, a fire hydrant shall be installed adjacent to the graded pad as approved by the fire code official.

**SECTION 163.** Section 2007.10.3 is hereby added to read as follows:

**2007.10.3 Access.**

When required by the fire code official, a fire apparatus access road leading to the helistop shall be provided in accordance with Section 503.

**SECTION 164.** Section 2108.5 is hereby added to read as follows:

**2108.5 Smoking.**

Smoking in dry-cleaning plants shall only be within designated smoking rooms. NO SMOKING signs shall be posted in rooms containing flammable or combustible liquids. See Section 310.3.

**SECTION 165.** Section 2204.2 is hereby added to read as follows:

**2204.2 Separators.**

Approved magnetic or pneumatic separators shall be installed ahead of shellers, crackers, crushers, grinding machines, pulverizers, and similar machines in which the entrance of foreign materials could cause sparks to be generated.

**SECTION 166.** Section 2204.3 is hereby added to read as follows:

**2204.3 Dust Collection.**

Suitable dust-collecting equipment shall be installed on all dust-producing machinery and interlocked with the machinery power supply so that the machinery cannot be operated without the dust-collection equipment also operating.

**SECTION 167.** Section 2204.4 is hereby added to read as follows:

**2204.4 Electrical Grounding.**

Artificial lighting in areas containing dust-producing or dust-agitating operations shall be by electricity with wiring and electrical equipment installed in accordance with the Electrical Code. Machinery and metal parts of crushing, drying, pulverizing, and conveying systems shall be electrically grounded in accordance with the Electrical Code.

Static electricity shall be removed from machinery and other component parts by permanent grounds or bonds or both. The design and installation of such grounds shall be in accordance with approved standards.

**SECTION 168.** Section 2404.4 is hereby amended to read as follows:

**2404.4 Fire Protection.**

Spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system complying with Chapter 9. Protection shall also extend to exhaust plenums, exhaust ducts, and both sides of dry filters when such filters are used. Spray booths shall be provided with automatic fire sprinkler system protection when the spray

booth is located in a portion of a building that is protected with an automatic fire sprinkler system.

**SECTION 169.** Section 2408.5 is hereby amended as follows:

**2408.5 Sources of ~~i~~Ignition.**

Smoking shall be prohibited and NO SMOKING signs shall be prominently displayed in compliance with Section 310.3 in areas where organic peroxides are stored, mixed, or applied. Only non-sparking tools shall be used in areas where organic peroxides are stored, mixed, or applied.

**SECTION 170.** Section 2504.6 is hereby added to read as follows:

**2504.6 Smoking.**

NO SMOKING signs shall be posted at every entrance, in compliance with Section 310.3, and smoking shall be prohibited in ripening rooms.

**SECTION 171.** Section 2602.1 is hereby amended to read as follows:

**2602.1 Definitions.**

The following terms are defined in Chapter 2.

**FUMIGANT.**

**FUMIGATION.**

**FUMIGATOR.**

**INSECTICIDAL FOGGING.**

**SECTION 172.** Section 2803.3.3 is hereby added to read as follows:

**2803.3.3 Combustible Waste.**

The storage, accumulation, and handling of combustible materials and control of vegetation shall be in accordance with Section 304.1.

**SECTION 173.** Section 2810 is hereby added to read as follows:

**2810 STORAGE OF COMBUSTIBLE IDLE PALLETS**

**SECTION 174.** Section 2810.1 is hereby added to read as follows:

**2810.1 General.**

Storage of combustible idle pallets shall be in accordance with this section.

**SECTION 175.** Section 2810.2 is hereby added to read as follows:

**2810.2 Storage Location.**

Pallets shall be stored outside or in a separate building designed for pallet storage unless stored indoors in accordance with Section 2810.3.

**SECTION 176.** Section 2810.3 is hereby added to read as follows:

**2810.3 Indoor Storage.**

Pallet storage in a building used for other storage or other purpose shall be in accordance with the provisions for high-hazard commodity high-piled combustible storage contained in Chapter 32.

**Exception:** When indoor storage does not exceed 6 feet (1.8 m) in height and the aggregate volume of all stored pallets does not exceed 2,500 cubic feet (70.8 $m^3$).

**SECTION 177.** Section 2810.4 is hereby added to read as follows:

**2810.4 Outdoor Storage.**

Pallets stored outside shall be stored in accordance with Table 2810.4.1 and Table 2810.4.2 and Sections 2810.5 and 2810.6.

**Table 2810.4.1**

**Required Clearance Between Outside Idle Pallet Storage and Other Yard Storage**

| Pile Size | Minimum Distance, in feet (m) |
|---|---|
| Under 50 pallets | 20 (6.1 m) |
| 50--200 pallets | 30 (9.2 m) |
| Over 200 pallets | 50 (15.2 m) |

**Table 2810.4.2**

**Required Clearance Between Outside Idle Pallet Storage and Structures**

| Wall Construction | Minimum distance of wall from storage, in feet (m) | | |
|---|---|---|---|
| | Under 50 Pallets | 50 to 200 Pallets | Over 200 Pallets |
| Masonry or concrete with no openings | 0 | 0 | 15 (4.6 m) |
| Masonry with wired glass in openings, outside sprinklers and 1-hour doors | 0 | 10 (3.1 m) | 20 (6.1 m) |
| Masonry with wired or plain glass, outside sprinklers, and 3/4-hour doors | 10 (3.1 m) | 20 (6.1 m) | 30 (9.2 m) |
| Wood or metal with outside sprinklers | 10 (3.1 m) | 20 (6.1 m) | 30 (9.2 m) |
| Wood, metal, other | 20 (6.1 m) | 30 (9.2 m) | 50 (15.2 m) |

**SECTION 178.** Section 2810.5 is hereby added to read as follows:

**2810.5 Outdoor Pile Dimensions.**

Pallet stacks shall not exceed 15 feet (4.6 m) in height nor shall cover an area greater than 500 square feet (46.5 $m^2$). Pallet stacks shall be arranged to form stable piles. Piles shall be separated by a minimum of 8 feet (2.5m). Piles shall be a minimum of 10 feet (3.1 m) from property lines.

**SECTION 179.** Section 2810.6 is hereby added to read as follows:

**2810.6 Fire Department Access.**

Fire department access roadways shall be provided and maintained, in accordance with Section 503.

**SECTION 180.** Section 3104.21 is hereby amended to read as follows:

**3104.21 Combustible ~~v~~Vegetation.**

Combustible vegetation that could create a fire hazard shall be removed from the area occupied by a tent or membrane structure, and from areas within 30 feet (9144 mm) of such structures. When a tent or membrane structure has a capacity of 10 or more people, combustible vegetation shall be removed from areas within 50 feet of such structures. When a tent or membrane structure is located in a hazardous fire area, combustible vegetation shall be removed from areas within 50 feet from such structures or from areas within up to 200 feet from such structures when required by the fire code official.

**SECTION 181.** Section 3201.2 is hereby amended to read as follows:

**3201.2 Permits.**

A permit shall be required as set forth in Section 105.6. Prior to approval of storage racks, a building permit is required in occupancies regulated by this chapter. Proof of all required permits and all engineering calculations must be provided to the fire code official upon request. The approved permit must be kept on the premises and be available at all times for inspection by the fire code official.

**SECTION 182.** Section 3206.2 is hereby amended to read as follows:

**TABLE 3206.2 GENERAL FIRE PROTECTION AND LIFE SAFETY REQUIREMENTS**

. . .

Footnotes

. . .

c. Piles shall be separated by a minimum of 96-inch aisles complying with Section 3206.9.

. . .

~~j. Not required when storage areas with an exit access travel distance of 250 feet (76 200 mm) or less are protected by early suppression fast response (ESFR) sprinkler systems installed in accordance with Section 903.3.1.1.~~

**SECTION 183.** Section 3206.7.1 is hereby added to read as follows:

**3206.7.1 Types of Vents.**

Smoke and heat vents shall be approved and shall be labeled to indicate compliance with nationally recognized standards. Smoke and heat vents shall be operated automatically by activation of any one of the following:

1. An approved fixed-temperature heat-responsive device rated between 100 and 200° F (56 and 111° C) above estimated ambient temperatures. If a fire sprinkler system is provided, the fixed-temperature heat-responsive device shall also be a minimum of one temperature rating higher than the sprinkler heads. With ESFR sprinkler systems, the fixed-temperature heat-responsive device shall also be a minimum two temperature ratings higher than the sprinkler heads up to 360° F;

2. An approved rate-of-rise device; or

3. Approved heat-sensitive glazing designed to shrink and drop out of the vent opening.

The heat-responsive device shall be listed and labeled. Smoke and heat vents shall have the capability of being opened by an approved exterior manual operation.

**SECTION 184.** Section 3208.2.2 is hereby amended to read as follows:

**3208.2.2 Racks with ~~s~~Solid ~~s~~Shelving.**

Racks with solid shelving having an area greater than 32 square feet (3 m²), measured between approved flue spaces at all four edges of the shelf, shall be in accordance with this section.

**Exceptions:**

. . .

3. In buildings with ESFR fire sprinkler protection, the storage racks shall not utilize solid, slatted, or other types of shelving that obstructs sprinkler water penetration down through the racks, unless allowed per NFPA 13.

**SECTION 185.** Section 3312.2 is hereby added to read as follows:

**3312.2 Fire Hose.**

When required by the fire code official, approved fire hoses with attached nozzles shall be maintained for immediate use at a construction site or a demolition site. Such hoses and nozzles shall be connected to an approved water supply. Where a fire hydrant is permitted to be used as the source of water supply, the fire hose connection to the fire hydrant shall not impede the fire department from using the hydrant.

**SECTION 186.** Section 3501.3 is hereby amended to read as follows:

**3501.3 Restricted ~~a~~Areas.**

Hot work shall only be conducted in areas designed or authorized for that purpose by the personnel responsible for a Hot Work Program. Hot work shall not be conducted in the following areas unless approval has been obtained from the fire code official:

. . .

3. Areas with readily ignitable materials, such as storage of large quantities of bulk sulfur, baled paper, cotton, lint, dust, or loose combustible materials, or wildfire risk areas.

. . .

**SECTION 187.** Section 3505.9 is hereby added to read as follows:

**3505.9 Backflash Prevention.**

Approved protective devices shall be installed in the fuel gas and oxygen lines to prevent backflash in the fuel system and backflow in the fuel and oxygen system in accordance with nationally recognized safe practices.

**SECTION 188.** Section 3604.2 is hereby amended to read as follows:

**3604.2 Standpipes.**

Marinas and boatyards shall be equipped throughout with standpipe systems in accordance with NFPA 303. Systems shall be provided with hose connections located such that no point on the marina pier or float system exceeds 150 feet (15 240 mm) from a standpipe hose connection. Standpipe systems shall be of a wet type unless the system is installed in an area that is subject to freezing temperatures.

**SECTION 189.** Section 3604.2.2 is hereby added to read as follows:

**3604.2.2 Floats.**

Portions of floats more than 250 (76,200 mm) feet travel distance from fire apparatus access shall be provided with an approved wet standpipe system.

**SECTION 190.** Section 3604.2.2.1 is hereby added to read as follows:

**3604.2.2.1 Hose Stations.**

Hose stations shall be spaced to provide protection to all portions of floats or floating vessels. Hoses shall be mounted on a reel or rack and enclosed within an approved cabinet. Hose stations shall be labeled FIRE HOSE – EMERGENCY USE ONLY. Listed equipment shall be used. Each hose station shall be provided with a 2 ½-inch fire hose valve with a 2 ½ x 1 ½ reducer and a maximum 100 feet of lined hose and an approved fog nozzle.

The pipe sizing shall be a minimum of 2 ½ inches and shall be based on providing 65 psi at 100 gpm at the most remote hose station valve outlet, using a maximum 150 psi at the fire department inlet connection.

**SECTION 191.** Section 4801.3 is hereby amended to read as follows:

**4801.3 Definitions.**

. . .

**APPROVED PRODUCTION FACILITY.** An existing building, or portion of a building, or a group of buildings altered for use by the entertainment industry for the purpose of motion picture, television, and commercial production.

**COMMERCIAL STILL PHOTOGRAPHY PRODUCTION.** Includes all activity attendant to the staging or shooting of commercial still photography production to create single or multiple photographs for sale or use for a commercial purpose.

. . .

**SECTION 192.** Section 4803.2 is hereby amended to read as follows:

**4803.2 Additional ~~p~~Permits.**

A permit shall be required for:

. . .

f) Any additional permits, including motion picture, commercial, and television productions, as required by the fire code official as determined in Section 105.6 of this code.

**SECTION 193.** Section 4807.1.1 is hereby added to read as follows:

**4807.1.1 Fire Safety Officers/Advisors.**

When in the opinion of the fire code official it is necessary for the preservation of life or property, due to the hazardous nature of an event, production, operation, or function, the fire official shall require the owner or lessee to employ or cause the employment of one or more approved fire safety officers or advisors to be on duty at such place during the hazardous activity.

**SECTION 194.** Section 4811.9 is hereby amended to read as follows:

**4811.9 Fire ~~d~~Department ~~a~~Access.**

Required emergency vehicle access, fire lanes, and existing fire apparatus access roads shall be maintained as per Section 503. Any deviations are subject to approval by the fire code official.

**SECTION 195.** Section 4902.1 is hereby amended to read as follows:

**4902.1 General.**

For the purpose of this chapter, certain terms are defined as follows:

. . .

**FIRE PROTECTION PLAN.** A document prepared for a specific project or development proposed for a Wildland-Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure.

The Fire Protection Plan shall be in accordance with this ~~Article~~Chapter. When required by the ~~enforcing agency~~fire code official for the purposes of granting modifications, a fire protection plan shall be submitted. ~~Only locally adopted ordinances that have been filed with the California Building Standards Commission in accordance with Section 101.14 or the Department of Housing and Community Development in accordance with Section 101.15 shall apply.~~

**FIRE HAZARD SEVERITY ZONES.** Geographical areas designated pursuant to California Public Resources Codes sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code sections 51175 through 51189. See Appendix M for the designations within the County of Los Angeles.

. . .

**FUEL MODIFICATION PLAN.** A fuel modification plan shall consist of a set of scaled plans that includes a plot plan showing fuel modification zones indicated with applicable assessment notes, a detailed landscape plan, and an irrigation plan. A fuel modification plan submitted for approval shall be prepared by a State licensed

landscape architect, State licensed landscape contractor, a landscape designer, or an individual with expertise acceptable to the forestry division of the fire department.

. . .

**SECTION196.** Section 4905.2 is hereby amended to read as follows:

**4905.2 Construction ~~m~~Methods and ~~r~~Requirements ~~w~~Within ~~e~~Established ~~l~~Limits.**

Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements contained in the ~~California Building Standards~~Los Angeles County Building Code including the following:

1. ~~California~~Los Angeles County Building Code, Chapter 7A.
2. ~~California~~Los Angeles County Residential Code, Section R327.
3. ~~California~~Los Angeles County Referenced Standards Code, Chapter 12-7A and this chapter.

**SECTION 197.** Section 4907.1 is hereby amended to read as follows:

**4907.1 General.**

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

Buildings and structures within the Very High Fire Hazard Severity Zones of a Local Responsibility Areas (LRA) shall maintain defensible space as outlined in

Government Code 51175 -- 51189, Chapter 3 of this code and any local ordinance of the authority having jurisdiction.

**SECTION 198.** Section 5001.5 is hereby amended to read as follows:

**5001.5 Permits.**

Permits shall be required as set forth in Sections 105.6 and 105.7.

When required by the fire code official, permittees shall apply for approval to permanently close a storage, use, or handling facility. Such application shall be submitted at least 30 days prior to the termination of the storage, use, or handling of hazardous materials. The fire code official is authorized to require that the application be accompanied by an approved facility closure plan in accordance with Section 5001.6.3. A unified program facility permit shall be required for hazardous materials handlers, hazardous waste generators, or on-site treatment of hazardous waste in accordance with Chapters 12.50, 12.52, and 12.64 of the County Code. Unified program facility permits, if required, shall be obtained prior to the issuance of any fire code permit required by this code.

A permit shall be required for tank vehicles or railroad tank cars to remain on a siding indoors or outdoors, at the point of delivery while connected for transfer operations. Transfer operations shall be in accordance with DOT requirements and this code.

**SECTION 199.** Section 5001.5.1.1 is hereby added to read as follows:

**5001.5.1.1 Hazardous Materials Business Plan.**

Each application for a permit for businesses handling or storing hazardous materials at anytime during the year exceeding 55 gallons, 500 pounds, or 200 cubic feet shall include a hazardous materials business plan (HMBP). The location of the HMBP shall be posted adjacent to permits when an HMBP is provided. The HMBP shall include a facility site plan designating the following:

1. Storage and use areas.
2. Maximum amount of each material stored or used in each area.
3. Range of container sizes.
4. Locations of emergency isolation and mitigation valves and devices.
5. Product conveying piping containing liquids or gases, other than utility-owned fuel gas lines and low-pressure fuel gas lines.
6. On and off positions of valves for valves which are of the self-indicating type.
7. Storage plan showing the intended storage arrangement, including the location and dimensions of aisles.

The plans shall be legible and approximately to scale. Separate distribution systems are allowed to be shown on separate pages.

**SECTION 200.** Section 5001.5.1.2 is hereby added to read as follows:

**5001.5.1.2 Application.**

Each application for a permit required by this chapter shall include a hazardous materials business plan (HMBP) in accordance with Chapter 12.64 of Title 12 of the Los Angeles County Code.

**SECTION 201.** Section 5001.5.2.1 is hereby added to read as follows:

**5001.5.2.1 Hazardous Materials Disclosure.**

A chemical inventory prepared in accordance with Chapter 12.64 of Title 12 of the Los Angeles County Code shall be considered the equivalent of the Hazardous Materials Inventory Statement (HMIS) discussed in Section 5001.5.2.

**SECTION 202.** Section 5001.5.2.2 is hereby added to read as follows:

**5001.5.2.2 Health Hazardous Materials Division Authority.**

The provisions of Chapter 50 of this code may be enforced by any duly-authorized technician, health hazardous materials division staff, or fire code official of this department.

**SECTION 203.** Section 5001.5.2.3 is hereby added to read as follows:

**5001.5.2.3 Reporting.**

Every business shall comply with the reporting requirements as set forth in Chapter 12.64 of Title 12 of the Los Angeles County Code.

**SECTION 204.** Section 5001.5.2.4 is hereby added to read as follows:

**5001.5.2.4 Notification.**

The fire code official and the HHMD shall be notified immediately when an unauthorized discharge becomes reportable under State, federal, or local regulations.

**SECTION 205.** Section 5001.5.2.5 is hereby added to read as follows:

**5001.5.2.5 California Accidental Release Prevention Program.**

Every business shall comply with the requirements as set forth in Chapter 12.64 of Title 12 of the Los Angeles County Code.

**SECTION 206.** Section 5001.5.2.6 is hereby added to read as follows:

**5001.5.2.6 Emergency Information.**

Hazardous materials business plans, risk management prevention programs, and hazardous materials inventory statements shall be posted in an approved location and immediately available to emergency responders. The fire code official may require that the information be posted at the entrance to the occupancy or property.

**SECTION 207.** Section 5002.1 is hereby amended to read as follows:

**5002.1. Definitions.**

The following terms are defined in Chapter 2.

**ASSESS.**

. . .

**CONSOLIDATED CONTINGENCY PLAN.**

. . .

**DEPARTMENT OF TOXIC SUBSTANCE CONTROL (DTSC).**

. . .

**EPA ID NUMBER.**

. .

**HAZARDOUS WASTE.**

**HAZARDOUS WASTE CONTROL LAW.**

. . .

**HEALTH HAZARDOUS MATERIALS DIVISION (HHMD).**

. . .

**UNIFIED PROGRAM.**

**UNIFIED PROGRAM FACILITY PERMIT.**

. . .

**WASTE.**

**SECTION 208.** Section 5003.2.1 is hereby amended to read as follows:

**5003.2.1 Design and ~~c~~Construction of ~~c~~Containers, ~~c~~Cylinders, and ~~t~~Tanks.**

Containers, cylinders, and tanks shall be designed and constructed in accordance with approved standards. Containers, cylinders, tanks, and other means used for containment of hazardous materials shall be of an approved type. Pressure vessels shall comply with the ASME Boiler and Pressure Vessel Code. Tank vehicles and railroad tank cars shall be used in accordance with Section 5005.

**SECTION 209.** Section 5003.2.5 is hereby amended to read as follows:

**5003.2.5 Empty ~~c~~Containers and ~~t~~Tanks.**

Empty containers and tanks previously used for the storage of hazardous materials shall be free from residual material and vapor as defined by DOT~~n~~, the Resource Conservation and Recovery Act (RCRA), or other regulating authority or maintained as specified for the storage of the hazardous material. Containers larger than five gallons in capacity shall be marked with the date they have been emptied and shall be reclaimed, reconditioned, or remanufactured within one year of being emptied. Containers which previously held acute or extremely hazardous materials are considered empty if the container has been triple-rinsed and the rinsate managed as a hazardous waste. If the activity does not qualify for an exemption, the activity may require a permit to treat on site.

**SECTION 210.** Section 5003.3.1.2 is hereby amended to read as follows:

**5003.3.1.2 Preparation.**

~~Provisions shall be made for controlling and mitigating unauthorized discharges.~~The consolidated contingency plan of the Unified Program of the hazardous material business plan shall be prepared and maintained. Copies shall be on-site and submitted every three years to the fire department as required by the provisions of the California Health and Safety Code, Division 20, Chapter 6.95, Hazardous Materials Release Response Plans and Inventory.

**SECTION 211.** Section 5003.3.1.3 is hereby amended to read as follows:

**5003.3.1.3 Control.**

When an unauthorized discharge caused by primary container failure is discovered, the involved primary container shall be repaired or removed from service. Any waste generated as a result of the unauthorized discharge must be disposed of in accordance with all applicable regulations pertaining to hazardous waste. If the facility does not have an EPA ID number it must obtain a temporary ID number from DTSC prior to disposal.

**SECTION 212.** Section 5003.3.1.4 is hereby amended to read as follows:

**5003.3.1.4 Responsibility for ~~c~~Cleanup.**

The person, firm, or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. When deemed necessary by the fire code official, cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be borne by the owner, operator, or other person responsible for the unauthorized discharge. Upon termination of cleanup activities, the HHMD emergency operation section of the fire department must be contacted to assess cleanup measures and to clear the site for re-occupancy or reuse.

**SECTION 213.** Section 5003.5 is hereby amended to read as follows:

**5003.5 Hazard ~~i~~Identification ~~s~~Signs.**

Unless otherwise exempted by the fire code official, visible hazard identification signs as specified in NFPA 704 for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used, or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official. Each building that stores, handles, or dispenses a hazardous material shall be conspicuously posted with the overall occupancy hazard by using the NFPA 704 placard system for any product or waste that has a three or higher rating in any category or is a special hazard.

**SECTION 214.** Section 5003.8.5.2.1 is hereby added to read as follows:

**5003.8.5.2.1 Ventilation and Storage Arrangement.**

Compressed gas cylinders shall be stored within gas cabinets, exhaust enclosures, or gas rooms. Portable or stationary tanks shall be stored within gas rooms or exhaust enclosures. Tank vehicles or railroad tank cars engaged in the use or dispensing of toxic or highly toxic gases shall be stored within a ventilated separate gas storage room or placed within an exhaust enclosure. When stationary or portable cylinders, containers, tanks, railroad tank cars, or tank vehicles are located outdoors for dispensing or use of toxic or highly toxic gases, gas cabinets or exhaust enclosures shall be provided.

**SECTION 215.** Section 5003.9.1.1 is hereby amended to read as follows:

**5003.9.1.1 Fire ~~d~~Department ~~l~~Liaison.**

Responsible persons shall be designated and trained to be liaison personnel for the fire department. These persons shall aid the fire department in preplanning emergency responses and identifying the locations where hazardous materials are located, and shall have access to Material Safety Data Sheets and be knowledgeable in the site's emergency response procedures. These persons shall be identified as the emergency coordinator with 24-hour contact numbers in the business plan as required by the provisions of the California Health and Safety Code, Division 20, Chapter 6.95, Article 1, Business and Area Plans.

**SECTION 216.** Section 5003.11.3.8 is hereby amended to read as follows:

**5003.11.3.8 Floors.**

Floors shall be in accordance with Section 5004.12. Floors shall be level and impervious.

**SECTION 217.** Section 5005.1 is hereby amended to read as follows:

**5005.1 General.**

Use, dispensing, and handling of hazardous materials in amounts exceeding the maximum allowable quantity per control area set forth in Section 5003.1 shall be in accordance with Sections 5001, 5003, and 5005. Use, dispensing, and handling of hazardous materials in amounts not exceeding the maximum allowable quantity per control area set forth in Section 5003.1 shall be in accordance with Sections 5001 and 5003. Tank vehicles and railroad tank cars shall not be used as a means of hazardous

materials storage. Indoor unloading or transfer operations from tank vehicles or railroad tank cars shall be in accordance with Section 5005.2.

Outdoor unloading or transfer operations shall be in accordance with Section 5005.3.

**SECTION 218.** Section 5005.1.11.1 is hereby added to read as follows:

**5005.1.11.1 Bulk Plant or Terminal.**

Gases or liquids having a hazard ranking of 3 or 4 in accordance with NFPA 704 shall not be transferred from a tank vehicle or tank car into the cargo tank of another tank vehicle or tank car.

**Exception:** In an emergency, gases or liquids having a hazard rating of 3 or 4 may be transferred from a tank vehicle or tank car to the cargo tank of another tank vehicle or tank car when approved by the fire code official.

**SECTION 219.** Section 5601.2 is hereby added to read as follows:

**5601.2 Permits.**

Permits shall be required as set forth in Section 105.6 and regulated in accordance with this section.

**SECTION 220.** Section 5601.2.1 is hereby added to read as follows:

**5601.2.1 Fees.**

As required by California Health and Safety Code section 12105, a permit for the storage of explosives shall not be issued until after the payment of a fee of $10, unless the quantity of explosives is 100 pounds or less, in which case the fee shall be $2. The

permit fee shall be equally divided and deposited into the treasury of the County of Los Angeles and into the State Treasury.

**SECTION 221.** Section 5601.3 is hereby added to read as follows:

**5601.3 Fireworks.**

The possession, manufacture, storage, sale, handling, and use of fireworks is prohibited.

**Exceptions:**

1. Storage and handling of fireworks as allowed by State law.

2. Manufacture, assembly, and testing of fireworks as allowed by State law.

3. The use of fireworks for fireworks displays as allowed in California Code of Regulations Title 19, Division 1, Chapter 6--Fireworks.

4. The possession, storage, sales, handling, and use of California State Fire Marshal classified safe and sane fireworks as allowed by state law and local ordinance in accordance with California Health and Safety Code section 12541.1.

5. Retail sales and use of California State Fire Marshal classified snap caps or party popper pyrotechnic devices.

**SECTION 222.** Section 5601.4 is hereby added to read as follows:

**5601.4 Model Rockets and Experimental High Power Rockets.**

The storage, handling, and use of a model rocket or an experimental high power rocket shall be in accordance with Title 19 California Code of Regulations, Chapter 6. The storage, handling, and use of a model rocket or an experimental high power rocket

shall be in accordance with NFPA 1122, NFPA 1125, or NFPA 1127 for fire and life safety matters not regulated by State law.

**SECTION 223.** Section 5608.1 is hereby amended to read as follows:

**5608.1 General.**

~~Outdoor f~~Fireworks displays, use of pyrotechnics before a proximate audience, and pyrotechnic special effects in theatrical and group entertainment productions shall comply with California Code of Regulations Title 19, Division 1, Chapter 6--Fireworks and this chapter. Additionally, firework displays and pyrotechnics before a proximate audience shall be conducted in accordance with NFPA 1123 or NFPA 1126 for fire and life safety matters not regulated by State law.

**SECTION 224.** Section 5609 is hereby added to read as follows:

**5609 Seizure of Explosives, Explosive Materials, and Fireworks.**

The fire code official is authorized to remove or cause to be removed or disposed of in an approved manner, at the expense of the owner, explosives, explosive materials, or fireworks offered or exposed for sale, stored, possessed, or used in violation of this chapter. Seizure shall be conducted in accordance with California Health and Safety Code Sections 12350 through 12355 and 12721 through 12724.

**SECTION 225.** Section 5701.4.1 is hereby added to read as follows:

**5701.4.1 Plans.**

Plans shall be submitted with each application for a permit to store more than 5,000 gallons (18,925 L) of liquids outside of buildings in drums or tanks. The plans

shall indicate the method of storage, quantities to be stored, distances from buildings and property lines, accessways, fire-protection facilities, and provisions for spill control and secondary containment.

**SECTION 226.** Section 5701.6 is hereby added to read as follows:

**5701.6 Maintenance and Operating Practices.**

Maintenance and operating practices shall be in accordance with established procedures which will tend to control leakage and unauthorized discharge of flammable or combustible liquids. Spills shall be cleaned up promptly.

**SECTION 227.** Section 5704.2.6.1 is hereby added to read as follows:

**5704.2.6.1 Waste Control.**

Waste liquids shall be kept in a sump, tank, or receptacle approved for this purpose. The waste must be disposed of in accordance with the provisions of the California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control.

**SECTION 228.** Section 5704.2.8.3 is hereby amended to read as follows:

**5704.2.8.3 Secondary ~~c~~Containment.**

Vaults shall be substantially liquid tight and there shall be no backfill around the tank or within the vault. The vault floor shall drain to a sump. For pre-manufactured vaults, liquid tightness shall be certified as part of the listing provided by a nationally-recognized testing laboratory. For field-erected vaults, liquid tightness shall be certified in an approved manner. Secondary containment shall be provided for new installations of underground tanks and existing tanks with a breach in integrity.

**SECTION 229.** Section 5704.2.8.16.1 is hereby added to read as follows:

**5704.2.8.16.1 System Requirements.**

The fire protection system shall be a deluge type foam system, which provides a minimum of .25 gpm over the entire vault area. The minimum duration of the foam supply shall be 10 minutes. If a manual system is provided, it must assume a maximum of 125 psi at the fire department connection.

**SECTION 230.** Section 5704.2.9.1.1 is hereby added to read as follows:

**5704.2.9.1.1 Required Foam Fire Protection Systems.**

All above-ground tanks exceeding 1,500 square feet of liquid surface area used for the storage of Class I or Class II flammable liquids shall be provided with foam fire protection.

**Exceptions:**

1. Tanks with floating roofs for storage of crude oil exceeding 1,500 square feet of liquid surface area and less than 12,300 square feet of liquid surface area shall have foam fire protection only for the seal area.

2. Floating roof tanks or pressure tanks operating at or above 1-pound-per square inch gauge.

**SECTION 231.** Section 5704.2.9.6.1.3 is hereby amended to read as follows:

**5704.2.9.6.1.3 Location of ~~t~~Tanks ~~s~~Storing ~~b~~Boilover ~~l~~Liquids.**

Above-ground tanks for storage of liquids with boilover characteristics shall be located in accordance with Table 22.4.1.4 of NFPA 30. Shell-to-shell spacing between tanks shall not be less than the diameter of the largest tank.

**SECTION 232.** Section 5704.3.7.6 is hereby added to read as follows:

**5704.3.7.6 Construction.**

The construction of liquid storage rooms shall be in accordance with the Building Code and have a minimum of one exterior wall having a door providing fire fighting access.

**SECTION 233.** Section 5706.3.1.4 is hereby added to read as follows:

**5706.3.1.4 Zoning Regulations.**

The permit for any new well shall be issued only after it has complied with applicable planning and zoning regulations.

**SECTION 234.** Section 5706.3.9 is hereby added to read as follows:

**5706.3.9 Permits.**

For permits to drill, own, operate, or maintain an oil or natural gas well, see Section 105.6.16. No person shall drill, own, operate, or maintain any oil or natural gas well without first obtaining a permit. Each oil or natural gas well permit shall be valid only for the calendar year in which it is issued. The permit fee shall be $48.00. There shall be no charge for renewals.

**SECTION 235.** Section 5706.4 is hereby amended to read as follows:

**5706.4 Bulk ~~p~~Plants or ~~t~~Terminals.**

Portions of properties where flammable and combustible liquids are received by tank vessels, pipelines, tank cars, or tank vehicles and which are stored, transferred, or blended in bulk for the purpose of distributing such liquids by tank vessels, pipelines, tank cars, tank vehicles, or containers shall be in accordance with Sections 5706.4.1 through 5706.4.10.4.

**SECTION 236.** Section 5706.5.1.1. is hereby amended to read as follows:

**5706.5.1.1 Location.**

Bulk transfer and process transfer operations shall be conducted in approved locations. Tank cars shall be unloaded only on private sidings or railroad-siding facilities equipped for transferring flammable or combustible liquids. Tank vehicle and tank car transfer facilities shall be separated from buildings, above-ground tanks, combustible materials, lot lines, public streets, public alleys, or public ways by a distance of ~~25 feet (7620 mm)~~100 feet (30,480 mm) for Class I liquids and ~~15 feet (4572 mm)~~25 feet (7,620 mm) for Class II and III liquids measured from the nearest position of any loading or unloading valve. Buildings for pumps or shelters for personnel shall be considered part of the transfer facility.

**SECTION 237.** Section 5706.5.1.19 is hereby added to read as follows:

**5706.5.1.19 Liquid Transfer.**

Class I, II, or III liquids shall be transferred from a tank vehicle or tank car only into an approved atmospheric tank or approved portable tank, except as provided in Sections 5706.5.4.4 through 5706.5.4.6.

**SECTION 238.** Section 5706.5.4.6 is hereby added to read as follows:

**5706.5.4.6 Time Limit for Unloading and Permit.**

Tank vehicles and railroad tank cars shall be unloaded as soon as possible after arrival at point of delivery and shall not be used as storage tanks. Tank cars shall be unloaded only on private sidings or railroad siding facilities equipped for transferring the liquid between tank cars and permanent storage tanks. A permit shall be required for a tank car to remain on a siding at the point of delivery while connected for transfer operations. Transfer operations shall be in accordance with DOT requirements and this code.

**SECTION 239.** Section 5706.6.1.12 is hereby added to read as follows:

**5706.6.1.12 Transfer of Cargo.**

Class I, II, or III liquids shall not be transferred from a tank vehicle or tank car into the cargo tank of another tank vehicle or tank car.

**Exception:** In an emergency, Class I, II, or III liquids may be transferred from a tank vehicle or tank car to the cargo tank of another tank vehicle or tank car when approved by the fire code official.

**SECTION 240.** Section 6104.4 is hereby amended to read as follows:

**6104.4 Multiple LP-gas ~~c~~Container ~~i~~Installations.**

. . .

Where one of these forms of protection is provided, the separation shall not be less than 25 feet (7620 mm) between LP-gas container groups. At LP-gas multi-container installations, the aggregate capacity of the containers shall be used to determine minimum distances to the buildings or adjoining property lines.

**SECTION 241.** Section 6104.5 is hereby added to read as follows:

**6104.5 Tank Car and Tank Vehicle Stations.**

Tank car and tank vehicle bulk loading and unloading stations shall be located not less than 100 feet from buildings, source of ignition, or adjoining property lines that may be built upon.

**SECTION 242.** Section 6104.6 is hereby added to read as follows:

**6104.6 Container Orientation.**

Unless special protection is provided and approved by the fire code official, LP-gas containers shall be oriented so that the longitudinal axes do not point toward other LP-gas containers, vital process equipment, control rooms, loading stations, or flammable liquid storage tanks.

**SECTION 243.** Section 6106.1 is hereby amended to read as follows:

**6106.1 Attendants.**

Dispensing of LP-gases shall be performed by a qualified attendant. Self-service LP-Gas dispensing open to the public is prohibited.

**SECTION 244.** Chapter 81 is hereby added to read as follows:

## CHAPTER 81 AUTOMOBILE WRECKING YARDS

### 8101 GENERAL

#### 8101.1 Scope.

Automobile wrecking yards shall comply with the requirements of Chapter 81. For rubbish handling operations, see Chapters 3 and 22.

### 8102 DEFINITIONS

#### 8102.1 Limited Application.

For the purpose of Chapter 81, the following term is defined in Chapter 2:

**MOTOR VEHICLE FLUIDS**.

### 8103 PERMITS

Permits to operate automobile wrecking yards are required. See Section 105.6.45.

### 8104 FIRE APPARATUS ACCESS ROADS

Fire apparatus access roads shall be constructed and maintained throughout the site in accordance with Section 503 of this code. Aisles or passageways shall be provided so as to allow fire department hose streams to reach all stored items and material.

### 8105 WELDING AND CUTTING

Welding and cutting operations shall be in accordance with Chapters 35 and 53 of this code.

## 8106 HOUSEKEEPING

Combustible rubbish accumulated on the site shall be collected and stored in approved containers, rooms, or vaults of noncombustible materials. Combustible vegetation, cut or uncut, shall be removed when determined by the fire code official to be a fire hazard.

## 8107 FIRE PROTECTION

Offices, storage buildings, and vehicles used for site operations shall each be provided with at least one portable fire extinguisher with a rating of not less than 4-A: 40-B: C. When required by the fire code official, additional portable fire extinguishers shall be provided in specific use areas in accordance with Section 906.

## 8108 TIRES

Tires shall be stored on racks in an approved manner or shall be piled in accordance with Chapter 34 and Sections 315.4 and 1105.

## 8109 BURNING OPERATIONS

The burning of salvage vehicles and salvage or waste materials shall be in accordance with section 307 and federal, State, or local air quality control regulations.

## 8110 MOTOR VEHICLE FLUIDS AND HAZARDOUS MATERIALS

### 8110.1 General.

The storage, use, and handling of motor vehicle fluids and hazardous materials, such as those used to operate air bags and electrical systems, shall be in accordance with Section 8110 and Chapters 23, 50, and 57.

**8110.2 Motor Vehicle Fluids.**

Motor vehicle fluids shall be drained from salvage vehicles when such fluids are leaking. Storage and handling of motor vehicle fluids shall be done in an approved manner. Flammable and combustible liquids shall be stored and handled in accordance with Chapters 23, 50, and 57.

**8110.3 Mitigation for Vehicle Fluid Leaks.**

Supplies or equipment capable of mitigating leaks from fuel tanks, crankcases, brake systems, and transmissions shall be kept available on-site. Single-use plugging, diking, and absorbent materials shall be disposed of as hazardous waste and removed from the site in a manner approved by federal, State, or local requirements.

**8110.4 Lead-Acid Batteries.**

Lead-acid batteries shall be removed from salvage vehicles when such batteries are leaking. Lead-acid batteries that have been removed from vehicles shall be stored in an approved manner.

**SECTION 245.** Chapter 82 is hereby added to read as follows:

**CHAPTER 82 INFRACTIONS**

**8201 GENERAL**

**8201.1 Offenses Deemed Infractions.**

In accordance with Section 109.3, the violation of the following sections or subsections shall be infractions:

| Section | Offense |
|---|---|
| 303.1--303.9 | Asphalt kettles |
| 304.1.1 | Waste material |
| 304.1.2 | Vegetation |
| 304.2 | Combustible waste rubbish—storage |
| 305.2 | Hot ashes and spontaneous ignition sources |
| 310. 4 | Removal "No smoking" sign |
| 315.3.2.1 | Stairway--storage under |
| 503.4 | Obstructing access roadway |
| 505.1 | Address identification |
| 507.5.4-- 507.5.5 | Obstruction of fire hydrants |
| 507.5.6 | Physical protection--fire hydrants |
| 507.5.7 | Fire-fighting water source markers |
| 507.5.8 | Identification--private fire hydrant |
| 507.5.9 | Private fire hydrant caps or plugs |
| 605.5 | Electrical extension cords |
| 901.7 | Failure to notify fire department |
| 901.6.3.1 | Signs--above ground water control valves |
| 901.6.3.2 | Locks--above ground water control valves |
| 901.6.3.3 | Identification--above ground water control valves |
| 906.1--906.10 | Fire extinguishers |
| 912.7 | Identification--Fire department connection |
| 912.8 | Breakable caps or plugs-fire department connection |
| 1007.9 | Exit doors identification |
| 1008.1.9.1 | Door--operating devices |
| 1104.3 | Sign illumination |
| 2003.2 | "No Smoking" signs within aircraft hangers |
| 2108.4 | Fire extinguisher--dry cleaning plant |
| 2108.5 | No smoking signs--dry cleaning plant |

| Section | Offense |
|---|---|
| 2311.2.2 | Waste oil storage |
| 2403.2.7 | Welding warning signs |
| 2403.4 | Operations and maintenance |
| 2403.4.3 | Metal waste cans for rags and waste |
| 2404.7.8.5 | Filter disposal |
| 2405.3.4 | Dip tank covers |
| 2405.4.2 | Portable fire protection equipment |
| 2406.5 | Maintenance--powder coating |
| 2407.1 | Maintenance--electrostatic apparatus |
| 2407.5.2 | Signs--"Danger" |
| 2408.5 | Sources of ignition (organic peroxides) |
| 2505.1 | Housekeeping--fruit ripening room |
| 2803.3.1 | Lumber yards--housekeeping |
| 2803.3.3 | Combustible waste |
| 3103.12.6.1 | Exit sign illumination |
| 3104.21 | Vegetation removal |
| 3603.2 | Open flame device--boat or marina |
| 3603.4 | Rubbish containers--marina |
| 3604.4 | Portable fire extinguishers--marinas |
| 4811.9 | Fire department access--motion picture production locations |
| 4811.12 | Blocked or obstructed fire hydrants and appliances |
| 5003.5 | Hazardous materials signage |
| 5003.7.1 | No smoking signs--hazardous materials |
| 5004.11 | Combustible materials clearance--hazardous materials storage |
| 5005.3.8 | Combustible materials clearance--hazardous materials use |
| 5303.4 | Markings--compressed gases |
| 5303.5 | Security--compressed gases |
| 5701.6 | Maintenance and operating practices--flammable and combustible liquids |

| Section | Offense |
|---|---|
| 5704.2.3.1 | "No smoking" sign |
| 5704.3.3.4 | Empty containers |
| 6107.2 | "No smoking" signs--LPG container |
| 6107.3 | Combustible material clearance LPG container |
| 8104 | Auto wrecking yards--fire apparatus access |

**8201.2 Penalties for Infractions.**

Every violation determined to be an infraction is punishable by a fine not to exceed $100 for the first violation, $200 for the second, $500 for the third, and $500 for each additional violation of the same ordinance within one year. Each such violation is a separate offense for each and every day during any portion of which such violation is committed or allowed to continue. For the purposes of this section a forfeiture of bail shall be equivalent to a conviction.

**SECTION 246.** Chapter 83 is hereby added to read as follows:

**CHAPTER 83 CONSOLIDATED FIRE PROTECTION DISTRICT OF LOS ANGELES FIRE CODE**

**8301 FIRE CODE ADOPTED**

Title 32 (Fire Code) of the Los Angeles County Code is hereby adopted and incorporated herein by reference at this point as if set forth at length herein as the Fire Code for the Consolidated Fire Protection District of Los Angeles County (District).

A copy of Title 32 of the Los Angeles County Code has been filed in the executive office of the Board of Supervisors and shall be at all times maintained by the executive office for use and inspection by the public.

**8302 AREAS REGULATED**

The District finds and declares that this code does not occupy the whole area of any subject matter regulated or covered therein except where the this code expressly states its intent to occupy the whole area of any subject matter regulated or covered therein.

Thus, in enacting this ordinance, it is not the intent of the District to preempt or otherwise nullify any other local ordinance containing different standards and protections.

**8303 APPLICABILITY**

Except as provided in California Health and Safety Code section 13869.7, this code shall apply to, and be enforceable in, all areas, including cities and unincorporated areas, served by the District. All references in this code to the Los Angeles County Building Code, Residential Code, Mechanical Code, Plumbing Code, and Electrical Code shall mean the appropriate legally applicable code adopted by each incorporated city that is a part of the District, or receives services from the District.

**SECTION 247.** Appendix B, Section B104.2 is hereby amended to read as follows:

**B104.2 Area ~~s~~Separation.** Portions of buildings which are separated by fire walls without openings, constructed in accordance with the ~~California~~Los Angeles County Building Code, are allowed to be considered as separate fire-flow calculation areas. Fire barriers or fire partitions cannot be used to create separate fire-flow calculation areas.

**SECTION 248.** Appendix B, Section B105.1 is hereby amended to read as follows:

**B105.1** **One-~~and two~~ family dwellings.** The minimum fire-flow ~~and flow duration~~ requirements for one-~~and two~~ family dwellings having a fire-flow calculation area that does not exceed 3,600 square feet (344.5 m²) shall be ~~1,000 gallons per minute(3785.4 L/min) for 1 hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5m2) shall not be less than that specified in Table B105.1.~~as follows:

1. For dwellings located on a lot of one acre or more, which are not located in a High or Very High Fire Hazard Severity Zones, the fire-flow shall be 750 gallons per minute (2,839 L/min) for a duration of two hours and public hydrants shall be spaced not more than 600 feet apart.

2. For dwellings located on a lot less than one acre, which are not located in a High or Very High Fire Hazard Severity Zones, the fire-flow shall be 1,250 gallons per minute (4,732 L/min) for a duration of two hours and public hydrants shall be spaced not more than 600 feet apart.

3. For dwellings located on a lot of one acre or more in High and Very High Fire Hazard Severity Zones, the fire-flow shall be 1,000 gallons per minute (3,785.4 L/min) for a duration of two hours and public hydrants shall be spaced not more than 600 feet apart.

4. For dwellings located on a lot less than one acre in High and Very High Fire Hazard Severity Zones, the fire-flow shall be 1,250 gallons per minute

(4,731.8 L/min) for a duration of two hours and public hydrants shall be spaced not more than 600 feet apart. Fire-flow and flow duration for one-family dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m²) shall not be less than that specified in Table B105.1.

**Exception:** For one-family dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m²), ~~A~~a reduction in required fire-flow of up to 50 percent, as approved, is allowed when the building is ~~equipped~~provided with an approved automatic sprinkler system. The resulting fire-flow shall not be less than 1,000 gallons per minute for the prescribed duration as specified in Table B105.1.

**SECTION 249.** Appendix B, Section B105.1.1 is hereby added to read as follows:

**B105.1.1 Two-Family Dwellings.**

The minimum fire-flow requirements for two-family dwellings having a fire-flow calculation area which does not exceed 3,600 square feet (344.5 m²) shall be 1,500 gallons per minute (5,678 L/min). Fire-flow and flow duration for two-family dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5 m²) shall not be less than that specified in Table B105.1.

**Exception:** A reduction in required fire-flow of up to 50 percent, as approved, is allowed for two-family dwellings when the building is provided with an approved automatic sprinkler system. The resulting fire-flow shall not be less than 2,000 gallons per minute for the prescribed duration as specified in Table B105.1.

**SECTION 250.** Appendix B, Section B105.2 is hereby amended to read as follows:

**B105.2 Buildings ~~o~~Other ~~t~~Than ~~o~~One- and ~~t~~Two-family ~~d~~Dwellings.**

The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

**Exception:** A reduction in required fire-flow of up to ~~75~~50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than ~~1,500~~2,000 gallons per minute (5,678 L/min) for the prescribed duration as specified in Table B105.1.

**SECTION 251.** Appendix B, Section B105.3 is hereby added to read as follows:

**B105.3 Mobile Home Parks.**

The required fire-flow for mobile home parks located in the Very High Fire Hazard Severity Zones shall be 4,000 gallons per minute (15,141.6 L/min) for a duration of two hours and with public hydrant spacing of not more than 600 feet apart. For recreational buildings located within a mobile home park, the fire-flow and duration shall be according to the fire-flow calculation area set forth in Table B105.1. For mobile home parks not located in the Very High Fire Hazard Severity Zones, the required fire-flow shall be 1,250 gallons per minute (4,731.8 L/min) for a duration of two hours and with public hydrant spacing of not more than 600 feet apart.

**SECTION 252.** Appendix B, Section B105.4 is hereby added to read as follows:

**B105.4 Land Subdivision Projects.**

For the subdivision of undeveloped land, due to the undetermined building size and type of construction, the required fire-flow shall be 5,000 gallons per minute (18,927 L/min) for a duration of five hours with public hydrant spacing of 300 feet. The required fire-flow for the subdivision of land consisting of lots having existing structures shall be in accordance with Table B105.1 for fire-flow and duration.

**SECTION 253.** Appendix C, Section C102.2 is hereby added to read as follows:

**C102.2 Location on Street.**

Public hydrants shall be required on both sides of the street whenever streets have raised median center dividers that make access to hydrants difficult, cause time delays, and/or creates an undue hazard as determined by the fire code official.

**SECTION 254.** Appendix C, Section C105.2 is hereby added to read as follows:

**C105.2 One-Family Dwelling.**

For one-family dwellings, fire hydrants shall be spaced no more than 600 feet apart. For urban properties with more than one dwelling unit per acre, no portion of lot frontage should be more than 450 feet via vehicular access away from a public hydrant. For non-urban properties less than one dwelling unit per acre, no portion of a structure

shall be farther than 750 feet away via vehicular access from a properly spaced public hydrant that meets the required fire-flow.

**SECTION 255.** Appendix C, Section C105.2.1 is hereby added to read as follows:

**C105.2.1 Cul-de-Sac Hydrant Location.**

When cul-de-sac depth exceeds 450 feet (residential) or 200 feet (commercial), hydrants shall be required at mid-block. Additional hydrants will be required if hydrant spacing exceeds specified distances.

**SECTION 256.** Appendix C, Section C105.2.2 is hereby added to read as follows:

**C105.2.2 Buildings Other than One-Family Dwelling Units.** For all occupancies other than one-family dwellings, including commercial, industrial, multi-family dwellings, private schools, and institutions, fire hydrant spacing shall be 300 feet. No portion of lot frontage shall be more than 200 feet via vehicular access from a public hydrant. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public hydrant.

**SECTION 257.** Appendix C Section C106 is hereby added to read as follows:

**C106 On-Site Hydrants.**

When any portion of a proposed structure exceeds the allowable distances from a public hydrant, via vehicular access, on-site hydrants shall be provided. The spacing distance between on-site hydrants shall be 300 to 400 feet. All on-site fire hydrants

shall have, at a minimum, a fire-flow of 1,250 gallons per minute at 20 psi for a duration of two hours. If more than one on-site fire hydrant is required, the fire-flow shall be in accordance with Table B105.1. All on-site hydrants shall be installed a minimum of 25 feet from a structure or protected by a two-hour firewall.

**Exception:** For fully sprinkled multi-residential structures, on-site hydrants may be installed a minimum of 10 feet from the structure.

**SECTION 258.** Appendix K, Section K101.2 is hereby amended to read as follows:

**K101.2** **Permits.** A~~n~~ place of assembly operational permit shall be required ~~for~~to operate temporary amusement haunted houses, ghost walks, or similar amusement uses in accordance with Appendix K101.2.

**SECTION 259.** Appendix K, Section K101.2.1 is hereby amended to read as follows:

**K101.2.1** **Permit ~~d~~Documents.** The permit ~~application~~applicant shall submit construction documents for approval which include, as a minimum, a dimensioned site plan and floor plan.

. . .

**SECTION 260.** Appendix K, Section K101.3 is hereby added to read as follows:

**K101.3 Jurisdictional Building and Planning Department Approval.**

Approval to operate a temporary amusement haunted house or similar use or to change the approved use of an existing building, or portion thereof, for temporary amusement haunted house or similar use shall be approved by the jurisdictional building official and planning official prior to the Fire Department's final construction approval and issuance of an operational permit.

**SECTION 261.** Appendix K, Section K102.2 is hereby amended to read as follows:

**K102.2 TEMPORARY AMUSEMENT HAUNTED HOUSE.**

A temporary building or structure, or portion thereof, which contains a system that transports passengers or provides a walkway through a course so arranged that the means of egresses are not apparent due to theatrical distractions, not visible due to low illumination, are disguised or are not readily available due to the method of transportation through the building or structure usually used during the Halloween season for amusement or entertainment purposes where decorative materials, props, visual effects, or audio effects are utilized to create theatrical environment. A temporary amusement haunted house may be deemed a special amusement building by the fire code official depending on the floor plan layout, lighting, or visual distractions used and

the effects those elements have on identifying and accessing the means of egress in the event of a fire or an emergency.

**SECTION 262.** Appendix K, Section K102.3 is hereby amended to read as follows:

**K102.3 GHOST WALKS.**

Similar to temporary amusement haunted houses and may include both indoor and outdoor areas ~~where the means of egresses are similarly not readily identifiable~~used for amusement or entertainment purposes.

**SECTION 263.** Appendix K, Section K102.4 is hereby added to read as follows:

**K102.4 TEMPORARY.**

Temporary shall mean amusement use of buildings or structures, or portion thereof, at one location for not more than 90 days within a one-year period.

**SECTION 264.** Appendix K, Section K102.5 is hereby added to read as follows:

**K102.5 SPECIAL AMUSEMENT BUILDING.**

Any temporary or permanent building or portion thereof that is occupied for amusement, entertainment, or educational purposes, and that contains a device or system that conveys passengers or provides a walkway along, around, or over a course in any direction so arranged that the means of egress path is not readily apparent due to visual or audio distractions or is intentionally confounded or is not readily available

because of the nature of the attraction or mode of conveyance through the building or structure. See California Building Code section 411.2.

**SECTION 265.** Appendix K, Section K103.1 is hereby amended to read as follows:

**K103.1 Allowable ~~s~~Structures.**

Temporary amusement haunted houses, ghost walks, and similar amusement uses which meet the definition of a Special Amusement Building shall only be located in structures that comply with the provisions for Special Amusement Buildings in accordance with the California Building Code.

**SECTION 266.** Appendix K, Section K103.7 is hereby amended to read as follows:

**K103.7 Fire ~~p~~Protection.**

~~Haunted houses and ghost walks~~Temporary amusement haunted houses, ghost walks, and similar amusement uses which meet the definition of a Special Amusement Building shall be provided with fire protection systems in accordance with Appendix K103.~~6~~7.

. . .

**SECTION 267.** Appendix K, Section K103.7.2 is hereby amended to read as follows:

**K103.7.2 Fire ~~d~~Detection ~~s~~Systems.**

An approved automatic fire detection system shall be provided in accordance with Section 907.2.12 as required for Special ~~a~~Amusement ~~b~~Buildings.

**SECTION 268.** Appendix K, Section K103.7.4 is hereby amended to read as follows:

**K103.7.4 Emergency ~~v~~Voice ~~a~~Alarm.**

Provide an emergency voice/alarm communication system in accordance with Section 907.2.12.3 as required for Special ~~a~~Amusement ~~b~~Buildings.

**SECTION 269.** Appendix K, Section K103.7.5 is hereby amended to read as follows:

**K103.7.5 Portable ~~f~~Fire ~~e~~Extinguishers.**

See Section K103.16. Fire extinguishers shall have a minimum 2A-10B:C rating. Fire extinguishers shall be properly mounted and shall be visible and accessible at all times. Clearly identify locations with signs or reflective tape. Fire extinguishers shall be located within 50 feet travel distance from anywhere in the building.

**SECTION 270.** Appendix K, Section K103.9 is hereby amended to read as follows:

**K103.9 Decorative ~~m~~Materials and Interior Finishes.** Interior wall, ceiling, and floor finishes shall be Class A rated in accordance with the California Building Code.

**SECTION 271.** Appendix K, Section K103.15 is hereby amended to read as follows:

**K103.15 Maintenance.** Good housekeeping shall be maintained throughout exhibit and exit pathways, at all times. The means of egress system shall not be obstructed during event operation.

**SECTION 272.** Appendix K, Section K103.16 is hereby added to read as follows:

**K103.16 Portable Fire Extinguishers.**

Fire extinguishers shall have a minimum 2A-10B:C rating. Fire extinguishers shall be properly mounted and shall be visible and accessible at all times. Clearly identify locations with signs or reflective tape. Fire extinguishers shall be located within 50 feet travel distance from anywhere in the building or structure.

**SECTION 273.** Appendix L is hereby added to read as follows:

**APPENDIX L RIFLE RANGE**

**L101 GENERAL**

**L101.1 Scope.**

Rifle ranges shall comply with the basic fire and life safety requirements in this appendix.

**L101.2 Permits.**

A permit from the fire code official is required to establish, maintain, or operate a rifle range. Applications for permits shall be referred to the chief law enforcement officer for approval.

**L102 DEFINITIONS**

**RIFLE RANGE.** Any indoor or outdoor firing, shooting, or target range established, maintained, or operated for the discharge of a rifle, pistol, revolver, shotgun, or firearm.

## L103 RANGE OFFICER

### L103.1 Supervision.

Rifle ranges shall not be operated or maintained without the supervision of a qualified range officer.

### L103.2 Qualifications.

To qualify as a range officer, individuals shall demonstrate to the fire code official and chief law enforcement officer their knowledge of firearms and ammunition, including the general rules of safety and the provisions of this code relative thereto. Individuals shall possess a valid certificate stating he or she is a qualified range officer.

## L104 AMMUNITION

### L104.1 Inspection and Disposal.

Ammunition shall be inspected and approved by the range officer before permission to fire or discharge the same is granted. Ammunition that will not fire or discharge or which is otherwise defective shall be surrendered to the range officer for safe disposal.

## L105 FIRE APPLIANCES

### L105.1 Portable Fire Appliances.

Rifle ranges shall be equipped with portable fire appliances and other equipment required by the fire code official. Additional fire-prevention measures required by the fire code official shall be provided.

**L106 VEGETATION**

**L106.1 Removal.**

Rifle ranges, including striking grounds, shall be completely clear of vegetation within a safe distance from the firing line.

**L107 SIGNAGE**

**L107.1 Warnings.**

Rifle ranges which are not fenced shall be posted with approved warning posters or signs to notify and protect the public from danger.

**SECTION 274.** Appendix M is hereby added to read as follows:

**APPENDIX M LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONES**

**M101 GENERAL**

**M101.1 Scope.**

This appendix defines local agency very high fire hazard severity zones and provides the legal description of the geographic areas for the installation of fire sprinkler systems in occupancies as required by Section 903.2.11.7.

**M101.2 DEFINITIONS**

See Chapter 49 for definitions.

**M102 LOCAL AGENCY VERY HIGH FIRE HAZARD SEVERITY ZONES**

**M102.1 General.**

Local Agency Very High Fire Hazard Severity Zones, as defined in Section 4902.1 of this code, are hereby designated in those areas as specified in sections M102.2 and M102.3 of Appendix M. See also Chapter 49.

**M102.2 Designation of Local Agency Very High Fire Hazard Severity Zones (VHFHSZ) in Incorporated Cities of the Consolidated Fire Protection District of Los Angeles County.**

The following incorporated cities are designated as being located wholly or in part in the Local Responsibility Area Very High Fire Hazard Severity Zone: Agoura Hills, Azusa, Bradbury, Calabasas, Claremont, Covina, Diamond Bar, Duarte, Glendora, Hidden Hills, Irwindale, La Canada Flintridge, La Habra, La Mirada, Malibu, Palmdale, Palos Verdes Estates, Pomona, Rancho Palos Verdes, Rolling Hills, Rolling Hills Estates, San Dimas, Santa Clarita, Walnut, Westlake Village, and Whittier.

**M102.3 Designation of Local Agency Very High Fire Hazard Severity Zones (VHFHSZ) in Unincorporated Areas of Los Angeles County.**

The following unincorporated areas located near the following jurisdictions are designated as being located wholly or in part in the Local Responsibility Area Fire Hazard Severity Zones: Angeles National Forest, City of Hidden Hills, parcels between the City of Agoura Hills and the City of Calabasas, Santa Monica Mountains, parcels South of the City of Diamond Bar, parcels North of the City of Whittier, San Dimas, Covina, West Covina, parcels located East of the Cities of Covina and West Covina, Universal City, parcels West of Rolling Hills, Baldwin Hills, Catalina Island, Claremont,

Claremont Island, Glendora, Azusa, La Habra Heights, Whittier, West Hills and Valley Boulevard, the Malibu-Santa Monica Mountains Area, and the San Gabriel Mountains Southface Area.

**M102.4 Parcel Identification.**

All map and parcel identification, fire hazard severity zone designation, and other information for those areas as specified in Sections M102.2 and M102.3 shall be accessible to property owners and the public at a Fire Department's Fire Prevention Engineering Unit Office or at the Forestry Division's Fuel Modification Unit Office.

**M102.5 Periodic Review.**

The fire code official shall periodically review the areas in the Consolidated Fire Protection District of Los Angeles County identified as Fire Hazard Severity Zones pursuant to this section, and as necessary, make recommendations to revise the Fire Hazard Severity Zones. See California Government Code sections 51175 through 51189.

**M103 MALIBU-SANTA MONICA MOUNTAINS AND THE SAN GABRIEL MOUNTAINS SOUTHFACE AREAS**

**M103.1 General.**

Malibu-Santa Monica Mountains and the San Gabriel Mountains Southface Areas are hereby designated in those areas as specified in sections M103.2 and M103.3 of Appendix M. See also Section 903.2.11.7.

**M103.2 Malibu-Santa Monica Mountains Area.**

Beginning at a point where the Los Angeles County-Ventura County boundary line meets the Pacific Ocean means high tide line. This being the true point of beginning. Thence, northeasterly along said Los Angeles County boundary line and all its various courses to the City of Los Angeles boundary line along the southerly line of Section 9, Township 1 North, Range 17 West, San Bernardino Base Meridian. Thence, southeasterly along said city boundary and all its various courses to the Pacific Ocean mean high tide line. Thence, westerly along said mean high tide line and all its various courses to the point of the beginning.

**M103.3 San Gabriel Mountains Southface Area.**

Beginning at a point where Interstate 5 Freeway and Latitude 34 degrees, 21 minutes (Northern Hemisphere) intersect. This being the true point of beginning. Thence, east along said Latitude of 34 degrees, 21 minutes to the Los Angeles County-San Bernardino County boundary line. Thence, south along the Los Angeles County Boundary to State Highway 30 (Baseline Road). Thence, west on State Highway 30 to Interstate Freeway 210, along Interstate 210 Freeway to the Interstate 5 Freeway. Thence, north on said Interstate 5 Freeway to the point of beginning.

**SECTION 275. Findings in Support of Adoption of More Restrictive Building Standards.**

The provisions of this ordinance contain various changes, modifications, and additions to the 2013 California Fire Code. Some of those changes are administrative in nature in that they do not constitute changes or modifications to requirements

contained in the building standards adopted by the State Fire Marshall and published in the California Building Standards Code. Pursuant to Health and Safety Code sections 17958.5, 17958.7, and 189415, the Board of Supervisors hereby expressly finds and determines that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code, contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles and in the Consolidated Fire Protection District of Los Angeles County. This expressed finding is supported and based upon the following more specific determinations:

CLIMATIC - The County of Los Angeles is located in an area subject to climatic conditions with long periods of low humidity and hot weather, combined with unpredictable seasonal high winds (Santa Ana wind conditions), resulting in increased exposure to fire risk. This combination of events creates an environment that is conducive to rapidly spreading fires. Control of such fires requires rapid response. With the time that is required to deal with potential obstacles from the wind, such as fallen trees, street lights, and utility poles, in addition to the time required to climb 75 feet vertically up flights of stairs, the ability to respond rapidly is negatively impacted. Additionally, there is a significant increase in the amount of wind 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. High winds will also cause burning embers to become airborne resulting in the rapid spread of a fire to nearby structures. Immediate

containment of a fire is the only method by which it can be controlled during high wind conditions. In high fire severity zones, a unique combination of low humidity, strong winds, and dry vegetation exists.

GEOLOGICAL - The County of Los Angeles 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. Tall buildings would become 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 significant physical obstacles and logistical challenges. With the probability of strong aftershocks, there exists a need to provide increased protection for anyone on upper floors.

Geological conditions created by the numerous faults will result in increased fire danger to structures, delayed fire department response, and unique rescue challenges. Seismic events of sufficient magnitude will cause substantial damage to structures. These damages are likely to be accompanied by a substantial number of fires that may exceed the fire department suppression capabilities. Accordingly, built-in fire suppression systems provide the only adequate measure to mitigate the potential hazards from and damage caused by such fires.

The County of Los Angeles is subject to occasional severe rainstorms. The impacts from these rainstorms are exacerbated if hillside areas have been burned by wildland fires because significant mud and debris flows can occur. Mud and debris

flows can impair fire department access or delay response times if access roads are obstructed by mud or debris.

TOPOGRAPHICAL - The topographical conditions of the County of Los Angeles includes many mountains, hills, and canyons which tend to accelerate the periodic high-velocity winds by means of a venturi effect. These canyon winds and the significant growth of vegetation of a combustible nature increase the fire danger. Additionally, long periods of dry, hot weather, combined with unpredictable seasonal winds (Santa Ana wind conditions) result in increased exposure to fire risk. The hillside areas have access roads that are narrow, steep, and contain many sharp curves, all of which makes timely response by large fire apparatus difficult.

The specific sections of this code that constitute more restrictive building standards are identified in the table set forth below. The more restrictive building standards contained in this code and identified in the table below shall be applicable only in those cities served by the District which have ratified the aforesaid sections in accordance with California Health and Safety Code section 13869.

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 304.1.2 – Vegetation | Climatic and Topographical | Local amendment requiring brush clearance in order to maintain defensible space for fire operations that is necessary due to Los Angeles County's unique climate and topography to reduce risk of fire and to minimize the spreading of fire to structures. |
| 315.3.2.1 – Storage under stairways | Climatic | Prevents storage of combustible materials under stairways to help prevent fire in stairways from preventing safe exit in event of fire. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 316 – Structures and outdoor storage underneath high-voltage transmission lines | Climatic, Geological, and Topographical | Imposes additional requirements for construction under high-voltage transmission lines in order to protect property, the public, and firefighters responding to emergencies. Necessary due to Los Angeles County's unique climate and topography to reduce risk of fire, to reduce the possibility of fires being causes by downed high-voltage transmission lines, to minimize the spreading of fires that may begin under transmission lines, and to protect firefighters responding to emergencies under transmission lines. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 317 – Rooftop gardens and landscaped roofs. | Climatic and Topographical | Provides various design and location requirements for roof gardens and landscaped roofs for residential and commercial structures. Necessary due to Los Angeles County's unique climate and topography to reduce risk of fire, to reduce the possibility of fires being causes by rooftop vegetation, to minimize the spreading of fires, and to protect firefighters responding to emergencies by ensuring that the integrity of the roof is not compromised by a garden or landscaping. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 326.7 – Fire protection facilities required | Climatic, Geological, and Topographical | Local amendment to require fire safety measures including but not limited to water supply, firebreaks, posting of fire watchers, access roads, restriction of activities during high fire hazard and other conditions to maintain reasonable fire safety. Necessary due to Los Angeles County's unique climate and topography to reduce risk of fire, to reduce the possibility of wildland fires spreading to structures, and to minimize impacts of fire. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 326.12.2 – Chimneys | Climatic and Topographical | Local amendment to reduce the threat of fires by requiring spark arrestors on chimneys that is necessary due to Los Angeles County's unique climate and topography to reduce risk of fire and to minimize impacts of fire. Such spark arrestors reduce the likelihood of embers exiting a chimney and igniting a fire. |
| 326.14 – Roadway clearance | Climatic and Topographical | Local amendment requiring clearance of roadways to provide adequate access for firefighting apparatus, to create defensible space for fire operations, and to reduce the possibility of wildland fires spreading to structures. Necessary due to Los Angeles County's unique climate and topography. |
| 503.1.2 – Additional access | Climatic, Geological, and Topographical | Provides for additional access requirements necessary because of terrain, climate, or other factors that limit access. Necessary to ensure adequate response times due to the unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 503.2.1 – Dimensions | Climatic, Geological, and Topographical | Requires unobstructed clearance to sky on fire apparatus access roads with exception for protected tree species. Necessary to prevent obstruction of access roads by tree limbs or other obstructions and thus allow for quick response times to fires and other emergencies. Necessary to ensure adequate response times due to the unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 503.2.5 – Dead-ends | Climatic, Geological, and Topographical | Provides for more stringent width, turning radius, and grade specifications for access roads to ensure access for fire apparatus. Necessary due to unique climatic and topographical conditions that increase the risk of fires. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 503.4 – Obstruction of fire apparatus access roads | Climatic, Geological, and Topographical | Adds speed bumps and speed humps to list of prohibited obstructions to fire apparatus access roads. Speed bumps and speed humps reduce response times to fires and other emergencies because fire apparatus have to slow down to pass over them or drive around them. Necessary to ensure adequate response times due to the unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 503.4.1 – Traffic-calming devices | Climatic, Geological, and Topographical | Requires fire code official approval to install traffic calming devices such as speed bumps and speed humps. Such devices can reduce response times to fires and other emergencies. Necessary to ensure adequate response times due to the unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. This section is necessary because the risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 503.7 – Fire apparatus access roads in recreational vehicle, mobile home, manu-factured housing, sales lots, and storage lots | Climatic, Geological, and Topographical | Requires fire apparatus access roads in recreational vehicle, mobile home, manufactured housing, sales lots, and storage lots. Necessary to ensure adequate water supply and access to such locations due to the unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because the risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 503.7.1 – Fire apparatus access roads in mobilehome parks and special occupancy parks | Climatic, Geological, and Topographical | Requires additional fire apparatus access roads in mobilehome parks and special occupancy parks. Necessary to ensure adequate water supply and access to such locations due to the unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 504.5 – Roof top barriers and parapets | Climatic, Geological, and Topographical | Provides various design and location requirements for solar photovoltaic systems installed on roofs of buildings for residential and commercial structures. Access and spacing requirements ensure firefighter access to the roof, provide access pathways to specific areas of the roof, provide for venting cut-out areas, and to provide emergency egress from the roof. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| 507.5.1.2 – Pool draft system in fire hazard severity zones | Climatic, Geological, and Topographical | Requires a draft hydrant for swimming pools and spas located in the fire hazard severity zone in order to provide a source of water to fight fires. Necessary because of unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 507.5.10 – Draft system identification sign | Climatic, Geological, and Topographical | Provides posting of sign to notify fire department of draft hydrant for swimming pools and spas in fire hazard severity zone. Necessary because of unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 901.6.3.1 – Above-ground water control valve signs | Climatic, Geological, and Topographical | Provides signage requirements for water control valves in order to facilitate fire fighter identification and use of said valves in an emergency. Necessary because of unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 901.6.3.4 – Clear space around above-ground water control valve | Climatic, Geological, and Topographical | Provides clearance requirements for water control valves in order to facilitate fire fighter identification and use of said valves in an emergency. Necessary because of unique climatic and topographical conditions that increase the risk of fires in fire hazard severity zones. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 903.2.11.3 – Building over three stories in height | Climatic and Geological | Provides an additional level of protection to occupancies in case of a fire by requiring installation of automatic fire sprinklers. Necessary because of large number of buildings over three stories in Los Angeles County that increases the risk of fire due to damage or collapse of buildings due to the increased prevalence of earthquakes in Los Angeles County. |
| 903.2.11.7 – Occupancies in Fire Hazard Severity Zones and in the Malibu- Santa Monica Mountains or San Gabriel Southface areas | Climatic, Geological, and Topographical | Provides an additional level of protection to occupancies in case of a fire by requiring installation of automatic fire sprinklers. Necessary because of unique climatic and topographical conditions that increase the risk of catastrophic fires in fire hazard severity zones and due to the topography that reduces response times to fires. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 903.4.2 – Alarms | Climatic and Geological | Requires installation of exterior fire alarm visual device. Visual alarms are necessary to warn both disabled and non-disabled persons. Necessary because of increased likelihood of fires due to climatic conditions. Further necessary because risk of fire is increased due to the prevalence of earthquakes in the County. |
| 903.7 – Buildings four or more stories | Climatic and Geological | Requires installation of devices for the automatic fire sprinkler system within an exit stairway enclosure. Necessary because of increased likelihood of fires due to climatic conditions. Further necessary because risk of fire is increased due to the prevalence of earthquakes in the County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 905.2.1 – Class I standpipes; 905.2.1.1, 905.2.1.2; 905.2.1.3 | Climatic | Construction and installation requirements for Class I standpipes to ensure adequate fire protection systems and water supply due to fires in Los Angeles County's hot and windy climate. |
| 905.4 – Location of Class I standpipe hose connections | Climatic | Installation/Regulation of Fire Protection System to ensure proper location of hose connection to control fires in Los Angeles County's hot and windy climate. |
| 905.5.3 – Class II System 1 1/2-inch hose | Climatic | Installation and regulation of interior wet standpipes to ensure adequate fire protection system due to fires in Los Angeles County's hot and windy climate. |
| 905.6.1 – Protection | Climatic | Local amendment regarding installation and regulation of Fire Protection System to ensure proper location of hose connection to control fires. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 905.6.1.1 – Size | Climatic | Size requirements for Class III standpipes to ensure adequate fire protection system. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 905.9 – Riser shutoff valve supervision and drain | Climatic | Additional requirements to fire protection system for testing, maintenance and operation. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 905.12 – Basement pipe inlets, 905.12.1, 905.12.2, 905.12.3, 905.12.4 | Climatic | Requires installation and other guidelines related to inlets for fire protection systems in basements. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 910.2.1.1 – Group S-2 | Climatic and geological | Requires smoke and heat removal for basement level parking garages. Necessary to increase ability of fire fighters to respond to fires in parking garages. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions and the prevalence of earthquakes in Los Angeles County. |
| 910.4 – Mechanical smoke exhaust | Climatic | Requirements for mechanical smoke exhaust in buildings. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 912.2.1 – Visible location | Climatic, Topographical, Geological | Requires fire department connections to be located within 150 feet of a public fire hydrant and at a safe distance from the building. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. Further necessary because the risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 912.7 – Identification | Climatic, Topographical | Requires red paint on fire department connections subject to rust or corrosion in order to identify them to firefighters and protect from the elements. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 912.8 – Breakable caps or plugs | Climatic, Topographical | Requires breakable caps or plugs for fire hose couplings to protect them from the elements and to ensure easy access to the fire department connection during fires. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 914.9.1 – Spray booths | Climatic | Requires spray booths to have automatic fire sprinkler system protection under specified conditions. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. Further necessary because the risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 1007.9.1 – Signage for high-rise buildings | Climatic, Geological, and Topographical | Requirements for signage warning against elevator use in an emergency. Necessary to ensure proper notice and evacuation in case of fire or other emergency. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. Further necessary because risk of fire and need for evacuation is increased due to the prevalence of earthquakes in Los Angeles County. |
| 1103.2 – Emergency Responder Radio Coverage in Existing buildings | Climatic and Geological | Adopts International Fire Code requirements for radio coverage in existing buildings. Necessary to increase fire and life safety and increase ability of fire fighters to rescue people trapped in buildings during an emergency and to communication between fire fighters when responding to fire and life safety emergencies. Necessary because of the prevalence of earthquakes in Los Angeles County and the risk of fires due to the climate in Los Angeles County. |
| 1104 – Means of egress for existing buildings | Climatic and Geological | Adopts International Fire Code requirements regarding egress requirements for existing buildings. Necessary to increase fire and life safety and to minimize fire danger from hazardous materials. Necessary because risk of fire and spillage of hazardous materials is increased due to the prevalence of earthquakes in Los Angeles County. |
| 1104.6.7 – Maintenance | Climatic and Geological | Adopts requirement to keep fire escapes clear and unobstructed to allow for safe evacuation of buildings in event of fire or other life safety emergency. Necessary to increase fire and life safety in evacuations because of the prevalence of earthquakes in Los Angeles County and the risk of fires due to the climate in Los Angeles County. |
| 1105.1 – Tire Storage Yards | Climatic, Topographical, and Geological | Requirement for fire access roads for tire storage yards to enable fire apparatus to gain access to fight fires. Necessary to increase fire and life safety and to minimize risk of fire spreading beyond storage areas. Necessary because risk of fire due to climate and topography in Los Angeles County and due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 2007.9 – Helistops for high rise | Climatic and Topographical | Provides for additional public safety evacuation/landing area on high-rise buildings. Necessary due to large number of high-rise buildings in Los Angeles County and difficulty in evacuating high-rise buildings in case of fire or other emergency. |
| 2007.10 – Helistops in Fire Hazard Severity Zones; 1107.10.1 Surface | Climatic and Topographical | Provides for requirements for helistops in fire hazard severity zones to enable helicopters and associated water tenders and support equipment to safely operate to conduct operations to combat fires in those areas. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions and topography that hinders the ability for fire apparatus to gain access to remote portions of the County. |
| 2007.10.2 – Hydrant | Climatic; Topographical | Requires a hydrant next to helistops in fire hazard severity zones to enable helicopters to fill their tanks to facilitate water drops on wildland fires in those areas. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions and topography that hinders the ability for fire apparatus to gain access to remote portions of the County. |
| 2007.10.3 – Access | Climatic; Topographical | Adopts requirements for fire apparatus access to helistops in fire hazard severity zones to enable support equipment and apparatus associated with helicopter operations to combat fires in those areas. Necessary because of increased danger of fire in the county due to hot and windy conditions and topography that hinders the ability for fire apparatus to gain access to remote portions of the County. |
| 2404.4 – Fire protection | Climatic | Provides for spray booths to be equipped with automatic fire sprinklers. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 2503, 2504, 2505, 2506, 2507 – Fruit and crop ripening | Climatic and Geological | Provides requirements for fruit and crop ripening operations to prevent ignition of ethylene gas and reduce risk of fire and explosion. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions and to reduce risk of fires and explosion from earthquakes. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 2810 – Storage of combustible idle pallets | Climatic | Provides requirements for the safe storage of combustible pallets to reduce risk of fire. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 3104.21 – Combustible vegetation | Climatic and Topographic | Increased clearance requirements for combustible vegetation near tents and membrane structures. Necessary to increase fire and life safety around such structures and to create defensible space. Necessary because of fire risk due to climate and unique topography of Los Angeles County. |
| Table 3206.2 | Climatic and Geological | Provides for increased separation for aisles. Necessary because of unique climatic conditions that increase the risk of fires. Further necessary because risk of fire is increased due to the prevalence of earthquakes in Los Angeles County. |
| 3206.7.1 – Vents | Climatic | Requires installation of smoke and heat vents. Necessary because of increased danger of fire in Los Angeles County due to hot and windy conditions. |
| 3208.2.2 – Racks with solid shelving | Climatic | Provides for effectiveness of sprinkler systems by prohibiting solid shelves, which would restrict water from extinguishing fire on shelves. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions. |
| 3505.9 – Backflash prevention | Geological | Requires protective devices to be installed on fuel gas and oxygen lines to increase safety and reduce risk of explosion and fire. Necessary because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 4907.1 – General | Climatic and Topographical | Local amendment providing that defensible space requirements shall also comply with Chapter 3 of this code. Necessary due to Los Angeles County's unique climate and topography to reduce risk of fire and to minimize impacts of fire in Fire Hazard Severity Zone. |
| 5003.11.3.8 – Floors | Climatic and Geological | Creates requirements for floors in buildings where hazardous materials are used or stored. Necessary to increase fire and life safety and to minimize fire danger from hazardous materials. Necessary because risk of fire and spillage of hazardous materials is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 5704.2.8.3 – Secondary containment | Geological | Requires secondary containment of flammable and combustible liquids that are necessary to increase fire and life safety and to prevent fires involving flammable and combustible liquids from spreading. Necessary because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 5704.2.8.16.1 – System requirements | Climatic and Geological | Requires foam deluge system. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 5704.2.9.1.1 – Required foam fire protection systems | Geological and Climatic | Requires all above-ground tanks exceeding 1,500 square feet of liquid surface area used for the storage of Class I or Class II flammable liquids to be provided with foam fire protection. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 5704.2.9.6.1.3 – Location of tanks for boilover liquids | Geological and Climatic | Provides for additional spacing between tanks to reduce fire danger and help prevent fire from spreading to adjacent tanks. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 5704.3.7.6 – Construction | Geological and Climatic | Construction and fire access requirements for liquid storage rooms. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of explosion or container failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 5706.5.1.1 – Location | Geological and Climatic | Provides increased distances for bulk transfer and process transfer operations so that they are farther away from the public and other buildings. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| 5706.5.1.19 – Liquid transfer | Geological and Climatic | Class I, II, or III liquids shall be transferred from a tank vehicle or tank car only into an approved atmospheric tank or approved portable tank. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County. |
| 6104.4 – Multiple container installation | Geological and Climatic | Requirements for LP gas storage tank distances. Necessary because of increased danger of fire in Los Angeles County due to climatic conditions and because risk of leaks or tank failure is increased due to the prevalence of earthquakes in Los Angeles County |
| 8104 – fire apparatus access roads; 8106 – housekeeping; 8108 tires | Climatic and Topographical | Creates requirements for fire access roads and storage requirements for tire storage in automobile wrecking yards. Necessary to enable fire apparatus and fire fighters to gain access to fight fires and respond to emergencies. Necessary because risk of fire due to climate and topography in Los Angeles County. |
| APPENDIX B Section B105.1 – One-family dwellings | Topographical and Climatic | Provides for increased fire-flow to allow for more water to be available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX B Section B105.1.1 – Two-family dwellings | Topographical and Climatic | Provides for increased fire-flow to allow for more water to be available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX B Section B105.2 – Buildings other than one-and two-family dwellings | Topographical and Climatic | Provides for increased fire-flow to allow for more water to be available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX B Section B105.3 – Mobile home parks | Topographical and Climatic | Provides for increased fire-flow at mobile home parks in Very High Fire Hazard Severity Zones to allow for more water to be available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |

| Section | Local Condition | Explanation and Findings |
|---|---|---|
| APPENDIX B Section B105.4 – Land subdivision projects | Topographical and Climatic | Provides for increased fire-flow for subdivisions of land to allow for more water to be available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX C, Section C102.2 – Location on street | Topographical and Climatic | Provides for hydrant spacing on streets to ensure hydrants are accessible to firefighters. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX C, Section C105.2 – One-family dwelling | Topographical and Climatic | Provides for hydrant spacing to ensure that water is available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX C, Section C105.2.1 – Cul-de-sac hydrant location | Topographical and Climatic | Provides for hydrant spacing for cul-de-sacs to ensure that there is adequate water supply available to fight fires. Necessary because of increased danger of fire in the County due to climatic and topographical conditions. |
| APPENDIX C, Section C105.2.2 - Buildings other than one-family dwelling units | Topographical and Climatic | Provides for hydrant spacing for buildings other than single family dwellings to ensure that there is adequate water supply available to fight fires. Necessary because of increased danger of fire in the County due to climatic and topographical conditions. |
| APPENDIX C, Section C106 - On-site hydrants | Topographical and Climatic | Provides requirements for on-site hydrants to ensure that there is adequate water supply available to fight fires. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions. |
| APPENDIX K, Section K103 – General Requirements | Topographical, Geographic, and Climatic | Provides various design and location requirements for temporary haunted houses, ghost walks, and similar amusement uses where the means of egress are not apparent due to decorative materials confusing sounds and or visual effects. Necessary because of increased danger of fire in Los Angeles County due to climatic and topographical conditions and the prevalence of earthquakes in Los Angeles County. |

**SECTION 276.** This ordinance shall become effective 30 days after it is adopted.

[3201FIRECODESKCC]

**SECTION 277.** This ordinance shall be published in The Daily Commerce a newspaper printed and published in the County of Los Angeles.

Don Knabe
Chairman

ATTEST:

Sachi A. Hamai
Executive Officer -
Clerk of the Board of Supervisors
County of Los Angeles

I hereby certify that at its meeting of March 25, 2014 the foregoing ordinance was adopted by the Board of Supervisors of said County of Los Angeles by the following vote, to wit:

| | Ayes | | Noes |
|---|---|---|---|
| Supervisors | Gloria Molina | Supervisors | None |
| | Mark Ridley-Thomas | | |
| | Zev Yaroslavsky | | |
| | Don Knabe | | |
| | Michael D. Antonovich | | |

Effective Date: April 24, 2014

~~Operative Date:~~

Sachi A. Hamai
Executive Officer -
Clerk of the Board of Supervisors
County of Los Angeles

I hereby certify that pursuant to Section 25103 of the Government Code, delivery of this document has been made.

SACHI A. HAMAI
Executive Officer
Clerk of the Board of Supervisors

By _____
Deputy

APPROVED AS TO FORM:
JOHN F. KRATTLI
County Counsel

By _____
Richard D. Weiss
Chief Deputy County Counsel

S:\Ordinances\County Counsel\2014\2014-0014

## ANALYSIS

This ordinance repeals those provisions of Title 31 - Green Building Standards Code of the Los Angeles County Code, which had incorporated portions of the 2010 Edition of the California Green Building Standards Code by reference, and replaces them with provisions incorporating portions of the 2013 California Green Building Standards Code, published by the California Building Standards Commission, by reference, with certain changes and modifications.

State law requires that the County adopt ordinances that contain the same requirements as are contained in the building standards published in the most recent edition of the California Green Building Standards Code. State law allows the County to change or modify these requirements only if it determines that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions.

The changes and modifications to requirements contained in the building standards published in the 2013 California Green Building Standards Code, which are contained in this ordinance, are based upon express findings, contained in the ordinance, that such changes are reasonably necessary due to local climatic, geological, or topographical conditions. This ordinance also makes certain modifications to the administrative portions of Title 31, and incorporates, by reference, certain administrative provisions contained in Title 26 - Building Code.

JOHN F. KRATTLI
County Counsel

By Carole B. Suzuki
CAROLE B. SUZUKI
Deputy County Counsel
Public Works Division

CBS:gjv

Requested: 7/03/13
Revised: 09/24/13

HOA.996319.2

**ORDINANCE NO. _____**

An ordinance amending Title 31 – Green Building Standards Code of the Los Angeles County Code, by adopting the 2013 California Green Building Standards Code by reference, with certain changes and modifications, and making other revisions thereto.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Chapters 2 through 8, Appendix A4, and Appendix A5, which incorporate by reference and modify portions of the 2010 California Green Building Standards Code, are hereby repealed.

**SECTION 2.** Section 100 is hereby amended to read as follows:

**100 ADOPTION BY REFERENCE**

Except as hereinafter changed or modified, Sections 102 through 119 of Chapter 1 of Title 26 of the Los Angeles County Code are adopted by reference and incorporated into this Title 31 as if fully set forth below, and shall be known as Sections 102 through 119 of Chapter 1 of Title 31 of the Los Angeles County Code.

Except as hereinafter changed or modified, Chapters 2 through 8, Appendix A4, and Appendix A5 of that certain code known and designated as the ~~2010~~2013 California Green Building Standards Code, as published by the California Building Standards Commission, are adopted by reference and incorporated into this Title 31 as if fully set forth below, and shall be known as Chapters 2 through 8, Appendix A4, and Appendix A5 of Title 31 of the Los Angeles County Code.

A copy of the ~~2010~~2013 California Green Building Standards Code shall be at all times maintained by the Building Official for use and examination by the public.

**SECTION 3.** Section 202 is hereby amended to read in alphabetical order as follows:

**202 DEFINITIONS**

. . .

**DEVELOPMENT.** Any activity requiring discretionary or non-discretionary land use or construction approval from the County that results in the creation, addition, modification, or replacement of impervious surface area, which replacement is not part of routine maintenance activity. Development includes, but is not limited to, land subdivisions; the construction, installation, addition, or replacement of a building or structure; expansion of a building footprint; and land-disturbing activities related to structural or impervious surfaces. Development shall not include routine maintenance of original lines and grades and/or hydraulic capacity.

. . .

**SECTION 4.** Section 301 is hereby amended to read as follows:

**301 GENERAL**

**301.1 Scope.**

Buildings and structures shall be designed to include the green building measures indicated in Sections 301.1.1, 301.2, and 301.3.~~specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and~~

~~construction of structures covered by this code, but are not required unless adopted by a city, county or city and county as specified in Section 101.7.~~

**301.1.1 ~~Additions and alterations.~~Residential construction. [HCD]**

The mandatory provisions of Chapter 4 shall be applied to newly constructed low-rise and high-rise residential buildings and structures six stories or less and additions or alterations of existing residential buildings where the addition or alteration increases the building's conditioned volume or size. The requirements shall apply only to and/or within the specified area of the addition or alteration.

Newly constructed high-rise residential buildings of seven stories or greater shall comply with Section 301.3.

. . .

**301.3 Nonresidential~~additions and alterations~~ construction. [BSC]**

. . .

**301.3.1 Nonresidential buildings greater than or equal to 25,000 square feet.**

In addition to the requirements of Section 301.3, any newly constructed nonresidential building greater than or equal to 25,000 square feet shall comply with all requirements of Section A5.601.2.4 Tier 1.

**Exceptions:**

1. Compliance with Section A5.601.2.3 shall be voluntary.

2. High-rise residential buildings of seven stories or greater shall comply with Table A4.106.5.1(3) in lieu of Table A5.106.11.2.2.

**SECTION 5.** Section 4.106.4 is hereby added to read as follows:

**4.106.4 Low-impact development (LID).**

New development or alterations to existing developed sites shall comply with Chapter 12.84 of Title 12 of the Los Angeles County Code.

**SECTION 6.** Section 4.304 is hereby amended to read as follows:

**4.304 OUTDOOR WATER USE**

**4.304.1 Irrigation controllers.**

Automatic irrigation system controllers for landscaping ~~provided by the builder and~~shall be installed at the time of final inspection and shall comply with the following:

. . .

**4.304.2 Reserved.**

**4.304.3 Water budget.**

A water budget shall be developed for landscape irrigation use installed in conjunction with a new building that conforms to the California Department of Water Resources Model Water Efficient Landscape Ordinance.

**Exception:** As an alternative to a water budget, developer-installed landscapes with a landscape area less than 2,500 square feet, or homeowner-provided and/or homeowner-hired landscapes with a landscaped area less than 5,000 square feet may comply with all of the following measures:

1. Turf area shall be water-efficient and shall not exceed 25 percent of the total landscaped area.

2. Non-invasive drought-tolerant plant and tree species appropriate for the climate zone region shall be utilized in at least 75 percent of the total landscaped area.

3. Hydrozoning irrigation techniques shall be incorporated into the landscape design.

**Note:** Prescriptive measures to assist in compliance with the water budget are listed in Sections 492.5 through 492.8, 492.10, and 492.11 of the MWELO.

**SECTION 7.** Section 4.408 is hereby amended to read as follows:

**4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING**

~~**4.408.1 Construction waste management.**~~

~~Recycle and/or salvage for reuse a minimum of 50 percent of the non-hazardous construction and demolition waste, in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance.~~

~~**Exceptions:**~~

~~1. Excavated soil and land-clearing debris.~~

~~2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.~~

~~3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility.~~

**4.408.1 Newly constructed projects of four or fewer units, additions, and alterations.**

Newly constructed projects consisting of four or fewer units and additions and alterations to existing buildings shall recycle and/or salvage for reuse a minimum of 50 percent of the non-hazardous construction and demolition debris, or meet a local construction and demolition waste management ordinance, whichever is more stringent. Calculate the amount of materials diverted by weight or volume, but not by both.

~~**4.408.2 Construction waste management plan.**~~

~~Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.~~

~~1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale.~~

~~2. Specify if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).~~

~~3. Identify diversion facilities where the construction and demolition waste material will be taken.~~

~~4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.~~

~~5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.~~

**4.408.2 Newly constructed projects of five or more units.**

Newly constructed projects consisting of five or more units shall recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition debris, or meet a local construction and demolition waste management ordinance, whichever is more stringent. Calculate the amount of materials diverted by weight or volume, but not by both.

~~**4.408.3 Waste management company.**~~

~~Utilize a waste management company, approved by the enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1.~~

~~Note: The owner or contractor may make the determination if the construction and demolition waste materials will be diverted by a waste management company.~~

~~**4.408.4 Waste stream reduction alternative.**~~

~~Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed four (4) lbs./sq. ft. of the building area shall meet the minimum 50 percent construction waste reduction requirement in Section 4.408.1.~~

~~**4.408.4.1 Waste stream reduction alternative (HR).**~~

~~Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed two (2) lbs./sq. ft. of the building~~

~~area, shall meet the minimum 50 percent construction waste reduction requirement in Section 4.408.1~~

~~**4.408.5 Documentation.**~~

~~Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, Items 1 through 5, Section 4.408.3 or Section 4.408.4.~~

~~Notes:~~

~~1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in documenting compliance with this section.~~

~~2. Mixed construction and demolition debris (C&D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).~~

**SECTION 8.** Section 5.106.2 is hereby added to read as follows:

**5.106.2 Low-impact development (LID).**

New development or alterations to existing developed sites shall comply with Chapter 12.84 of Title 12 of the Los Angeles County Code.

**SECTION 9.** Section 5.106.3 is hereby added to read as follows:

**5.106.3 Reserved.**

**SECTION 10.** Section 5.304.1 is hereby amended to read as follows:

**5.304.1 Water budget.**

A water budget shall be developed for landscape irrigation use that installed in conjunction with a new building or an addition or alteration conforms to ~~the local water~~

~~efficient landscape ordinance or to~~ the California Department of Water Resources Model Water Efficient Landscape Ordinance ~~where no local ordinance is applicable~~.

**Exception:** As an alternative to a water budget, landscapes with a landscaped area less than 2,500 square feet may comply with all of the following measures:

1. Turf area shall not exceed 25 percent of the total landscaped area.

2. Non-invasive drought-tolerant plant and tree species appropriate for the climate zone region shall be utilized in at least 75 percent of the total landscaped area.

3. Hydrozoning irrigation techniques shall be incorporated into the landscape design.

. . .

**SECTION 11.** Section 5.304.3 is hereby amended to read as follows:

**5.304.3 Irrigation design.**

~~In new nonresidential construction or building addition or alteration with at least 1,000 but no more than 2,500 square feet of cumulative landscaped area (the level at which the MWELO applies), i~~Install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations.

**SECTION 12.** Section 5.408 is hereby amended to read as follows:

**5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING**

**5.408.1 Construction waste management.**

Newly constructed projects and additions and alterations to existing buildings shall ~~R~~recycle and/or salvage for reuse a minimum of ~~50~~65 percent of the

non-hazardous construction and demolition debris~~waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3,~~ or meet a local construction and demolition waste management ordinance, whichever is more stringent. Calculate the amount of materials diverted by weight or volume, but not by both.

~~**5.408.1.1 Construction waste management plan.**~~

~~Where a local jurisdiction does not have a construction and demolition waste management ordinance that is more stringent, submit a construction waste management plan that;~~

~~1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.~~

~~2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).~~

~~3. Identifies diversion facilities where construction and demolition waste material collected will be taken.~~

~~4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.~~

~~**5.408.1.2 Waste management company.**~~

~~Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.~~

~~Note: The owner or contractor shall make the determination if the construction and demolition material will be diverted by a waste management company.~~

~~Exceptions to Sections 5.408.1.1 and 5.408.1.2:~~

~~1. Excavated soil and land-clearing debris~~

~~2. Alternate waste reduction methods developed by working with local agencies if diversion and recycle facilities capable of compliance with this item do not exist.~~

~~3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.~~

~~**5.408.1.3 Waste stream reduction alternative.**~~

~~The combined weight of new construction disposal that does not exceed 2 pounds per square foot of building area may be deemed to meet the 50 percent minimum requirement as approved by the enforcing agency.~~

~~**5.408.1.4 Documentation.**~~

~~Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1 through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination of the enforcing agency.~~

~~Notes:~~

~~1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located at~~ ~~http://www.bsc.ca.gov/Home/CALGreen.aspx~~ ~~default.htm may be used to~~

~~assist in documenting compliance with the waste management plan.~~

~~2. Mixed construction and demolition debris (C&D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).~~

~~**5.408.3 Excavated soil and land clearing debris [BSC].**~~

~~100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.~~

~~Exception: Reuse, either on- or off-site, of vegetation or soil contaminated by disease or pest infestation.~~

~~Notes:~~

~~1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material. (www.cdfa.ca.gov/exec/county/county_contacts.html)~~

~~2. For a map of known pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)~~

**SECTION 13.** Appendix A4 is hereby amended to read as follows:

**APPENDIX A4**

**RESIDENTIAL VOLUNTARY MEASURES**

~~Some of t~~The measures contained in this appendix are not mandatory unless indicated elsewhere in this Code. ~~adopted by a city, county or city and county as~~

~~specified in Section 101.7 and provide additional measures that d~~Designers, builders, and property owners ~~may wish~~are encouraged to consider all of these measures during the planning, design, and construction process.

**SECTION 14.** Table A4.106.5.1(3) is hereby amended to read as follows:

**TABLE A4.106.5.1(3)**

**TIER 1 - HIGH-RISE RESIDENTIAL BUILDINGS, HOTELS, AND MOTELS**

| ROOF SLOPE | CLIMATE ZONE | MINIMUM 3-YEAR AGED SOLAR REFLECTANCE | THERMAL EMITTANCE | SRI |
|---|---|---|---|---|
| ≤ 2 : 12 | ~~10 &~~9-11, 13-15 | 0.55 | 0.75 | ~~64~~60 |
| >2 : 12 | 2-15 | 0.20 | 0.75 | ~~16~~11 |

**SECTION 15.** Section A4.107.1 is hereby amended to read as follows:

**A4.107.1 Innovative concepts and local environmental conditions.**

The provisions of this ~~c~~Code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design, or method of construction not specifically prescribed by this ~~c~~Code. ~~This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.~~

**SECTION 16.** Section A4.306.1 is hereby amended to read as follows:

**A4.306.1 Innovative concepts and local environmental conditions.**

The provisions of this ~~c~~Code are not intended to prevent the use of any alternate

material, appliance, installation, device, arrangement, method, design, or method of construction not specifically prescribed by this ~~c~~Code. ~~This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.~~

**SECTION 17.** Section A4.411.1 is hereby amended to read as follows:

**A4.411.1 Innovative concepts and local environmental conditions.**

The provisions of this ~~c~~Code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design, or method of construction not specifically prescribed by this ~~c~~Code. ~~This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.~~

**SECTION 18.** Section A4.509.1 is hereby amended to read as follows:

**A4.509.1 Innovative concepts and local environmental conditions.**

The provisions of this ~~c~~Code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design, or method of construction not specifically prescribed by this ~~c~~Code. ~~This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.~~

**SECTION 19.** Section A4.601.1 is hereby amended to read as follows:

**A4.601.1 Scope.**

The measures contained in this appendix are not mandatory unless ~~adopted by a city, county, or city and county as specified in Section 101.7~~indicated elsewhere in this

Code. The provisions of this ~~s~~Section outline means of achieving enhanced construction or reach levels by incorporating additional green building measures. In order to meet one of the tier levels designers, builders or property owners are required to incorporate additional green building measures necessary to meet the threshold of each level.

**SECTION 20.** Section A4.601.2 is hereby amended to read as follows:

**A4.601.2 Prerequisite measures.**

Tier 1 and Tier 2 thresholds require compliance with the mandatory provisions of this ~~c~~Code and incorporation of the required prerequisite measures listed in Section A4.601.4.2 for Tier 1 and A4.601.5.2 for Tier 2. ~~Prerequisite measures are also identified in the Residential Occupancies Application Checklist in Section A4.602.~~

~~As specified in Section 101.7, additional prerequisite measures may be included by the enforcing agency to address specific local environmental conditions and may be listed in the Innovative Concepts and Local Environmental Conditions portions of the checklist.~~

**SECTION 21.** Section A4.602 is hereby amended to read as follows:

**RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST**

. . .

[1]~~Green building measures listed in this table may be mandatory if adopted by a city, county, or city and county as specified in Section 101.7.~~**Reserved.**

. . .

**SECTION 22.** Section A4.701.1 is hereby amended to read as follows:

**A4.701.1 General.**

The voluntary measures of this ~~c~~Code are designed and promulgated to be adopted by reference and made mandatory by local ordinance~~ pursuant to Section 101.7~~. Jurisdictions wishing to adopt the voluntary provisions of this ~~c~~Code as an enforceable regulation governing structures and premises should ensure that certain factual information is included in the adopting ordinance and that the measures are appropriate and achievable and are considered to be suitable as mandatory by the city, county, or city and county. The following sample adoption ordinance addresses several key elements of a code adoption ordinance, including the information required for insertion into the ~~c~~Code text.

~~This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code.~~

. . .

**SECTION 23.** The Appendix A5 heading is hereby amended to read as follows:

**APPENDIX A5**

**NON-RESIDENTIAL VOLUNTARY MEASURES**

The measures contained in this appendix are not mandatory ~~unless adopted by a city, county, or city and county as specified in Section 101.7 and provide additional measures that~~except to the extent indicated elsewhere in this Code. ~~d~~Designers, builders and property owners ~~may wish~~are encouraged to consider all of these measures during the planning, design, and construction process.

**SECTION 24.** Table A5.106.11.2.2 is hereby amended to read as follows:

**TABLE A5.106.11.2.2 [BSC]**

**TIER 1**

| ROOF SLOPE | CLIMATE ZONE | MINIMUM AGED SOLAR REFLECTANCE | THERMAL EMITTANCE | SRI |
|---|---|---|---|---|
| ≤ 2 : 12 | 1 – 16 | ~~0.55~~0.63 | 0.75 | ~~64~~72 |
| >2 : 12 | 1 – 16 | 0.20 | 0.75 | ~~16~~11 |

**SECTION 25.** Section A5.601.1 is hereby amended to read as follows:

**A5.601.1 Scope.**

The measures contained in this appendix are not mandatory ~~unless adopted by local government as specified in Section 101.7~~except to the extent indicated elsewhere in this Code. The provisions of this ~~s~~Section outline means of achieving enhanced construction or reach levels by incorporating additional green building measures for newly constructed nonresidential buildings as well as additions. In order to meet one of the tier levels designers, builders or property owners are required to incorporate additional green building measures necessary to meet the threshold of each level.

**SECTION 26.** The provisions of this ordinance contain various changes, modifications, and additions to the 2013 Edition of the California Green Building Standards Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Green Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Green Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly in the table set forth below:

| GREEN BUILDING STANDARDS CODE AMENDMENTS | | |
|---|---|---|
| **CODE SECTION** | **CONDITION** | **EXPLANATION** |
| 301.1, 301.1.1 | Climatic and Topographic | Environmental resources in the County of Los Angeles are scarce due to varying and occasionally immoderate temperatures and weather conditions. Expanding the scope of the mandatory requirements of this Code for residential buildings of seven stories or greater in height will achieve a greater reduction in greenhouse gases, higher efficiencies of energy, water, and material usage and improved environmental air quality. |
| 301.3, 301.3.1 | Climatic and Topographic | Environmental resources in the County of Los Angeles are scarce due to varying and occasionally immoderate temperatures and weather conditions. Expanding the scope of the mandatory requirements of this Code for nonresidential buildings and residential buildings of seven stories or greater in height that are greater than or equal to 25,000 square feet in floor area will achieve a greater reduction in greenhouse gases, higher efficiencies of energy, water, and material usage and improved environmental air quality. |
| 4.106.4 | Climatic and Topographic | The County of Los Angeles is a densely populated area having residential buildings constructed within a region where water is scarce and maintaining storm water runoff quality is an issue. The proposed low impact development measures will allow greater conservation of rain water, increase in groundwater recharge, reduction of storm water runoff, and improvement in storm water runoff quality. |

| GREEN BUILDING STANDARDS CODE AMENDMENTS | | |
|---|---|---|
| **CODE SECTION** | **CONDITION** | **EXPLANATION** |
| 4.304.1 | Climatic | The County of Los Angeles is a densely populated area having residential buildings constructed within a region where water is scarce. The proposed modification to require weather or soil based irrigation controllers for any residential building subject to Chapter 4, regardless of which entity provides the landscaping, will allow greater efficiencies of outdoor water use. |
| 4.304.3 | Climatic | The County of Los Angeles is a densely populated area having residential buildings constructed within a region where water is scarce. The proposed landscape design measures will allow greater efficiencies of outdoor water use. |
| 4.408.1, 4.408.2, 4.408.3, 4.408.4, 4.408.4.1 4.408.5 | Climatic and Topographic | Solid waste disposal sites and locally sourced construction materials in the County of Los Angeles are scarce due to population density and varying and occasionally immoderate temperatures and weather conditions. The proposed modification to require projects of five residential units or more to recycle or reuse 65 percent (instead of 50 percent) of construction debris will allow for a reduction in greenhouse gases and greater material conservation and resource efficiency. |
| 5.106.2 | Climatic and Topographic | The County of Los Angeles is a densely populated area having buildings constructed within a region where water is scarce and maintaining storm water runoff quality is an issue. The proposed low-impact development measures will allow greater conservation of rain water, increase in groundwater recharge, reduction of storm water runoff and improvement in storm water runoff quality. |
| 5.304.1, 5.304.3 | Climatic | The County of Los Angeles is a densely populated area having residential buildings constructed within a region where water is scarce. The proposed landscape design measures will allow greater efficiencies of outdoor water use. |
| 5.408.1, 5.408.1.1, 5.408.1.2, 5.408.1.3, 5.408.1.4, | Climatic and Topographic | Solid waste disposal sites and locally sourced construction materials in the County of Los Angeles are scarce due to population density and varying and occasionally immoderate temperatures and weather conditions. The proposed modification to require |

| GREEN BUILDING STANDARDS CODE AMENDMENTS | | |
|---|---|---|
| **CODE SECTION** | **CONDITION** | **EXPLANATION** |
| 5.408.3 | | nonresidential projects to recycle or reuse 65 percent (instead of 50 percent) of construction debris will allow for a reduction in greenhouse gases and greater material conservation and resource efficiency. |
| Appendix A5,<br><br>A5.601.1 | Climatic and Topographic | Environmental resources in the County of Los Angeles are scarce due to varying and occasionally immoderate temperatures and weather conditions. Expanding the scope of the mandatory requirements of this Code for nonresidential buildings and residential buildings of seven stories or greater in height that are greater than or equal to 25,000 square feet in floor area will achieve a greater reduction in greenhouse gases, higher efficiencies of energy, water, and material usage and improved environmental air quality. |

**SECTION 27.** This ordinance shall become operative on January 1, 2014.

[TITLE312013CSCC]

## ANALYSIS

This ordinance repeals those provisions of Title 27 - Electrical Code of the Los Angeles County Code, which had incorporated portions of the 2010 Edition of the California Electrical Code by reference, and replaces them with provisions incorporating by reference portions of the 2013 California Electrical Code, published by the California Building Standards Commission, with certain changes and modifications. Unless deleted or modified herein, the previously enacted provisions of Title 27 continue in effect.

State law requires that the County's Electrical Code impose the same requirements as are contained in the building standards published in the most recent edition of the California Electrical Code except for changes or modifications deemed reasonably necessary by the County because of local climatic, geologic, or topographic conditions.

The changes and modifications to requirements contained in the building standards published in the 2013 California Electrical Code which are contained in this ordinance are based upon express findings contained in the ordinance, that such changes are reasonably necessary due to local climatic, geologic, or topographic conditions. This ordinance also makes certain modifications to the administrative provisions of Title 27.

JOHN F. KRATTLI
County Counsel

BY: Carole B. Suzuki

CAROLE B. SUZUKI
Deputy County Counsel
Public Works Division

CBS:gm

Requested: 8/08/13
Revised: 10/21/13

HOA.1005333.1

**ORDINANCE NO. _____**

An ordinance amending Title 27 – Electrical Code of the Los Angeles County Code by adopting portions of the 2013 California Electrical Code, by reference, with certain changes and modifications, and making other revisions thereto.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Sections 89.102 through 89.114 of Article 89, Article 90, Chapters 1 through 9, and Annexes A, B, C, D, E, F, G, and H which incorporate by reference and modify portions of the 2010 California Electrical Code, are hereby repealed.

**SECTION 2.** Section 80-1.5 is hereby amended to read as follows:

**Sec. 80-1.5. California Electrical Code (CEC) Adoption by Reference**

Except as hereinafter changed or modified, Sections 89.102 through 89.114 of Article 89, Article 90, Chapters 1 through 9, and Annexes A, B, C, D, E, F, G, ~~and~~ H, and I of that certain Electrical Code known and designated as the ~~2010~~2013 California Electrical Code as published by the California Building Standards Commission are adopted by reference and incorporated into this Title 27 of the Los Angeles County Code as if fully set forth below, as Sections 89.102 through 89.114 of Article 89, Article 90, ~~and~~ Chapters 1 through 9, and Annexes A, B, C, D, E, F, G, ~~and~~ H, and I of Title 27 of the Los Angeles County Code.

A copy of the ~~2010~~2013 California Electrical Code, hereinafter referred to as the CEC, shall be at all times maintained by the Chief Electrical Inspector for use and examination by the public.

**SECTION 3.** Section 82-2 is hereby amended to read as follows:

**Sec. 82-2. Time Limit**

Every permit issued under the provisions of this Code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or ~~if~~ the work authorized by such permit is suspended or abandoned for a period of 180 days, or the permittee fails to obtain inspection as required by the provisions of Section 82-14 ~~at any time after the work is commenced,~~ for a period of 180 days. ~~or more. Before such work can be commenced or recommenced, a new permit shall be first obtained and the fee therefor shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and provided, further, that the new permit is obtained no later than one year from the date of the expired permit, or the duration of suspension or abandonment has not exceeded one year.~~

**EXCEPTION:** Permits issued to abate violation(s) in conjunction with a code enforcement action shall expire and become null and void at a date determined by the Building Official.

~~Any permittee holding an unexpired permit may apply for an extension of time within which work may commence under that permit.~~ The Chief Electrical Inspector may extend the time for action by the permittee for a period not exceeding 180 days from the date of expiration upon written request by the permittee and payment of a fee in an amount determined by the Chief Electrical Inspector, not to exceed~~equal to~~ 25 percent

of the ~~original~~ permit fee. No permit shall be extended more than twice.

Once a permit, including any extension(s) thereof, has expired, the permittee shall file a new application as specified in Section 82-1.~~In order to renew a permit after expiration, except as provided for above, the permittee shall pay a new full permit fee.~~

**SECTION 4.** Section 82-4 is hereby amended to read as follows:

**Sec. 82-4. Application for Electrical Permits**

. . .

**(f) Expiration of Application.** ~~An application for permit for which no permit is issued within one year following the date of application shall expire by limitation.~~ When no permit is issued within one year following the date of the application therefor, the application shall automatically expire. Plans and specifications previously submitted may thereafter be returned to the applicant or destroyed by the Chief Electrical Inspector. The Chief Electrical Inspector may grant up to two extensions ~~of up to~~ not exceeding 180 days per extension beyond the initial one-year limit upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken and upon payment of an extension fee in an amount determined by the Chief Electrical Inspector, not to exceed 25 percent of the plan check fee.

Once an application ~~and~~, including any extension(s) ~~have~~thereof has expired, the applicant shall file a new application, resubmit plans and specifications and pay a new plan checking or review fee.

**SECTION 5.** Section 83-3 is hereby amended to read as follows:

**Sec. 83-3. Alternate Materials and Methods of Construction and Modifications**

**(a) Alternate Materials and Methods of Construction.**

The provisions of this Code are not intended to prevent the use of any material, appliance, installation, device, arrangement method, design, or method of construction not specifically prescribed by this Code, provided any such alternate has been approved by the Chief Electrical Inspector.

The Chief Electrical Inspector may approve on a case-by-case basis any such alternate that is found to be satisfactory and does not lessen provisions for safety or health required by this Code.

Such approval shall be based upon submittal of substantiating data and including, but not limited to, performance characteristics, measurements, calculations, diagrams, equipment and construction factors, where applicable.

**(b) Modifications.**

Whenever there are practical difficulties involved in carrying out the provisions of this Code, the Chief Electrical Inspector may grant minor modifications on a case by case basis, provided the Chief Electrical Inspector shall first find that a special individual reason makes the strict letter of this Code impractical and that the modification is in reasonable conformity with the spirit and purpose of this Code and that such modification does not lessen any health, fire-protection, or other life-safety related

requirements. The details of any action granting modifications shall be recorded and entered in the files of the code enforcement agency.

**SECTION 6.** Section 83-7 is hereby amended to read as follows:

**Sec. 83-7. Electrical Testing Certifications**

Electrical testing certifications will be accepted as complying with the requirements of this Code only when such certifications are issued in accordance with this Code and nationally recognized standards by electrical testing laboratories which have been accredited by the Chief Electrical Inspector.

The Chief Electrical Inspector recognizes three types of electrical testing laboratories:

- Nationally Recognized Testing Laboratories;
- Field Evaluation Organization Laboratories; and
- Calibration ~~and startup~~ Laboratories.

**SECTION 7.** Section 83-8 is hereby amended to read as follows:

**Sec. 83-8. Accreditation of Electrical Testing Laboratories**

**(a) Nationally Recognized Testing Laboratories.** A Nationally Recognized Testing Laboratory (NRTL) accreditation issued by the United States Occupational Safety and Health Administration is accepted by the Chief Electrical Inspector as meeting the accreditation requirements of this Code for listing and labeling testing laboratories.

**(b) Field Evaluation Organization Laboratories.** Field Evaluation Organizations laboratories shall be a Nationally Recognized Testing Laboratory (NRTL) which received its accreditation from the United States Occupational Safety and Health Administration and must

apply to and be approved by the Chief Electrical Inspector to perform field evaluation on required electrical equipment. These laboratories must have a professional electrical engineer registered in California pursuant to the Professional Engineer's Act (California Business and Professions Code section 6700, et seq.) on their permanent full-time staff. For each individual project, ~~The~~ test reports shall be submitted for approval by the Chief Electrical Inspector and shall bear the professional electrical engineer's signature as required by the State of California Regulations.

**(c) Calibration ~~and Startup~~ Laboratories.** Calibration ~~and startup~~ laboratories must apply to and be approved by the Chief Electrical Inspector. These laboratories must have a professional electrical engineer registered in California pursuant to the Professional Engineer's Act (California Business and Professions Code section 6700, et seq.) on their permanent full-time staff.

**SECTION 8.** Section 690.19 is hereby added to Article 690 to read as follows:

**Sec. 690.19. Disconnecting Means for Multiple Arrays.**

Where more than one array is combined to form a single output, a disconnecting means rated for the output shall be installed immediately adjacent to the combiner box on the output side.

**EXCEPTION 1**: If the combiner box is located adjacent to the inverter(s), the disconnecting means as stated above shall not be required.

**EXCEPTION 2**: For a single-family dwelling with PV system rated up to 10 KW.

**SECTION 9.** The provisions of this ordinance contain additions to the 2013 Edition of the California Electrical Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Electrical Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that the additions to requirements contained in the building standards published in the California Electrical Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

**ELECTRICAL CODE AMENDMENTS**

| CODE SECTION | CONDITION | EXPLANATION |
|---|---|---|
| 690.19 | Geological | Emergency situations caused by seismic events may require the disconnection of electrical power in a building. Presently, the CEC does not require a disconnecting means for conductors for multi-arrayed solar photovoltaic systems. |

**SECTION 10.** This ordinance shall become operative on January 1, 2014.

[TITLE272013CSCC]

## ANALYSIS

This ordinance repeals those provisions of Title 28 – Plumbing Code of the Los Angeles County Code, which had incorporated portions of the 2010 Edition of the California Plumbing Code by reference, and replaces them with provisions incorporating by reference portions of the 2013 California Plumbing Code, published by the California Building Standards Commission, with certain changes and modifications. Unless deleted or modified herein, the previously enacted provisions of Title 28 continue in effect.

State law requires that the County's Plumbing Code impose the same requirements as are contained in the building standards published in the most recent edition of the California Plumbing Code except for changes or modifications deemed reasonably necessary by the County because of local climatic, geologic, or topographic conditions.

The changes and modifications to requirements contained in the building standards published in the 2013 California Plumbing Code which are contained in this ordinance are based upon express findings contained in the ordinance, that such changes are reasonably necessary due to local climatic, geologic, or topographic conditions.

This ordinance also makes certain modifications to the administrative provisions of Title 28.

JOHN F. KRATTLI
County Counsel

BY Carole B. Suzuki

CAROLE B. SUZUKI
Deputy County Counsel
Public Works Division

CBS:ia

Requested: 08/23/13
Revised: 11/08/13/13

**ORDINANCE NO._____**

An ordinance amending Title 28 - Plumbing Code of the Los Angeles County Code by adopting portions of the 2013 California Plumbing Code, by reference, with certain changes and modifications, and making other revisions thereto.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Sections 119.1.2 through 119.1.14 of Chapter 1, Chapters 2 through 16A, and Appendices A, B, D, G, I, and K, which incorporate by reference and modify portions of the 2010 California Plumbing Code, and Appendix S are hereby repealed.

**SECTION 2.** Chapter 1 is hereby amended to read as follows:

**CHAPTER 1**

**ADMINISTRATION**

**100 ADOPTION BY REFERENCE.**

Except as hereinafter changed or modified, Sections 1.2.0 through 1.14.0 of Chapter 1, Division I of that certain Plumbing Code known and designated as the ~~2010~~2013 California Plumbing Code as published by the California Building Standards Commission, are adopted by reference and incorporated into this Title 28 of the Los Angeles County Code as if fully set forth below, and shall be known as Sections 119.1.2 through 119.1.14, respectively, of Chapter 1 of Title 28 of the Los Angeles County Code.

Except as hereinafter changed or modified, Chapters 2 through ~~16A~~17 and Appendices A, B, D, ~~G,~~ H, I, ~~and K~~and J of that certain Plumbing Code known and

designated as the ~~2010~~2013 California Plumbing Code as published by the California Building Standards Commission, are adopted by reference and incorporated into this Title 28 of the Los Angeles County Code as if fully set forth below, and shall be known as Chapters 2 through ~~16A~~17, and Appendices A, B, D, ~~G,~~ H, I, ~~and K~~and J of Title 28 of the Los Angeles County Code.

A copy of the ~~2010~~2013 California Plumbing Code shall be at all times maintained by the Chief Plumbing Inspector for use and examination by the public.

**101.0 General provisions.**

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**101.3 Scope.** The provisions of this Code shall apply to the construction, alteration, moving, removal, repair and use of any plumbing or drainage work, and the qualification and registration of certain persons performing such work on any premises within the unincorporated territory of the County of Los Angeles, and to such work or use by the County of Los Angeles in any incorporated city not exercising jurisdiction over such work or use.

Where the requirements of this Code conflict with the requirements of Title 29 - Mechanical Code of the Los Angeles County Code, this Code shall prevail.

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**101.5 Use of Terms.**

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1. For purposes of administering the requirements of Title 28, Appendix ~~K~~H relating to the plan approval of private sewage disposal systems or plan approval of any construction activity impacting a private sewage disposal system, the Authority Having Jurisdiction shall be the Health Officer;

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**103.2 Time Limit.** Every permit issued by the Building Official under the provisions of this Code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of such permit, or ~~if~~ the work authorized by such permit is suspended or abandoned for a period of 180 days, or the permittee fails to obtain inspection as required by the provisions of Section 104 of this Code ~~at any time after the work is commenced~~ for a period of 180 days. ~~Before such work can be recommenced, a new permit shall be first obtained, and the fee therefor shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work; and provided further, that the new permit is obtained no later than one year from date of the initial permit or that the period of the suspension or abandonment has not exceeded one year.~~

**EXCEPTION:** Permits issued to abate violation(s) in conjunction with a code enforcement action shall expire and become null and void at a date determined by the Building Official.

~~Any permittee holding an unexpired permit may apply for an extension of time within which work may commence under that permit.~~ The Building Official may extend

the time for action by the permittee for a period not exceeding 180 days from the date of expiration upon written request by the permittee ~~showing that circumstances beyond the control of the permittee have prevented action from being taken~~ and payment of a fee in an amount determined by the Building Official, not to exceed~~equal to~~ 25 percent of the ~~original~~ permit fee. No permit shall be extended more than twice. ~~In order to renew action on a permit after expiration, except as provided for above, the permittee shall pay a new full permit fee.~~ Once a permit, including any extension(s) thereof, has expired, the permittee shall file a new application as specified in Section 103.9.

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**103.9 Application for Permit.**

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~~An application for a permit shall expire if no permit is issued within one year following the date of application. Plans and specifications previously submitted may thereafter be returned to the applicant or destroyed by the Chief Plumbing Inspector. The Chief Plumbing Inspector may grant up to two extensions of up to 180 days per extension, beyond the initial one year period upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented the applicant from taking the actions requested by the Chief Plumbing Inspector and upon the payment of an extension fee as determined by the Chief Plumbing Inspector, not to exceed 25 percent of the plan check fee.~~

When no permit is issued within one year following the date of the application therefor, the application shall automatically expire. Plans and specifications previously

submitted may thereafter be returned to the applicant or destroyed by the Chief Plumbing Inspector. The Chief Plumbing Inspector may, before or after expiration of the application, grant up to two extensions, not exceeding 180 days per extension, beyond the initial one-year limit upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken and upon the payment of an extension fee as determined by the Chief Plumbing Inspector, not to exceed 25 percent of the plan check fee.

Once an application~~and~~, including any extension(s) thereof ~~have~~has expired, the applicant shall file a new application, resubmit plans and specifications and pay a new plan checking or review fee.

**SECTION 3.** Section 301.1.2 is hereby amended to read as follows:

**301.1.2** **Standards.** Standards listed or referred to in this ~~c~~Chapter or other ~~c~~Chapters cover materials that will conform to the requirements of this ~~c~~Code, where used in accordance with the limitations imposed in this or other chapters thereof and their listing. Where a standard covers materials of various grades, weights, quality, or configurations, the portion of the listed standard that is applicable shall be used. Design and materials for special conditions or materials not provided for herein shall be permitted to be used only by special permission of the Authority Having Jurisdiction after the Authority Having Jurisdiction has been satisfied as to their adequacy. A list of accepted plumbing material standards is referenced in Table 1401.1. Solar energy systems and material standards are referenced in Table S-17 of Appendix S. IAPMO Installation Standards are referenced in Appendix I for the convenience of the users of

this ~~c~~Code. They are not considered as a part of this ~~c~~Code unless formally adopted as such by the Authority Having Jurisdiction.

**SECTION 4.** Section 301.2 is hereby amended to read as follows:

**301.2 Alternate Materials and Methods of Construction ~~Equivalency~~ and Modifications.**

**301.2.1 Alternate Materials and Methods of Construction.** Nothing in this ~~c~~Code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this ~~c~~Code. Technical documentation shall be submitted to the Authority Having Jurisdiction to demonstrate equivalency. The Authority Having Jurisdiction shall have the authority to approve or disapprove the system, method, or device for the intended purpose. [HCD 1] (See Section 1.8.7).

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**301.2.1.1 Testing.**

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**301.2.1.1.1 Tests.**

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**301.2.1~~.2~~.1.2 Request by Authority Having Jurisdiction.**

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**301.2.2 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of this Code, the Authority Having Jurisdiction may grant minor modifications on a case by case basis, provided the Authority Having

Jurisdiction shall first find that a special individual reason makes the strict letter of this Code impractical and that the modification is in reasonable conformity with the spirit and purpose of this Code and that such modification does not lessen any health, fire-protection, or other life-safety related requirements. The details of any action granting modifications shall be recorded and entered in the files of the Authority Having Jurisdiction.

**SECTION 5.** Table 604.1 is hereby amended to read as follows:

**TABLE 604.1**

**MATERIALS FOR BUILDING SUPPLY AND WATER DISTRIBUTION PIPING AND FITTINGS**

| MATERIAL | BUILDING SUPPLY PIPE AND FITTINGS | WATER DISTRIBUTION OR SOLAR THERMAL PIPE AND FITTINGS[5] | REFERENCED STANDARD(S) PIPE | REFERENCED STANDARD(S) FITTINGS |
|---|---|---|---|---|
| Asbestos-Cement | X[1] | — | ASTM C 296 | — |
| Brass | X | X | ASTM B 43, ASTM B 135 | — |
| Copper | X | X[5] | ASTM B 42, ASTM B 75, ASTM B 88, ASTM B 251, ASTM B 302, ASTM B 447 | ASME B16.15, ASME B16.18, ASME B16.22, ASME B16.26 |
| CPVC | X | X | ASTM D 2846, ASTM F 441, ASTM F 442 | ASTM D 2846, ASTM F 437, ASTM F 438, ASTM F 439, ASTM F 1970 |
| Ductile-Iron | X | X[6] | AWWA C151 | ASME B16.4, AWWA C110, AWWA C153 |
| Galvanized Steel | X | X[8] | ASTM A 53 | — |
| Malleable Iron | X | X[7] | — | ASME B16.3 |
| PE | X[1] | — | ASTM D 2239, ASTM D 2737, ASTM D 3035, AWWA C901, CSA B137.1 | ASTM D 2609, ASTM D 2683, ASTM D 3261, ASTM F 1055, CSA B137.1 |

| | | | | |
|---|---|---|---|---|
| PE-AL-PE | X | X | ASTM F 1282, CSA B137.9 | ASTM F 1282, ASTM F 1974, CSA B137.9 |
| PE-RT | X | X | ASTM F 2769 | ASTM F 1807, ASTM F 2098, ASTM F 2159; ASTM F 2735, ASTM F 2769 |
| PEX[2, 3] | X | X | ASTM F 876, ASTM F 877 CSA B137.5, AWWA C904[1] | ASSE 1061, ASTM F 877, ASTM F 1807, ASTM F 1960, ASTM F 1961, ASTM F 2080, ASTM F 2159, ASTM F 2735, CSA B137.5 |
| PEX-AL-PEX[4] | X | X | ASTM F 1281, CSA B137.10, ASTM F 2262 | ASTM F 1281, ASTM F 1974, ASTM F 2434, CSA B137.10 |
| PP | X | X | ASTM F 2389, CSA B137.11 | ASTM F 2389, CSA B137.11 |
| PVC | X[1] | — | ASTM D 1785, ASTM D 2241, AWWA C900 | ASTM D 2464, ASTM D 2466, ASTM D 2467, ASTM F 1970 |
| Stainless Steel | X | X | ASTM A 269, ASTM A | — |

[1] For Building Supply or cold-water applications.

[2] When PEX tubing is placed in soil and is used in potable water systems intended to supply drinking water to fixtures or appliances, the tubing or piping shall be sleeved with a material approved for potable water use in soil or other material that is impermeable to solvents or petroleum products.

[3] PEX tubing shall meet or exceed the requirements of ASTM F876-08 or an equivalent or more stringent standard when used in continuously recirculating hot water systems and the PEX tubing is exposed to the hot water 100% of the time.

[4] [For BSC, DSA-SS, DSA-SS/CC & HCD] The use of PEX-AL-PEX in potable water supply systems is not adopted.

[5] Copper tube for solar thermal piping shall have a weight of not less than Type L. Type M copper tubing shall be permitted to be used for solar thermal piping where piping is aboveground in, or on, a building or underground outside of structures.

[6] Cast iron fittings not more than 2 inches (50 mm) in size, where used in connection with potable water piping, shall be galvanized.

[7] Malleable iron water fittings shall be galvanized.

[8] Galvanized steel shall not be used in solar thermal systems where in contact with glycol heat transfer fluid.

**SECTION 6.** Section 609.7 is hereby amended to read as follows:

**609.7** **Abutting Lot.** Nothing contained in this ~~c~~Code shall be construed to prohibit the use of all or part of an abutting or adjacent lot or lots to:

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**SECTION 7.** Section 713.1 is hereby amended to read as follows:

**713.1** **Where Required.** A building in which plumbing fixtures are installed and premises having drainage piping thereon shall have a connection to a public or private sewer, except as provided in Sections ~~101.8~~101.3.3, 713.2, and 713.4.

**SECTION 8.** Section 721.3 is hereby added to read as follows:

**721.3** **Public Sewer.** If the public sewer does not extend to a point from which each building on a lot or parcel of land large enough to permit future subdivision can be independently served, the property owner shall construct a public sewer as required by Title 20 – Utilities of the Los Angeles County Code, Division 2 – Sanitary Sewer and Industrial Waste Ordinance, to provide adequate sewerage for each such possible parcel.

**EXCEPTION:** When the Authority Having Jurisdiction finds that the character of a lot is such that no further subdivision can be reasonably anticipated, or the use is such as to preclude subdivision, or where the owner has executed a covenant stating that the lot or parcel of land together with all improvements thereon will be maintained as a unit and that before any subdivision is made or any portion of said lot is transferred to another owner, separate sewerage facilities as hereinbefore required in this Section will be installed, the drainage system of all buildings may be connected to a common building sewer or private sewage disposal system. The covenant shall be recorded, by the owner, in the office of the Department of Registrar-Recorder as part of the conditions of ownership of said property. Such agreement shall be binding on all heirs, successors, and assigns to said property.

This exception shall apply only while the whole of such lot remains in one undivided ownership. Upon the transfer of any portion of such lot other than the whole thereof, to another owner, whether such transfer is made before or after the operative date of the ordinance adding this provision, the exception shall cease and a person shall not use or maintain any building or structure except in compliance with the provisions of this Code. As used in this Section, a sale, foreclosure, or contract to sell by the terms of which the purchaser is given the right of possession shall be deemed a transfer.

**SECTION 9.** Section 728.0 is hereby added to read as follows:

**728.0 Building Sewer Connection Requirements.**

**728.1 Size.** That portion of the building sewer extending from the public sewer to the property line shall be not less than four (4) inches (100 mm) in internal diameter.

**728.2 Depth.** When laid within the limits of any public thoroughfare when the public sewer is sufficiently deep, no building sewer shall be less than six (6) feet (1.8 m) below grade. Whenever practicable, the alignment and grade of each building sewer shall be straight from the public sewer to the property line.

**728.3 Taps and Saddles.** Whenever it becomes necessary to connect a building sewer to a public sewer at a point where no branch fitting has been installed in the public sewer, such connection shall be made as required by Title 20 – Utilities of the Los Angeles County Code, Division 2 – Sanitary Sewer and Industrial Waste Ordinance.

**728.4 Connection to Trunks.** Whenever required, an approved-type unvented running trap shall be installed in each building sewer which is connected directly to a trunk sewer by any means whatsoever. Each such running trap shall be installed in the building sewer between the house drain or drains and the connection to the trunk sewer. A T-type cleanout shall be installed in the building sewer immediately below the running trap. This cleanout need not be extended to grade. Every running trap and cleanout shall be located on the lot served by the building sewer.

**728.5 Street Widening.** Where a future street or road-widening area has been established by the master plan of highways or in any other manner, all work installed in such area shall conform to the requirements established in this or other related ordinances for work on public property.

**728.6 Main Line Required.** Building sewer construction shall conform to the requirements of main line sewers as set forth in Title 20 – Utilities of the Los Angeles County Code, Division 2 – Sanitary Sewer and Industrial Waste Ordinance, when either of the following conditions exist:

1. Where the Authority Having Jurisdiction requires such construction because of the character or quantity of the sewage or industrial waste to be discharged.

2. Where the sewer is designed to be, or proposed to be, dedicated to the County of Los Angeles at the present or any future time.

**SECTION 10.** Table H 1.7 of Appendix H is hereby amended to read as follows:

## TABLE H 1.7

## LOCATION OF SEWAGE DISPOSAL SYSTEM

| MINIMUM HORIZONTAL DISTANCE IN CLEAR REQUIRED FROM | BUILDING SEWER | SEPTIC TANK | DISPOSAL FIELD | SEEPAGE PIT OR CESSPOOL |
|---|---|---|---|---|
| Building or structures[1] | 2 feet | 5 feet | 8 feet | 8 feet |
| Property line adjoining private | Clear[2] | 5 feet | 5 feet | 8 feet |
| Water supply wells[9] | 50 feet[3] | 50 feet | 100 feet | 150 feet |
| Streams and other bodies of water[9] | 50 feet | 50 feet | 100 feet[7] | 150 feet[7] |
| Trees | | 10 feet | | 10 feet |
| Seepage pits or cesspools[8] | | 5 feet | 5 feet | 12 feet |
| Disposal field[8] | | 5 feet | 4 feet[4] | 5 feet |
| On-site domestic water service line | 1 foot[5] | 5 feet | 5 feet | 5 feet |
| Distribution box | | | 5 feet | 5 feet |
| Pressure public water main | 10 feet[6] | 10 feet | 10 feet | 10 feet |

For SI units: 1 foot = 304.8 mm

Notes:

1 Including porches and steps, whether covered or uncovered, breezeways, roofed porte cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures or appurtenances.

2 See Section 312.3.

3 Drainage piping shall clear domestic water supply wells by not less than 50 feet (15 240 mm). This distance shall be permitted to be reduced to not less than 25 feet (7620 mm) where the drainage piping is constructed of materials approved for use within a building.

4 Plus 2 feet (610 mm) for each additional 1 foot (305 mm) of depth in excess of 1 foot (305 mm) below the bottom of the drain line. (See Section H 6.0)

5 See Section 720.0.

6 For parallel construction For crossings, approval by the Health Department shall be required.

7 These minimum clear horizontal distances shall also apply between disposal fields, seepage pits, and the mean high-tide line.

8 Where disposal fields, seepage pits, or both are installed in sloping ground, the minimum horizontal distance between any part of the leaching system and ground surface shall be 15 feet (4572 mm).

9 Where special hazards are involved, the distance required shall be increased as may be directed by the Authority Having Jurisdiction.

**SECTION 11.** Table H 2.1 of Appendix H is hereby amended to read as follows:

**TABLE H 2.1**
**CAPACITY OF SEPTIC TANKS**[1, 2, 3, 4]

| SINGLE-FAMILY DWELLINGS - NUMBER OF BEDROOMS[5] | MULTIPLE DWELLING UNITS OR APARTMENTS - ONE BEDROOM EACH | OTHER USES: MAXIMUM FIXTURE UNITS SERVED PER TABLE 702.1 | MINIMUM SEPTIC TANK CAPACITY (gallons) |
|---|---|---|---|
| 1 or 2 | — | 15 | 750 |
| 3 | — | 20 | 1000 |
| 4 | 2 units | 25 | 1200 |
| 5 or 6 | 3 | 33 | 1500 |
| — | 4 | 45 | 2000 |
| — | 5 | 55 | 2250 |
| — | 6 | 60 | 2500 |
| — | 7 | 70 | 2750 |
| — | 8 | 80 | 3000 |
| — | 9 | 90 | 3250 |
| — | 10 | 100 | 3500 |

For SI units: 1 gallon = 3.785 L

**Notes:**

1. Extra bedroom, 150 gallons (568 L) each.
2. Extra dwelling units over 10:250 gallons (946 L) each.
3. Extra fixture units over 100, 25 gallons (94.6 L) per fixture unit.
4. Septic tank sizes in this table include sludge storage capacity and the connection of domestic food waste disposal units without further volume increase.
5. Applies to mobile homes not installed in a mobile home park.

**SECTION 12.** Table H 2.1(1) of Appendix H is hereby amended to read as follows:

## TABLE H 2.1(1)

## ESTIMATED WASTE SEWAGE FLOW RATES[1, 2, ~~3~~]

**TABLE H 2.1(1)**
**ESTIMATED WASTE SEWAGE FLOW RATES**[1, 2, ~~3~~]

**TYPE OF OCCUPANCY** **GALLONS PER DAY**

1. Airports.....15 per employee
   5 per passenger
2. Auto washers .....Check with equipment manufacturer
3. Bowling alleys (snack bar only).....75 per lane
4. Camps:
   - Campground with central comfort station .....35 per person
   - Campground with flush toilets, no showers.....25 per person
   - Day camps (no meals served) .....15 per person
   - Summer and seasonal.....50 per person
5. Churches (Sanctuary).....5 per seat
   - with kitchen waste .....7 per seat
6. Dance halls .....5 per person
7. Factories
   - no showers.....25 per employee
   - with showers .....35 per employee
   - Cafeteria, add .....5 per employee
8. Hospitals.....250 per bed
   - kitchen waste only.....25 per bed

laundry waste only .....40 per bed
9. Hotels (no kitchen waste).....60 per bed (2 person)
10. Institutions (Resident) .....75 per person
Nursing home.....125 per person
Rest home.....125 per person
11. Laundries, self-service
(minimum 10 hours per day).....~~50 per wash cycle~~ 300 per machine
Commercial .....Per manufacturer's specifications
12. Motel .....50 per bed space
with kitchen.....60 per bed space
13. Offices .....20 per employee
14. Parks,~~mobile homes~~.....~~250 per space~~
Picnic parks (toilets only).....20 per parking space
Recreational vehicles
without water hook-up.....75 per space
with water and sewer hook-up.....100 per space
15. Restaurants – cafeterias .....~~20 per employee~~ 50 per seat
~~toilet .....7 per customer~~
~~kitchen waste.....6 per meal~~
~~add for garbage disposal .....1 per meal~~
~~add for cocktail lounge.....2 per customer~~
~~kitchen waste – disposable service .....2 per meal~~
16. Schools – Staff and office .....20 per person
Elementary students .....15 per person
Intermediate and high.....20 per student
with gym and showers, add .....5 per student
with cafeteria, add.....3 per student
Boarding, total waste .....100 per person
17. Service station, toilets .....1000 for 1st bay
500 for each additional bay
18. Stores .....20 per employee
Public restrooms, add .....1 per 10 square feet of floor space
19. Swimming pools, public .....10 per person
20. Theaters, auditoriums.....5 per seat
Drive-in.....10 per space

For SI units: 1 square foot = 0.0929 $m^2$, 1 gallon per day 3.785 L/day

**Notes:**

~~1 Sewage disposal systems sized using the estimated waste/sewage flow rates shall be calculated as follows:~~

~~(a) Waste/sewage flow, up to 1500 gallons per day (5678 L/day)~~
~~Flow x 1.5 = septic tank size~~

~~(b) Waste/sewage flow, over 1500 gallons per day (5678 L/day)~~
~~Flow x 0.75 + 1125 = septic tank size~~

~~(c) Secondary system shall be sized for total flow per 24 hours.~~

~~2~~1See Section H 2.1.

~~3~~2Because of the many variables encountered, it is not possible to set absolute values for waste/sewage flow rates for all situations. The designer should evaluate each situation and, where figures in this table need modification, they should be made with the concurrence of the Authority Having Jurisdiction.

**SECTION 13.** Table H 2.1(3) of Appendix H is hereby amended to read as follows:

## TABLE H 2.1(2)

## DESIGN CRITERIA OF ~~FIVE~~SIX TYPICAL SOILS

| TYPE OF SOIL | REQUIRED SQUARE FEET OF LEACHING AREA PER 100 GALLONS | MAXIMUM ABSORPTION CAPACITY IN GALLONS PER SQUARE FEET OF LEACHING AREA FOR A 24 HOUR PERIOD |
|---|---|---|
| Coarse sand or gravel | 20 | 5.0 |
| Fine sand | 25 | 4.0 |
| Sandy loam ~~or sandy clay~~ | 40 | 2.5 |
| Sandy clay | 60 | 1.66 |
| Clay with considerable sand or gravel | 90 | 1.1 |
| Clay with small amount of sand or gravel | 120 | 0.8 |

For SI units: 1 square foot = 0.0929 $m^2$, 1 gallon = 3.785 L, 1 gallon per square foot = 40.7 $L/m^2$

**SECTION 14.** Table H 2.1(3) of Appendix H is hereby amended to read as follows:

## TABLE H 2.1(3)

## LEACHING AREA SIZE BASED ON SEPTIC TANK CAPACITY

| REQUIRED SQUARE FEET OF LEACHING AREA PER 100 GALLONS SEPTIC TANK CAPACITY (square feet per 100 gallons) | MAXIMUM SEPTIC TANK SIZE ALLOWABLE (gallons) |
|---|---|
| 20-25 | 7500 |
| 40 | 5000 |
| 60 | 3500 |
| 90 | ~~3500~~3000 |
| 120 | ~~3000~~2500 |

For SI units: 1 square foot per 100 gallons = 0.000245 $m^2/L$, 1 gallon = 3.785 L

**SECTION 15.** Section H 3.1 is hereby amended to read as follows:

**H 3.1 General.**

. . .

(3) No excavation for a leach line or leach bed shall be located within ~~5 feet (1,524 mm)~~10 feet (3048 mm) of ~~the~~groundwater ~~table~~ nor to a depth where sewage ~~is~~

~~capable of~~ may contaminat~~ing~~e the underground water stratum ~~that is useable for domestic purposes~~.

**EXCEPTION:** ~~In areas where the records or data indicate that the ground waters are grossly degraded, the 5 foot (1524 mm) separation requirement shall be permitted to be reduced by the Authority Having Jurisdiction.~~When approved by the Authority Having Jurisdiction, this distance may be reduced to 5 feet (1.5 m) from ocean water. The applicant shall supply evidence of groundwater depth to the satisfaction of the Authority Having Jurisdiction.

(4) The minimum effective absorption area in any seepage pit shall be calculated as the excavated sidewall area below the inlet exclusive of any hardpan, rock, clay, or other impervious formations. The minimum required area of porous formation shall be provided in one or more seepage pits. No excavation shall extend within 10 feet (3048 mm) of ~~the~~groundwater ~~table~~ nor to a depth where sewage is ~~capable of contaminating~~may contaminate underground water stratum ~~that is useable for domestic purposes~~.

**EXCEPTION:** ~~In areas where the records or data indicate that the groundwaters are grossly degraded, the 10 foot (3048 mm) separation requirement shall be permitted to be reduced by the Authority Having Jurisdiction1~~When approved by the Authority Having Jurisdiction, this distance may be reduced to 5 feet (1.5 m) from ocean water.

. . .

**SECTION 16.** Section H 4.3 is hereby amended to read as follows:

**H 4.3** **Absorption Rates.** Where a percolation test is required, the proposed system shall have the capability to absorb a quantity of clear water in a 24-hour period equal to at least five times the liquid capacity of the proposed septic tank. ~~n~~No private disposal system shall be permitted to serve a building if that test shows the absorption capacity of the soil is less than 0.83 gallons per square foot (gal/ft$^2$) (33.8 L/m$^2$) or more than 5.12 gal/ft$^2$ (208.6 L/m$^2$) of leaching area per 24 hours. Where the percolation test shows an absorption rate greater than 5.12 gal/ft$^2$ (208.6 L/m$^2$) per 24 hours, a private disposal system may be permitted where the site does not overlie groundwaters protected for drinking water supplies, a minimum thickness of 2 feet (610 mm) of the native soil below the entire proposed system is replaced by loamy sand, and the system design is based on percolation tests made in the loamy sand.

**SECTION 17.** Section H 6.5 is hereby amended to read as follows:

**H 6.5** **Distribution Boxes.** Where two or more drain lines are installed, an approved distribution box of sufficient size to receive lateral lines shall be installed at the head of each disposal field. The inverts of outlets shall be level, and the invert of the inlet shall be not less than 1 inch (25.4 mm) above the outlets. Distribution boxes shall be designed to ensure equal flow and shall be installed on a level concrete slab in natural or compacted soil. Distribution boxes shall be coated on the inside with a bituminous coating or other approved method acceptable to the Authority Having Jurisdiction.

**SECTION 18.** Section H 6.8 is hereby amended to read as follows:

**H 6.8** **Dosing Tanks.** ~~Where the quantity of sewage exceeds the amount that is permitted to be disposed in 500 lineal feet (152.4 m) of leach line, a dosing tank shall be used. Dosing tanks shall be equipped with an automatic siphon or pump that discharges the tank once every 3 or 4 hours. The tank shall have a capacity equal to 60 to 75 percent of the interior capacity of the pipe to be dosed at one time. Where the total length of pipe exceeds 1000 lineal feet (304.8 m), the dosing tank shall be provided with two siphons or pumps dosing alternately and each serving one-half of the leach field.~~Automatic syphon or dosing tanks shall be installed when required or as permitted by the Authority Having Jurisdiction.

**SECTION 19.** Section H 7.2 is hereby amended to read as follows:

**H 7.2** **Multiple Installations.** Multiple seepage pit installations shall be served through an approved distribution box or be connected in series ~~by means of a watertight connection laid on undisturbed or compacted soil. The outlet from the pit shall have~~. When connected in series, the effluent shall leave each pit through an approved vented leg fitting extending not less than 12 inches (305 mm) ~~below the inlet fitting~~downward into such existing pit and having its outlet flow line at least 6 inches below the inlet. All pipe between pits shall be laid with approved watertight joints.

**SECTION 20.** Section H 10.1 is hereby amended to read as follows:

**H 10.1** **Inspection.** Inspection requirements shall comply with the following:

(1) Applicable provisions of Section ~~103.5~~104.0 of this ~~c~~Code and this appendix shall be required. Plans shall be required in accordance with Section ~~101.5~~102.1 of this ~~c~~Code.

. . .

(5) Disposal fields and seepage pits shall not be installed in uncompacted fill.

**SECTION 21.** Section H 11.6 is hereby added to read as follows:

**H 11.6 Excavation.** No excavation for an abandoned sewer or sewage facility shall be left unattended at any time unless the permittee shall have first provided a suitable and adequate barricade to assure public safety.

**SECTION 22.** Appendix S is hereby added to read as follows:

## APPENDIX S

## SOLAR ENERGY SYSTEMS

**S-1 General.**

In addition to the requirements of this Appendix, the provisions of this Code shall apply to the erection, installation, alteration, relocation, replacement, addition to, use, maintenance, and repair of solar energy systems, including but not limited to equipment and appliances intended to utilize solar energy for water heating and swimming pool heating.

**S-2 Definitions.**

For the purpose of this Appendix, certain terms, words, phrases, and their derivatives shall be construed as set forth in this Section. Whenever terms are not defined, their ordinary dictionary meaning shall apply.

**Absorber.** That part of the solar collector that receives the incident radiation energy.

**Ambient Temperature.** Surrounding temperature.

**Area, Absorber.** The total projected heat transfer area from which the absorbed solar irradiation heats the transfer media.

**Closed Loop System.** A system where the fluid is enclosed in a piping system that is not vented to the atmosphere.

**Collector.** See Solar Collector.

**Collector System.** That section of the solar system that includes the collector and piping or ducts from the collector to the storage system.

**Cover (Glazing).** The material covering the aperture to provide thermal and environmental protection.

**Design Pressure.** The maximum allowable pressure for which a specific part of a system is designed.

**Design Temperature.** The maximum allowable continuous or intermittent temperature for which a specific part of a solar energy system is designed to operate safely and reliably.

**Distribution System.** That section of the solar system from the storage system to the point of use.

**Flash Point.** The minimum temperature corrected to a pressure of 14.7 psi (101 kPa) at which a test flame causes the vapors of a portion of the sample to ignite under

the conditions specified by the test procedures and apparatus. The flash point of a liquid shall be determined in accordance with ASTM D 56, ASTM D 93, or ASTM D 3278.

**Heat Exchanger.** A device that transfers heat from one medium to another.

**Heat Transfer Medium.** The medium used to transfer energy from the solar collectors to the thermal storage or load.

**Langelier Saturation Index.** A formula used to measure water balance or mineral saturation control of pool, spa, or hot tub water. Total alkalinity, calcium hardness, pH, water temperature, and total dissolved solids are measured, given a factor, and calculated to determine whether water has a tendency to be corrosive or scale forming.

**Open Loop System.** A solar thermal system where the fluid is enclosed in a piping system that is vented to the atmosphere.

**Out-Gassing.** As applied to thermal energy, the thermal process by which materials expel gas.

**Passive Solar Systems.** As used in these requirements, are solar thermal systems that utilize elements of a building, without augmentation by mechanical components such as blowers or pumps, to provide for the collections, storage, or distribution of solar energy for heating, cooling, or both.

**Solar Collector.** A device used to absorb energy from the sun.

**Solar Energy System.** A configuration of equipment and components to collect, convey, store, and convert the sun's energy for a purpose.

**Solar Energy System Components.** Any appliance, assembly, device, equipment, or piping used in the conversion of solar energy into thermal energy for service water heating, pool water heating, space heating and cooling, and electrical service.

**Solar Thermal System.** A type of solar energy system that utilizes a complete assembly of subsystems which convert solar energy into thermal energy and utilize this energy for service water heating, pool water heating, space heating and cooling purposes.

**Thermosiphon.** The natural circulation of fluids due to temperature differential.

**Total Alkalinity.** The sum of all alkaline minerals in the water that is primarily in bicarbonate form, but also as sodium, calcium, magnesium, potassium carbonates, and hydroxides. It is a measure of the water's ability to resist changes in pH.

**S-3 Permits Required.**

It shall be unlawful for a person, firm, or corporation to construct, install, alter, repair, replace, or remodel a solar energy system regulated by this Code or cause the same to be done without first obtaining a separate permit for each separate system or interconnected set of systems as specified in Section 103.0 of this Code.

**S-4 Plans and Specifications.**

Plans, engineering calculations, diagrams, and other data shall be submitted in one or more sets with each application for a permit. Where required by the Authority Having Jurisdiction, the plans, computations, diagrams, specifications and other data

shall be prepared by, and the solar energy system designed by, an engineer, an architect, or both who shall be licensed by the state to practice as such.

**EXCEPTION:** The submission of plans, calculations or other data may be waived where the Authority Having Jurisdiction determines that the nature of the work applied for is such that reviewing of plans is not necessary to obtain compliance within the Code.

**S-5 Inspection and Testing.**

**S-5.1 General.** Solar energy systems for which a permit is required by this Code shall be inspected by the Authority Having Jurisdiction. No solar energy system or portion thereof shall be covered, concealed, or put into use until it first has been tested, inspected, and approved as prescribed in this Code. Neither the Authority Having Jurisdiction nor the jurisdiction shall be liable for any expense entailed in the removal or replacement of material required to permit inspection. Solar energy systems regulated by this Code shall not be connected to the water, the energy fuel supply, or the sewer system until authorized by the Authority Having Jurisdiction. Installation of a solar energy system shall comply with other parts of this Code including section 104.0.

**S-5.2 Required Inspection.** New solar energy system work and such portions of existing systems as affected by new work, or changes, shall be inspected by the Authority Having Jurisdiction to ensure compliance with the requirements of this Code and to ensure that the installation and construction of the solar energy system is in accordance with approved plans. The Authority Having

Jurisdiction shall make the following inspections and other such inspections as necessary. The permittee or the permittee's authorized agent shall be responsible for the scheduling of such inspections as follows:

(1) Underground inspection shall be made after trenches or ditches are excavated and bedded, piping installed, and before backfill is put in place.

(2) Rough-in inspection shall be made prior to the installation of wall or ceiling membranes.

(3) Final inspection shall be made upon completion of the installation.

**S-5.3 Testing.** Solar energy systems shall be tested and approved as required by this Code or the Authority Having Jurisdiction.

**S-5.3.1 Piping.** The piping of the solar thermal system shall be tested with water, air, heat transfer liquid, or as recommended by the manufacturer's instructions, except that plastic pipe shall not be tested with air. The Authority Having Jurisdiction shall be permitted to require the removal of plugs, etc., to ascertain where the pressure has reached all parts of the system. In cases where it would be impractical to provide the required water or air tests, or for minor installations and repairs, the Authority Having Jurisdiction shall be permitted to make such inspection as deemed advisable in order to be assured that the work has been performed in accordance with the intent of this Code. Joints and connections in the solar energy system shall be gastight and watertight for the pressures required by the test.

**S-5.3.2 System Requirements.** Upon completion, the solar thermal system, including piping, collectors, heat exchangers, and other related equipment, shall be tested and proved airtight.

**S-5.3.2.1 Open Loop Systems.** Open loop systems directly connected to the potable water system shall be tested under a water pressure not less than the maximum working pressure under which it is to be used. The water used for tests shall be obtained from a potable source of supply. A 50 pound-force per square inch (psi) (345 kPa) air pressure test shall be permitted to be substituted for the water test.

**S-5.3.2.2 Other Open Loop Systems.** Systems operating at atmospheric pressure shall be tested under actual operating conditions.

**S-5.3.2.3 Closed Loop Systems.** Closed loop or other type pressure systems shall be tested at one-and-one-half times maximum designed operating pressure. Systems shall withstand the test without leaking for a period of not less than 15 minutes.

**S-5.3.3 Storage Tanks.** Storage tanks conforming to the requirements of Section S-8 shall be tested in accordance with Sections S-5.3.3.1 and S-5.3.3.2.

**S-5.3.3.1 Pressure Type.** The test pressure for storage tanks that are subject to water pressure from utility mains (with or without a pressure reducing valve) shall be two times the working pressure but not less than 300 psi (2068 kPa).

**S-5.3.3.2 Non-Pressure Type.** A storage tank shall be tested by filling it with water for a period of 24 hours prior to inspection and shall withstand the test without leaking. No tank or portion thereof shall be covered or concealed prior to approval.

**S-5.3.4 Connection to Service Utilities.** No person shall make connections from a source of energy or fuel to a solar energy system or equipment regulated by this Code and for which a permit is required until approved by the Authority Having Jurisdiction. No person shall make connection from a water-supply line nor shall any person connect to a sewer system regulated by this Code and for which a permit is required until approved by the Authority Having Jurisdiction. The Authority Having Jurisdiction shall be permitted to authorize temporary connection of the solar energy system equipment to the source of energy or fuel for the purpose of testing the equipment.

**S-6 Location.**

**S-6.1 System.** Except as otherwise provided in this Code, no solar energy system, or parts thereof shall be located in a lot other than the lot that is the site of the building, structure, or premises served by such facilities.

**S-6.2 Ownership.** No subdivision, sale, or transfer of ownership of existing property shall be made in such manner that the area, clearance, and access requirements of this Code are decreased.

**S-7 Abandonment.**

**S-7.1 General.** An abandoned solar thermal system or part thereof shall be disconnected from remaining systems, drained, plugged, and capped in a manner satisfactory to the Authority Having Jurisdiction.

**S-7.2 Storage Tank.** An underground water storage tank that has been abandoned or discontinued otherwise from use in a solar thermal system shall be completely drained and filled with earth, sand, gravel, concrete, or other approved material or removed in a manner satisfactory to the Authority Having Jurisdiction.

**S-8 Tanks.**

**S-8.1 Storage Tanks.**

**S-8.1.1 Plans.** Plans for storage tanks shall be submitted to the Authority Having Jurisdiction for approval, unless listed by an approved listing agency. Such plans shall show dimensions, reinforcing, structural calculations, and such other pertinent data as required by the Authority Having Jurisdiction.

**S-8.1.2 Gravity Storage Tanks.** Gravity storage tanks shall be installed with an overflow opening of not less than 2 inches (50 mm) Internal Pipe Size (IPS). The openings shall be aboveground and installed with a screened return bend.

**S-8.1.3 Prefabricated Storage Tanks.** Prefabricated storage tanks shall be listed by an approved agency and labeled.

**S-8.1.4 Pressure-Type Storage Tanks.** Pressure-type water storage tanks shall be installed with a listed combination temperature and pressure relief valve. The temperature setting shall not exceed 210°F (99°C). The pressure setting shall not exceed 150 percent of the maximum designed operating pressure of

the solar thermal system, or 150 percent of the established normal operating pressure of the piping materials, or the labeled maximum operating pressure of a pressure-type storage tank, whichever is less. The relief valve setting shall not exceed the recommendations of the equipment manufacturer.

All storage tanks, including bottom-fed storage tanks, connected to a water heater shall be provided with a vacuum relief valve at the top of the tank that will operate up to a water pressure not exceeding 200 psi (1379 kPa) and up to a temperature not exceeding 250°F (121°C) to prevent siphoning of any water heater or storage tank. The size of such vacuum relief valves shall have a minimum rated capacity for the equipment served. This Section shall not apply to pressurized captive air diaphragm/bladder storage tanks.

Valves shall not be located on either side of a relief valve connection. The relief valve discharge pipe shall be of approved material that is rated for the temperature of the solar thermal system. The discharge pipe shall be the same diameter as the relief valve outlet, and shall discharge by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) nor less than 6 inches (152 mm) above the ground and pointing downward.

**S-8.1.5 Separate Storage Tanks.** For installations with separate storage tanks, a pressure relief valve and temperature relief valve or combination thereof shall be installed on both the water heater and storage tank. There shall not be a check valve or shutoff valve between a relief valve and the heater or tank served.

The relief valve discharge pipe shall be of approved material that is rated for the temperature of the solar thermal system. The discharge pipe shall be the same diameter as the relief valve outlet, discharge by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) nor less than 6 inches (152 mm) above the ground and pointing downward. Discharges from such valves on solar thermal systems utilizing other than potable water heat transfer mediums shall be approved by the Authority Having Jurisdiction.

**S-8.1.6 Underground Storage Tanks.** Storage tanks shall be permitted to be buried underground where designed and constructed for such installation.

**S-8.1.7 Pressure Vessels.** Pressure vessels, and the installation thereof, shall comply with minimum requirements for safety from structural failure, mechanical failure, and excessive pressures in accordance with the requirements of the Authority Having Jurisdiction and nationally recognized standards.

**S-8.1.8 Devices.** Devices attached to or within a storage tank shall be accessible for repair and replacement.

**S-8.1.9 Storage Tank Covers.** Storage tank covers shall be structurally designed to withstand anticipated loads and pressures in accordance with the manufacturer's instructions.

**S-8.1.10 Watertight Pan.** Where a storage tank is installed in an attic, attic-ceiling assembly, floor-ceiling assembly, or floor subfloor assembly where damage could result from a leaking storage tank, a watertight pan of corrosion-resistant

materials shall be installed beneath the storage tank with not less than 3/4 of an inch (20 mm) diameter drain to a location satisfactory to the Authority Having Jurisdiction.

**S-8.1.11 Storage Tank Materials.**

**S-8.1.11.1 Construction.** Storage tanks shall be constructed of durable materials not subject to excessive corrosion or decay and shall be watertight. Each such tank shall be structurally designed to withstand anticipated loads and pressures and shall be installed level and on a solid bed.

**S-8.1.11.2 Standards.** Storage tanks shall be constructed in accordance with recognized standards referenced in this Code and approved by the Authority Having Jurisdiction.

**S-8.1.11.3 Concrete.** The walls and floor of each poured-in-place, concrete storage tank shall be monolithic. The exterior walls shall be double-formed so as to provide exposure of the exterior walls during the required water test. The compressive strength of a concrete tank wall, top and covers, or floor shall be not less than 2500 pounds per square inch ($lb/in^2$) (1.7577 E+06 $kg/m^2$). Where required by the Authority Having Jurisdiction, the concrete shall be sulfate resistant (Type V Portland Cement).

**S-8.1.11.4 Metal Storage Tanks.** Metal storage tanks shall be welded, riveted and caulked, brazed, bolted, or constructed using a combination of these methods. Filler metal used in brazing for a metal storage tank shall be non-ferrous metal or an alloy having a melting point above 1000°F (538°C) and below that of the metal joined.

**S-8.1.11.5 Non-Fiberglass Storage Tanks.** Non-fiberglass storage tanks shall be constructed in accordance with ASME Boiler and Pressure Vessel Code, Section VIII or other approved standards.

**S-8.1.11.6 Fiber-Reinforced Storage Tanks.** Fiber-reinforced storage tanks shall be constructed in accordance with ASME Boiler and Pressure Vessel Code, Section X or other approved standards.

**S-8.2 Expansion Tanks.**

**S-8.2.1 Where Required.** An expansion tank shall be installed in a solar thermal system where a pressure reducing valve, backflow prevention device, check valve or other device is installed on a water supply system utilizing storage or tankless water heating equipment as a means for controlling increased pressure caused by thermal expansion. Expansion tanks shall be of the closed or open type and securely fastened to the structure. Expansion tanks shall be rated for the pressure of the system. Supports shall be capable of carrying twice the weight of the expansion tank filled with water without placing strain on the connecting piping.

Solar thermal systems incorporating hot water tanks or fluid relief columns shall be installed to prevent freezing under normal operating conditions.

**S-8.2.2 Solar Thermal Systems with Open-Type Expansion Tanks.** Open-type expansion tanks shall be located not less than 3 feet (914 mm) above the highest point of the system. Such tanks shall be sized based on the capacity of the system. An overflow with a diameter of not less than one-half the size of the

water supply or not less than 1 inch (25 mm) in diameter shall be installed at the top of the expansion tank. The overflow shall discharge through an air gap into the drainage system.

**S-8.2.3 Closed-Type Solar Thermal Systems.** Closed-type solar thermal systems shall have an airtight tank or other approved air cushion that will be consistent with the volume and capacity of the system, and shall be designed for a hydrostatic test pressure of two and one-half times the allowable working pressure of the system. Expansion tanks for systems designed to operate at or above 30 pounds-force per square inch (psi) (207 kPa) shall be constructed in accordance with nationally recognized standards and the Authority Having Jurisdiction. Provisions shall be made for draining the tank without emptying the system, except for pressurized tanks.

**S-8.2.4 Minimum Capacity of Closed-Type Expansion Tank.** The minimum capacity of a closed-type expansion tank shall be in accordance with Table S-8.2.4(1) and Table S-8.2.4(2) or from the following formula:

$$Vt = \frac{(0.00041t - 0.0466)\ Vs}{\left(\frac{Pa}{Pf} - \frac{Pa}{Po}\right)} \qquad \text{(Equation S-8.2.4)}$$

Where:

| | | |
|---|---|---|
| *Vt* | = | Minimum volume of expansion tank, gallons. |
| *Vs* | = | Volume of system, not including expansion tank, gallons. |
| *t* | = | Average operating temperature, °F. |
| *Pa* | = | Atmospheric pressure, feet $H_2O$ absolute. |
| *Pf* | = | Fill pressure, feet $H_2O$ absolute. |
| *Po* | = | Maximum operating pressure, feet $H_2O$ absolute. |

For SI units: 1 gallon = 3.785 L, °C = (°F-32)/1.8, 1 foot of water = 2.989 kPa

## TABLE S-8.2.4(1)

## EXPANSION TANK CAPACITIES FOR GRAVITY HOT WATER SYSTEMS

| INSTALLED EXPANSION DIRECT RADIATION* (square feet) | TANK CAPACITY (gallons) |
|---|---|
| Up to 350 | 18 |
| Up to 450 | 21 |
| Up to 650 | 24 |
| Up to 900 | 30 |
| Up to 1100 | 35 |
| Up to 1400 | 40 |
| Up to 1600 | 2 to 30 |
| Up to 1800 | 2 to 30 |
| Up to 2000 | 2 to 35 |
| Up to 2400 | 2 to 40 |

For SI units: 1 gallon = 3.785 L, 1 square foot = 0.0929 m2
*For systems exceeding 2400 square feet (222.9 m2) of installed equivalent direct water radiation, the required capacity of the cushion tank shall be increased on the basis of 1 gallon (3.785 L) tank capacity per 33 square feet (3.1 m2) of additional equivalent direct radiation.

## TABLE S-8.2.4(2)

## EXPANSION TANK CAPACITIES FOR FORCED HOT WATER SYSTEMS

| SYSTEM VOLUME* | TANK CAPACITY (gallons) |
|---|---|
| 100 | 15 |
| 200 | 30 |
| 300 | 45 |
| 400 | 60 |
| 500 | 75 |
| 1000 | 150 |
| 2000 | 300 |

For SI units: 1 gallon = 3.785 L
*Includes volume of water in boiler, radiation, and piping, not including expansion tank.

## S-9 Solar Collectors.

## S-9.1 Construction.

**S-9.1.1 General.** Frames and braces exposed to the weather shall be constructed of materials for exterior locations, and protected from corrosion or deterioration, in accordance with the requirements of the Authority Having Jurisdiction.

**S-9.1.2 Construction.** Collectors shall be designed and constructed to prevent interior condensation, out-gassing, or other processes that will reduce the transmission properties of the glazing, reduce the efficiency of the insulation, or otherwise adversely affect the performance of the collector.

**S-9.1.3 Glass.** Glass used in collector construction shall be tempered.

**S-9.1.4 Plastic.** Plastic used in collector construction shall be installed in accordance with the manufacturer's installation instructions.

**S-9.1.5 Listing.** Collectors that are manufactured as a complete component shall be listed or labeled by an approved listing agency in accordance with SRCC 100, UL 1279, or equivalent standard.

**S-9.1.6 Air Collectors.** Materials exposed within air collectors shall be noncombustible or shall have a flame spread index not to exceed 25 and a smoke developed index not to exceed 50 where tested as a composite product in accordance with ASTM E 84 or UL 723.

**S-9.1.6.1 Testing.** Materials used within an air collector shall not smoke, smolder, glow, or flame where tested in accordance with ASTM C 411 at temperatures exposed to in service. In no case shall the test temperature be less than 250°F (121°C).

**S-9.2 Solar Collector Installation.**

**S-9.2.1 General.** Solar collectors shall be anchored to roof structures or other surfaces in accordance with the manufacturer's installation instructions and the Title 26 – Building Code of the Los Angeles County Code. Collectors shall be mounted to minimize the accumulation of debris. Connecting pipes shall not be used to provide support for a solar collector.

**S-9.2.2 Roof Installations.** Anchors secured to and through a roofing material shall be made to maintain the water integrity of the roof covering. Roof drainage shall not be impaired by the installation of collectors. Solar collectors that are not an integral part of the roofing system shall be installed to preserve the integrity of the roof surface.

**S-9.2.3 Ground Installations.** Solar collectors installed at ground level shall be not less than 6 inches (152 mm) above the ground level.

**S-9.2.4 Access.** Access shall be provided to collectors and components in an approved manner. A work space adjacent to collectors for maintenance and repair shall be provided in accordance with requirements of the Authority Having Jurisdiction.

**S-9.2.5 Stagnation Condition.** The collector assembly shall be capable of withstanding stagnant conditions in accordance with the manufacturer's instructions where high solar flux and no flow occurs.

**S-9.2.6 Waterproofing.** Joints between structural supports and buildings or dwellings, including penetrations made by bolts or other means of fastening, shall be made watertight with approved material.

**S-9.2.7 Fasteners.** Mountings and fasteners shall be made of corrosion-resistant materials. Carbon steel mountings and fasteners shall be classified as noncorrosive in accordance with ASME SA194.

**S-9.2.8 Combustible Materials.** Collectors constructed of combustible materials shall not be located on or adjacent to construction required to be of noncombustible materials or in Very High Fire Hazard Severity Zone (VHFHSZ) as defined in Title 32 – Fire Code of the Los Angeles County Code, unless approved by the Authority Having Jurisdiction.

**S-9.2.9 Orientation.** Collectors shall be located and oriented in accordance with the manufacturer's installation instructions.

**S-9.2.10 Wall Mounted.** Solar collectors that are mounted on a wall shall be secured and fastened in an approved manner in accordance with Section 313.0 of this Code.

**S-9.3 Fire Safety Requirements.**

**S-9.3.1 Building Components.** Collectors that function as building components shall be in compliance with Title 26 – Building Code of the Los Angeles County Code.

**S-9.3.2 Above or On the Roof.** Collectors located above or on roofs, and functioning as building components, shall not reduce the required fire-resistance and fire-retardance classification of the roof covering materials.

**EXCEPTIONS:**

(1) Collectors located on buildings not exceeding three stories in height, a 9000 square feet (836.13 $m^2$) total floor area; or both providing:

(a) The collectors are noncombustible.

(b) Collectors with plastic covers have noncombustible sides and bottoms, and the total area covered and the collector shall not exceed the following:

(i) Plastic CC1 – 33⅓ percent of the roof area.

(ii) Plastic CC2 – 25 percent of the roof area.

(c) Collectors with plastic film covers having a thickness of not more than 0.010 of an inch (0.254 mm) shall have noncombustible sides and bottoms, and the total area covered by the collector shall not exceed 33⅓ percent of the roof area.

**S-10 Hazardous Heat Transfer Medium for Solar Thermal Systems.**

**S-10.1 Approval.** Heat-transfer mediums that are hazardous shall not be used in solar thermal systems, except with prior approval of the Authority Having Jurisdiction.

**S-10.2 Flash Points.** The flash point of a heat-transfer medium shall be:

(1) Not less than 50°F (10°C) above the design maximum nonoperating temperature and as high as the maximum stagnation temperature of the medium in the solar thermal system.

(2) Not less than 50°F (10°C) above the design maximum operating temperature and exceeding the maximum stagnation temperature minus 200°F (93°C) of the medium in the solar thermal system.

**S-10.3 Discharge.** The collector, collector manifold, and manifold relief valve shall not discharge directly or indirectly into the building or toward an open flame or other source of ignition.

**S-11 Heat Exchangers.**

**S-11.1 General.** Heat exchangers used for heat transfer, heat recovery, or solar thermal systems shall protect the potable water system from being contaminated by the heat transfer medium. Single-wall heat exchangers shall meet the requirements of Section S-11.2. Double-wall heat exchangers shall separate the potable water from the heat transfer medium by providing a space between the two walls that is vented to the atmosphere.

**S-11.2 Single-Wall Heat Exchangers.** Solar thermal systems that incorporate a single-wall heat exchanger shall meet the following requirements:

(1) The heat transfer medium is either potable water or contains fluids recognized as safe by the Food and Drug Administration (FDA) as food grade.

(2) Bears a label with the word "Caution," followed by the following statements:

(a) The heat transfer medium must be water or other nontoxic fluid recognized as safe by the FDA.

(b) The maximum operating pressure of the heat exchanger is not permitted to exceed the maximum operating pressure of the potable water supply.

(3) The word "Caution" and the statements in letters shall have an uppercase height of not less than 0.120 of an inch (3.048 mm). The vertical spacing between lines of type shall be not less than 0.046 of an inch (1.168 mm). Lowercase letters shall be not less than compatible with the uppercase letter size specification.

**S-12 Valves.**

**S-12.1 General.** Valves shall be rated for the operating temperature and pressures of the solar thermal system and shall be compatible with the type of heat transfer medium. Valves shall be approved for the installation with the piping materials to be installed.

**S-12.2 Fullway Valves.** A fullway valve shall be installed on the water supply to solar thermal systems and on the water supply pipe to a gravity or pressurized water tank or to a water heater.

**S-12.3 Shutoff Valves.** A shutoff valve shall be installed on the supply line to each appliance, equipment, or pressure vessel and on a nondiaphragm-type expansion tank.

**S-12.4 Balancing Valves.** Balancing valves shall be permitted to be used to obtain uniform flow distribution. Balancing valves shall be installed at the outlet of each group of collectors. Balancing valves shall be made of a bronze body

with a brass ball, plastic, or other types compatible with the heat transfer medium. Final settings shall be marked on each balancing valve in an approved manner.

**S-12.5 Accessible.** Required fullway or shutoff valves shall be accessible.

**S-12.6 Control Valves.** An approved three-way valve shall be permitted to be installed for manual control of solar thermal systems. An approved electric control valve shall be permitted to be installed for automatic control of solar thermal systems. The installation and operation of automatic control valves shall comply with the manufacturer's instructions.

**S-12.7 Check Valves.** An approved-type check valve shall be installed on liquid heat transfer piping where the solar energy system design is capable of allowing reverse thermosiphoning of heated liquids into the collector array.

**S-12.8 Automatic Air Vents.** Automatic air release vents shall be installed at high points of the solar thermal system in accordance with the system design requirements and manufacturer's installation instructions.

**S-12.9 Closed Loop Systems.** Closed loop systems, where hose bibbs or similar valves are used to charge or drain the system, shall be of loose key type; have valve outlets capped; or have handles removed where the system is operational.

**S-13 Piping and Cross-connection Control For Solar Thermal Systems.**

**S-13.1 Cross Connection Control.**

**S-13.1.1 Prohibited Installation.** No installation of solar thermal piping, or part thereof, shall be made in such a manner that it will be possible for used, unclean, polluted, or contaminated water, mixtures, or substances to enter a portion of the potable water system from a pipe, tank, receptor, or any other equipment by reason of backsiphonage, suction, or any other cause, either during normal use and operation thereof, or where such pipe, tank, receptor, or equipment is subject to pressure exceeding the operating pressure in the potable water system.

**S-13.1.2 Cross-Contamination.** No person shall make a connection or allow one to exist between pipes or conduits carrying potable water supplied by a public or private building supply system, and pipes or conduits containing or carrying water from other source or containing or carrying water that has been used for any purpose whatsoever, or piping carrying chemicals, liquids, gases, or substances unless there is provided a backflow prevention device approved for the potential hazard and maintained in accordance with this Code.

**S-13.1.3 Backflow Prevention.** No device or construction shall be installed or maintained, or shall be connected to a potable water supply, where such installation or connection provides a possibility of polluting such water supply or cross-connection between a distributing system of water for drinking and domestic purposes and water that becomes contaminated by such device or construction unless there is provided a backflow prevention device approved for the potential hazard. Backflow prevention devices shall comply with Sections 602 and 603 of this Code.

**S-13.1.4 Water Supply Inlets.** Water supply inlets to tanks and other receptors shall be protected by one of the following means:

(1) An approved air gap.

(2) A listed vacuum breaker installed on the discharge side of the last valve with the critical level not less than 6 inches (152 mm) or in accordance with its listing.

(3) A backflow preventer suitable for the contamination or pollution, installed in accordance with the requirements for that type of device or assembly as set forth in this Code.

**S-13.2 Materials.**

**S-13.2.1 Piping Materials.** Piping materials shall comply with the applicable standards referenced in Table 604.1 and other provisions of this Code. Materials shall be rated for the operating temperature and pressures of the solar energy system and shall be compatible with the type of heat transfer medium and shall be approved for such use. Pipe fittings and valves shall be approved for the piping systems, and shall be compatible with, or shall be of the same material as the pipe or tubing. Exterior piping shall be protected from corrosion, degradation, and shall be resistant to UV radiation. Galvanized steel shall not be used in solar thermal systems where in contact with glycol heat transfer fluid.

**S-13.2.2 Screwed Fittings.** Screwed fittings shall be ABS, cast-iron, copper, copper alloy, malleable iron, PVC, steel, stainless steel or other approved materials. Threads shall be tapped out of solid metal or molded in solid ABS or PVC.

**S-13.2.3 Storage Tank Connectors.** Flexible metallic storage tank connectors or reinforced flexible storage tank connectors connecting a storage tank to the piping system shall be in accordance with the applicable standards (ASME A112.18.6-2009/CSA B 125.6-2009). Copper or stainless steel flexible connectors shall not exceed 24 inches (610 mm). PEX, PE-AL-PE, or PE-RT tubing shall not be installed within the first 18 inches (457 mm) of piping connected to a storage tank.

**S-13.2.3.1 Flexible Connectors.** Listed flexible connectors shall be installed in readily accessible locations, unless otherwise indicated in the listing.

**S-13.3 Safety Devices.**

**S-13.3.1 Pressure Relief Valves.** Solar energy system components containing pressurized fluids shall be protected against pressures exceeding design limitations with a pressure relief valve. Each section of the system in which excessive pressures are capable of developing shall have a relief device located so that a section cannot be isolated from a relief device. Valves shall not be located on either side of a relief valve connection. The relief valve discharge pipe shall be of approved material that is rated for the temperature of the system. The discharge pipe shall be the same diameter as the relief valve outlet and shall discharge by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) nor less than 6 inches (152 mm) above the ground and pointing downward.

**S-13.3.2 Vacuum Relief Valves.** The solar energy system components that are subjected to a vacuum while in operation or during shutdown shall be protected with vacuum relief valves. Where the piping configuration, equipment location, and valve outlets are located below the storage tank elevation the system shall be equipped with a vacuum relief valve at the highest point.

**S-13.3.3 Space Heating.** Where a combination potable water heating and space heating system requires water for space heating at temperatures higher than 140°F (60°C), a thermostatic mixing valve that is in accordance with ASSE 1017 shall be provided to limit the water supplied to the potable hot water distribution system to a temperature of 140°F (60°C) or less.

**S-13.4 Protection of System Components.**

**S-13.4.1 Corrosion.** Solar thermal systems and components subject to corrosion shall be protected in an approved manner. Metal parts exposed to atmospheric conditions shall be of corrosion-resistant material.

**S-13.4.2 Mechanical Damage.** Portions of a solar energy system installed where subjected to mechanical damage shall be guarded against such damage by being installed behind approved barriers or, where located within a garage, be elevated or located out of the normal path of a vehicle.

**S-13.4.3 Freeze Protection.** No solar thermal piping shall be installed or permitted outside of a building or in an exterior wall, unless, where necessary, adequate provision is made to protect such pipe from freezing. Freeze protection for solar thermal systems shall be provided in accordance with the following:

(1) Protection from freeze damage where the ambient temperature is less than 41°F (5°C) shall be provided for system components containing heat transfer liquids in an approved manner.

(2) The supplier of each system shall specify the limit ("Freeze Tolerance Limit") to the system's tolerance of freezing weather conditions.

(3) For systems that rely on manual intervention for freeze protection, the supplier shall specify the system's freeze tolerance limit based on exposure for 18 hours to a constant atmospheric temperature.

(4) For solar thermal systems where the collector fluid is potable water, not less than two freeze protection mechanisms shall be provided on each system. Manual intervention (e.g., draining, changing valve positions, etc.) shall be permitted as one mechanism. Not less than one freeze protection mechanism, in addition to manual intervention, shall be designed to protect components from freeze damage, in the event of power failure in an approved manner. Where approved, thermal mass of a system shall be permitted to be a form of freeze protection.

(5) Fittings, pipe slope, and collector shall be designed to allow for manual gravity draining and air filling of solar thermal system components and piping. Pipe slope for gravity draining shall be not less than ¼ inch per foot (20.8 mm/m) of horizontal length. This also applies to header pipes or absorber plate riser tubes internal to the collector. Where a means to drain the system is provided a drain valve shall be installed.

(6) At the time of installation, a label indicating the method of freeze protection for the system shall be attached to the system in a visible location. For systems which rely on manual intervention for freeze protection, such label shall indicate the minimum ambient temperature conditions (Freeze Tolerance Limit) below which owner action is recommended by the manufacturer's instructions.

**S-13.4.4 Water Hammer Protection.** Solar thermal systems where quick-acting valves are installed shall be provided with water hammer arrester(s) to absorb high pressures resulting from the quick closing of these valves. Water hammer arrestors shall be approved mechanical devices in accordance with the applicable standard(s) referenced in this Code and shall be installed as close as possible to quick-acting valves.

**S-13.4.5 Materials.** Solar thermal system components in contact with heat-transfer mediums shall be approved for such use. Solar thermal system components, installed outdoors, shall be resistant to UV radiation.

**S-13.4.6 Heat Transfer Medium.** Solar thermal piping shall be identified with an orange background with black uppercase lettering, with the words "CAUTION: HEAT TRANSFER MEDIUM, DO NOT DRINK." Each solar thermal system shall be identified to designate the medium being conveyed. The minimum size of the letters and length of the color field shall comply with Table S-13.4.6.

Each outlet on the solar thermal piping system shall be posted with black uppercase lettering as follows:

"CAUTION: HEAT TRANSFER MEDIUM, DO NOT DRINK.

## TABLE S-13.4.6

## Minimum Length of Color Field and Size of Letters

| Outside Diameter of Pipe or Covering (inches) | Minimum Length of Color Field (inches) | Minimum Size of Letters (inches) |
|---|---|---|
| 1/2 to 1 1/4 | 8 | 1/2 |
| 1 1/2 to 2 | 8 | 3/4 |
| 2 1/2 to 6 | 12 | 1 1/4 |
| 8 to 10 | 24 | 2 1/2 |
| Over 10 | 32 | 3 1/2 |

For SI units: 1 inch = 25.4 mm

**S-14 Specific Requirements.**

**S-14.1 Electrical.**

**S-14.1.1 Wiring.** Electrical connections, wiring, and devices shall be installed in accordance with the Los Angeles County Electrical Code. Electrical equipment, appliances, and devices installed in areas that contain flammable vapors or dusts shall be of a type approved for such environment.

**S-14.1.2 Controls.** Required electrical, mechanical, safety, and operating controls shall be listed or labeled by a listing agency. Electrical controls shall be of such design and construction as to be suitable for installation in the environment in which they are located.

**S-14.2 Flow Directions.** Solar thermal systems shall have flow directions indicated on system components and piping or shall have flow directions indicated on a diagrammatic representation of the system as installed, and permanently affixed to the system hardware in a readily visible location.

**S-14.3 Attic Installations.** An attic space in which solar energy system components are installed shall comply with Section 508.4 of this Code.

**S-14.4 Connections to Drainage System Required.** Receptors, drains, appurtenances, and appliances, used to receive or discharge liquid wastes, shall be connected to the drainage system of the building or premises in accordance with the requirements of this Code.

**S-14.5 Dry Storage Systems.**

**S-14.5.1 Waterproofing.** The containment structure for dry thermal storage systems shall be constructed in an approved manner to prevent the infiltration of water or moisture.

**S-14.5.2 Detecting Water Intrusion.** The containment structure shall be capable of fully containing spillage or moisture accumulation that occurs. The structure shall have a means, such as a sight glass, to detect spillage or moisture accumulation, and shall be fitted with a drainage device to eliminate spillage.

**S-14.5.3 Rock as Storage Material.** Systems utilizing rock as the thermal storage material shall use clean, washed rock that is free of organic material.

**S-14.5.4 Odor and Particulate Control.** Thermal storage materials and containment structures, including interior protective coating, shall not impart toxic elements, particulate matter, or odor to areas of human occupancy.

**S-14.5.5 Combustibles Within Ducts or Plenums.** Materials exposed within ducts or plenums shall be noncombustible or shall have a flame spread index not to exceed 25 and a smoke developed index not to exceed 50 where tested as a composite product in accordance with ASTM E 84 or UL 723.

**S-15 Solar Thermal Systems for Swimming Pool.**

**S-15.1 Applicability.** This Section applies to the installation and construction of solar thermal systems for swimming pools, spas, and hot tubs.

**S-15.2 Water Chemistry.** Where water from a swimming pool, spa or hot tub is heated by way of circulation through solar collectors, the chemistry of such water shall comply with the requirements of Section S-15.2 and Table S-15.2 and shall be filtered in accordance with Sections S-15.3 and S-15.3.1 of this Code.

**TABLE S-15.2**

**WATER CHEMISTRY**

| PARAMETER | ACCEPTABLE RANGE |
|---|---|
| Calcium hardness | 200 – 400 parts per million (ppm) |
| Langelier Saturation Index | 0 (+ or - 0.3 acceptable) |
| pH | 7.2 – 7.8 |
| TDS | < 1500 ppm |
| Total alkalinity | 80 – 120 ppm |

For SI Units: 1 part per million = 1 mg/L.

**S-15.3 Filter.** A filter shall be provided to remove debris from the water entering the solar loop.

**EXCEPTION:** A solar swimming pool, spa, or hot tub heating system with a heat exchanger.

**S-15.3.1 Location.** A filter shall be located upstream of a pump used to direct water to solar collectors.

**S-15.4 Corrosion Resistant.** Glazed solar collectors made of copper shall not be used for solar pool, spa, or hot tub heating.

**EXCEPTION:** Where a heat exchanger is provided between the collector circuit and the swimming pool, spa, or hot tub water.

**S-16 Certificate of Compliance.** Upon completion of the solar energy system, the permittee shall sign a Certificate of Compliance with this Code.

The Certificate of Compliance shall also list the following information:

(1) Type of freeze protection;

(2) Mixing valve setting degrees Fahrenheit (° F);

(3) Subsystem working pressure (if applicable) psi;

(4) Subsystem test pressure (if applicable) psi;

(5) Heat exchange make and model number (if applicable);

(6) Circulating pump over temperature protection shut-off setting degrees Fahrenheit (° F) for one-tank systems where the water heater controls utilize fusible-link type over temperature protection.

This Certificate shall be posted in a conspicuous location at or near the water heater.

**S-17 Referenced Standards.** The standards listed in Table S-17 are intended for use in the design, testing, and installation of materials, devices, appliances, and equipment regulated by this Chapter.

**TABLE S-17**

**REFERENCED STANDARDS**

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| ASCE 25-2006* | Earthquake Actuated Automatic Gas Shutoff Devices | Fuel Gas |
| ASHRAE 90.1-2010* | Energy Standard for Buildings Except Low-Rise Residential Buildings | Energy |
| ASHRAE 93-2010* | Methods of Testing to Determine the Thermal Performance of Solar Collectors | Testing |
| ASHRAE 95-1981* | Thermal Testing of 32 Residential Solar Water Heating Systems | Testing |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| ASHRAE 96-1980 (R1989)* | Thermal Performance of Unglazed Flat-Plate Liquid-Type Solar Collectors | Testing, Collector |
| ASME A13.1-2007* | Scheme for the Identification of Piping Systems | Piping |
| ASME A112.1.2-2004* | Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water-Connected Receptors) | Fittings |
| ASME A112.1.3-2000 (R2010)* | Air Gap Fittings for Use with Plumbing Fixtures, Appliances, and Appurtenances | Fittings |
| ASME A112.18.1-2005/CSA B125.1-2005 | Plumbing Supply Fittings | Fittings |
| ASME A112.18.2-2005/CSA B125.2-2005 | Plumbing Waste Fittings | Fittings |
| ASME A112.18.6-2009/CSA B 125.6-2009* | Flexible Water Connectors | Piping |
| ASME B1.20.1-1983 (R2006)* | Pipe Threads, General Purpose, Inch | Joints |
| ASME B16.3-2006* | Malleable-Iron Threaded Fittings: Classes 150 and 300 | Fittings |
| ASME B16.4-2006* | Gray Iron Threaded Fittings (Classes 125 and 250) | Fittings |
| ASME B16.5-2009* | Pipe Flanges and Flanged Fittings: NPS ½ through NPS 24 Metric/Inch | Fittings |
| ASME B16.12-2009* | Cast Iron Threaded Drainage Fittings | Fittings |
| ASME B16.15-2006* | Cast Copper Alloy Threaded Fittings: Classes 125 and 250 | Fittings |
| ASME B16.18-2001 (R2005)* | Cast Copper Alloy Solder Joint Pressure Fittings | Fittings |
| ASME B16.21-2005* | Nonmetallic Flat Gaskets for Pipe Flanges | Joints |
| ASME B16.22-2001 (R2010)* | Wrought Copper and Copper Alloy Solder Joint Pressure Fittings | Fittings |
| ASME B16.23-2002 (R2006)* | Cast Copper Alloy Solder Joint Drainage Fittings: DWV | Fittings |
| ASME B16.24-2006* | Cast Copper Alloy Pipe Flanges and Flanged Fittings: Classes 150, 300, 600, 900, 1500 and 2500 | Fittings |
| ASME B16.26-2006* | Cast Copper Alloy Fittings for Flared Copper Tubes | Fittings |
| ASME B16.29-2007* | Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings-DWV | Fittings |
| ASME B16.33-2002 (R2007)* | Manually Operated Metallic Gas Valves for use in Gas Piping Systems up to 125 psi (Sizes NPS ½ – NPS 2) | Valves |
| ASME B16.34-2009* | Valves – Flanged, Threaded, and Welding End | Valves |
| ASME B16.47-2006* | Large Diameter Steel Flanges: NPS 26 Through NPS 60 Metric/Inch | Fittings |
| ASME BPVC Section IV-2010* | Rules for Construction of Heating Boilers | Miscellaneous |
| ASME BPVC Section VIII-2010* | Rules for Construction of Pressure Vessels Division 1 | Miscellaneous |
| ASME BPVC Section IX-2010* | Welding and Brazing Qualifications | Certification |
| ASME BPVC Section X-2007* | Fiber-Reinforced Plastic Pressure Vessels | Pressure Vessel Construction, Pressure Vessels |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| ASME SA194-2010* | Carbon and Alloy Steel Nuts for Bolts for High-Pressure or High-Temperature Service or Both | Mounting |
| ASSE 1001-2008* | Atmospheric-Type Vacuum Breakers | Backflow Protection |
| ASSE 1002-2008* | Anti-Siphon Fill Valves for Water Closet Tanks | Backflow Protection |
| ASSE 1003-2009* | Water Pressure Reducing Valves for Domestic Water Distribution Systems | Valves |
| ASSE 1010-2004* | Water Hammer Arrestors | Water Supply Component |
| ASSE 1013-2009* | Reduced Pressure Principle Backflow Preventers and Reduced Pressure Principle Fire Protection Backflow Preventers | Backflow Protection |
| ASSE 1015-2009* | Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies | Backflow Protection |
| ASSE 1017-2009* | Temperature Actuated Mixing Valves for Hot Water Distribution Systems | Valves |
| ASSE 1018-2001* | Trap Seal Primer Valves–Potable Water Supplied | Valves |
| ASSE 1019-2004* | Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type | Backflow Protection |
| ASSE 1020-2004* | Pressure Vacuum Breaker Assembly | Backflow Protection |
| ASSE 1022-2003* | Backflow Preventer for Beverage Dispensing Equipment | Backflow Protection |
| ASSE 1044-2001* | Trap Seal Primer Devices-Drainage Types and Electronic Design Types | DWV Components |
| ASSE 1047-2009* | Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies | Backflow Protection |
| ASSE 1048-2009* | Double Check Detector Fire Protection Backflow Prevention Assemblies | Backflow Protection |
| ASSE 1052-2004* | Hose Connection Backflow Preventers | Backflow Protection |
| ASSE 1056-2001* | Spill Resistant Vacuum Breakers | Backflow Protection |
| ASSE 1061-2006* | Push-Fit Fittings | Fittings |
| ASSE 1079-2005 | Dielectric Pipe Unions | Joints |
| ASSE Series 5000-2009* | Cross-Connection Control Professional Qualifications | Certification |
| ASTM A 53/A 53M-2010 | Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded, and Seamless | Piping, Ferrous |
| ASTM A 74-2009 | Cast Iron Soil Pipe and Fittings | Piping, Ferrous |
| ASTM A 126-2004 (R2009) | Gray Iron Castings for Valves, Flanges, and Pipe Fittings | Piping, Ferrous |
| ASTM A 269-2010 | Seamless and Welded Austenitic Stainless Steel Tubing for General Service | Piping, Ferrous |
| ASTM A 312-2009 | Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes | Piping, Ferrous |
| ASTM A 377-2003 (R2008)[e1] | Ductile-Iron Pressure Pipe | Piping, Ferrous |
| ASTM A 518-1999 (R2008) | Corrosion-Resistant High-Silicon Iron Castings | Piping, Ferrous |
| ASTM A 733-2003 (R2009)[e1] | Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples | Piping, Ferrous |
| ASTM A 861-2004 (R2008) | High-Silicon Iron Pipe and Fittings (Note 1) | Piping, Ferrous |
| ASTM B 32-2008 | Solder Metal (Note 2) | Joints |
| ASTM B 42-2010 | Seamless Copper Pipe, Standard Sizes | Piping, Copper Alloy |
| ASTM B 43-2009 | Seamless Red Brass Pipe, Standard Sizes | Piping, Copper Alloy |
| ASTM B 75-2002 (R2010) | Seamless Copper Tube | Piping, Copper Alloy |
| ASTM B 88-2009 | Seamless Copper Water Tube | Piping, Copper Alloy |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| ASTM B 135-2010 | Seamless Brass Tube | Piping, Copper Alloy |
| ASTM B 251-2010 | General Requirements for Wrought Seamless Copper and Copper-Alloy Tube | Piping, Copper Alloy |
| ASTM B 302-2007 | Threadless Copper Pipe, Standard Sizes | Piping, Copper Alloy |
| ASTM B 306-2009 | Copper Drainage Tube (DWV) | Piping, Copper Alloy |
| ASTM B 447-2007 | Welded Copper Tube | Piping, Copper Alloy |
| ASTM B 584-2009a | Copper Alloy Sand Castings for General Applications (Note 3) | Piping, Copper Alloy |
| ASTM B 587-2008 | Welded Brass Tube | Piping, Copper Alloy |
| ASTM B 687-1999 (R2005)[e1] | Brass, Copper, and Chromium-Plated Pipe Nipples | Piping, Copper Alloy |
| ASTM B 813-2010 | Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube | Joints |
| ASTM B 828-2002 (R2010) | Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings | Joints |
| ASTM C 296-2000 (R2009)[e1] | Asbestos-Cement Pressure Pipe | Piping, Non-Metallic |
| ASTM C 411-2005 | Hot-Surface Performance of High-Temperature Thermal Insulation | Thermal Insulating Materials |
| ASTM C 425-2004 (R2009) | Compression Joints for Vitrified Clay Pipe and Fittings | Joints |
| ASTM C 443-2010 | Joints for Concrete Pipe and Manholes, Using Rubber Gaskets | Joints |
| ASTM C 564-2009a | Rubber Gaskets for Cast Iron Soil Pipe and Fittings | Joints |
| ASTM C 700-2011 | Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated | Piping, Non-Metallic |
| ASTM C 1277-2009a | Shielded Couplings Joining Hubless Cast Iron Soil Pipe and Fittings | Joints |
| ASTM D 56-2005* | Flash Point by the Tag Closed Cup Tester | Testing |
| ASTM D 93-2010a | Flash Point by Pensky-Martens Closed Cup Tester | Testing |
| ASTM D 635-2006 | Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position | Testing |
| ASTM D 1785-2006* | Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120 | Piping, Plastic |
| ASTM D 1869-1995 (R2010) | Rubber Rings for Asbestos-Cement Pipe | Joints |
| ASTM D 2235-2004 (R2011)* | Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings | Joints |
| ASTM D 2239-2003* | Polyethylene (PE) Plastic Pipe, (SDR-PR) Based on Controlled Inside Diameter | Piping, Plastic |
| ASTM D 2241-2009* | Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series) | Piping, Plastic |
| ASTM D 2464-2006* | Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80 (Note 1) | Fittings |
| ASTM D 2466-2006* | Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40 (Note 1) | Fittings |
| ASTM D 2467-2006* | Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80 (Note 1) | Fittings |
| ASTM D 2513-2011* | Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings (Note 1) | Piping, Plastic |
| ASTM D 2564-2004 (R2009)* | Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems | Joints |
| ASTM D 2609-2002 (R2008)* | Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe (Note 1) | Fittings |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| ASTM D 2657-2007* | Heat Fusion Joining of Polyolefin Pipe and Fittings (Note 1) | Joints |
| ASTM D 2672-1996a (R2009)* | Joints for IPS PVC Pipe Using Solvent Cement | Joints |
| ASTM D 2683-2010* | Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing | Fittings |
| ASTM D 2737-2003* | Polyethylene (PE) Plastic Tubing | Piping, Plastic |
| ASTM D 2846-2009b* | Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems | Piping, Plastic |
| ASTM D 2855-1996 (R2010)* | Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings | Joints |
| ASTM D 3035-2010* | Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter | Piping, Plastic |
| ASTM D 3139-1998 (R2011)* | Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals | Joints |
| ASTM D 3261-2010a* | Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing | Fittings |
| ASTM D 3278-1996 (R2011)* | Flash Point of Liquids by Small Scale Closed-Cup Apparatus | Testing |
| ASTM E 84-2010b* | Surface Burning Characteristics of Building Materials | Miscellaneous |
| ASTM E 2231-2009 | Specimen Preparation and Mounting of Pipe and Duct Insulation Materials to Assess Surface Burning Characteristics | Pipe Insulation |
| ASTM F 402-2005* | Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings | Joints |
| ASTM F 437-2009* | Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 | Fittings |
| ASTM F 438-2009* | Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40 | Fittings |
| ASTM F 439-2009* | Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 | Fittings |
| ASTM F 441-2009* | Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80 | Piping, Plastic |
| ASTM F 442-2009* | Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR) | Piping, Plastic |
| ASTM F 480-2006b$^{e1}$* | Thermoplastic Well Casing Pipe and Couplings Made in Stand-ard Dimension Ratios (SDR), Schedule 40 and Schedule 80 | Piping, Plastic |
| ASTM F 493-2010* | Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings | Joints |
| ASTM F 628-2008* | Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core (Note 1) | Piping, Plastic |
| ASTM F 656-2010* | Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings | Joints |
| ASTM F 876-2010* | Crosslinked Polyethylene (PEX) Tubing | Piping, Plastic |
| ASTM F 877-2007* | Crosslinked Polyethylene (PEX) Plastic Hot- and Cold-Water Distribution Systems | Piping, Plastic |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| ASTM F 891-2010* | Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core | Piping, Plastic |
| ASTM F 1055-1998 (R2006)* | Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing | Fittings |
| ASTM F 1281-2007* | Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe | Piping, Plastic |
| ASTM F 1282-2010* | Polyethylene/Aluminum olyethylene (PE-AL-PE) Composite Pressure Pipe | Piping, Plastic |
| ASTM F 1807-2010$^{e1}$* | Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing | Fittings |
| ASTM F 1960-2010* | Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing | Fittings |
| ASTM F 1961-2009* | Metal Mechanical Cold Flare Compression Fittings with Disc Spring for Crosslinked Polyethylene (PEX) Tubing | Fittings |
| ASTM F 1970-2005* | Special Engineered Fittings, Appurtenances or Valves for Use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems | Piping, Plastic |
| ASTM F 1974-2009* | Metal Insert Fittings for Polyethylene/Aluminum olyethylene and Crosslinked Polyethylene/ Aluminum/Crosslinked Polyethylene Composite Pressure Pipe | Fittings |
| ASTM F 2080-2009* | Cold-Expansion Fittings with Metal Compression Sleeves for Crosslinked Polyethylene (PEX) Pipe | Fittings |
| ASTM F 2098-2008* | Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert and Plastic Insert Fittings | Joints |
| ASTM F 2159-2010* | Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing | Joints |
| ASTM F 2262-2009* | Crosslinked Polyethylene/Aluminum/ Crosslinked Polyethylene Tubing OD Controlled SDR9 | Piping, Plastic |
| ASTM F 2389-2010 | Pressure-Rated Polypropylene (PP) Piping Systems | Piping, Plastic |
| ASTM F 2434-2009* | Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Tubing | Pipe Fittings |
| ASTM F 2735-2009 | Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing | Fittings |
| ASTM F 2769-2009 | Polyethylene of Raised Temperature (PE-RT) Plastic Hot and Cold-Water Tubing and Distribution Systems | Piping and Fittings, Plastic |
| AWS A5.8-2004* | Filler Metals for Brazing and Braze Welding | Joints |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| AWS A5.9-2006* | Bare Stainless Steel Welding Electrodes and Rods | Joints |
| AWS B2.2-2010* | Brazing Procedure and Performance Qualification | Certification |
| AWWA C110-2008* | Ductile-Iron and Gray-Iron Fittings | Fittings |
| AWWA C111-2007* | Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings (same as ANSI A 21.11) | Joints |
| AWWA C151-2009* | Ductile-Iron Pipe, Centrifugally Cast | Piping, Ferrous |
| AWWA C153-2006* | Ductile-Iron Compact Fittings for Water Service | Fittings |
| AWWA C203-2008* | Coal-Tar Protective Coatings and Linings for Steel Water Pipelines -Enamel and Tape -Hot Applied | Miscellaneous |
| AWWA C213-2007* | Fusion-Bonded Epoxy Coating for the Interior and Exterior of Steel Water Pipelines | Miscellaneous |
| AWWA C215-2010* | Extruded Polyolefin Coatings for the Exterior of Steel Water Pipelines | Miscellaneous |
| AWWA C500-2009* | Metal-Seated Gate Valves for Water Supply Service | Valves |
| AWWA C507-2005* | Ball Valves, 6 in. through 48 in. (150 mm through 1200 mm) | Valves |
| AWWA C510-2007* | Double Check Valve Backflow Prevention Assembly | Backflow Protection |
| AWWA C511-2007* | Reduced-Pressure Principle Backflow Prevention Assembly | Backflow Protection |
| AWWA C900-2007* | Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 in. through 12 in. (100 mm through 300 mm), for Water Transmission and Distribution | Piping, Plastic |
| AWWA C901-2008* | Polyethylene (PE) Pressure Pipe and Tubing, ½ in. (13 mm) through 3 in. (76 mm), for Water Service | Piping, Plastic |
| AWWA C 904-2006* | Cross-linked Polyethylene (PEX) Pressure Pipe, ½ in. (12 mm) through 3 in. (76 mm), for Water Service | Piping, Plastic |
| BS EN 12975-1-2006 | Thermal Solar Systems and Components – Solar Collectors (Part 1: General Requirements) | Collector |
| BS EN 12975-2-2006 | Thermal Solar Systems and Components – Solar Collectors (Part 2: Test Methods) | Collector |
| BS EN 12976-1-2006 | Thermal Solar Systems and Components – Factory Made Systems (Part 1: General Requirements) | Solar System |
| BS EN 12976-2-2006 | Thermal Solar Systems and Components – Factory Made Systems (Part 2: Test Methods) | Solar System |
| BS EN ISO 9488-2000 | Solar Energy – Vocabulary | Miscellaneous |
| CSA B64.1.1-2007 | Atmospheric Vacuum Breakers (AVB) | Backflow Protection |
| CSA B64.1.2-2007 | Pressure Vacuum Breakers (PVB) | Backflow Protection |
| CSA B64.2.1.1-2007 | Hose Connection Dual Check Vacuum Breakers (HCDVB) | Backflow Protection |
| CSA B64.4-2007 | Reduced Pressure Principle (RP) Backflow Preventers | Backflow Protection |
| CSA B64.4.1-2007 | Reduced Pressure Principle Backflow Preventers for Fire Protection Systems (RPF) | Backflow Protection |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| CSA B64.5-2007 | Double Check Valve (DVCA) Backflow Preventers | Backflow Protection |
| CSA B64.5.1-2007 | Double Check Valve Backflow Preventers for Fire Protection Systems (DVCAF) | Backflow Protection |
| CSA B137.1-2009 | Polyethylene (PE) Pipe, Tubing, and Fittings for Cold-Water Pressure Services | Piping, Plastic |
| CSA B137.5-2009 | Crosslinked Polyethylene (PEX) Tubing Systems for Pressure Applications | Piping, Plastic |
| CSA B137.9-2009 | Polyethylene/Aluminum olyethylene (PE-AL-PE) Composite Pressure-Pipe Systems | Piping, Plastic |
| CSA B137.10-2009 | Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Composite Pressure-Pipe Systems | Piping, Plastic |
| CSA B137.11-2009 | Polypropylene (PP-R) Pipe and Fittings for Pressure Applications | Piping, Plastic |
| CSA Z21.10.1a-2009* | Gas Water Heaters -Volume I, Storage Water Heaters with Input Ratings of 75 000 Btu Per Hour or Less (same as CSA 4.1a) | Fuel Gas, Appliances |
| CSA Z21.10.3b-2008 (R2010)* | Gas Water Heaters -Volume III, Storage Water Heaters with Input Ratings Above 75 000 Btu Per Hour, Circulating and Instantaneous (same as CSA 4.3b) | Fuel Gas, Appliances |
| CSA Z21.13a-2010* | Gas-Fired Low-Pressure Steam and Hot Water Boiler (same as CSA 4.9a) | Fuel Gas, Appliances |
| CSA Z21.22b-2001 (R2008)* | Relief Valves for Hot Water Supply Systems (same as CSA 4.4b) | Valves |
| CSA Z21.24a-2009* | Connectors for Gas Appliances (same as CSA 6.10a) | Fuel Gas |
| CSA Z21.56a-2008* | Gas-Fired Pool Heaters (same as CSA 4.7a) | Fuel Gas, Swimming Pools and Spas, and Hot Tubs |
| DD ENV 12977-1-2001 | Thermal Solar Systems and Components – Custom Built Systems (Part 1: General Requirements) | Solar System |
| DD ENV 12977-2-2001 | Thermal Solar Systems and Components – Custom Built Systems (Part 2: Test Methods) | Solar System |
| DD ENV 12977-3-2001 | Thermal Solar Systems and Components – Custom Built Systems (Part 3: Performance Characterization of Stores for Solar Heating Systems) | Solar System |
| IAPMO IS 8-2006 | PVC Cold Water Building Supply and Yard Piping | Piping, Plastic |
| IAPMO IS 13-2006 | Protectively Coated Pipe | Pipe Coatings |
| IAPMO IS 20-2010 | CPVC Solvent Cemented Hot and Cold Water Distribution Systems | Piping, Plastic |
| IAPMO PS 25-2002 | Metallic Fittings for Joining Polyethylene Pipe for Water Service and Yard Piping | Joints |
| IAPMO PS 64-2007a | Pipe Flashings | Miscellaneous |
| IAPMO PS 72-2007 | Valves with Atmospheric Vacuum Breakers | Valves |
| IAPMO PS-117-2008 | Copper and Copper Alloy Tubing System Incorporating Press-Type or Nail-Type Connections | Fittings |
| IEEE 937-2007 | Installation and Maintenance of Lead-Acid Batteries for Photovoltaic (PV) Systems | Installation and Maintenance, Photovoltaic |
| IEEE 1013-2007 | Sizing Lead-Acid Batteries for Stand-Alone Photovoltaic (PV) Systems | Photovoltaic, Sizing |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| IEEE 1361-2003 | Lead-Acid Batteries Used in Stand-Alone Photovoltaic (PV) Systems | Testing, Evaluation |
| IEEE 1526-2003 | Testing the Performance of Stand-Alone Photovoltaic Systems | Testing, Photovoltaic |
| IEEE 1547-2003 | Interconnecting Distributed Resources with Electric Power Systems | Connections, Photovoltaic |
| IEEE 1562-2007 | Array and Battery Sizing in Stand-Alone Photovoltaic (PV) Systems | Array, Battery, Photovoltaic |
| IEEE 1661-2007 | Lead-Acid Batteries Used in Photovoltaic (PV) Hybrid Power Systems | Testing and Evaluation, Photovoltaic |
| ISO 9459-1-1993 | Solar Heating – Domestic Water Heating Systems – Part 1 | Solar System |
| ISO 9459-2-1995 | Solar Heating – Domestic Water Heating Systems | Solar System |
| ISO 9806-1-1994 | Test Methods for Solar Collectors – Part 1 | Collector |
| ISO 9806-2-1995 | Test Methods for Solar Collectors – Part 2 | Collector |
| ISO 9806-3-1995 | Test Methods for Solar Collectors – Part 3 | Collector |
| ISO TR 10217-1989 | Solar Energy – Water Heating Systems – Guide to Material Selection with Regard to Internal Corrosion | Solar System |
| MSS SP-58-2009 | Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application, and Installation | Fuel Gas |
| MSS SP-80-2008* | Bronze Gate, Globe, Angle, and Check Valves | Valves |
| NFPA 70-2011* | National Electrical Code | Electrical |
| NFPA 274-2009* | Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation | Pipe Insulation |
| NSF 14-2010* | Plastic Piping System Components and Related Materials | Piping, Plastic |
| NSF 61-2010a* | Drinking Water System Components – Health Effects | Water Supply Components |
| SAE J512-1997 | Automotive Tube Fittings | Fittings |
| SRCC 100-2005 | Operating Guidelines for Certifying Solar Collectors | Collectors |
| SRCC 150-2008 | Test Methods and Minimum Standards for Certifying Innovative Solar Collectors | Testing |
| SRCC 300-2008 | Operating Guidelines and Minimum Standards for Certifying Solar Water Heating Systems | Solar System |
| UL 174-2004* | Household Electric Storage Tank Water Heaters (with revisions through April 22, 2009) | Appliances |
| UL 723-2008* | Test for Surface Burning Characteristics of Building Materials (with revisions through September 13, 2010) | Miscellaneous |
| UL 778-2010* | Motor-Operated Water Pumps (with revisions through August 25, 2011) | Pumps |
| UL 873-2007 | Temperature-Indicating and -Regulating Equipment (with revisions through January 6, 2010) | Electrical |
| UL 916-2007 | Energy Management Equipment (with revisions through June 4, 2010) | Electrical |
| UL 969-1995* | Safety Marking and Labeling System (with revisions through November 24, 2008) | Marking, Labeling |
| UL 1279-2010 | Outline of Investigation for Solar Collectors | Electrical |

| STANDARD NUMBER | STANDARD TITLE | APPLICATION |
|---|---|---|
| UL 1453-2004* | | |
| | Electric Booster and Commercial Storage Tank Water Heaters (with revisions through December 4, 2009) | Appliances |
| UL 1703-2002* | Flat-Plate Photovoltaic Modules and Panels (with revisions through May 23, 2011) | Electrical |
| UL 1741-2010 | Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources | Electrical |
| UL 4703-2010 | Outline of Investigation for Photovoltaic Wire | Electrical |
| UL 6703 -2010 | Outline for Connectors for Use in Photovoltaic Systems | Electrical |
| UL 8703-2008 | Outline for Concentrator Photovoltaic Modules and Assemblies | Electrical |
| UL 60730-1A-2002 | Automatic Electrical Controls for Household and Similar Use, Part 1: General Requirements | Electrical |

* ANSI designated as an American National Standard.

**Notes:**

1 Although this standard is referenced in Table S-17, some of the pipe, tubing, fittings, valves, or fixtures included in the standard are not acceptable for use under the provisions of the Uniform Plumbing Code.

2 See Section 605.3.4 and Section 705.5.3 for restrictions.

3 Alloy C85200 for cleanout plugs.

4 Standards for materials, equipment, joints and connections. Where more than one standard has been listed for the same material or method, the relevant portions of all such standards shall apply.

## S-17.1 Abbreviations in Table S-17.

**ANSI** American National Standards Institute, Inc., 25 W. 43rd Street, 4th Floor, New York, NY 10036.

**ASCE** American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191-4400.

**ASHRAE** American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc., 1791 Tullie Circle, NE, Atlanta, GA 30329-2305.

**ASME** American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990.

**ASSE** American Society of Sanitary Engineering, 901 Canterbury, Suite A, Westlake, Ohio 44145.

**ASTM** American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

**AWS** American Welding Society, 550 NW LeJeune Road, Miami, FL, 33126.

**AWWA** American Water Works Association, 6666 W. Quincy Avenue, Denver, CO 80235.

**BSI (BS EN)** British Standard International, 389 Chiswick High Road, London, W4 4AL United Kingdom.

**CSA** Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada, L4W 5N6.

**IAPMO** International Association of Plumbing and Mechanical Officials, 5001 E. Philadelphia Street, Ontario, CA 91761-2816.

**IEEE** The Institute of Electrical and Electronics Engineers, Inc., 445 Hoes Lane, Piscataway, NJ 08854.

**ISO** International Organization for Standardization, 1 ch. de la Voie-Creuse, Casa Postale 56, CH-1211 Geneva 20, Switzerland.

**MSS** Manufacturers Standardization Society of the Valve and Fittings Industry, 127 Park Street, NE, Vienna, VA 22180.

**NFPA** National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02169-7471.

**NSF** NSF International, 789 Dixboro Road, Ann Arbor, MI 48113-0140.

**SAE** Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096.

**SRCC** Solar Rating and Certification Corporation, 400 High Point Drive, Suite 400, Cocoa, FL 32926.

**UL** Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

**SECTION 23.** The provisions of this ordinance contain various changes, modifications, and additions to the 2013 Edition of the California Plumbing Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not

administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

**PLUMBING CODE AMENDMENTS**

| CODE SECTION | CONDITION | EXPLANATION |
|---|---|---|
| 721.3 | Geological Topographical | To allow for the proper operation of existing Los Angeles County sewer infrastructure and establish consistency with Title 20 – Utilities of the Los Angeles County Code, Division 2 (Sanitary Sewers and Industrial Waste) due to local soil conditions and topography. |
| 728.1 to 728.6 | Geological Topographical | To allow for the proper operation of existing Los Angeles County sewer infrastructure and establish consistency with Title 20 – Utilities of the Los Angeles County Code, Division 2 (Sanitary Sewers and Industrial Waste) due to local soil conditions and topography. |
| Table H 1.7 | Geological, Topographical, | To establish more restrictive requirements for protection of local groundwater due to local soil conditions. |
| Table H 2.1(1) | Geological, Topographical | To establish more restrictive requirements for protection of local groundwater due to local soil conditions, sewer capacity, and sewage treatment. |
| Table H 2.1(2) | Geological, Topographical | To establish consistency with requirements of the County Health Department for sewer capacity and sewage treatment due to local soil conditions. |
| Table H 2.1(3) | Geological, Topographical | To establish consistency with requirements of the County Health Department for sewer capacity and sewage treatment due to local soil conditions. |
| Section H 3.1 | Geological, Topographical, | To establish more restrictive requirements for protection of local groundwater due to local soil conditions. |

| CODE SECTION | CONDITION | EXPLANATION |
|---|---|---|
| Section H 4.3 | Geological, Topographical | To establish more restrictive requirements for protection of local groundwater due to local soil conditions. |
| Section H 6.5 | Geological, Topographical | To establish more restrictive requirements for protection of local groundwater due to local soil conditions. |
| Section H 6.8 | Geological, Topographical | To establish more restrictive requirements for protection of local groundwater due to local soil conditions. |
| Section H 7.2 | Geological, Topographical | To establish more restrictive requirements for protection of local groundwater due to local soil conditions. |
| Section H 10.1 | Geological | To establish more restrictive requirements to prevent earth movement based on local soil and seismic conditions. |
| Section H 11.6 | Geological | To establish more restrictive requirements to prevent earth movement based on local soil and seismic conditions. |

**SECTION 24.** This ordinance shall become operative on January 1, 2014.

[TITLE282013CSCC]

## ANALYSIS

This ordinance repeals those provisions of Title 29 - Mechanical Code of the Los Angeles County Code, which had incorporated portions of the 2010 Edition of the California Mechanical Code by reference and replaces them with provisions incorporating portions of the 2013 California Mechanical Code, published by the California Building Standards Commission, with certain changes and modifications. Unless deleted or modified herein, the previously enacted provisions of Title 29 continue in effect.

State law requires that the County's Mechanical Code contain the same requirements as are contained in the building standards published in the most recent edition of the California Mechanical Code. State law allows the County to change or modify these requirements only if it determines that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions. The changes and modifications to the requirements contained in the building standards published in the 2013 California Mechanical Code, which are contained in this ordinance, are based upon express findings, contained in the ordinance, that such changes are reasonably necessary due to local climatic, geological, or topographical conditions.

This ordinance also makes certain modifications to the administrative provisions of Title 29.

JOHN F. KRATTLI
County Counsel

By Carole B. Suzuki

CAROLE B. SUZUKI
Deputy County Counsel
Public Works Division

CBS:lm

Requested: 08/28/13
Revised: 10/21/13

HOA.1008337.1

**ORDINANCE NO. _____**

An ordinance amending Title 29 - Mechanical Code of the Los Angeles County Code, by adopting portions of the 2013 California Mechanical Code, by reference, with certain changes and modifications, and making other revisions thereto.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Sections 119.1.2 through 119.1.14 of Chapter 1, Chapters 2 through 17, and Appendices B, C, and D, which incorporate by reference and modify portions of the 2010 California Mechanical Code, are hereby repealed.

**SECTION 2.** Section 100 is hereby amended to read as follows:

**100 -- ADOPTION BY REFERENCE.**

Except as hereinafter changed or modified, Sections 1.2.0 through 1.14.0 of Chapter 1, Division I of that certain Mechanical Code known and designated as the ~~2010~~2013 California Mechanical Code as published by the California Building Standards Commission are adopted by reference and incorporated into this Title 29 of the Los Angeles County Code as if fully set forth below, and shall be known as Sections 119.1.2.0 through 119.1.14.0, respectively, of Chapter 1 of Title 29 of the Los Angeles County Code.

Except as hereinafter changed or modified, Chapters 2 through 17, and Appendices B, C, and D of that certain Mechanical Code known and designated as the ~~2010~~2013 California Mechanical Code as published by the California Building Standards Commission are adopted by reference and incorporated into this Title 29 of the Los Angeles County Code as if fully set forth below, and shall be known as

Chapters 2 through 17 and Appendices B, C, and D of Title 29 of the Los Angeles County Code.

A copy of the ~~2010~~2013 California Mechanical Code shall be at all times maintained by the Chief Mechanical Inspector for use and examination by the public.

**SECTION 3.** Section 103 is hereby amended to read as follows:

**103 -- SCOPE.**

. . .

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

Where the requirements of this Code conflict with the requirements of Title 28 - Plumbing Code of the Los Angeles County Code, the Plumbing Code shall prevail.

. . .

**SECTION 4.** Section 107 is hereby amended to read as follows:

**107 -- ALTERNATE MATERIALS AND METHODS OF CONSTRUCTION AND MODIFICATIONS.**

**107.1 Alternate Materials and Methods of Construction.**

**107.1.1 Purpose and Intent.** Nothing in this Code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this Code. Technical documentation shall be submitted to the Authority Having Jurisdiction to demonstrate equivalency. The Authority Having Jurisdiction shall have

the authority to approve or disapprove the system, method, or device for the intended purpose.

. . .

**107.1.2 Application.**

. . .

**107.1.3 Testing.** The Authority Having Jurisdiction may require any applicant to perform testing, in support of its application, in accordance with the following:

~~**107.3.1**~~ Tests shall be made in accordance with approved testing standards by an approved testing agency at the expense of the applicant. In the absence of such standards, the Authority Having Jurisdiction shall have the authority to specify the test procedure.

~~**107.3.2**~~ The Authority Having Jurisdiction may require tests to be made or repeated if, at any time, the Authority Having Jurisdiction has reason to believe that any previously approved alternate material or device no longer conforms to the requirements on which its approval was based.

**107.2 Modifications.** Whenever there are practical difficulties involved in carrying out the provisions of this Code, the Authority Having Jurisdiction may grant minor modifications on a case by case basis, provided the Authority Having Jurisdiction shall first find that a special individual reason makes the strict letter of this Code impractical and that the modification is in reasonable conformity with the spirit and purpose of this Code and that such modification does not lessen any health,

fire-protection, or other life-safety related requirements. The details of any action granting modifications shall be recorded and entered in the files of the Authority Having Jurisdiction.

**SECTION 5.** Section 111.2 is hereby amended to read as follows:

**111.2** **Permit Application.** To obtain a permit, the applicant shall file an application on forms furnished for that purpose. The application shall contain all information necessary to the lawful enforcement of the provisions of this Code.

~~Applications for permits for which no permit is issued within one year following the date of application shall expire by limitation. Plans and specifications previously submitted may thereafter be returned to the applicant or destroyed by the Chief Mechanical Inspector. The Chief Mechanical Inspector may grant up to two extensions of up to 180 days per extension beyond the initial one-year limit upon written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken and upon the payment of an extension fee in an amount determined by the Chief Mechanical Inspector, not to exceed 25 percent of the plan check fee.~~

When no permit is issued within one year following the date of the application therefor, the application shall automatically expire. Plans and specifications previously submitted may thereafter be returned to the applicant or destroyed by the Chief Mechanical Inspector. The Chief Mechanical Inspector may, before or after expiration of the application, grant up to two extensions not exceeding 180 days per extension, beyond the initial one-year limit upon written request by the applicant showing that

circumstances beyond the control of the applicant have prevented action from being taken and upon the payment of an extension fee as determined by the Chief Mechanical Inspector, not to exceed 25 percent of the plan check fee.

Once an application~~ and ~~, including any extension(s) thereof ~~have~~has expired, the applicant shall file a new application, resubmit plans and specifications and pay a new plan checking or review fee.

**SECTION 6.** Section 113.2 is hereby amended to read as follows:

**113.2** **Expiration.** Every permit issued by the Building Official under the provisions of this Code shall expire by limitation, and become null and void, if the work authorized by such permit is not commenced within 180 days from the date of such permit, or ~~if~~ the work authorized by such permit is suspended or abandoned for a period of 180 days, or the permittee fails to obtain inspection as required by the provisions of Section 115 of this Code~~ at any time after the work is commenced~~ for a period of 180 days. ~~Before such work can be recommenced, a new permit shall be first obtained, and the fee therefor shall be one-half the amount required for a new permit for such work provided no changes have been made or will be made in the original plans and specifications for such work; and provided, further, that such suspension or abandonment has not exceeded one year.~~

**EXCEPTION:** Permits issued to abate violation(s) in conjunction with a code enforcement action shall expire and become null and void at a date determined by the Building Official.

~~Any permittee holding an unexpired permit may apply for an extension of the time~~

~~within which he may commence work under that permit when he is unable to commence work within the time required by this section for good and satisfactory reasons.~~ The Building Official may extend the time for action by the permittee for a period not exceeding 180 days from the date of expiration upon written request by the permittee and payment of a fee in an amount determined by the Building Official, not to exceed~~equal to~~ 25 percent of the permit fee. No permit shall be extended more than twice. ~~In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.~~ Once a permit, including any extension(s) thereof, has expired, the permittee shall file a new application as specified in Section 111.2.

**SECTION 7.** Section 204.0 is hereby amended to read as follows:

**204.0** **– B –**

. . .

**Building Code** – The ~~building code that is adopted by this jurisdiction. [HCD1, HCD 2, and SFM] "Building Code" shall mean the California Building Code, Title 24, Part 2~~most recent edition of Title 26 of the Los Angeles County Code.

. . .

**SECTION 8.** Section 207.0 is hereby amended to read as follows:

**207.0** **– E –**

. . .

**Electrical Code** – The ~~National Electrical Code promulgated by the National Fire Protection Association, as adopted by this jurisdiction. [HCD 1 and HCD 2]. Whenever the term "Electrical Code" is used in this code, it shall mean the California Electrical~~

~~Code, Title 24, Part 3~~most recent edition of Title 27 of the Los Angeles County Code.

. . .

**SECTION 9.** Section 218.0 is hereby amended to read as follows:

**218.0** **– P –**

. . .

**Plumbing Code** – The ~~Uniform Plumbing Code promulgated by the International Association of Plumbing and Mechanical Officials, as adopted by this jurisdiction. [HCD 1 and HCD 2]. Whenever the term "Plumbing Code" is used in this code, it shall mean the California Plumbing Code, Title 24, Part 5~~most recent edition of Title 28 of the Los Angeles County Code.

. . .

**SECTION 10.** Section 501.1 is hereby amended to read as follows:

**501.1** **Applicability.** This ~~c~~Chapter includes requirements for environmental air ducts, product conveying systems, and commercial hoods and kitchen ventilation. Ventilation systems installed to control occupational health hazards shall comply with the requirements of the Health Officer.

**SECTION 11.** Section 508.4.1.5 is hereby amended to read as follows:

**508.4.1.5** **Medium to Low Temperature Appliances.** Type I hoods where the cooking equipment includes low-temperature appliances such as

medium-to-low temperature ranges, roasters, roasting ovens, pastry ovens, pizza ovens, and equipment approved for use under a Type II hood~~, such as pizza ovens~~:

. . .

**SECTION 12.** Section 510.1.6 is hereby amended to read as follows:

**510.1.6 Bracing and Supports.** Duct bracing and supports shall be of noncombustible material, securely attached to the structure, not less than the gauge required for grease duct construction, and designed to carry gravity and lateral loads within the stress limitations of the ~~b~~Building ~~c~~Code. Bolts, screws, rivets, and other mechanical fasteners shall not penetrate duct walls.

**SECTION 13.** Section 603.2 is hereby amended to read as follows:

**603.2 Metal Ducts.**

. . .

Supports for rectangular ducts shall comply with SMACNA HVAC Duct Construction Standards – Metal and Flexible, where suspended from above, shall be installed on two opposite sides of each duct and shall be welded, riveted, bolted, or metal screwed to each side of the duct at not more than the intervals specified.

. . .

**SECTION 14.** Section 1119.4 is hereby added to Section 1119.0 to read as follows:

**1119.4 Approvals Required.**

The method of discharge of systems containing other than group A1 refrigerants shall comply with the pertinent requirements of Title 32 - Fire Code and Division 2 of

Title 20 - Sanitary Sewer and Industrial Waste of the Los Angeles County Code. Where applicable, Section 1120 may be used with prior approval of the Authority Having Jurisdiction.

**SECTION 15.** The provisions of this ordinance contain various changes, modifications, and additions to the 2013 Edition of the California Mechanical Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Mechanical Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

**TABLE**

| MECHANICAL CODE AMENDMENTS | | |
|---|---|---|
| **CODE SECTION** | **CONDITION** | **EXPLANATION** |
| 501.1 | Climatic | Additional Health Department requirements are necessary due to local air quality concerns. |
| 508.4.1.5 | Climatic | Due to high temperature and dry conditions in Southern California, grease laden combustibles are a high fire hazard. |

| MECHANICAL CODE AMENDMENTS | | |
|---|---|---|
| **CODE SECTION** | **CONDITION** | **EXPLANATION** |
| 510.1.6 | Geological | High geologic activities, such as seismic events, in the Southern California area necessitates this local amendment for bracing and support. |
| 603.2 | Geological | High geologic activities, such as seismic events, in the Southern California area necessitates this local amendment for bracing and support. |
| 1119.4 | Geological | High geologic activities, such as seismic events, in the Southern California area necessitates this local amendment to reduce damage and potential for toxic refrigerant release during a seismic event caused by shifting equipment and to minimize impacts to the sewer system in such an event. |

**SECTION 16.** This ordinance shall become operative on January 1, 2014.

[TITLE292013CSCC]

## ANALYSIS

This ordinance repeals those provisions of Title 30 - Residential Code to the Los Angeles County Code, which had incorporated portions of the 2010 Edition of the California Residential Code by reference, and replaces them with provisions incorporating portions of the 2013 California Residential Code, published by the California Building Standards Commission, by reference, with certain changes and modifications.

State law requires that the County adopt ordinances that contain the same requirements as are contained in the building standards published in the California Residential Code. State law allows the County to change or modify these requirements only if it determines that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions.

The changes and modifications to requirements contained in the building standards published in the 2013 California Residential Code which are contained in this ordinance are based upon express findings, contained in the ordinance, that such changes are reasonably necessary due to local climatic, geological, or topographical conditions.

JOHN F. KRATTLI
County Counsel

By Carole B. Suzuki
CAROLE B. SUZUKI
Deputy County Counsel
Public Works Division

CBS:gjv

Requested: 07/10/13
Revised: 09/26/13

HOA.1009141.1

**ORDINANCE NO. _____**

An ordinance amending Title 30 – Residential Code of the Los Angeles County Code, by adopting the 2013 California Residential Code by reference, with certain changes and modifications.

The Board of Supervisors of the County of Los Angeles ordains as follows:

**SECTION 1.** Chapters 2 through 10, Chapter 44, and Appendix H, which incorporate by reference and modify portions of the 2010 California Residential Code, are hereby repealed.

**SECTION 2.** Chapter 1 is hereby amended to read as follows:

**R100 ADOPTION BY REFERENCE**

Except as hereinafter changed or modified, Sections 102 through 119 of Chapter 1, Section 1207 of Chapter 12, Chapters 34, 67, 69, 98, 99, and Appendix J of Title 26 of the Los Angeles County Code are adopted by reference and incorporated into this Title 30 as if fully set forth below, and shall be known as Sections 102 through 119 of Chapter 1, Section 1207 of Chapter 12, Chapters 34, 67, 69, 98, 99, and Appendix J of Title 30 of the Los Angeles County Code.

Except as hereinafter changed or modified, Chapters 2 through 10, Chapter 44, and Appendix H of that certain code known and designated as the ~~2010~~2013 California Residential Code as published by the California Building Standards Commission are adopted by reference and incorporated into this Title 30 as if fully set forth below, and

shall be known as Chapters 2 through 10, Chapter 44, and Appendix H of Title 30 of the Los Angeles County Code.

A copy of the ~~2010~~2013 California Residential Code shall be at all times maintained by the Building Official for use and examination by the public.

**SECTION 3.** Section R301.1.3.2 is hereby amended to read as follows:

**R301.1.3.2 Woodframe structures ~~greater than two stories~~.**

The ~~b~~Building ~~o~~Official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than two stories and basement in height located in Seismic Design Category A, B, or C. Notwithstanding other sections, the law establishing these provisions is found in Business and Professions Code sections 5537 and 6737.1.

The Building Official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than one story in height or with a basement located in Seismic Design Category $D_0$, $D_1$, or $D_2$.

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

**R301.1.4 Seismic design provisions for buildings constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope).**

The design and construction of new buildings and additions to existing buildings when constructed on or into slopes steeper than one unit vertical in three units

horizontal (33.3 percent slope) shall comply with Section 1613.7 of the Los Angeles County Building Code.

**SECTION 5.** Section R301.2 is hereby amended to read as follows:

**R301.2 Climatic and geographic design criteria.**

Buildings shall be constructed in accordance with the provisions of this ~~c~~Code as limited by the provisions of this ~~s~~Section. ~~Additional criteria shall be established by the local jurisdiction and set forth~~Consult with the Building Official regarding additional criteria in Table R301.2(1).

**SECTION 6.** Section R301.2.2.2.5 is hereby amended to read as follows:

**R301.2.2.2.5 Irregular buildings.**

. . .

1. When exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required.

~~**Exception:** For wood light-frame construction, floors with cantilevers or setbacks not exceeding four times the nominal depth of the wood floor joists are permitted to support braced wall panels that are out of plane with braced wall panels below provided that:~~

~~1. Floor joists are nominal 2 inches by 10 inches (51 mm by 254 mm) or larger and spaced not more than 16 inches (406 mm) on center.~~

~~2. The ratio of the back span to the cantilever is at least 2 to 1.~~

~~3. Floor joists at ends of braced wall panels are doubled.~~

~~4. For wood-frame construction, a continuous rim joist is connected to ends or all cantilever joists. When spliced, the rim joists shall be spliced using a galvanized metal tie not less than 0.058 inch (1.5 mm) (16 gage) and 11/2 inches (38 mm) wide fastened with six 16d nails on each side of the splice or a block of the same size as the rim joist of sufficient length to fit securely between the joist space at which the splice occurs fastened with eight 16d nails on each side of the splice; and~~

~~5. Gravity loads carried at the end of cantilevered joists are limited to uniform wall and roof loads and the reactions from headers having a span of 8 feet (2438 mm) or less.~~

2. When a section of floor or roof is not laterally supported by shear walls or braced wall lines on all edges.

**Exception:** Portions of floors that do not support shear walls or braced wall panels above, or roofs, shall be permitted to extend no more than 6 feet (1829 mm) beyond a shear wall or braced wall line.

3. When the end of a braced wall panel occurs over an opening in the wall below and ends at a horizontal distance greater than 1 foot (305 mm) from the edge of the opening. This provision is applicable to shear walls and braced wall panels offset in plane and to braced wall panels offset out of plane as permitted by the exception to Item 1 above.

~~**Exception:** For wood light-frame wall construction, one end of a braced wall panel shall be permitted to extend more than 1 foot (305 mm) over an opening not more than 8 feet (2438 mm) wide in the wall below provided that the opening includes a~~

~~header in accordance with the following:~~

~~1. The building width, loading condition and framing member species limitations of Table R502.5(1) shall apply; and~~

~~2. Not less than one 2x12 or two 2x10 for an opening not more than 4 feet (1219 mm) wide; or~~

~~3. Not less than two 2x12 or three 2x10 for an opening not more than 6 feet (1829 mm) wide; or~~

~~4. Not less than three 2x12 or four 2x10 for an opening not more than 8 feet (2438 mm) wide; and~~

~~5. The entire length of the braced wall panel does not occur over an opening in the wall below.~~

4. When an opening in a floor or roof exceeds the lesser of 12 feet (3658 mm) or 50 percent of the least floor or roof dimension.

5. When portions of a floor level are vertically offset.

~~**Exceptions:**~~

~~1. Framing supported directly by continuous foundations at the perimeter of the building.~~

~~2. For wood light-frame construction, floors shall be permitted to be vertically offset when the floor framing is lapped or tied together as required by section R502.6.1.~~

. . .

**SECTION 7.** Section R301.2.2.3.8 is hereby added to read as follows:

**R301.2.2.3.8 Anchorage of mechanical, electrical, or plumbing components and equipment.**

Mechanical, electrical, or plumbing components and equipment shall be anchored to the structure. Anchorage of the components and equipment shall be designed to resist loads in accordance with the Los Angeles County Building Code and ASCE 7, except where the component is positively attached to the structure and flexible connections are provided between the component and associated ductwork, piping, and conduit; and either:

1. The component weighs 400 lb (1,780 N) or less and has a center of mass located 4 ft (1.22 m) or less above the supporting structure; or

2. The component weighs 20 lb (89N) or less or, in the case of a distributed system, 5 lb/ft (73 N/m) or less.

**SECTION 8.** Table R302.1(2) is hereby amended by deleting Footnote a, as follows:

**TABLE R302.1(2)**
**EXTERIOR WALLS—DWELLINGS *AND ACCESSORY BUILDINGS WITH AUTOMATIC RESIDENTIAL FIRE SPRINKLER PROTECTION***

| EXTERIOR WALL ELEMENT | | MINIMUM FIRE-RESISTANCE RATING | MINIMUM FIRE SEPARATION DISTANCE |
|---|---|---|---|
| Walls | Fire-resistance rated | 1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from the outside | 0 feet |
| | Not fire-resistance rated | 0 hours | 3 feet~~[a]~~ |
| Projections | Fire-resistance rated | 1 hour on the underside | 2 feet~~[a]~~ |
| | Not fire-resistance rated | 0 hours | 3 feet |
| Openings in walls | Not allowed | N/A | < 3 feet |
| | Unlimited | 0 hours | 3 feet~~[a]~~ |
| Penetrations | All | Comply with Section R302.4 | < 3 feet |
| | | None required | 3 feet~~[a]~~ |

~~a. For residential subdivisions where all dwellings and accessory buildings are equipped throughout with an automatic sprinkler systems installed in~~

~~accordance with Section R313, the fire separation distance for nonrated exterior walls and rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet or more in width on the opposite side of the property line.~~

**SECTION 9.** Section R322.2.2 is hereby amended to read as follows:

**R322.2.2 Enclosed area below design flood elevation.**

Enclosed areas for attached and detached buildings and structures, including crawl spaces, that are below the design flood elevation shall:

. . .

**SECTION 10.** Section R327.1.1 is hereby amended to read as follows:

**R327.1.1 Scope.**

This ~~c~~Chapter applies to building materials, systems and or assemblies used in the exterior design and construction of new buildings, and to additions, alterations, or repairs made to existing buildings, erected, constructed, located, or moved within a Wildland-Urban Interface Fire Area as defined in Section R327.2.

**SECTION 11.** Section R327.1.3 is hereby amended to read as follows:

**R327.1.3 Application.**

New buildings, and any additions, alterations, or repairs made to existing buildings located in or moved within any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the ~~enforcing agency~~Los Angeles County Fire

Department constructed after the application date shall comply with the provisions of this ~~c~~Chapter.

**Exceptions:**

. . .

~~4. Additions to and remodels of buildings originally constructed prior to the applicable application date~~.

**SECTION 12.** Section R327.1.3.1 is hereby amended to read as follows:

**R327.1.3.1 Application date and where required.**

New buildings for which an application for a building permit is submitted on or after July 1, 2008, and any additions, alterations, or repairs made to existing buildings for which an application for a building permit is submitted on or after January 1, 2014, located in any Fire Hazard Severity Zone or Wildland Interface Fire Area shall comply with all ~~s~~Sections of this ~~c~~Chapter, including all of the following areas:

. . .

**Exceptions:**

1. ~~New b~~Buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all ~~s~~Sections of this ~~c~~Chapter.

2. ~~New b~~Buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland Interface Fire Area designated by cities and other local agencies for which an application for a building permit is submitted on or after

December 1, 2005 but prior to July 1, 2008, shall only comply with the following ~~s~~Sections of this ~~c~~Chapter:

. . .

**SECTION 13.** Section R327.1.4 is hereby amended to read as follows:

**R327.1.4 Inspection and certification.**

. . .

1. Building permit issuance. The ~~local b~~Building ~~o~~Official shall, prior to construction, provide the owner or applicant a certification that the building as proposed to be built complies with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this Chapter. Issuance of a building permit by the ~~local b~~Building ~~o~~Official for the proposed building shall be considered as complying with this ~~s~~Section.

2. Building permit final. The ~~local b~~Building ~~o~~Official shall, upon completion of construction, provide the owner or applicant with a copy of the final inspection report that demonstrates the building was constructed in compliance with all applicable state and local building standards, including those for materials and construction methods for wildfire exposure as described in this Chapter. Issuance of a certificate of occupancy by the ~~local b~~Building ~~o~~Official for the proposed building shall be considered as complying with this ~~s~~Section.

**SECTION 14.** Section R327.2 is hereby amended to read as follows:

## SECTION R327.2

## DEFINITIONS

. . .

**FIRE PROTECTION PLAN** is a document prepared for a specific project or development proposed for a Wildland-Urban Interface Fire Area. It describes ways to minimize and mitigate potential for loss from wildfire exposure. The fire protection plan shall be in accordance with this ~~c~~Chapter and the ~~California~~Los Angeles County Fire Code, Title 32, Chapter 49. When required by the enforcing agency for the purposes of granting modifications, a fire protection plan shall be submitted. ~~Only locally adopted ordinances that have been filed with the California Building Standards Commission or the Department of Housing and Community Development in accordance with Section 1.1.8 shall apply.~~

**FIRE HAZARD SEVERITY ZONES** are geographical areas designated pursuant to California Public Resources Code Sections 4201 through 4204 and classified as Very High, High, or Moderate in State Responsibility Areas or as Local Agency Very High Fire Hazard Severity Zones designated pursuant to California Government Code sections 51175 through 51189. See ~~California~~Los Angeles County Fire Code, ~~Article 86~~Chapter 49.

. . .

**HEAVY TIMBER.** A type of construction classification specified in Section 602 of the ~~California~~Los Angeles County Building Code. For use in this ~~c~~Chapter, heavy timber shall be sawn lumber or glue laminated wood with the smallest minimum nominal

dimension of 4 inches (102 mm). Heavy Timber walls or floors shall be sawn or glue-laminated planks splined, tongue-and-grove, or set close together and well spiked.

. . .

**WILDLAND-URBAN INTERFACE FIRE AREA** is a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code ~~S~~sections 4201 through 4204 and Government Code ~~S~~sections 51175 through 51189, or other areas designated by the ~~enforcing agency~~Los Angeles County Fire Department to be at a significant risk from wildfires.

**SECTION 15.** Section R327.3.2 is hereby amended to read as follows:

**R327.3.2 Qualification by testing.**

Material and material assemblies tested in accordance with the requirements of Section ~~703A~~R327.3 shall be accepted for use when the results and conditions of those tests are met. Product evaluation testing of material and material assemblies shall be approved or listed by the State Fire Marshal, the Building Official or identified in a current report issued by an approved agency.

**SECTION 16.** Section R327.3.3 is hereby amended to read as follows:

**R327.3.3 Approved agency.**

Product evaluation testing shall be performed by an approved agency as defined in Section 1702 of the ~~California~~Los Angeles County Building Code. The scope of accreditation for the approved agency shall include building product compliance with ~~c~~Code.

**SECTION 17.** Section R327.3.5.2 is hereby amended to read as follows:

**R327.3.5.2 Weathering.**

Fire-retardant-treated wood~~ and fire-retardant-treated wood shingles and shakes~~ shall meet the fire test performance requirements of this ~~c~~Chapter after being subjected to the weathering conditions contained in the following standards, as applicable to the materials and the conditions of use.

**SECTION 18.** Section R327.3.5.2.1 is hereby amended to read as follows:

**R327.3.5.2.1 Fire-retardant-treated wood.**

Fire-retardant-treated wood shall be tested in accordance with ASTM D2898, "Standard Practice for Accelerated Weathering of Fire-Retardant Treated Wood for Fire Testing (Method A)" and the requirements of ~~s~~Section 2303.2.

**SECTION 19.** Section R327.3.5.2.2 is hereby deleted in its entirety.

~~**R327.3.5.2.2 Fire-retardant-treated wood shingles and shakes.** Fire-retardant-treated wood shingles and shakes shall be approved and listed by the State Fire Marshal in accordance with Section 208(c), Title 19 California Code of Regulations.~~

**SECTION 20.** Section R327.3.6 is hereby amended to read as follows:

**R327.3.6 Alternates for materials, design, tests and methods of construction.**

The ~~enforcing agency~~Building Official is permitted to modify the provisions of this ~~c~~Chapter for site-specific conditions in accordance with Chapter 1, Section ~~1.11.2.4~~104.2.7. When required by the ~~enforcing agency~~Building Official for the

purposes of granting modifications, a fire protection plan shall be submitted in accordance with the ~~California~~Los Angeles County Fire Code, Chapter 49.

**SECTION 21.** Section R327.4.3 is hereby amended to read as follows:

**R327.4.3 Alternative methods for determining Ignition-resistant material.**

. . .

2. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use that complies with the requirements of ~~s~~Section 2303.2 of the ~~California~~Los Angeles County Building Code.

~~3. Fire-retardant-treated wood shingles and shakes. Fire-retardant-treated wood shingles and shakes, as defined in section 1505.6 and listed by State Fire Marshal for use as "Class B" roof covering, shall be accepted as an Ignition-resistant wall covering material when installed over solid sheathing.~~

**SECTION 22.** Section R327.5.2. is hereby amended to read as follows:

**R327.5.2 Roof coverings.**

Roof coverings shall be Class A as specified in Section R902.1. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be firestopped with approved materials or have one layer of minimum 72 pounds (32.4 kg) mineral-surfaced non-perforated cap sheet complying with ASTM D 3909 installed over the combustible decking. Wood shingles and wood shakes are prohibited in any Fire Hazard Severity Zones regardless of classification.

**SECTION 23.** Section R327.6.1 is hereby amended to read as follows:

**R327.6.1 General.**

Where provided, ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation shall be in accordance with Section 1203 of the ~~California~~Los Angeles County Building Code and ~~s~~Sections R327.6.1 through R327.6.3 of this ~~s~~Section to resist building ignition from the intrusion of burning embers and flame through the ventilation opening.

**SECTION 24.** Section R327.6.3 is hereby amended to read as follows:

**R327.6.3 Ventilation openings on the underside of eaves and cornices.**

. . .

**Exceptions:**

1. The ~~enforcing agency~~Building Official may accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.

2. Vents complying with the requirements of Section R327.6.2 may be installed on the underside of eaves and cornices in accordance with either one of the following conditions:

2.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 of the ~~California~~Los Angeles County Building Code or,

. . .

**SECTION 25.** Section R327.10.3.2 is hereby amended to read as follows:

**R327.10.3.2** When required by the ~~enforcing agency~~Building Official, detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this ~~s~~Section.

**SECTION 26.** Section R327.10.4 is hereby amended to read as follows:

**R327.10.4 Requirements.**

When required by the ~~enforcing agency~~Building Official, accessory structures shall be constructed of noncombustible or ignition-resistant materials.

**SECTION 27.** Section R401.1 is hereby amended to read as follows:

**R401.1 Application.**

. . .

Wood foundations in Seismic Design Category $D_0$, $D_1$, or $D_2$ shall ~~be designed in accordance with accepted engineering practice~~not be permitted.

**Exception:** In non-occupied, single-story, detached storage sheds and similar uses other than carport or garage, provided the gross floor area does not exceed 200 square feet, the plate height does not exceed 12 feet in height above the grade plane at any point, and the maximum roof projection does not exceed 24 inches.

**SECTION 28.** Section R403.1.2 is hereby amended to read as follows:

**R403.1.2 Continuous footing in Seismic Design Categories $D_0$, $D_1$ and $D_2$.**

The braced wall panels at exterior walls of buildings located in Seismic Design Categories $D_0$, $D_1$ and $D_2$ shall be supported by continuous footings. All required

interior braced wall panels in buildings ~~with plan dimensions greater than 50 feet (15240 mm)~~ shall ~~also~~ be supported by continuous footings.

**SECTION 29.** Section R403.1.3 is hereby amended to read as follows:

**R403.1.3 Seismic reinforcing.**

. . .

**Exception:** In detached one-and two-family dwellings located in Seismic Design Category A, B, or C which are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings, supporting columns or pedestals are permitted.

**SECTION 30.** Section R403.1.5 is hereby amended to read as follows:

**R403.1.5 Slope.**

The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope).

For structures located in Seismic Design Categories $D_0$, $D_1$, or $D_2$, stepped footings shall be reinforced with two No. 4 reinforcing bars located at the top and bottom of the footings as shown in Figure R403.1.5.

**SECTION 31.** Figure R403.1.5 is hereby added to read as follows:

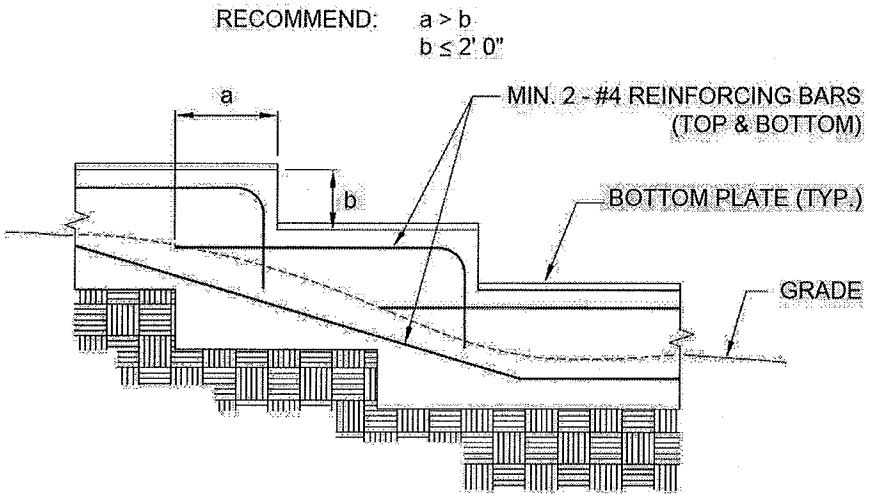



**FIGURE R403.1.5**
**STEPPED FOOTING**

**SECTION 32.** Section R404.2 is hereby amended to read as follows:

**R404.2 Wood foundation walls.**

Wood foundation walls shall be constructed in accordance with the provisions of Sections R404.2.1 through R404.2.6 and with the details shown in Figures R403.1(2) and R403.1(3). Wood foundation walls shall not be used for structures located in Seismic Design Category $D_0$, $D_1$, or $D_2$.

**SECTION 33.** Section R501.1 is hereby amended to read as follows:

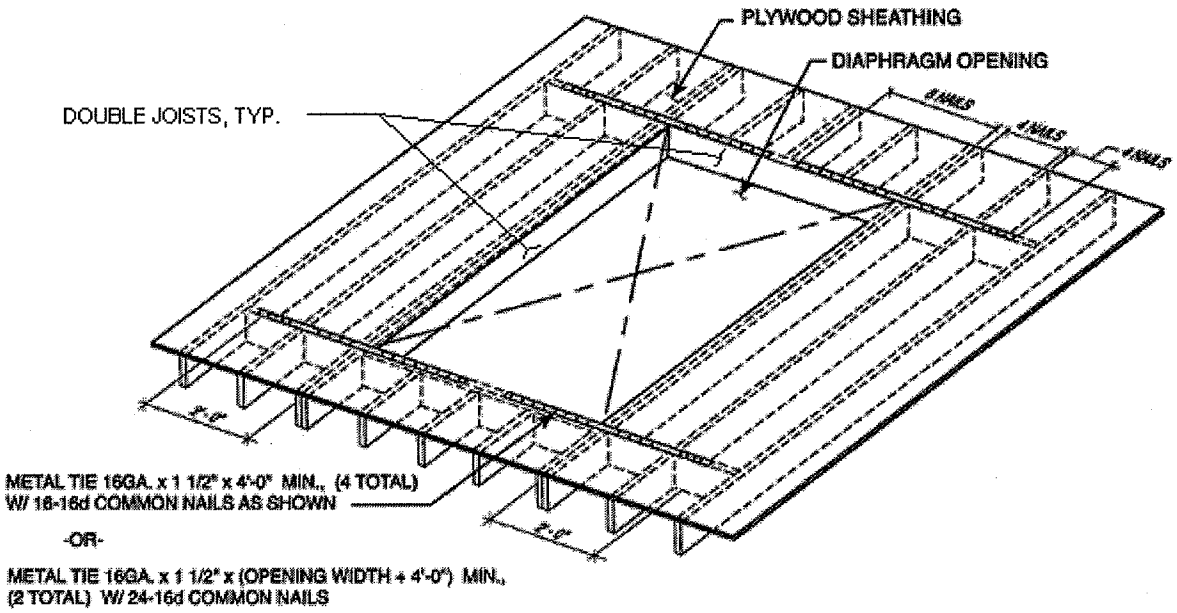
**R501.1 Application.**

The provision of this ~~c~~Chapter shall control the design and construction of the floors for all buildings including the floors of attic spaces used to house mechanical or plumbing fixtures and equipment. Mechanical or plumbing fixtures and equipment shall be attached or anchored to the structure in accordance with Section R301.2.2.3.8.

**SECTION 34.** Section R503.2.4 is hereby added to read as follows:

## R503.2.4 Openings in horizontal diaphragms.

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




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

**Notes:**

a. Blockings shall be provided beyond headers.

b. Metal ties not less than 0.058 inch [1.47 mm (16 galvanized gage)] by 1.5 inches (38 mm) wide with eight 16d common nails on each side of the header-joist intersection. The metal ties shall have a minimum yield of 33,000 psi (227 MPa).

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

**FIGURE R503.2.4**

**OPENING IN HORIZONTAL DIAPHRAGMS**

**SECTION 35.** Section R602.3.2 is hereby amended to read as follows:

**R602.3.2 Top plate.**

. . .

**Exception:** In other than Seismic Design Category $D_0$, $D_1$, or $D_2$, a~~A~~ single top plate may be installed in stud walls, provided the plate is adequately tied at joints, corners and intersecting walls by a minimum 3-inch-by-6-inch by a 0.036-inch-thick (76 mm by 152 mm by 0.914 mm) galvanized steel plate that is nailed to each wall or segment of wall by six 8d nails on each side, provided the rafters or joists are centered over the studs with a tolerance of no more than 1 inch (25 mm). The top plate may be omitted over lintels that are adequately tied to adjacent wall sections with steel plates or equivalent as previously described.

**SECTION 36.** Table R602.3(1) is hereby amended to read as follows:

**TABLE R602.3(1)**

**FASTENER SCHEDULE FOR STRUCTURAL MEMBERS**

**TABLE R602.3(1)**
**FASTENER SCHEDULE FOR STRUCTURAL MEMBERS**

| ITEM | DESCRIPTION OF BUILDING ELEMENTS | NUMBER AND TYPE OF FASTENER[a, b, c] | SPACING OF FASTENERS |
|---|---|---|---|
| | | **Roof** | |
| 1 | Blocking between joists or rafters to top plate, toe nail | 3-8d ($2^1/_2$" × 0.113") | — |
| 2 | Ceiling joists to plate, toe nail | 3-8d ($2^1/_2$" × 0.113") | — |
| 3 | Ceiling joists not attached to parallel rafter, laps over partitions, face nail | 3-10d | — |
| 4 | Collar tie to rafter, face nail or $1^1/_4$" × 20 gage ridge strap | 3-10d (3" × 0.128") | — |
| 5 | Rafter or roof truss to plate, toe nail | 3-16d box nails ($3^1/_2$" × 0.135") or 3-10d common nails (3" × 0.148") | 2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss[j] |
| 6 | Roof rafters to ridge, valley or hip rafters: toe nail face nail | 4-16d ($3^1/_2$" × 0.135")<br>3-16d ($3^1/_2$" × 0.135") | — |
| | | **Wall** | |
| 7 | Built-up studs-face nail | 10d (3" × 0.128") | 24" o.c. |
| 8 | Abutting studs at intersecting wall corners, face nail | 16d (3 ½" x 0.135") | 12" o.c. |
| 9 | Built-up header, two pieces with $^1/_2$" spacer | 16d ($3^1/_2$" × 0.135") | 16" o.c. along each edge |
| 10 | Continued header, two pieces | 16d ($3^1/_2$" × 0.135") | 16" o.c. along each edge |
| 11 | Continuous header to stud, toe nail | 4-8d ($2^1/_2$" × 0.113") | — |
| 12 | Double studs, face nail | 10d (3" × 0.128") | 24" o.c. |
| 13 | Double top plates, face nail | 10d (3" × 0.128") | 24" o.c. |
| 14 | Double top plates, minimum 24-inch offset of end joints, face nail in lapped area | 8-16d ($3^1/_2$" × 0.135") | — |
| 15 | Sole plate to joist or blocking, face nail | 16d ($3^1/_2$" × 0.135") | 16" o.c. |
| 16 | Sole plate to joist or blocking at braced wall panels | 3-16d ($3^1/_2$" × 0.135") | 16" o.c. |
| 17 | Stud to sole plate, toe nail | 3-8d ($2^1/_2$" × 0.113")<br>or<br>2-16d ($3^1/_2$" × 0.135") | —<br><br>— |
| 18 | Top or sole plate to stud, end nail | 2-16d ($3^1/_2$" × 0.135") | — |
| 19 | Top plates, laps at corners and intersections, face nail | 2-10d (3" × 0.128") | — |
| 20 | 1" brace to each stud and plate, face nail | 2-8d ($2^1/_2$" × 0.113")<br>2 staples $1^3/_4$" | —<br>— |
| 21 | 1" × 6" sheathing to each bearing, face nail | 2-8d ($2^1/_2$" × 0.113")<br>2 staples $1^3/_4$" | —<br>— |
| 22 | 1" × 8" sheathing to each bearing, face nail | 2-8d ($2^1/_2$" × 0.113")<br>3 staples $1^3/_4$" | —<br>— |
| 23 | Wider than 1" × 8" sheathing to each bearing, face nail | 3-8d ($2^1/_2$" × 0.113")<br>4 staples $1^3/_4$" | —<br>— |
| | | **Floor** | |
| 24 | Joist to sill or girder, toe nail | 3-8d ($2^1/_2$" × 0.113") | — |
| 25 | Rim joist to top plate, toe nail (roof applications also) | 8d ($2^1/_2$" × 0.113") | 6" o.c. |
| 26 | Rim joist or blocking to sill plate, toe nail | 8d ($2^1/_2$" × 0.113") | 6" o.c. |
| 27 | 1" × 6" subfloor or less to each joist, face nail | 2-8d ($2^1/_2$" × 0.113")<br>2 staples $1^3/_4$" | —<br>— |
| 28 | 2" subfloor to joist or girder, blind and face nail | 2-16d ($3^1/_2$" × 0.135") | — |
| 29 | 2" planks (plank & beam - floor & roof) | 2-16d ($3^1/_2$" × 0.135") | at each bearing |
| 30 | Built-up girders and beams, 2-inch lumber layers | 10d (3" × 0.128") | Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice. |
| 31 | Ledger strip supporting joists or rafters | 3-16d ($3^1/_2$" × 0.135") | At each joist or rafter |

*(continued)*

**TABLE R602.3(1)—continued**
**FASTENER SCHEDULE FOR STRUCTURAL MEMBERS**

| ITEM | DESCRIPTION OF BUILDING MATERIALS | DESCRIPTION OF FASTENER[b, c, e] | SPACING OF FASTENERS | |
|---|---|---|---|---|
| | | | Edges (inches)[i] | Intermediate supports[c, e] (inches) |
| **Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing** | | | | |
| 32 | $^3/_8$" - $^1/_2$" | 6d common (2" × 0.113") nail (subfloor wall)[j]<br>8d common (2$^1/_2$" × 0.131") nail (roof)[f] | 6 | 12[g] |
| 33 | $^{19}/_{32}$" - 1" | 8d common nail (2$^1/_2$" × 0.131") | 6 | 12[g] |
| 34 | 1$^1/_8$" - 1$^1/_4$" | 10d common (3" × 0.148") nail or<br>8d (2$^1/_2$" × 0.131") deformed nail | 6 | 12 |
| **Other wall sheathing[h]** | | | | |
| 35 | $^1/_2$" structural cellulosic fiberboard sheathing | 1$^1/_2$" galvanized roofing nail, $^7/_{16}$" crown or 1" crown staple 16 ga., 1$^1/_4$" long | 3 | 6 |
| 36 | $^{25}/_{32}$" structural cellulosic fiberboard sheathing | 1$^3/_4$" galvanized roofing nail, $^7/_{16}$" crown or 1" crown staple 16 ga., 1$^1/_2$" long | 3 | 6 |
| 37[k] | $^1/_2$" gypsum sheathing[d] | 1$^1/_2$" galvanized roofing nail; staple galvanized, 1$^1/_2$" long; 1$^1/_4$ screws, Type W or S | 7 | 7 |
| 38[k] | $^5/_8$" gypsum sheathing[d] | 1$^3/_4$" galvanized roofing nail; staple galvanized, 1$^5/_8$" long; 1$^5/_8$" screws, Type W or S | 7 | 7 |
| **Wood structural panels, combination subfloor underlayment to framing** | | | | |
| 39 | $^3/_4$" and less | 6d deformed (2" × 0.120") nail or<br>8d common (2$^1/_2$" × 0.131") nail | 6 | 12 |
| 40 | $^7/_8$" - 1" | 8d common (2$^1/_2$" × 0.131") nail or<br>8d deformed (2$^1/_2$" × 0.120") nail | 6 | 12 |
| 41 | 1$^1/_8$" - 1$^1/_4$" | 10d common (3" × 0.148") nail or<br>8d deformed (2$^1/_2$" × 0.120") nail | 6 | 12 |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 Ksi = 6.895 MPa.

a. All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.

b. Staples are 16 gage wire and have a minimum $^7/_{16}$-inch on diameter crown width.

c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.

d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.

e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).

f. For regions having basic wind speed of 110 mph or greater, 8d deformed (2$^1/_2$" × 0.120) nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if mean roof height is more than 25 feet, up to 35 feet maximum.

g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. When basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.

h. Gypsum sheathing shall conform to ASTM C 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208.

i. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.

j. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.

k. Use of staples in braced wall panels shall be prohibited in Seismic Design Category $D_0$, $D_1$, or $D_2$.

**SECTION 37.** Table R602.3(2) is hereby amended to read as follows:

## TABLE R602.3(2)

## ALTERNATE ATTACHMENTS TO TABLE R602.3(1)

. . .

b. Staples shall have a minimum crown width of 7/16-inch on diameter except as noted. Use of staples in roof, floor, subfloor, and braced wall panels shall be prohibited in Seismic Design Category $D_0$, $D_1$, or $D_2$.

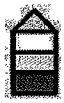
. . .

**SECTION 38.** Table R602.10.3(3) is hereby amended to read as follows:

## TABLE R602.10.3(3)

## BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY

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

| • SOIL CLASS D[b]<br>• WALL HEIGHT = 10 FEET<br>• 10 PSF FLOOR DEAD LOAD<br>• 15 PSF ROOF/CEILING DEAD LOAD<br>• BRACED WALL LINE SPACING ≤ 25 FEET | | | MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a] | | | | |
|---|---|---|---|---|---|---|---|
| Seismic Design Category | Story Location | Braced Wall Line Length (feet) | Method LIB[c] | Method GB [e] | Methods DWB, SFB, PBS, PCP, HPS, CS-SFB[c,e] | Method WSP | Methods CS-WSP, CS-G |
| C (townhouses only) | | 10 | 2.5 | 2.5 | 2.5 | 1.6 | 1.4 |
| | | 20 | 5.0 | 5.0 | 5.0 | 3.2 | 2.7 |
| | | 30 | 7.5 | 7.5 | 7.5 | 4.8 | 4.1 |
| | | 40 | 10.0 | 10.0 | 10.0 | 6.4 | 5.4 |
| | | 50 | 12.5 | 12.5 | 12.5 | 8.0 | 6.8 |
| | | 10 | NP | 4.5 | 4.5 | 3.0 | 2.6 |
| | | 20 | NP | 9.0 | 9.0 | 6.0 | 5.1 |
| | | 30 | NP | 13.5 | 13.5 | 9.0 | 7.7 |
| | | 40 | NP | 18.0 | 18.0 | 12.0 | 10.2 |
| | | 50 | NP | 22.5 | 22.5 | 15.0 | 12.8 |
| |  | 10 | NP | 6.0 | 6.0 | 4.5 | 3.8 |
| | | 20 | NP | 12.0 | 12.0 | 9.0 | 7.7 |
| | | 30 | NP | 18.0 | 18.0 | 13.5 | 11.5 |
| | | 40 | NP | 24.0 | 24.0 | 18.0 | 15.3 |
| | | 50 | NP | 30.0 | 30.0 | 22.5 | 19.1 |
| $D_0$ | | 10 | NP | ~~2.8~~ 5.6 | ~~2.8~~ 5.6 | 1.8 | 1.6 |
| | | 20 | NP | ~~5.5~~ 11.0 | ~~5.5~~ 11.0 | 3.6 | 3.1 |
| | | 30 | NP | ~~8.3~~ 16.6 | ~~8.3~~ 16.6 | 5.4 | 4.6 |
| | | 40 | NP | ~~11.0~~ 22.0 | ~~11.0~~ 22.0 | 7.2 | 6.1 |
| | | 50 | NP | ~~13.8~~ 27.6 | ~~13.8~~ 27.6 | 9.0 | 7.7 |
| | | 10 | NP | ~~5.3~~ NP | ~~5.3~~ NP | 3.8 | 3.2 |
| | | 20 | NP | ~~10.5~~ NP | ~~10.5~~ NP | 7.5 | 6.4 |
| | | 30 | NP | ~~15.8~~ NP | ~~15.8~~ NP | 11.3 | 9.6 |
| | | 40 | NP | ~~21.0~~ NP | ~~21.0~~ NP | 15.0 | 12.8 |
| | | 50 | NP | ~~26.3~~ NP | ~~26.3~~ NP | 18.8 | 16.0 |
| | | 10 | NP | ~~7.3~~ NP | ~~7.3~~ NP | 5.3 | 4.5 |
| | | 20 | NP | ~~14.5~~ NP | ~~14.5~~ NP | 10.5 | 9.0 |
| | | 30 | NP | ~~21.8~~ NP | ~~21.8~~ NP | 15.8 | 13.4 |
| | | 40 | NP | ~~29.0~~ NP | ~~29.0~~ NP | 21.0 | 17.9 |
| | | 50 | NP | ~~36.3~~ NP | ~~36.3~~ NP | 26.3 | 22.3 |

*(continued)*

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

| • SOIL CLASS D[b]<br>• WALL HEIGHT = 10 FEET<br>• 10 PSF FLOOR DEAD LOAD<br>• 15 PSF ROOF/CEILING DEAD LOAD<br>• BRACED WALL LINE SPACING ≤ 25 FEET | | | MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a] | | | | |
|---|---|---|---|---|---|---|---|
| **Seismic Design Category** | **Story Location** | **Braced Wall Line Length (feet)** | **Method LIB[c]** | **Method GB[e]** | **Methods DWB, SFB, PBS, PCP, HPS, ~~CS-SFB[d]~~[e]** | **Method WSP** | **Methods CS-WSP, CS-G** |
| $D_1$ | | 10 | NP | ~~3.0~~ 6.0 | ~~3.0~~ 6.0 | 2.0 | 1.7 |
| | | 20 | NP | ~~6.0~~ 12.0 | ~~6.0~~ 12.0 | 4.0 | 3.4 |
| | | 30 | NP | ~~9.0~~ 18.0 | ~~9.0~~ 18.0 | 6.0 | 5.1 |
| | | 40 | NP | ~~12.0~~ 24.0 | ~~12.0~~ 24.0 | 8.0 | 6.8 |
| | | 50 | NP | ~~15.0~~ 30.0 | ~~15.0~~ 30.0 | 10.0 | 8.5 |
| | | 10 | NP | ~~6.0~~ NP | ~~6.0~~ NP | 4.5 | 3.8 |
| | | 20 | NP | ~~12.0~~ NP | ~~12.0~~ NP | 9.0 | 7.7 |
| | | 30 | NP | ~~18.0~~ NP | ~~18.0~~ NP | 13.5 | 11.5 |
| | | 40 | NP | ~~24.0~~ NP | ~~24.0~~ NP | 18.0 | 15.3 |
| | | 50 | NP | ~~30.0~~ NP | ~~30.0~~ NP | 22.5 | 19.1 |
| | | 10 | NP | ~~8.5~~ NP | ~~8.5~~ NP | 6.0 | 5.1 |
| | | 20 | NP | ~~17.0~~ NP | ~~17.0~~ NP | 12.0 | 10.2 |
| | | 30 | NP | ~~25.5~~ NP | ~~25.5~~ NP | 18.0 | 15.3 |
| | | 40 | NP | ~~34.0~~ NP | ~~34.0~~ NP | 24.0 | 20.4 |
| | | 50 | NP | ~~42.5~~ NP | ~~42.5~~ NP | 30.0 | 25.5 |
| $D_2$ | | 10 | NP | ~~4.0~~ 8.0 | ~~4.0~~ 8.0 | 2.5 | 2.1 |
| | | 20 | NP | ~~8.0~~ 16.0 | ~~8.0~~ 16.0 | 5.0 | 4.3 |
| | | 30 | NP | ~~12.0~~ 24.0 | ~~12.0~~ 24.0 | 7.5 | 6.4 |
| | | 40 | NP | ~~16.0~~ 32.0 | ~~16.0~~ 32.0 | 10.0 | 8.5 |
| | | 50 | NP | ~~20.0~~ 40.0 | ~~20.0~~ 40.0 | 12.5 | 10.6 |
| | | 10 | NP | ~~7.5~~ NP | ~~7.5~~ NP | 5.5 | 4.7 |
| | | 20 | NP | ~~15.0~~ NP | ~~15.0~~ NP | 11.0 | 9.4 |
| | | 30 | NP | ~~22.5~~ NP | ~~22.5~~ NP | 16.5 | 14.0 |
| | | 40 | NP | ~~30.0~~ NP | ~~30.0~~ NP | 22.0 | 18.7 |
| | | 50 | NP | ~~37.5~~ NP | ~~37.5~~ NP | 27.5 | 23.4 |
| | | 10 | NP | NP | NP | NP | NP |
| | | 20 | NP | NP | NP | NP | NP |
| | | 30 | NP | NP | NP | NP | NP |
| | | 40 | NP | NP | NP | NP | NP |
| | | 50 | NP | NP | NP | NP | NP |
| | Cripple wall below one- or two-story dwelling | 10 | NP | NP | NP | 7.5 | 6.4 |
| | | 20 | NP | NP | NP | 15.0 | 12.8 |
| | | 30 | NP | NP | NP | 22.5 | 19.1 |
| | | 40 | NP | NP | NP | 30.0 | 25.5 |
| | | 50 | NP | NP | NP | 37.5 | 31.9 |

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 pound per square foot = 0.0479 kPa.

a. Linear interpolation shall be permitted.

b. Wall bracing lengths are based on a soil site class "D." Interpolation of bracing length between the $S_{ds}$ values associated with the Seismic Design Categories shall be permitted when a site-specific $S_{ds}$ value is determined in accordance with Section 1613.3 of the *International Building Code*.

c. Method LIB shall have gypsum board fastened to at least one side with nails or screws per Table R602.3(1) for exterior sheathing or Table R702.3.5 for interior gypsum board. Spacing of fasteners at panel edges shall not exceed 8 inches.

d. Method CS-SFB applies in SDC C only.

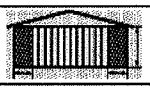
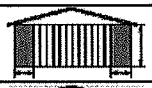
e. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC $D_0$, $D_1$, or $D_2$. Methods DWB, SFB, PBS, and HPS are not permitted in SDC $D_0$, $D_1$, or $D_2$.

**SECTION 39.** Table R602.10.4 is hereby amended to read as follows:

## TABLE R602.10.4

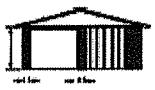
## BRACING METHODS

**TABLE R602.10.4**
**BRACING METHODS** [f]

| METHODS, MATERIAL | | MINIMUM THICKNESS | FIGURE | CONNECTION CRITERIA[a] | |
|---|---|---|---|---|---|
| | | | | Fasteners | Spacing |
| Intermittent Bracing Method | **LIB** Let-in-bracing | 1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16″ stud spacing | | Wood: 2-8d common nails or 3-8d ($2^1/_2$″ long x 0.113″ dia.) nails | Wood: per stud and top and bottom plates |
| | | | | Metal strap: per manufacturer | Metal: per manufacturer |
| | **DWB** Diagonal wood boards | $^3/_4$″(1″ nominal) for maximum 24″ stud spacing |  | 2-8d ($2^1/_2$″ long × 0.113″ dia.) nails or 2 - $1^3/_4$″ long staples | Per stud |
| | **WSP** Wood structural panel (See Section R604) | ~~$^3/_8$″~~ 15/32″ | 8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge | ~~Exterior sheathing per Table R602.3(3)~~ | 6″ edges 12″ field |
| | | | 8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge | ~~Interior sheathing per Table R602.3(1) or R602.3(2)~~ | ~~Varies by fastener~~ 6″ edges 12″ field |
| | **BV-WSP**[e] Wood Structural Panels with Stone or Masonry Veneer (See Section R602.10.6.5) | $^7/_{16}$″ | See Figure R602.10.6.5 | 8d common ($2^1/_2$″ × 0.131) nails | 4″ at panel edges 12″ at intermediate supports 4″ at braced wall panel end posts |
| | **SFB** Structural fiberboard sheathing | $^1/_2$″ or $^{25}/_{32}$″ for maximum 16″ stud spacing | | $1^1/_2$″ long × 0.12″ dia. (for $^1/_2$″ thick sheathing) $1^3/_4$″ long × 0.12″ dia. (for $^{25}/_{32}$″ thick sheathing) galvanized roofing nails or 8d common ($2^1/_2$″ long × 0.131″ dia.) nails | 3″ edges 6″ field |
| | **GB** Gypsum board | $^1/_2$″ | | Nails or screws per Table R602.3(1) for exterior locations | For all braced wall panel locations: 7″ edges (including top and bottom plates) 7″ field |
| | | | | Nails or screws per Table R702.3.5 for interior locations | |
| | **PBS** Particleboard sheathing (See Section R605) | $^3/_8$″ or $^1/_2$″ for maximum 16″ stud spacing | | For $^3/_8$″, 6d common (2″ long × 0.113″ dia.) nails For $^1/_2$″, 8d common ($2^1/_2$″ long × 0.131″ dia.) nails | 3″ edges 6″ field |
| | **PCP** Portland cement plaster | See Section R703.6 for maximum 16″ stud spacing |  | $1^1/_2$″ long, 11 gage, $^7/_{16}$″ dia. head nails or $^7/_8$″ long, 16 gage staples [g] | 6″ o.c. on all framing members |
| | **HPS** Hardboard panel siding | $^7/_{16}$″ for maximum 16″ stud spacing | | 0.092″ dia., 0.225″ dia. head nails with length to accommodate $1^1/_2$″ penetration into studs | 4″ edges 8″ field |
| | **ABW** Alternate braced wall | $^3/_8$″ | | See Section R602.10.6.1 | See Section R602.10.6.1 |

*(continued)*

**TABLE R602.10.4—continued**
**BRACING METHODS** [f]

| | METHODS, MATERIAL | MINIMUM THICKNESS | FIGURE | CONNECTION CRITERIA[a] | |
|---|---|---|---|---|---|
| | | | | Fasteners | Spacing |
| Intermittent Bracing Methods | **PFH** Portal frame with hold-downs | $^3/_8$" | | See Section R602.10.6.2 | See Section R602.10.6.2 |
| | **PFG** Portal frame at garage | $^7/_{16}$" |  | See Section R602.10.6.3 | See Section R602.10.6.3 |
| Continuous Sheathing Methods | **CS-WSP** Continuously sheathed wood structural panel | ~~$^3/_8$"~~ 15/32" | 8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge<br>8d common (2 1/2"x0.131) nails 3/8" edge distance to panel edge | ~~Exterior sheathing per Table R602.3(3)~~<br>~~Interior sheathing per Table R602.3(1) or R602.3(2)~~ | 6" edges 12" field<br>~~Varies by fastener~~ 6" edges 12" field |
| | **CS-G**[b,c] Continuously sheathed wood structural panel adjacent to garage openings | ~~$^3/_8$"~~ 15/32" | | See Method CS-WSP | See Method CS-WSP |
| | **CS-PF** Continuously sheathed portal frame | ~~$^7/_{16}$"~~ 15/32" | | See Section R602.10.6.4 | See Section R602.10.6.4 |
| | **CS-SFB**[d] Continuously sheathed structural fiberboard | $^1/_2$" or $^{25}/_{32}$" for maximum 16" stud spacing | | $1^1/_2$" long × 0.12" dia. (for $^1/_2$" thick sheathing) $1^3/_4$" long × 0.12" dia. (for $^{25}/_{32}$" thick sheathing) galvanized roofing nails or 8d common ($2^1/_2$" long × 0.131" dia.) nails | 3" edges 6" field |

For SI: 1 inch = 25.4 mm, 1 foot = 305 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m², 1 mile per hour = 0.447 m/s.

a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, $D_0$, $D_1$ and $D_2$.

b. Applies to panels next to garage door opening when supporting gable end wall or roof load only. May only be used on one wall of the garage. In Seismic Design Categories $D_0$, $D_1$ and $D_2$ roof covering dead load may not exceed 3 psf.

c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R502.5(1). A full height clear opening shall not be permitted adjacent to a Method CS-G panel.

d. Method CS-SFB does not apply in Seismic Design Categories $D_0$, $D_1$ and $D_2$ and in areas where the wind speed exceeds 100 mph.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories $D_0$ through $D_2$ only.

f. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC $D_0$, $D_1$, or $D_2$. Methods LIB, DWB, SFB, PBS, HPS, and PFG are not permitted in SDC $D_0$, $D_1$, or $D_2$.

g. Use of staples in braced wall panels shall be prohibited in SDC $D_0$, $D_1$, or $D_2$.

**SECTION 40.** Table R602.10.5 is hereby amended to read as follows:

## TABLE R602.10.5

## MINIMUM LENGTH OF BRACED WALL PANELS

**TABLE R602.10.5**
**MINIMUM LENGTH OF BRACED WALL PANELS**

| METHOD (See Table R602.10.4) | | MINIMUM LENGTH[a] (inches) Wall Height | | | | | CONTRIBUTING LENGTH (inches) |
|---|---|---|---|---|---|---|---|
| | | 8 feet | 9 feet | 10 feet | 11 feet | 12 feet | |
| DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP | | 48 | 48 | 48 | 53 | 58 | Actual[b] |
| GB | | 48 | 48 | 48 | 53 | 58 | Double sided = Actual<br>Single sided = 0.5 × Actual |
| LIB | | 55 | 62 | 69 | NP | NP | Actual[b] |
| ABW | SDC A, B and C, wind speed < 110 mph | 28 | 32 | 34 | 38 | 42 | 48 |
| | SDC $D_0$, $D_1$ and $D_2$, wind speed < 110 mph | 32 | 32 | 34 | NP | NP | |
| PFH | Supporting roof only | ~~16~~ 24 | ~~16~~ 24 | ~~16~~ 24 | ~~18~~[c] 24[c] | ~~20~~[c] 24[c] | 48 |
| | Supporting one story and roof | 24 | 24 | 24 | 27[c] | 29[c] | 48 |
| PFG | | 24 | 27 | 30 | 33[d] | 36[d] | 1.5 × Actual[b] |
| CS-G | | 24 | 27 | 30 | 33 | 36 | Actual[b] |
| CS-PF[e] | | ~~16~~ 24 | ~~18~~ 24 | ~~20~~ 24 | ~~22~~[e] 24[e] | 24[e] | Actual[b] |
| CS-WSP, CS-SFB | Adjacent clear opening height (inches) | | | | | | |
| | ≤ 64 | 24 | 27 | 30 | 33 | 36 | Actual[b] |
| | 68 | 26 | 27 | 30 | 33 | 36 | |
| | 72 | 27 | 27 | 30 | 33 | 36 | |
| | 76 | 30 | 29 | 30 | 33 | 36 | |
| | 80 | 32 | 30 | 30 | 33 | 36 | |
| | 84 | 35 | 32 | 32 | 33 | 36 | |
| | 88 | 38 | 35 | 33 | 33 | 36 | |
| | 92 | 43 | 37 | 35 | 35 | 36 | |
| | 96 | 48 | 41 | 38 | 36 | 36 | |
| | 100 | — | 44 | 40 | 38 | 38 | |
| | 104 | — | 49 | 43 | 40 | 39 | |
| | 108 | — | 54 | 46 | 43 | 41 | |
| | 112 | — | — | 50 | 45 | 43 | |
| | 116 | — | — | 55 | 48 | 45 | |
| | 120 | — | — | 60 | 52 | 48 | |
| | 124 | — | — | — | 56 | 51 | |
| | 128 | — | — | — | 61 | 54 | |
| | 132 | — | — | — | 66 | 58 | |
| | 136 | — | — | — | — | 62 | |
| | 140 | — | — | — | — | 66 | |
| | 144 | — | — | — | — | 72 | |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.

NP = Not Permitted.

a. Linear interpolation shall be permitted.

b. Use the actual length when it is greater than or equal to the minimum length.

c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height may be increased to 12 feet with pony wall.

d. Maximum opening height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height may be increased to 12 feet with pony wall.

e. Maximum opening height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height may be increased to 12 feet with pony wall.

**SECTION 41.** Figure R602.10.6.1 is amended to read as follows:

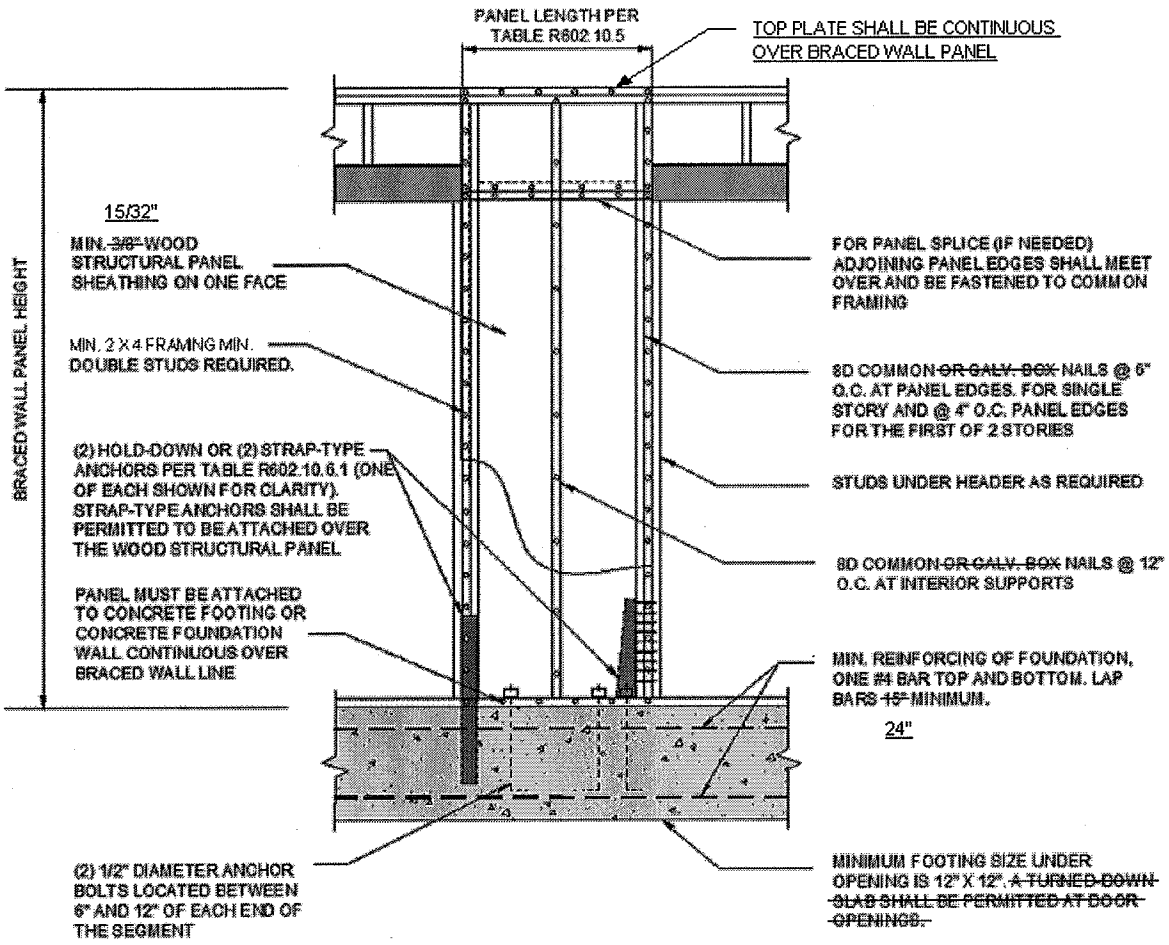



**FIGURE R602.10.6.1**
**METHOD ABW—ALTERNATE BRACED WALL PANEL**

**SECTION 42.** Figure R602.10.6.2 is hereby amended to read as follows:

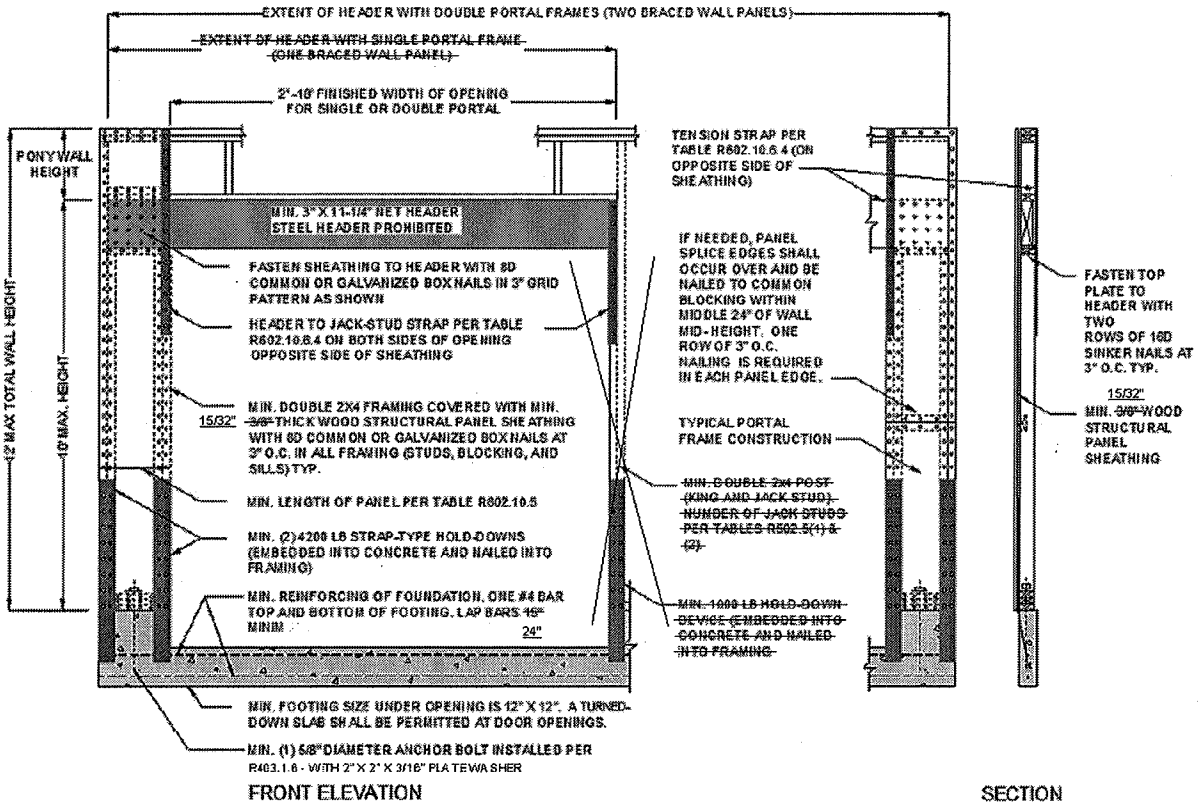
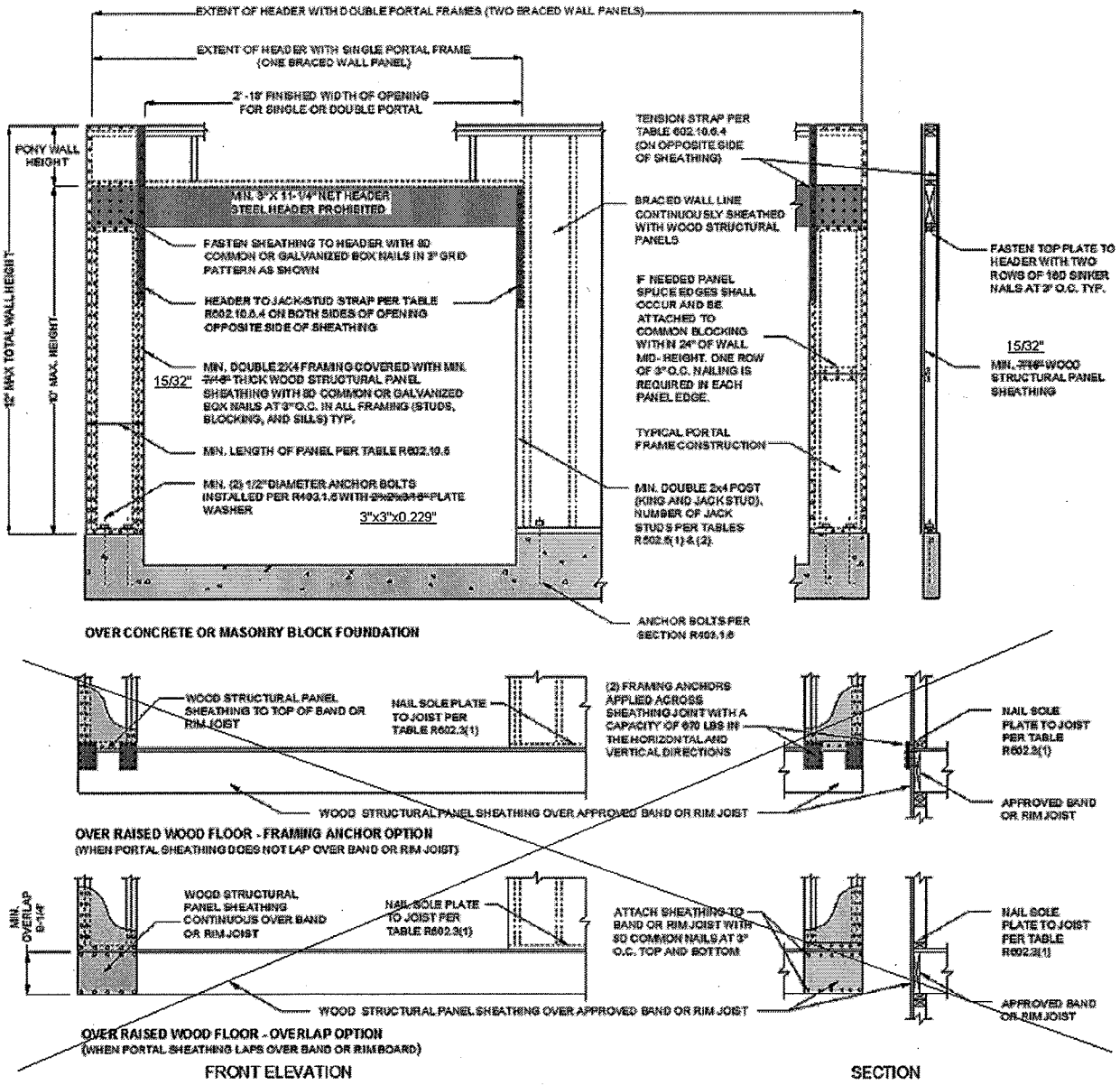



**FIGURE R602.10.6.2**
**METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS**
**AT DETACHED GARAGE DOOR OPENINGS**

**SECTION 43.** Figure R602.10.6.4 is hereby amended to read as follows:




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

**FIGURE R602.10.6.4**
**METHOD CS-PF-CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION**

**SECTION 44.** Section R602.10.9.1 is hereby deleted in its entirety.

~~**R602.10.9.1 Braced wall panel support for Seismic Design Category**~~

~~**D2.**~~

~~In one-story buildings located in Seismic Design Category $D_2$, braced wall panels shall be supported on continuous foundations at intervals not exceeding 50 feet (15 240 mm). In two-story buildings located in Seismic Design Category $D_2$, all braced wall panels shall be supported on continuous foundations.~~

~~**Exception**: Two-story buildings shall be permitted to have interior braced wall panels supported on continuous foundations at intervals not exceeding 50 feet (15 240 mm) provided that:~~

~~1. The height of cripple walls does not exceed 4 feet (1219 mm).~~

~~2. First-floor braced wall panels are supported on doubled floor joists, continuous blocking or floor beams.~~

~~3. The distance between bracing lines does not exceed twice the building width measured parallel to the braced wall line.~~

**SECTION 45.** Section R606.2.4 is hereby amended to read as follows:

**R606.2.4 Parapet walls.**

Unreinforced solid masonry parapet walls shall not be less than 8 inches (203 mm) thick and their height shall not exceed four times their thickness. Unreinforced hollow unit masonry parapet walls shall be not less than 8 inches (203 mm) thick, and their height shall not exceed three times their thickness. Masonry parapet walls in areas subject to wind loads of 30 pounds per square foot (1.44 kPa) or located in Seismic Design Category $D_0$, $D_1$, or $D_2$, or on townhouses in Seismic Design Category C shall be reinforced in accordance with Section R606.12.

**SECTION 46.** Section R606.12.2.2.3 is hereby amended to read as follows:

**R606.12.2.2.3 Reinforcement requirements for masonry elements.**

Masonry elements listed in Section R606.12.2.2.2 shall be reinforced in either the horizontal or vertical direction as shown in Figure ~~R606.11(2)~~R606.11(3) and in accordance with the following:

1. Horizontal reinforcement. Horizontal joint reinforcement shall consist of ~~at least two longitudinal W1.7 wires spaced not more than 16 inches (406 mm) for walls greater than 4 inches (102 mm) in width and at least one longitudinal W1.7 wire spaced not more than 16 inches (406 mm) for walls not exceeding 4 inches (102 mm) in width; or~~ at least one No. 4 bar spaced not more than 48 inches (1219 mm). ~~Where two longitudinal wires of joint reinforcement are used, the space between these wires shall be the widest that the mortar joint will accommodate.~~ Horizontal reinforcement shall be provided within 16 inches (406 mm) of the top and bottom of these masonry elements.

2. Vertical reinforcement. Vertical reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Vertical reinforcement shall be within ~~16~~ 8 inches (~~406~~203 mm) of the ends of masonry walls.

**SECTION 47.** Section R803.2.4 is hereby added to read as follows:

**R803.2.4 Openings in horizontal diaphragms.**

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

**SECTION 48.** Section R1001.3.1 is hereby amended to read as follows:

**R1001.3.1 Vertical reinforcing.**

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

**SECTION 49.** The provisions of this ordinance contain various changes, modifications, and additions to the 2013 Edition of the California Residential Code. Some of these changes are administrative in nature in that they do not constitute changes or modifications to requirements contained in the building standards published in the California Building Standards Code.

Pursuant to California Health and Safety Code sections 17958.5, 17958.7, and 18941.5, the Board of Supervisors hereby expressly finds that all of the changes and modifications to requirements contained in the building standards published in the California Building Standards Code contained in this ordinance, which are not administrative in nature, are reasonably necessary because of local climatic, geological, or topographical conditions in the County of Los Angeles as more particularly described in the table set forth below.

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| R301.1.3.2 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. After the 1994 Northridge Earthquake, the Wood Frame Construction Joint Task Force recommended that the quality of wood frame construction needs to be greatly improved. One such recommendation identified by the Task Force is to improve the quality and organization of structural plans prepared by the engineer or architect so that plan examiners, building inspectors, contractors, and special inspectors may logically follow and construct the presentation of the seismic force-resisting systems in the construction documents. For buildings or structures located in Seismic Design Category $D_0$, $D_1$, $D_2$, or E that are subject to a greater level of seismic forces, the requirement to have a California licensed architect or engineer prepare the construction documents is intended to minimize or reduce structural deficiencies that may cause excessive damage or injuries in wood frame buildings. Structural deficiencies such as plan and vertical irregularities, improper shear transfer of the seismic force-resisting system, missed details or connections important to the structural system, and the improper application of the prescriptive requirements of the California Residential Code can be readily addressed by a registered design professional. |
| R301.1.4 | Geological Topographical | This technical amendment is for buildings constructed on hillsides. Due to the local topographical and geological conditions of the sites within the greater Los Angeles region and their susceptibility to earthquakes, this amendment is required to address and clarify special needs for buildings constructed on hillside locations. A joint Structural Engineers Association of Southern California (SEAOSC) and Los Angeles City Joint Task Force investigated the performance of hillside building failures after the Northridge earthquake. Numerous hillside failures resulted in loss of life and millions of dollars in damage. These criteria were developed to minimize the damage to these structures and have been in use by the City and County of Los Angeles for several years. |
| R301.2.2.2.5 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Due to the high geologic activities in the Southern |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | California area and the expected higher level of performance on buildings and structures, this local amendment limits the type of irregular conditions as specified in the 2013 California Residential Code. Such limitations are recommended to reduce structural damages in the event of an earthquake. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls and all associated elements when designed for high levels of seismic loads. |
| R301.2.2.3.8 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this local amendment limits the potential anchorage and supporting frame failure resulting from additional weight. There is no limitation for weight of mechanical and plumbing fixtures and equipment in the International Residential Code. Requirements from ASCE 7 and the International Building Code would permit equipment weighing up to 400 lbs. when mounted at 4 feet or less above the floor or attic level without engineering design. Where equipment exceeds this requirement, it is the intent of this proposed amendment that a registered design professional be required to analyze if the floor support is adequate and structurally sound. |
| Table R302.1(2) | Climatic | This amendment will not allow unprotected openings (openings that do not resist the spread of fire) to be in the exterior wall of a residential building that is located on a property line. This amendment is necessary due to local climatic conditions. During the hot, dry weather conditions of late summer in combination with the Santa Ana winds creates an extreme fire danger. Residential buildings with unprotected openings located on a property line will allow the spread of fire from the inside of the building to adjacent properties and likewise from exterior properties to the interior of the building. |
| R327.1.1 | Climatic | Clarifies the application of Chapter R327 to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to low humidity, strong winds, and dry |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings. |
| R327.1.3 | Climatic | Clarifies the application of Chapter R327 to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings. |
| R327.1.3.1 | Climatic | Clarifies the application of Chapter R327 to include additions, alterations, and/or relocated buildings. Many areas of the County have been designated as Fire Hazard Severity Zones due to the increased risk of fire caused by low humidity, strong winds, and dry vegetation. Additions, alterations, and/or relocated buildings have the same fire risk as new buildings. |
| R327.3.5.2 | Climatic | Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation. |
| R327.3.5.2.2 | Climatic | Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation. |
| R327.4.3 | Climatic | Disallows the use of wood-shingle/wood-shake roofs due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in High Fire Severity Zones. |
| R327.5.2 | Climatic | Disallows the use of wood-shingle/wood-shake roofs and requires the use of Class A roof covering due to the increased risk of fire in the County caused by low humidity, strong winds, and dry vegetation in High Fire Severity Zones. |
| R401.1 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Wood foundations, even those that are preservative-treated, encounter a higher risk of deterioration when contacting the adjacent ground. The required seismic anchorage and transfer of lateral forces into the foundation system necessary for 2-story structures and foundation walls could become compromised at varying states of wood decay. In addition, global structure overturning moment and sliding resistance is reduced when utilizing |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | wood foundations as opposed to conventional concrete or masonry systems. However, non-occupied, single-story storage structures pose significantly less risk to human safety and should be able to utilize the wood foundation guidelines specified in this Chapter. |
| R403.1.2<br>R403.1.3<br>R403.1.5<br>Figure R403.1.5 | Climatic<br>Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. These proposed amendments require minimum reinforcement in continuous footings and stepped footings to address the problem of poor performance of plain or under-reinforced footings during a seismic event. These amendments reflect the recommendations by SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in the 1994 Northridge Earthquake. These proposed amendments are a continuation of an amendment adopted during previous code adoption cycles. Interior walls can easily be called upon to resist over half of the seismic loading imposed on simple buildings or structures. Without a continuous foundation to support the braced wall line, seismic loads would be transferred through other elements such as non-structural concrete slab floors, wood floors, etc. Requiring interior braced walls be supported by continuous foundations is intended to reduce or eliminate the poor performance of buildings or structures. |
| R404.2 | Climatic<br>Geological | No substantiating data has been provided to show that wood foundations are effective in supporting structures and buildings during a seismic event while being subject to deterioration caused by presence of water in the soil as well as other materials detrimental to wood foundations. Wood foundations, when they are not properly treated and protected against deterioration, have performed very poorly and have led to slope failures. Most contractors are typically accustomed to construction in dry weather in the Southern California region and are not generally familiar with the necessary precautions and treatment of wood that makes it suitable for both seismic events and wet applications. With the higher seismic demand placed on buildings and structures in this region, coupled with the dryer weather conditions here as oppose to the northern and eastern part of the country, it is the intent of this proposal to take the necessary precautionary steps to |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | reduce or eliminate potential problems that may result from the use of wood footings and foundations that does not take into consideration the conditions of this surrounding environment. |
| R501.1 | Geological | Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this local amendment limits the potential anchorage and supporting frame failure resulting from additional weight. There is no limitation for weight of mechanical and plumbing fixtures and equipment in the International Residential Code. Requirements from ASCE 7 and the International Building Code would permit equipment weighing up to 400 lbs. when mounted at 4 feet or less above the floor or attic level without engineering design. Where equipment exceeds this requirement, it is the intent of this proposed amendment that a registered design professional be required to analyze if the floor support is adequate and structurally sound. |
| R503.2.4 | Geological | Section R502.10 of the Code does not provide any prescriptive criteria to limit the maximum floor opening size nor does Section R503 provide any details to address the issue of shear transfer near larger floor openings. With the higher seismic demand placed on buildings and structures in this region, it is important to ensure that a complete load path is provided to reduce or eliminate potential damages caused by seismic forces. Requiring blocking with metal ties around larger floor openings and limiting opening size is consistent with the requirements of Section R301.2.2.2.5. |
| R602.3.2 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads by eliminating single top plate construction. The performance of modern day braced wall panel construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. This proposed amendment is a continuation of an amendment adopted during the previous code adoption cycle. |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| Table R602.3(1) | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. As a matter of fact, the test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. Therefore, the use of staples as fasteners for shear walls sheathed with other materials shall not be permitted without being substantiated by cyclic testing. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycle. |
| Table R602.3(2) | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. In September 2007, limited cyclic testing data was provided to the ICC Los Angeles Chapter Structural Code Committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. As a matter of fact, the test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. Therefore, the use of staples as fasteners for shear walls sheathed with other materials shall not be permitted without being substantiated by cyclic testing. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycle. |
| Table R602.10.3(3) | Geological | Due to the high geologic activities in the Southern California area and the expected higher level of performance on buildings and structures, this local amendment continues to reduce/eliminate the allowable shear values for shear walls sheathed with lath, plaster or gypsum board. The poor performance of such shear walls sheathed with other materials in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads. |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| Table R602.10.4 | Geological | 3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. This proposed amendment specifies minimum WSP sheathing thickness and nail size and spacing so as to provide a uniform standard of construction for designers and buildings to follow. This is intended to improve the performance level of buildings and structures that are subject to the higher seismic demands placed on buildings or structure in this region. This proposed amendment reflects the recommendations by SEAOSC and the Los Angeles City Joint Task Force that investigated the poor performance observed in 1994 Northridge Earthquake. In September 2007, cyclic testing data was provided to the structural code committee showing that stapled wood structural shear panels do not exhibit the same behavior as the nailed wood structural shear panels. In addition, the test results of the stapled wood structural shear panels appeared much lower in strength and drift than the nailed wood structural shear panel test results. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycle. |
| Table R602.10.5 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity with respect to the "maximum shear wall aspect ratios" of the framing of the shear walls when designed for high levels of seismic loads. This proposed amendment is consistent with the shear wall aspect ratio provision of Section 4.3.4 of AF&PA SDPWS-2008. |
| Figure R602.10.6.1 | Geological | 3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. Box nails were observed to cause massive and multiple failures of the typical 3/8" thick 3 ply-plywood during the Northridge Earthquake. The cities and County of the Los Angeles region have taken extra measures to maintain the |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | structural integrity of the framing of the shear walls when designed for high levels of seismic loads. The performance of modern day braced wall panel construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. This proposed amendment continues amendments adopted during the previous Code cycles for the California Building Code. |
| Figure R602.10.6.2 | Geological | 3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads. Box nails were observed to cause massive and multiple failures of the typical 3/8-inch thick plywood during the Northridge Earthquake. The proposal to change the minimum lap splice requirement is consistent with Section 12.16.1 of ACI 318-11. This proposed amendment is a continuation of an amendment adopted during the previous Code adoption cycles. |
| Figure R602.10.6.4 | Geological | 3/8" thick 3 ply-plywood shear walls experienced many failures during the Northridge Earthquake. The poor performance of such shear walls sheathed in the 1994 Northridge Earthquake was investigated by SEAOSC and the Los Angeles City Joint Task Force. The cities and County of the Los Angeles region have taken extra measures to maintain the structural integrity of the framing of the shear walls when designed for high levels of seismic loads. The proposal in which "washers shall be a minimum of 0.229 inch by 3 inches by 3 inches in size" is consistent with Section R602.11.1 of the California Residential Code and Section 2308.12.8 of the California Building Code. This proposed amendment is a continuation of an amendment adopted during the previous code adoption cycle. |
| R602.10.9.1 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The performance of modern day braced wall panel |

| Code Section | Condition | Explanation of Amendment |
|---|---|---|
| | | construction is directly related to an adequate load path extending from the roof diaphragm to the foundation system. Interior braced wall panels, therefore, are also directly dependent upon the adequacy of the foundation system. In addition, the proposed amendment for Section R403.1.2 specifies that all exterior walls and required interior braced wall panels in buildings shall be supported with continuous footings. |
| R606.2.4 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The addition of the word "or" will prevent the use of unreinforced parapets in Seismic Design Category $D_0$, $D_1$ or $D_2$, or on townhouses in Seismic Design Category C. |
| R606.12.2.2.3 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. Reinforcement using longitudinal wires for buildings and structures located in high seismic areas are not as ductile as deformed rebar. Having vertical reinforcement closer to the ends of masonry walls help to improve the seismic performance of masonry buildings and structures. |
| R803.2.4 | Geological | Section R802 of the Code does not provide any prescriptive criteria to limit the maximum size of roof openings, nor does Section R803 provide any details to address the issue of shear transfer near larger roof openings. With the higher seismic demand placed on buildings and structures in this region, it is important to ensure that a complete load path is provided to reduce or eliminate potential damage caused by seismic forces. Requiring blocking with metal ties around larger roof openings and limiting the size of openings is consistent with the requirements of Section R301.2.2.2.5. |
| R1001.3.1 | Geological | Los Angeles County is prone to seismic activity due to the existence of active faults in the Southern California area. The performance of fireplaces/chimneys without anchorage to the foundation has been observed to be inadequate during major earthquakes. The lack of anchorage to the foundation results in overturn or displacement. |

**SECTION 49.** This ordinance shall become operative on January 1, 2014.

[TITLE302013CSCC]

Item Number

**12B**

# STAFF REPORT

**Date:** September 16, 2014

**To:** Honorable Mayor & Council Members

**From:** Jose E. Pulido, City Manager
By: Isabel Birrueta, Assistant City Attorney

**Subject:** **Report Regarding the City's City Attorney Services Agreement with Olivarez Madruga, P.C.**

## RECOMMENDATION

The City Council is requested to receive and file report regarding the City's City Attorney Services Agreement with Olivarez Madruga, P.C.

## BACKGROUND

The City Council has requested that the Assistant City Attorney provide a report on the structure of the February 18, 2014 First Amendment to Agreement for City Attorney Services between the City of Cudahy and Olivarez Madruga, P.C. ("Retainer Agreement"), detailing the types of activities that are charged as basic retainer legal services and those types of activities that are charged as special matter services, to facilitate the City Council's discussion of possible options for managing legal fees.

## ANALYSIS

Under the Retainer Agreement, the City of Cudahy ("City") pays a flat monthly fee of Twenty Thousand Dollars ($20,000.00) for certain legal services ("Basic Retainer Services"). These legal services are primarily those services that are necessary for the standard day-to-day operations of a City, such as attendance at regular meetings, review of agendas and resolutions, drafting of ordinances, drafting and/or review of contracts, and providing general legal advice to the City Council and City staff regarding general public law issues, potential tort liability, and risk management.

Legal services that are generally not related to the standard day-to-day operations of the City may be billed to the City as Special Matters ("Special Matter Services"), subject to the parameters of the Retainer Agreement. Unlike Basic Retainer Services for which the City pays a flat monthly legal services fee, the City is billed for Special Matter Services according to the set hourly rates contained in the Retainer Agreement. Examples of Special Matter Services are services such as drafting legal documents and legal analysis in preparation for anticipated or pending litigation, negotiation/drafting/reviewing during complex land use transactions and projects, the conduct or coordination of internal investigations, and representation of the City during collective bargaining negotiations and for Successor Agency business.

## CONCLUSION

The attached Exhibit A shows the legal fees for Basic Retainer Services and Special Matter Services billed to the City for the months of February 2014 through June 2014. The benefit to the City in paying a flat monthly fee, rather than an hourly fee, for Basic Retainer Services over these five (5) months has resulted in savings to the City of $12,876.00 (approximately $2,600 per month). A breakdown of the costs of particular Special Matters is also provided in Exhibit A for the City Council's review.

## FINANCIAL IMPACT

None.

## ATTACHMENTS

Exhibit A: Legal Fees for February 2014 through June 2014

# EXHIBIT A

## BASIC RETAINER LEGAL SERVICES

**City of Cudahy 2014 Retainer**

| Month | Hours Billed | Legal Fees (If No Retainer) | Fees Billed (Under Retainer) |
|---|---|---|---|
| Feb | 90.7 | $ 17,394.00 | $ 20,000.00 |
| March | 166.8 | $ 32,015.00 | $ 20,000.00 |
| April | 90.2 | $ 17,402.00 | $ 20,000.00 |
| May | 116.5 | $ 22,389.00 | $ 20,000.00 |
| June | 123.5 | $ 23,676.00 | $ 20,000.00 |
| TOTAL | 587.7 | $ 112,876.00 | **$ 100,000.00** |
| | **TOTAL CITY SAVINGS:** | **$ 12,876.00** | |

## SPECIAL MATTER LEGAL SERVICES

**City of Cudahy Special Matters: Monthly Totals**

| Month | Hours Billed | Total Legal Fees |
|---|---|---|
| February | 93.4 | $ 17,818.00 |
| March | 195.5 | $ 37,604.00 |
| April | 198.7 | $ 38,210.00 |
| May | 102.2 | $ 19,595.00 |
| June | 79.8 | $ 15,306.00 |
| **TOTAL** | **669.6** | **$ 128,533.00** |

**FEBRUARY TOTALS**

| Special Matters | February Hours Billed | Total |
|---|---|---|
| LACCD v. County | 1.4 | $ 266.00 |
| 21st Cetnury | 20.7 | $ 3,939.00 |
| 4840 Clara Street | 0.4 | $ 76.00 |
| DTSC | 4.8 | $ 912.00 |
| Layoffs | 40 | $ 7,643.00 |
| Rodriguez EDD Claim | 3.6 | $ 684.00 |
| Successor Agency Business | 21.2 | $ 4,047.50 |
| California v. Yashar | 0.6 | $ 114.00 |
| Investigations | 0.7 | $ 136.50 |
| **TOTAL** | **93.4** | **$ 17,818.00** |

**MARCH TOTALS**

| Special Matters | March Hours Billed | Total |
|---|---|---|
| Personnel | 0.2 | $ 39.00 |
| 21st Century | 38.5 | $ 7,329.50 |
| 4840 Clara Street | 15.4 | $ 2,997.50 |
| 7200 Atlantic | 0.1 | $ 19.50 |
| DTSC | 34.2 | $ 6,553.50 |

# EXHIBIT A

| | | | |
|---|---|---|---|
| LAUSD v. Cudahy | 0.7 | $ | 135.50 |
| Layoffs | 19.6 | $ | 3,763.50 |
| Public Recoreds Request over 1 hour | 2.7 | $ | 513.00 |
| Rodriguezz EDD Claim | 10.5 | $ | 1,998.50 |
| Special Meetings | 7.5 | $ | 1,462.50 |
| Successor Agency Business | 55.4 | $ | 10,706.00 |
| USA Fitness | 0.4 | $ | 78.00 |
| Code Enforcement | 2 | $ | 390.00 |
| CMEA Grievance | 8.3 | $ | 1,618.50 |
| **TOTAL** | **195.5** | **$** | **37,604.50** |

**APRIL TOTALS**

| Special Matters | April Hours Billed | Total | |
|---|---|---|---|
| 21st Century | 6.1 | $ | 1,167.50 |
| 4840 Clara Street | 40 | $ | 7,725.50 |
| DTSC | 13.3 | $ | 2,529.50 |
| ECM | 1 | $ | 195.00 |
| LAUSD v. Cudahy | 1.4 | $ | 266.00 |
| Layoffs | 3.9 | $ | 746.50 |
| Melia Homes | 8.8 | $ | 1,690.50 |
| Personnel | 0.6 | $ | 117.00 |
| Special Meetings | 7.1 | $ | 1,384.50 |
| Successor Agency Business | 110.6 | $ | 21,252.00 |
| USA Fitness | 1.3 | $ | 248.00 |
| Code Enforcement | 0.5 | $ | 97.50 |
| CMEA Grievance | 4.1 | $ | 791.00 |
| **TOTAL** | **198.7** | **$** | **38,210.50** |

**MAY TOTALS**

| Special Matters | May Hours Billed | Total | |
|---|---|---|---|
| 21st Century | 19.3 | $ | 3,672.00 |
| 4840 Clara Street | 18.6 | $ | 3,587.00 |
| DTSC | 4.8 | $ | 913.50 |
| LAUSD v. Cudahy | 1.3 | $ | 252.00 |
| Layoffs | 5.5 | $ | 1,045.00 |
| Public Recoreds Request over 1 hour | 1.9 | $ | 361.00 |
| Special Meetings | 3.3 | $ | 643.50 |
| Successor Agency Business | 45 | $ | 8,636.50 |
| CMEA Grievance | 2.5 | $ | 484.50 |
| **TOTAL** | **102.2** | **$** | **19,595.00** |

**JUNE TOTALS**

| Special Matters | June Hours Billed | Total | |
|---|---|---|---|
| 21st Century | 0.6 | $ | 114.00 |
| 4840 Clara Street | 9 | $ | 1,748.50 |
| 7200 Atlantic | 10.3 | $ | 1,971.50 |

# EXHIBIT A

| | | |
|---|---|---|
| DTSC | 5.2 | $ 990.00 |
| LAUSD v. Cudahy | 0.4 | $ 78.00 |
| Special Meetings | 3.8 | $ 741.00 |
| Successor Agency Business | 44.9 | $ 8,599.50 |
| USA Fitness | 5.6 | $ 1,064.00 |
| **TOTAL** | **79.8** | **$ 15,306.50** |