RESOLUTION NO. 13-8088

A RESOLUTION OF THE CITY OF SANTA CLARA, CALIFORNIA, MAKING EXPRESS FINDINGS REQUIRED BY SECTION 17958.7 OF THE CALIFORNIA HEALTH AND SAFETY CODE THAT CERTAIN LOCAL MODIFICATIONS AND AMENDMENTS TO THE FOLLOWING MODEL CODES, AS AMENDED BY THE STATE OF CALIFORNIA, ARE NEEDED FOR THE CITY OF SANTA CLARA AND SETTING FORTH THE JUSTIFICATION FOR THE CHANGES:

1) **INTERNATIONAL BUILDING CODE (2012 EDITION)**
2) **INTERNATIONAL RESIDENTIAL CODE (2012 EDITION)**
3) **NATIONAL ELECTRICAL CODE (2011 EDITION)**
4) **UNIFORM MECHANCIAL CODE (2012 EDITION)**
5) **UNIFORM PLUMBING CODE (2012 EDITION)**
6) **INTERNATIONAL EXISTING BUILDING CODE (2012 EDITION)**

BE IT RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

WHEREAS, the State of California recently adopted and amended the Model Codes of the International Code Council and related uniform code publishers, and they will become applicable to all California cities on January 1, 2014;

WHEREAS, pursuant to authority granted in Health and Safety Code section 17958, the City may adopt local amendments to the Model Codes;

WHEREAS, the City has worked with other Bay area jurisdictions and the International Code Council chapters to adopt local amendments which are prudent and necessary based upon our climatic, topographical or geological changes; and,

WHEREAS, the City must set forth the justifications for those local amendments.

NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY OF SANTA CLARA AS FOLLOWS:

1. 2012 International Building Code. That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "A"** necessary for

the reasons set forth in **Exhibit "A-1."** Both exhibits are attached hereto and incorporated by this reference.

2. 2012 International Residential Code. That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "B"** necessary for the reasons set forth in **Exhibit "B-1".** Both exhibits are attached hereto and incorporated by this reference.

3. 2011 National Electrical Code. That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "C"** necessary for the reasons set forth in **Exhibit "C-1."** Both exhibits are attached hereto and incorporated by this reference.

4. 2012 Uniform Mechanical Code. That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "D"** necessary for the reasons set forth in **Exhibit "D-1."** Both exhibits are attached hereto and incorporated by this reference.

5. 2012 Uniform Plumbing Code. That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "E"** necessary for the reasons set forth in **Exhibit "E-1."** Both exhibits are attached hereto and incorporated by this reference.

6. 2012 International Existing Building Code. That the City Council of the City of Santa Clara hereby expressly finds the modifications and amendments set forth in **Exhibit "F"** necessary for the reasons set forth in **Exhibit "F-1."** Both exhibits are attached hereto and incorporated by this reference.

7. Public Record of Findings. That the City Clerk of the City of Santa Clara is hereby authorized and directed to have available as a public record in the City Clerk's office a copy of the findings as to the necessity of the modifications or amendments. The City Clerk is furthermore authorized and directed to transmit a copy of the findings to be filed with the California Building Standards Commission as required by Section 17958.7 of the California Health and Safety Code.

8. Constitutionality, severability. If any section, subsection, sentence, clause, phrase, or word of this resolution is for any reason held by a court of competent jurisdiction to be unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of the resolution. The City of Santa Clara, California, hereby declares that it would have passed this resolution and each section, subsection, sentence, clause, phrase, and word thereof, irrespective of the fact that any one or more section(s), subsection(s), sentence(s), clause(s), phrase(s), or word(s) be declared invalid.

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9. Effective date. This resolution shall become effective on January 1, 2014.

I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION PASSED AND ADOPTED BY THE CITY OF SANTA CLARA, CALIFORNIA, AT A REGULAR MEETING THEREOF HELD ON THE 19TH DAY OF NOVEMBER, 2013, BY THE FOLLOWING VOTE:

AYES:	COUNCILORS:	Davis, Gillmor, Kolstad, Mahan, Marsalli and O'Neill and Mayor Matthews
NOES:	COUNCILORS:	None
ABSENT:	COUNCILORS:	None
ABSTAINED:	COUNCILORS:	None

ATTEST:

ROD DIRIDON, JR.
CITY CLERK
CITY OF SANTA CLARA

Attachments incorporated by reference:
1. Exhibits A and A-1: 2012 International Building Code modifications/amendments and reasons therefor
2. Exhibits B and B-1: 2012 International Residential Code modifications/amendments and reasons therefor
3. Exhibits C and C-1: 2011 National Electrical Code modifications/amendments and reasons therefor
4. Exhibits D and D-1: 2012 Uniform Mechanical Code modifications/amendments and reasons therefor
5. Exhibits E and E-1: 2012 Uniform Plumbing Code modifications/amendments and reasons therefor
6. Exhibits F and F-1: 2012 International Existing Building Code modifications/amendments and reasons therefor

EXHIBIT "A"

CITY OF SANTA CLARA
MODIFICATIONS AND AMENDMENTS TO
THE INTERNATIONAL BUILDING CODE [2012 Edition]

The following modifications and amendments are a part of the International Building Code, 2012 Edition. They are to add to, replace, or supersede the respective sections and subsections appearing in said code prior to such modifications.

(A) **Sections 101.4.1, 101.4.2, 101.4.3, 101.4.4, 101.4.6, 102.6, and 103 through 116, inclusive.** Administrative. Not adopted.

(B) **Section 1705.3 - Concrete Construction.** Modifications.

1705.3 Concrete Construction. The *special inspections* and verifications for concrete construction shall be as required by this section and TABLE 1705.3.

Exceptions: *Special inspections* shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above *grade plane* that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pound per square inch (psi) (17.2 Mpa).

(C) **Section 1905.1.8 ACI 318, Section 22.10** – Delete ACI 318, Section 22.10, and replace with the following:

22.10 - Plain concrete in structures assigned to Seismic Design Category C, D, E or F.
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.~~

(a) 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 dwelling 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.

(b) Plain concrete footing 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 (2013 mm) in thickness,~~ 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.

Exception:

~~1. In seismic design categories A, B and C,~~ In detached one- and two-family dwellings three stories or less in height and constructed with stud bearing walls, ~~are permitted to have~~ plain concrete footings ~~without longitudinal reinforcement.~~ 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 stem wall, a minimum of one bar shall be provided at the top of the stem wall 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.~~

(D) **Chapter 29 – Plumbing Systems.** Not adopted.

(E) **Appendix Chapter J - Grading.** Adopted.

EXHIBIT "A-1"

CITY OF SANTA CLARA
JUSTIFICATION FOR
MODIFICATIONS AND AMENDMENTS TO:
THE INTERNATIONAL BUILDING CODE [2012 Edition]

(A) **Sections 101.4.1, 101.4.2, 101.4.3, 101.4.4, 101.4.6, 102.6, and 103 through 116, inclusive.** Administrative. Not adopted.

Justification: Contained in the Administrative Code.

(B) **Section 1705.3 Concrete Construction** modification.

Justification: Results from studies after the 1994 Northridge earthquake indicated that a lot of the damages were attributed to lack of quality control during construction. The proposed amendment limits the type of concrete footings (compressive strength, f'c, no greater than 2,500 psi) without special inspections and improves quality control during construction and therefore needs to be incorporated into the Code. This proposed amendment is a continuation of an amendment adopted during the previous code adoption cycle, and is necessary due to the geological condition of Santa Clara.

(C) **Section 1905.1.8 ACI 318, Section 22.10.** Replace ACI 318-08, sections 22.10 and 22.10.1.

Justification: The proposed amendment addresses the problem of poor performance of plain or under-reinforced concrete footings during a seismic event. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance of plain and under-reinforced concrete footings observed in 1994 Northridge earthquake. This amendment is a continuation of an amendment adopted during the previous code adoption cycle, and is necessary because of the geological condition of City of Santa Clara.

(E) **Chapter 29 – Plumbing Systems.** Not adopted.

Justification: Fixture count and plumbing requirements are covered in the Plumbing code. Amendment eliminates conflicts between the two codes.

(F) **Appendix Chapter J** - Grading. Adopted.

Justification: Permit is required for grading operations and will control isolated excavations or fills where no building permit is required.

EXHIBIT "B"

CITY OF SANTA CLARA
MODIFICATIONS AND AMENDMENTS TO
THE INTERNATIONAL RESIDENTIAL CODE [2012 Edition]

The following modifications and amendments are a part of the International Residential Code, 2012 Edition. They are to add to, replace, or supersede the respective sections and subsections appearing in said code prior to such modifications.

(A) **Sections R103 through R114, inclusive.** Administrative. Not adopted.

(B) **Section R403.1.3. – Seismic Reinforcing.** Modification.

R403.1.3 Seismic reinforcing. Concrete footings located in Seismic Design Categories D0, D1 and D2, as established in Table R301.2(1), shall have minimum reinforcement of at least two continuous longitudinal reinforcing bars not smaller than No. 4 bars. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

In Seismic Design Categories D0, D1 and D2 where a construction joint is created between a concrete footing and a stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing, have a standard hook and extend a minimum of 14 inches (357 mm) into the stem wall.

In Seismic Design Categories D0, D1 and D2 where a grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing and have a standard hook.

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

Exception: In detached one- and two-family *dwellings* which are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings supporting columns or pedestals are permitted.

(C) **Section R602.10.4 and Table R602.10.3(3).** Modifications.

Add a new footnote "e" to the end of Table R602.10.3(3), to read:

e. In Seismic Design Categories D_0, D_1, and D_2, Method GB is not permitted and the use of Method PCP is limited to one-story single family dwellings and accessory structures.

Add the "e" footnote notation in the title of Table R602.10.3(3), to read:

TABLE R602.10.3(3)[e]

Add a new subsection R602.10.4.4, to read:

R602.10.4.4 Limits on methods GB and PCP. In Seismic Design Categories D_0, D_1, and D_2, Method GB is not permitted for use as intermittent braced wall panels, but gypsum board is permitted to be installed when required by this Section to be placed on the opposite side of the studs from other types of braced wall panel sheathing. In Seismic Design Categories D_0, D_1, and D_2, the use of Method PCP is limited to one-story single family dwellings and accessory structures.

(D) **Chapters 11 through 43, inclusive.** Not adopted.

(E) **Appendix Chapter H. Patio Covers.** Adopted.

(F) **Appendix Chapter K. Sound Transmission.** Adopted.

EXHIBIT "B-1"

CITY OF SANTA CLARA
MODIFICATIONS AND AMENDMENTS TO
THE INTERNATIONAL RESIDENTIAL CODE [2009 Edition]

(A) **Sections R103 through R114, inclusive.** Administrative. Not adopted.

Justification: Cover in the Administrative Code.

(B) **Section R403.1.3. Modification.**

Justification: This proposed amendment is made to be consistent with the amendment in the International Building Code that modifies plain concrete provisions in Section 1905.1.8 and ACI 318 Section 22.10. This proposed amendment addresses the problem of poor performance of plain or under-reinforced concrete footings during a seismic event. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOC) and the Los Angeles City Joint Task Force that investigated the poor performance of plain and under-reinforced concrete footings observed in 1994 Northridge earthquake. The amendment is required because of the geological condition of City of Santa Clara.

(C) **Section R602.10.4 and Table R602.10.3(3).** Modifications and addition.

Justification: The proposed amendment addresses the problem of poor performance of gypsum wallboard and Portland cement plaster as wall bracing materials in high seismic areas. This amendment reflects the recommendations by the Structural Engineers Association of Southern California (SEAOSC) and the Los Angeles City Joint Task Force that investigated the poor performance of these bracing materials that were observed in 1994 Northridge earthquake. The amendment is necessary due to the geological condition of City of Santa Clara.

(D) **Chapters 11 through 43, inclusive.** Not adopted.

Justification: Regulations are covered by other codes.

(E) **Appendix Chapter H. Patio Covers.** Adopted.

Justification: Provide standards for patio covers and patio enclosures.

(F) **Appendix Chapter K. Sound Transmission.** Adopted.

Justification: Provide standards for sound transmission between dwelling units.

EXHIBIT "C"

CITY OF SANTA CLARA
MODIFICATIONS AND AMENDMENTS TO:
THE NATIONAL ELECTRIC CODE [2011 Edition]

The following amendment is a part of the National Electric Code, 2011 Edition.

(A) **Article 90.4. Enforcement.** Not adopted.

EXHIBIT "C-1"

CITY OF SANTA CLARA
JUSTIFICATION FOR
MODIFICATIONS AND AMENDMENTS TO:
THE NATIONAL ELECTRIC CODE [2011 Edition]

(A) **Section 90.4 Enforcement.** Administrative - Not adopted.

Justification: Contained in the Administrative Code.

EXHIBIT "D"

CITY OF SANTA CLARA
MODIFICATIONS AND AMENDMENTS TO:
THE UNIFORM MECHANICAL CODE [2012 Edition]

The following amendments are a part of the Uniform Mechanical Code, 2012 edition.

(A) **Sections 106 through 117, inclusive.** Administrative. Not adopted.

EXHIBIT "D-1"

CITY OF SANTA CLARA
JUSTIFICATION FOR
MODIFICATIONS AND AMENDMENTS TO:
THE UNIFORM MECHANICAL CODE [2012 Edition]

(A) **Sections 106 through 117 inclusive.** Administrative - Not adopted.

Justification: Contained in the Administrative code.

EXHIBIT "E"

CITY OF SANTA CLARA
MODIFICATIONS AND AMENDMENTS TO:
THE UNIFORM PLUMBING CODE [2012 Edition]

The following modifications and amendments are a part of the Uniform Plumbing Code, 2012 Edition. They are to add to, replace, or supersede the respective sections and subsections appearing in said Code prior to such modifications.

(A) **Sections 102 through 103.6 inclusive.** Administrative - Not adopted.

(B) **Appendix A, Recommended Rules for Sizing The Water Supply Systems.** Adopted.

(C) **Appendix B, Explanatory Notes on Combination Waste and Vent Systems.** Adopted.

(D) **Appendix C, Alternate Plumbing Systems.** Adopted.

(E) **Appendix D, Sizing Storm Water Drainage Systems.** Adopted.

(E) **Appendix I, Installation Standards.** Adopted.

EXHIBIT "E-1"

CITY OF SANTA CLARA
JUSTIFICATION FOR
MODIFICATIONS AND AMENDMENTS TO:
THE UNIFORM PLUMBING CODE [2012 Edition]

(A) **Section 102 through 103.6, inclusive.** Administration - Not adopted.

Justification: Contained in the Administrative Code.

(B) **Appendix A,** Recommended Rules for Sizing The Water Supply Systems. Adopted.

Justification: Provides standard for sizing water systems.

(C) **Appendix B,** Explanatory Notes on Combination Waste and Vent Systems. Adopted.

Justification: Provides standards for combination waste and vent systems.

(D) **Appendix C:** Alternate Plumbing Systems

Justifications: Provides alternate plumbing systems.

(D) **Appendix D,** Sizing Storm Water Drainage Systems. Adopted.

Justification: Provides standards for rainwater systems.

(E) **Appendix I,** Installation Standards. Adopted.

Justification: Provide installation standards for various plumbing systems.

EXHIBIT "F"

CITY OF SANTA CLARA
MODIFICATION AND AMENDMENTS TO:
THE INTERNATIONAL EXISTING BUILDING CODE [2012 Edition]

(A) **Chapter 10, Means of Egress, general** - Section1012.4. Adopted.

EXHIBIT "F-1"

CITY OF SANTA CLARA
JUSTIFICATION FOR
MODIFICATIONS AND AMENDMENTS TO:
THE INTERNATIONAL EXISTING BUILDING CODE [2012 Edition]

(A) Section 1012.4 Means of egress, general. Adopted.

Justification: The means of egress hazard categories provisions for change in occupancy in existing buildings will help to clarify which sections of the code will need to be brought to be in compliance with the new code when there is a change in occupancy.