ECONOMIC DEVELOPMENT COMMITTEE

DALLAS CITY COUNCIL COMMITTEE AGENDA

REVISED

RECEIVED

TUESDAY, JANUARY 17, 2017 CITY HALL COUNCIL BRIEFING ROOM, 6ES 1500 MARILLA DALLAS, TEXAS 75201 9:00 A.M. – 10:30 A.M.

2017 JAN 13 PM 12: 49
CITY SECRETARY

DALLAS, TEXAS

Chair, Councilmember Rickey D. Callahan Vice-Chair, Councilmember Casey Thomas, II Councilmember Lee M. Kleinman Councilmember Carolyn King Arnold Councilmember Adam Medrano Councilmember B. Adam McGough

Call to Order

1. Approval of December 5, 2016 Economic Development Committee Minutes

BRIEFINGS

 Factory Six03 (West End Marketplace /603 Munger)
 City Center TIF District (West End/South Lamar Sub-District)

Karl Zavitkovsky, Director Office of Economic Development

3. Property Tax Overview

Jack Ireland, Director
Office of Financial Services

4. <u>UPCOMING AGENDA ITEMS</u>

January 25, 2017

Sustainable Development & Construction

- A. Authorize the deposit of the amount awarded by the Special Commissioners in the condemnation proceeding styled <u>City of Dallas v. Linda Sue Reid, et al.</u>, Cause No. CC-16-03154-C, pending in Dallas County Court at Law No. 2, to acquire approximately 59,276 square feet of land located near the intersection of Seagoville Road and Interstate Highway 20 for the Southwest 120/96-inch Water Transmission Pipeline Project Not to exceed \$4,190 Financing: Water Utilities Capital Improvement Funds
- B. Authorize settlement in lieu of proceeding further with condemnation in <u>City of Dallas v. Nueva Vida/New Life Assembly Inc.</u>, Cause No. CC-16-03158-E, pending in Dallas County Court at Law No. 2, to acquire a tract of land containing approximately 17,755 square feet located in Dallas, County for the Southwest 120/96-inch Water Transmission Pipeline Project Not to exceed \$ 32,510, increased from \$100,490 (\$96,990, plus closing costs and title expenses not to exceed \$3,500) to \$133,000 (\$129,585, plus closing costs an title expenses not to exceed (\$3,415) Financing: Water Utilities Capital Construction Funds

- C. Authorize settlement in lieu of proceeding further with condemnation in <u>City of Dallas v. Vicente Delgado and Antonio Delgado, et al</u> Cause No. CC-16-03163-A, pending in Dallas County Court at Law No. 2, to acquire approximately 1,931 square feet of land located in Dallas, County for the Southwest 120/96-inch Water Transmission Pipeline Project Not to exceed \$14,000 (\$11,586, plus closing costs and title expenses not to exceed \$2,414) Financing: Water Utilities Capital Construction Funds
- D. Authorize acquisition from Brian Leigh Bader and Lisa Bader, of approximately 120,582 square feet of land located in Kaufman County for the Lake Tawakoni 144-inch Transmission Pipeline Project Not to exceed \$123,500 (\$120,350, plus closing costs and title expenses not to exceed \$3,150) Financing: Water Utilities Capital Construction Funds
- E. Authorize an amendment for a five-year lease agreement with E Avenue F, LLC for approximately 9,747 square feet of office, showroom, and warehouse space located at 3131 Irving Boulevard, Suite 605 to be used by the Sales and Auction Division of Business Development and Procurement Services Department for the period February 1, 2017 through January 31, 2022 Not to exceed \$419,063 Financing: Current Funds (subject to annual appropriations)
- F. A resolution accepting a landscape plan as required by Section 51P-921.112(e)(1) of Chapter 51P of the Dallas Development Code on property on the east line of Coit Road, north of Campbell Road D167-012 Financing: No cost consideration to the City
- G. A resolution authorizing a Purchase and Sale Agreement to be prepared for the auctioned surplus property upon receiving the highest qualified bid sold absolute on approximately 161,848 square feet of unwanted and unneeded unimproved City-owned land located near the intersection of Forney Road and Olson Drive Estimated Revenue \$242,772
- H. An ordinance abandoning a portion of a sanitary sewer easement to CADG Forest Lane 18, LLC, the abutting owner, containing approximately 658 square feet of land, located near the intersection of Forest Lane and Creekway Drive Revenue: \$5,400, plus the \$20 ordinance publication fee
 - I. An ordinance abandoning a portion of a sanitary sewer easement to COG Dallas Homes, LLC, the abutting owner, containing approximately 8,510 square feet of land, located near the intersection of Moser Avenue and Fuqua Street Revenue: \$5,400, plus the \$20 ordinance publication fee
 - J. An ordinance abandoning a portion of a utility easement to C.C. Young Memorial Home, the abutting owner, containing approximately 2,957 square feet of land, located near the intersection of Lawther Drive and Mockingbird Lane and authorizing the quitclaim Revenue: \$5,400, plus the \$20 ordinance publication fee
 - K. An ordinance amending Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code; an ordinance amending Chapter 53 "Dallas Building Code," of the Dallas City Code; an ordinance amending Chapter 54 "Dallas Plumbing Code," of the Dallas City Code; an ordinance amending Chapter 55 "Dallas Mechanical Code," of the Dallas City Code; an ordinance amending Chapter 57 "Dallas One-and Two-Family Dwelling Code," of the Dallas City Code; an ordinance amending Chapter 59 "Dallas Energy Conservation Code," of the Dallas City Code; an ordinance amending Chapter 60 "Dallas Fuel and Gas Code," of the Dallas City Code; an ordinance amending Chapter 61 "Dallas Green Construction Code," of the Dallas City Code; to adopt the 2015 International Codes with regional and local amendments regulating construction work in the City; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date Financing: No cost consideration to the City
 - L. Authorize the second step of acquisition for condemnation by eminent domain to acquire a tract of land containing approximately 432,376 square feet located in Kaufman County for the Lake Tawakoni 144-

inch Pipeline Project, from Morris Dale Martin - Not to exceed \$55,000 (\$51,615, plus closing costs and title expenses not to exceed \$3,385) - Financing: Water Utilities Capital Improvement Funds

M. An ordinance abandoning a portion of Newton Court to Park Cities Presbyterian Church, the abutting owner, containing approximately 19,805 square feet of land, located near the intersection of Oak Lawn Avenue and Newton Court and authorizing the quitclaim - Revenue: \$1,163,582, plus the \$20 ordinance publication fee

Equipment & Building Services

- N. Authorize a professional services contract with Alliance Geotechnical Group, lowest responsive proposer of four, to perform material testing on four construction projects in the Aviation Airside Capital Improvement Program at Dallas Love Field Not to exceed \$534,194 Financing: Aviation Capital Construction Funds
- O. Authorize an increase to the construction services contract with DENCO CS Corporation, Inc., for additional work required to complete the East Kitchen Improvement Project at the Kay Bailey Hutchison Convention Center Dallas, located at 650 South Griffin Street Not to exceed \$138,237, from \$1,876,422 to \$2,014,659 Financing: Convention and Event Services Capital Construction Funds
- P. Authorize an increase to the construction contract with EAS Contracting L.P. for the final change order, reconciling deletions and additions of work on the Hold Sign Relocation Project at Dallas Love Field for a net deductive increase to the contract, increasing the contract Not to exceed \$11,740, from \$1,306,252 to \$1,317,992 Financing: Aviation Capital Construction Funds

5. **UPCOMING AGENDA ITEMS**

February 8, 2017

Economic Development

- Q. Authorize a public hearing to be held on February 22, 2017 to receive citizen comments concerning the City of Dallas' participation in the Texas Enterprise Zone Program pursuant to the Texas Enterprise Zone Act, Chapter 2303 Texas Government Code as revised in order to allow the nomination of The Neiman Marcus Group LLC, 4121 Pinnacle Point Drive, 1700 Pacific Avenue, 1201 Elm Street and 1618 Main Street as an Enterprise Zone Project. Financing: No cost consideration to the City
- R. Authorize (1) the recension of Resolution No. 15-0291, previously approved on February 11, 2015, which authorized a 75 percent real property tax abatement for 8 years with PIHV Mountain Creek, LLC; and (2) a 75 percent business personal property tax abatement agreement for 8 years with Carbonlite Recycling, LLC on new business personal property to be located at 4685 Mountain Creek Parkway within Mountain Creek NEZ No. 1 in Dallas Revenue: First year revenue estimated at \$83,688; eight-year revenue estimated at \$546,224 (Estimated revenue foregone for eight-year business personal property tax abatement estimated at \$1,638,672)
- S. Authorize a Chapter 380 e-commerce sales tax grant agreement with Chewy, Inc., a Delaware Corporation, to provide a 10-year e-commerce grant equal to 50 percent of the e-commerce sales taxes paid annually by Chewy.com customers to the City of Dallas for the ten year period beginning March 1, 2017 through February 28, 2027 from its leased facility at 7243 Grady Niblo Road in Dallas, in accordance with the City's Revised Public/Private Partnership Program; Revenue: First year revenue estimated at \$400,000; ten-year revenue is not capped but is estimated to be approximately \$7,015,939 (Estimated ten-year grant agreement payment of \$7,015,939) Financing: Current Funds, subject to future appropriations

Sustainable Development & Construction

- T. Authorize a sixteen-year lease agreement with Dallas Area Rapid Transit approximately 1,068 square feet of office space located at 2111 South Corinth Street, Suite 106, to be used as the South Oak Cliff Community Court for the period February 1, 2017 through January 31, 2032, plus a one-time payment for leasehold improvements in an amount not to exceed \$138,600 Not to exceed \$138,601 Financing: Convention and Event Services Current Funds (subject to annual appropriations)
- U. Authorize an historic preservation tax exemption for the Lakewood Theater building located at 1825 Abrams Road for a ten-year period on the added value of the land and structure Revenue Foregone: First year tax revenue foregone estimated at \$7,825 (Estimated revenue foregone over ten years is \$78,250)

Adjourn

Rickey D. Callahan, Chair

Economic Development Committee

EXECUTIVE SESSION NOTICE

A closed executive session may be held if the discussion of any of the above agenda items concerns one of the following:

- 1. seeking the advice of its attorney about pending or contemplated litigation, settlement offers, or any matter in which the duty of the attorney to the City Council under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act. [Tex. Govt. Code §551.071]
- 2. deliberating the purchase, exchange, lease, or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.072]
- deliberating a negotiated contract for a prospective gift or donation to the city if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.073]
- deliberating the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee unless the officer or employee who is the subject of the deliberation or hearing requests a public hearing. [Tex. Govt. Code §551.074]
- 5. deliberating the deployment, or specific occasions for implementation, of security personnel or devices. [Tex. Govt. Code §551.076]
- 6. discussing or deliberating commercial or financial information that the city has received from a business prospect that the city seeks to have locate, stay or expand in or near the city and with which the city is conducting economic development negotiations; or deliberating the offer of a financial or other incentive to a business prospect. [Tex Govt. Code §551.087]

Handgun Pohibition Notice for Meetings of Government Entities

"Pursuant to Section 30.06, Penal Code (trespass by license holder with a concealed handgun), a person licensed under Subchapter H, Chapter 411, Government Code (handgun licensing law), may not enter this property with a concealed handgun."

"De acuerdo con la sección 30.06 del código penal (ingreso sin autorización de un titular de una licencia con una pistola oculta), una persona con licencia según el subcapítulo h, capítulo 411, código del gobierno (ley sobre licencias para portar pistolas), no puede ingresar a esta propiedad con una pistola oculta."

"Pursuant to Section 30.07, Penal Code (trespass by license holder with an openly carried handgun), a person licensed under Subchapter H, Chapter 411, Government Code (handgun licensing law), may not enter this property with a handgun that is carried openly."

"De acuerdo con la sección 30.07 del código penal (ingreso sin autorización de un titular de una licencia con una pistola a la vista), una persona con licencia según el subcapítulo h, capítulo 411, código del gobierno (ley sobre licencias para portar pistolas), no puede ingresar a esta propiedad con una pistola a la vista."

Economic Development Committee DRAFT

Meeting Record December 5, 2016

Meeting Start time: 9:06 AM

The Economic Development Committee meetings are recorded. Agenda materials and audiotapes may be reviewed/copied by contacting the Office of Economic Development, Staff Coordinator at 214-670-1686.

Meeting Date: December 5, 2016

Committee Members Present: Rickey D. Callahan (Chair) Casey Thomas, II, (Vice Chair) B. Adam McGough Carolyn King Arnold Lee M. Kleinman Adam Medrano Other Council Members Present: Mark Clayton	Staff Present: Ryan S. Evans, First Assistant City Manager, City Manager's Office Karl Zavitkovsky, Director, Office of Economic Development J. Hammond Perot, Assistant Director, Office of Economic Development Tommy Ludwig, Assistant Director, Sustainable Development & Construction Other Presenters:
Approval of November 7, 2016 Minutes of t Presenter(s):	he Economic Development Committee
Action Taken/Committee Recommendation Motion made by: Mr. Kleinman Item passed unanimously: X Item failed unanimously:	Motion seconded by: Mr. Thomas Item passed on a divided vote:
Follow-up (if necessary):	Item failed on a divided vote:
2. Jacobs Engineering Relocation Update Presenter(s): Hammond Perot, Assistant D	irector, Office of Economic Development
Motion made by Mr. Kleinman Item passed unanimously: X	n(s): (1) Motion made to send the item to Council Motion seconded by: Mr. McGough Item passed on a divided vote:
Item failed unanimously:	Item failed on a divided vote:
Follow-up (if necessary): 3. Public /Private Partnership Program Review Presenter(s): J. Hammond Perot, Assistant	Director, Office of Economic Development
Motion made by: Mr. Thomas T	n(s): Motion made to send the item to Council Motion seconded by: Mr. Kleinman
Item passed unanimously: X	Item passed on a divided vote:
Item failed unanimously: Follow-up (if necessary):	Item failed on a divided vote:
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5. UPCOMING AGENDA ITEMS

December 14, 2016

Economic Development

- A. Authorize the nomination of United States Cold Storage (USCS) located at 2225 North Cockrell Hill Road to receive designation as an Enterprise Project under the Texas Enterprise Zone Act, as amended (Government Code, Chapter 2303) to the Office of the Governor Economic Development and Tourism through the Economic Development Bank Financing: No cost consideration to the City
- B. Authorize a third amendment of the development agreement with AP-Prescott Stoneleigh Hotel LP, for the Stoneleigh Hotel redevelopment TIF project completed in 2008 to remove the requirement to obtain City Council approval prior to: (1) assign the development agreement and TIF Subsidy from AP-Prescott Stoneleigh Hotel LP to HEI Stoneleigh Hotel, LLC; (2) remove requirement to obtain City Council approval for future assignments; and (3) require Director of Office of Economic Development consent for future assignments Financing: No cost consideration to the City

C. <u>Trammell Crow Cedardale Distribution Center</u>

- * Authorize a real property tax abatement with Cedardale Phase I, LLC for the purpose of granting a ten-year abatement of 90 percent of the taxes on added value to the real property for phase one of the Trammell Crow Cedardale Distribution Center, the first phase (consisting of approximately 50.55 acres) of a proposed two phase speculative commercial/industrial distribution development located on approximately 106 acres in the aggregate in the 3300-3900 blocks of Cedardale Road in southern Dallas within the International Inland Port of Dallas in accordance with the City's Public/Private Partnership Program Financing: No cost consideration to the City
- * Authorize a real property tax abatement with Cedardale Phase II, LLC for the purpose of granting a ten-year abatement of 90 percent of the taxes on added value to the real property for phase two of the Trammell Crow Cedardale Distribution Center, the second phase (consisting of approximately 56 acres) of a proposed two phase speculative commercial/industrial/warehouse distribution development located on approximately 106 acres in the aggregate in the 3300-3900 blocks of Cedardale Road in southern Dallas within the International Inland Port of Dallas in accordance with the City's Public/Private Partnership Program Financing: No cost consideration to the City
- D. Authorize a grant agreement with Blocks GKM, L.P. and Victory Park UST Joint Venture I, L.P., to reimburse a portion of project costs associated with the construction of new retail space and renovation of existing vacant retail space totaling approximately 40,000 to 45,000 square feet in an amount not to exceed \$3,500,000 from revenues accruing to Tax Increment Financing Reinvestment Zone Seven (Sports Arena TIF District) and establish minimum investment, occupancy, and employment requirements as a condition of grant payment Not to exceed \$3,500,000 Financing: Sports Arena TIF District Funds (subject to appropriations)
- E. Authorize PetroCorrigan Towers, LP's proposed assignment of TIF subsidies, described in its amended development agreement with the City, to a Wisconsin Public Finance Authority as security and the sole recourse for bonds issued pursuant to Wisconsin law for the purpose of financing the Tower Petroleum building (1907 Elm Street) and Corrigan Tower (1900 Pacific Avenue) redevelopment project Financing: No cost consideration to the City
- F. (1) Supplemental Agreement No. 1, to the conditional grant agreement with City Wide Community Development Corporation, executed April 27, 2016, to secure development of a commercial office/retail building in the Lancaster Corridor. The proposed Supplemental Agreement will increase the City's grant amount by \$350,000 from \$825,000 to \$1,175,000 and extend the completion deadline by 6 months. As consideration, the City will receive 50% of all net cash proceeds, up to a maximum amount of \$350,000, in the event of a sale or refinance of the project. The City's interest is secured by a second mortgage on the property, located at 311 3115

- South Lancaster Road in Dallas, Texas, which will be subordinate to Legacy Texas's first lien; and (2) extension of the project completion date by 6 months, from March 31, 2017 to September 30, 2017 Not to exceed \$350,000 Financing: 2012 Bond Funds
- G. Authorize an ordinance to: (1) amend Tax Increment Financing Reinvestment Zone Number Eleven's (Downtown Connection TIF District) Project and Reinvestment Zone Financing Plans to add the Statler/Library redevelopment project to the District's Project Plan; (2) approve the directed sale, for fair market value consideration and yet to be negotiated sale terms subject to City Council approval of a 0.129 acre (5,600 square feet) City owned tract of land addressed as 210 South Harwood Street, located in the Downtown Connection TIF District to Centurion Acquisitions, LP to complete the Statler/Library redevelopment project in accordance with the District's Project Plan; and (3) make corresponding modifications to the Downtown Connection TIF District's Project and Reinvestment Zone Financing Plans, consistent with the requirements and limitations of the Act Financing: No cost consideration to the City

Sustainable Development & Construction

- H. An ordinance abandoning a sanitary sewer easement and a water easement to West Commerce Investments LLC, the abutting owner, containing a total of approximately 1,555 square feet of land, located near the intersection of Commerce and Beatrice Streets Revenue: \$5,400, plus the \$20 ordinance publication fee
- I. An ordinance abandoning two sanitary sewer easements and one floodway easement to Platinum Storage Maple, LLC, the abutting owner, containing a total of approximately 11,722 square feet of land, located near the intersection of Maple Avenue and Butler Street, and providing for the dedication of approximately 10,147 square feet for a needed drainage, water, wastewater and detention area easement Revenue: \$24,334, plus the \$20 ordinance publication fee
- J. An ordinance amending Ordinance No. 29383, amended by Ordinance No. 30094, previously approved on May 25, 2016, which abandoned a portion of Straightway Drive, located near the intersection of Northwest Highway and Straightway Drive, to Northwest Overlake, L.L.C. and Rizos Land Group Northwest Highway, LLC to extend the final replat from two years to 39 months and alter dedication requirements Revenue: \$5,400, plus the \$20 ordinance publication fee
- K. Authorize acquisition from Golden Venture, LTD., of approximately 21,874 square feet of vacant land located near the intersection of Northaven Road and US Highway 75 for the Northaven Trail Project Not to exceed \$1,320,000 (\$1,310,000 plus closing cost and title expenses not to exceed \$10,000) Financing: 2006 Bond Funds (to be reimbursed by Dallas County)
- L. A resolution authorizing the conveyance of two temporary working space easements containing a total of approximately 23,076 square feet of land to the City of Rowlett for the construction and maintenance of wastewater facilities across City-owned land at Lake Ray Hubbard located near the intersection of Lakeview Parkway and Edgewater Drive Financing: No cost consideration to the City
- M. A resolution authorizing the conveyance of a wastewater easement containing approximately 149,176 square feet of land to the City of Rowlett for the construction and maintenance of wastewater facilities across Cityowned land at Lake Ray Hubbard located near the intersection of La Costa and Fuqua Drives - Financing: No cost consideration to the City
- N. A resolution authorizing the conveyance of two wastewater easements containing a total of approximately 33,399 square feet of land to the City of Rowlett for the construction, maintenance of wastewater facilities across City-owned land at Lake Ray Hubbard located near the intersection of Lakeview Parkway and Edgewater Drive Financing: No cost consideration to the City
- O. Authorize an historic preservation tax exemption for the Allen Building at 1700 Commerce Street for a ten-year period on 100% of the land and structure value Revenue Foregone: First year tax revenue foregone estimated at \$18,730 (Estimated revenue foregone over ten years is \$187,295)

Aviation

P. Authorize a sixth amendment to the 1999 lease agreement with MLT Development Co. to provide rent abatement in consideration for City's temporary use of an undeveloped portion of approximately 163,349 square feet of the leased premises as a staging area for the Airfield Pavement Repair Project as well as four subsequent airfield related projects for sixteen months beginning January 1, 2017 at Dallas Love Field -Estimated Revenue Foregone: \$66,619, over the sixteen month period Action Taken/Committee Recommendation(s): (1) Motion made to send the item to Council Motion made by Ms. Arnold Motion seconded by: Mr. Medrano Item passed unanimously: X Item passed on a divided vote: Item failed unanimously: _____ Item failed on a divided vote: Follow-up (if necessary): Meeting Adjourned: 9:56 A.M. Approved By:

Memorandum



DATE January 13, 2017

Members of the Economic Development Committee:
Rickey D. Callahan (Chair), Casey Thomas, II, (Vice Chair), Adam Medrano,
Lee M. Kleinman, Carolyn King Arnold, Adam McGough

SUBJECT Factory Six03 (West End Marketplace/603 Munger)

On Tuesday, January 17, 2017, the Economic Development Committee will be briefed on the Factory Six03 (West End Marketplace/603 Munger) project.

Briefing material is attached. Thank you.

Should you have any questions, please contact me at (214) 670-3390.

Márk McĎániél

Assistant City Manager

C: The Honorable Mayor and Members of the City Council A.C. Gonzalez, City Manager Larry Casto, City Attorney Craig D. Kinton, City Auditor Rosa A. Rios, City Secretary

Daniel F. Solis, Administrative Judge Ryan S. Evans, First Assistant City Manager Eric D. Campbell, Assistant City Manager Jill A. Jordan, P.E., Assistant City Manager
Joey Zapata, Assistant City Manager
M. Elizabeth Reich, Chief Financial Officer
Sana Syed, Public Information Officer
Karl Zavitkovsky, Director, Office of Economic Development

J. Hammond Perot, Assistant Director, Office of Economic Development Elsa Cantu, Assistant to the City Manager – Mayor & Council

Factory Six03 (West End Marketplace /603 Munger)

City Center TIF District
(West End/South Lamar Sub-District)

Economic Development Committee January 17, 2017





Purpose

Provide background information on City Center TIF District

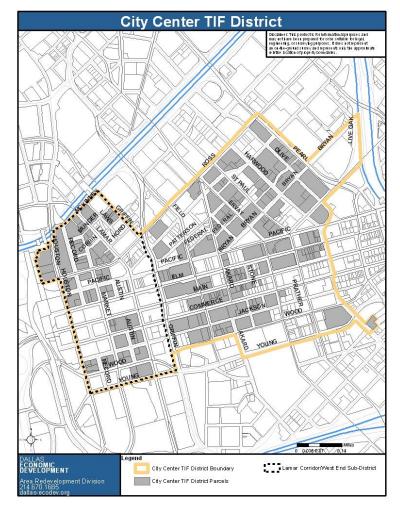
Review the Factory Six03 (West End Marketplace/603 Munger) redevelopment project

Obtain Economic Development Committee's approval for consideration of the project by City Council on January 25, 2017



City Center TIF District Background

- Created to develop an attractive, sustainable urban core and reimburse costs of public improvements and redevelopment of vacant or underutilized buildings downtown
- District was amended December 2012 to:
 - Extend District's Boundary to the West End area
 - Extend Term of District
 - Increase District's Budget
 - Decrease City Participation Rate
 - Establish Other Taxing Jurisdiction Participation Rates

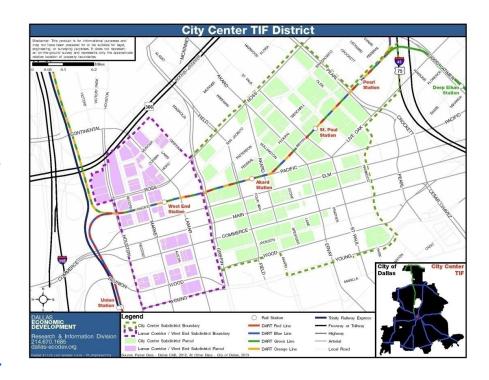






City Center TIF District Amendments

- Boundary Adjustment (Creation of two Sub-districts)
 - City Center Sub-district original district boundary (green dashed line)
 - Lamar Corridor/West End Subdistrict – approximately 27 acres; encompasses properties along the Lamar Corridor and properties in the Historic West End area (lavender dashed line)
- Term Extension
 - City Center Sub-district –
 12/31/2012 to 12/31/2022 (10 yrs)
 - Lamar Corridor/West End Subdistrict – 12/31/2012 to 12/31/2037 (25 year term)





City Center TIF District Amendments (Continued)

District Budget Amendment

- The District's budget increased from \$87.6M to \$152.0M
- The increased budget:
- Provides a source of funding to stimulate redevelopment of the Lamar Corridor and Historic West End area
- Provides a source of funding to accomplish recommendations of the Downtown Dallas 360 Area Plan, that wouldn't otherwise be funded
- Provides a source of funding to fill in redevelopment gaps in the downtown core

City Center TIF District Projected Increment Revenues to Retire TIF Fund			
Category	TIF Budget		
Original City Center TIF Collections**	\$75,696,253		
Public Infrastructure Improvements Streetscape Improvements, Pedestrian Linkages, Lighting, Utility Burial, Utility Upgrades	\$8,500,182		
Parking	\$5,500,000		
Redevelopment/Development Projects Environmental Remediation, Interior & Exterior Demolition, Façade Improvements/Restoration, TIF Grants	\$40,972,111		
District Wide Improvements	\$4,000,000		
Affordable Housing	\$6,500,000		
Ground Floor Activation (in the form of a TIF Grant)	\$8,300,000		
Plan Implementation/Administration	\$2,500,000		
Total Project Costs	\$151,968,546		
Budget shown above in total dollars, as approved in the Amer Plan and Reinvestment Zone Financing Plan for the District.	nded Project		



City Center TIF District Factory Six03

- Located in Historic West End District
- Built in stages between 1903 and 1923
- Originally built as Brown Cracker and Candy Company and over the years, until its closing over ten years ago, held a variety of tourist and destination activities
- Some of those uses, including a movie theater, affected the structure and rendered the building unfit for future uses





Factory Six03 Project Location





Factory Six03 Project Description

- Existing 182,000 square foot building (plus 28,000 sf basement space)
 - Both 4 story and 7 story portions of building will have additions to top for an executive office, tenant lounge and conference center
 - New entrance will be added to building
 - All additions will be reviewed and approved by National Park Service, in compliance with national historic renovation guidelines
 - Minimum 9,000 square feet ground floor retail/restaurant space required
 - Minimum 165,000 square feet office space required
 - Target market is creative/innovative office tenants
 - Basement to be converted into 55 parking spaces



Factory Six03, Cont. Project Description

- Required Project Cost: \$54,000,000, including acquisition (anticipated actual cost \$73.3M)
- Deadline to Obtain Building Permit: September 30, 2016*
- Project Completion Date: September 30, 2017
- TIF Funding:
 - Total \$4.66M
 - Public Infrastructure Improvements: \$2.25M
 - Redevelopment/Development: \$2.41M
- * Permit has been obtained and work is underway. Upon acquisition of property, Granite Properties began negotiating public incentives for the project. They agreed to proceed with the project at their own risk in hopes that City Council would ultimately approve incentives for the project. They considered timing of the construction of the renovated facility as crucial as the public incentives (developer did not want to miss market opportunity). As such, they began renovating the building and planning for the open space plaza improvements.



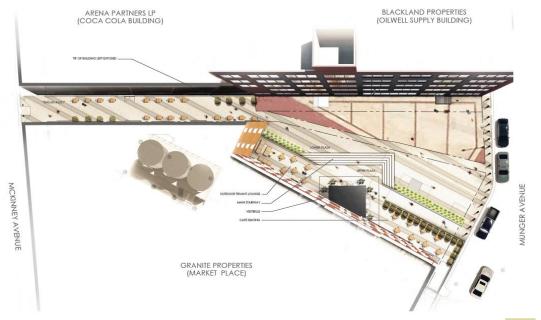
Factory Six03 Site Plan





Factory Six03 Streetscape Related Improvements

- Proposed TIF funding for streetscape and plaza improvements and renovation of historic building
 - Streetscape improvements will take place on all sides of the building
 - Plaza space will be repositioned as a key gathering space in the West End Historic District and a space that transitions from downtown to the Sports Arena/Victory area
- On July 22, 2016, the developer's design team and Economic Development staff met with the Urban Design Peer Review Panel to review the project's design. CityDesign Studio compiled the panel's comments and provided them to developer. Developer adjusted plaza design to accommodate recommendations



Note: only includes improvements to plaza area that Granite controls



Factory Six03 Building Improvements

- Proposed TIF funding also for renovation of historic building
 - Ground floor will be used primarily to house restaurants, spilling out into the old dock space, as well as serve as the office lobby
 - TIF funds would also be used to assist with renovations to the historic façade and historic structure





Factory Six03 Proposed TIF Funding

- If all conditions of agreement are met, a maximum of \$1,250,000 may be released prior to the expiration of the City Center Sub-District (December 31, 2022 with last collection and disbursement 2023), unless funds are available after all City Center Sub-District obligations have been fulfilled
- Remaining TIF funds may be reimbursed from the West End/Lamar Sub-District, beginning in 2023, with 2024 collections
- Actual TIF amount will be based on actual expenditures for each line item in the TIF reimbursement budget below

Description	Amount
Public Infrastructure Improvements	
Streetscape improvements, Landscaping, Lighting, Signage, Design and Engineering, Contingency Costs (5%)	\$2,250,000
Redevelopment/Development Projects	
Environmental Remediation, Interior & Exterior Demolition, Façade Improvements, Storefront Improvements, Design and Engineering, Contingency Costs (5%)	\$2,407,174
Total TIF Funding Recommended	\$4,657,174



Factory Six03 Budget and Sources and Uses of Funds

Factory Six03 (603 Munger Avenue/West End Marketplace) Project Budget			
Acquisition	\$12,372,746		
Environmental and Demo	\$2,378,850		
Façade Restoration	\$5,431,007		
Hard Construction Costs - Existing Structure (includes sitework and contingency)	\$23,002,945		
Additions (5th flor and 8th floor)	\$5,482,036		
Streetscape/Public Space	\$1,841,225		
Tenant Improvements and Leasing Commission	\$13,461,085		
Soft Costs	\$9,291,396		
Total Costs	\$73,261,290		

Sources	Amount	%
Equity	\$27,409,490	37%
Construction Loan	\$29,250,000	40%
Historic Tax Credit Proceeds	\$16,601,800	23%
TOTAL	\$73,261,290	100%



Factory Six03 Summary

Factory Six03 (603 Munger/West End Marketplace) Redevelopment Project		
Minimum Office Renovations (required)	165,000 s.f.	
Minimum Retail/Restaurant Space (required)	9,000 s.f.	
Required Private Investment – (acquisition, construction hard and soft costs)	Min. \$54,000,000	
Expected Total Project Cost	\$73,261,290	
TIF Funding	\$4,657,174	
% TIF funds to total project cost	6.36%	
Return on Cost without TIF	6.6%	
Return on Cost with TIF	7.1%	
Deadline to Obtain Building Permit	September 30, 2016*	
Deadline to Obtain Final CO (165,000 sf of renovated space)	September 30, 2017	

^{*} Permit Issued



Strategic Importance of Proposed Project

- Revitalizes obsolete and vacant historic building in West End Historic District
- Adds needed streetscape improvements and plaza that serves as gathering space and connects to Victory
- Increases leasibility of downtown office space, focused on creative class







Factory Six03 TIF Board Funding Recommendation

 On August 11, 2016, the City Center TIF District Board of Directors reviewed and recommended approval of a development agreement with GPIWE Limited Partnership for TIF incentives and dedication of TIF funding for TIF-eligible project costs associated with redevelopment of the West End Marketplace building located at 603 Munger Avenue in an amount not to exceed \$4,657,174, subject to 1) sufficient public access assurance and 2) satisfying Peer Review's comments



Recommendations

- Economic Development Committee recommendation for Council approval of a development agreement for TIF funding
- Council consideration on January 25, 2017



APPENDICES





Appendix A: Factory Six03 Conditions of TIF Funding

- **Minimum private investment** of \$54,000,000 for the Project (acquisition, construction and construction related soft costs).
- The term "Invest" or "Investment" means the sum of all acquisition costs, construction costs (hard and soft) paid, payable or actually incurred by or on behalf of the Owner, with respect to the Project and the improvements thereon. Construction related soft costs include the following items: architecture and engineering, interior design, remediation and demolition. Carrying or other similar costs shall not be considered toward this definition of project investment. The owner must provide verification of all expenditures.
- Redevelopment of the Project shall include:
 - Minimum 165,000 square feet of office space; and
 - Minimum 9,000 square feet of retail/restaurant; and
 - Streetscape improvements
- Obtain a building and/or demolition permit and start construction for the Project by September 30,
 2016 (note that this milestone has been met)
- Obtain a Certificate of Occupancy (CO) for a minimum of 165,000 square feet of rentable office space by September 30, 2017, 2017
- Occupy a minimum of 50% of the newly converted ground floor retail/restaurant space prior to TIF reimbursement



Appendix A: Factory Six03 Conditions of TIF Funding (Continued)

- Obtain final acceptance of public infrastructure improvements associated with the Project, as evidenced by the issuance of a Green Tag from the Public Works and Transportation Department by September 30, 2017 and submit documentation to the Office of Economic Development (the "OED")
- Execute an Operating and Maintenance agreement for public infrastructure improvements associated with the Project by September 30, 2017, for a period of 20 years
- Construct Project in substantial conformance with design plans approved by the City Center TIF Board of Directors, the Dallas Design Studio and Dallas City Council
- Submit to the Director of the OED a quarterly status report for ongoing work on the project, as well as public improvements. Status reports will be due once every three months after the Council approval date
- Owner shall make a good faith effort to (i) comply with the Business Inclusion and Development ("BID") goal of twenty-five percent (25%) Minority/Women-owned Business Enterprise (M/WBE) participation for TIF reimbursable improvements, and (ii) achieve a goal of 25% certified M/WBE participation for total private improvement construction expenditures for the Project, and meet all reporting requirements for each;
- If necessary, the project deadline can be extended up to 6 months, subject to the Office of Economic Development Director's and City Center TIF District Board of Director's approval



Appendix B: Factory Six03 Renovation Project Proforma

Factory603 (West End Marketplace) Renovation Proforma			
	City Center	TIF District	
PROJECT DESCRIPTION:	603 Munger		
PROJECT TYPE:	Office and Restaurant/Retail		
CONSTRUCTION START DATE:	September 30, 2016		
PROJECT SCHEDULE:	September 30, 2017		
<u>Use Breakdown</u>	<u>SF</u>	Total Leasable SF (entire project)	
Office	166,457	201,457	
Addition of executive office, conference center	25,000		
Basement conversion to parking (55 spaces)	28,000	Total Bldg SF (Gross)	
Retail/Restaurant	10,000	284,701	
Back of House/Common Area	55,244		
Project Costs		<u>Income</u>	
Hard Cost	\$28,484,980	Office Revenue	\$6,776,782
Soft Cost (less Developer Fee)	\$7,760,558	Retail Revenue	\$536,500
Acquisition	\$12,372,746	Parking & Other	\$118,072
Office Tenant Improvements	\$10,081,050	Total Income	\$7,431,354
Office Leasing Commissions	\$3,380,035		
Public Improvements (include hist façade, etc)	\$11,181,919		
Total Project Cost	\$73,261,288		
Total Project Cost	\$73,261,288	Expenses	
TIF Assistance	\$4,657,174	Office Operating Expense	\$903,072
Historic Tax Credits	\$16,601,800	Retail Operating Expense	\$44,200
Net Cost to Developer (after TIF reimbursement)	\$52,002,314	Property and Franchise Taxes	\$1,285,890
		Property Management	\$199,313
Return on Cost Analysis		Total Expenses	\$2,432,475
NOI/Total Project Costs		Capital Reserves	\$145,948
Return on Cost (without City \$)	6.6%	NOI (after reserves)	\$4,852,931
Return on Cost (with City \$)	7.1%		



Appendix C: Factory Six03 Development Team

<u>Granite Properties</u> Since 1991, Granite Properties has acquired or developed more than 20 million square feet of commercial real estate. With an emphasis on office properties, Granite Properties' business is based on recognizing outstanding investment opportunities and maximizing their value. They are dedicated to creating exceptional work environments for their tenants while conserving natural resources.

Michael Dardick, CEO – Michael is a founding partner and President and CEO of Granite Properties, Inc. Prior to founding Granite Properties, Michael served as a Senior VP at a JPMorgan/Chase predecessor running the Foreclosed Real Estate Division. Prior to that, Michael was responsible for establishing a new regional office for one of the largest real estate auction-marketing firms in the country and before that, started his career spending 3 years as a commercial real estate lender.

Greg Fuller, COO/President – Greg joined Granite Properties in 2000 and oversees operations, development, human resources and corporate administration company wide. He also focuses on development, leasing and growth opportunities for the Dallas office. Prior to joining Granite, Greg was vice president of business development and corporate marketing of Paric Corporation, a design build and construction firm where he also served on the Executive Committee.

David R. Cunningham, Director of Development and Construction - David joined Granite in 2000 and is responsible for development and construction management for shell projects as well as interior construction for Granite Properties. Prior to joining Granite, David developed projects for his own account and was the director of development and construction for the DalMac Companies.



Memorandum



DATE January 13, 2017

Honorable Members of the Economic Development Committee: Rickey D. Callahan (Chair),
Casey Thomas, II (Vice Chair), Lee M. Kleinman, Carolyn King Arnold, Adam Medrano,
B. Adam McGough

SUBJECT Property Tax Overview

On Tuesday, January 17, 2017, the Office of Financial Services will brief the Economic Development Committee on "Property Tax Overview." I have attached the briefing for your review.

Please let me know if you need additional information.

M. Elizabeth Reich Chief Financial Officer

Attachment

c: Honorable Mayor and Members of the City Council A.C. Gonzalez, City Manager Larry Casto, City Attorney Craig D. Kinton, City Auditor Rosa A. Rios, City Secretary Daniel F. Solis, Administrative Judge Ryan S. Evans, First Assistant City Manager Eric D. Campbell, Assistant City Manager
Jill A. Jordan, P.E., Assistant City Manager
Mark McDaniel, Assistant City Manager
Joey Zapata, Assistant City Manager
Sana Syed, Public Information Officer
Elsa Cantu, Assistant to the City Manager – Mayor & Council



Property Tax Overview

Economic Development Committee January 17, 2017



Briefing Outline

- > Property tax base values
- > Property tax rate
- > Property tax exemptions
- > Legislative session
- > Next steps
- > Appendix
 - A: Miscellaneous information
 - B: Legislative information

Overview

- Ad valorem taxes are single largest revenue for City and total nearly \$843m for both General Fund and Debt Service
 - General Fund \$603.1m or 49.1% of revenue
 - Debt Service \$239.5m or 91.3% of revenue
- > Ad valorem taxes are based on following:
 - Property tax base values determined by appraisal districts
 - Tax rate set by City Council
 - Exemptions set by State and City Council

Property Tax Base Values

Property Tax Base Values

- Taxable property values represent market value (determined by Appraisal Districts) net of exemptions
- Property within City of Dallas is physically located in and appraised by 4 different appraisal districts
 - Dallas County 94.6%
 - Collin County 4.2%
 - Denton County 1.2%
 - Rockwall County 0.02%
- Each appraisal district is required by state law to certify value by July 25th of each year

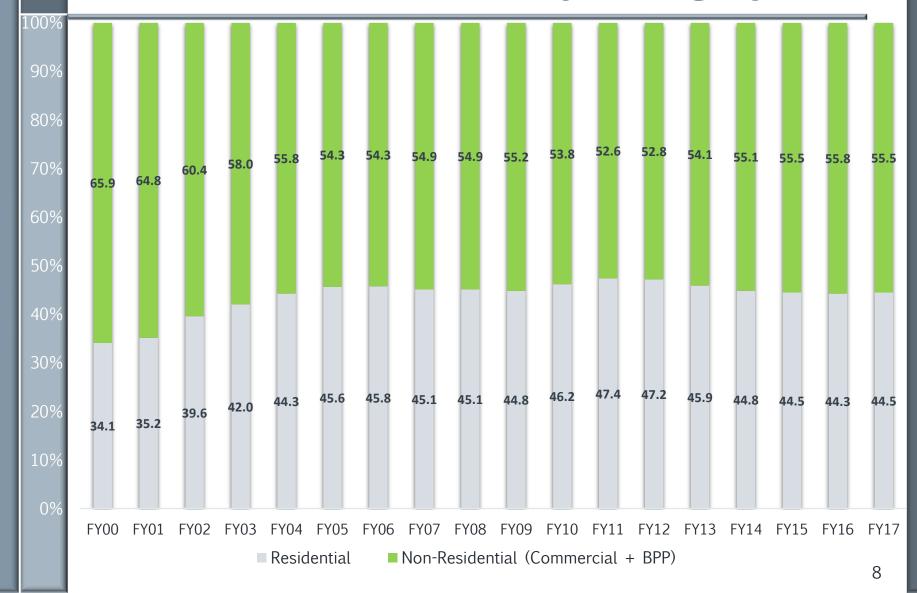
Property Tax Base Values (\$ in billions)



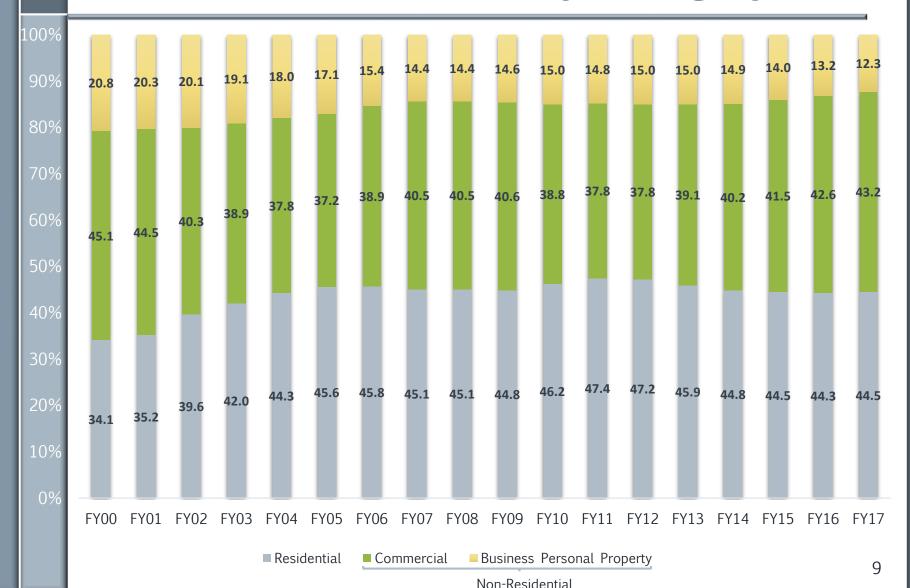
Property Tax Base Values

- Taxable value is presented in categories determined by whether use is for residential or non-residential purposes:
 - Residential property single-family homes and home-site land
 - > Residential 44.5% of Dallas tax base
 - Non-residential property apartments/multifamily residential property, buildings and land used for office/industrial use as well as personal property used in generating business revenue
 - > Commercial 43.2% of Dallas tax base
 - > Business Personal Property 12.3% of Dallas tax base

Property Tax Base Values Historical Distribution by Category



Property Tax Base Values Historical Distribution by Category



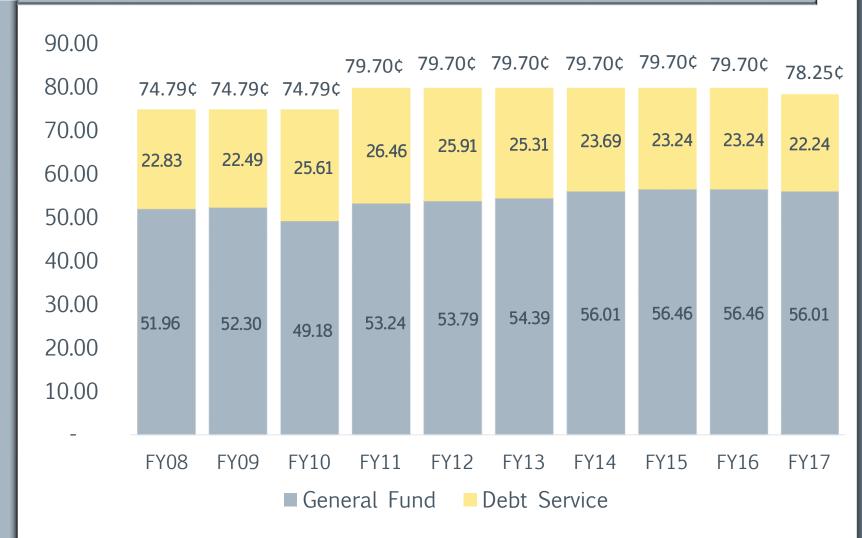
Property Tax Rate

Property Tax Rate

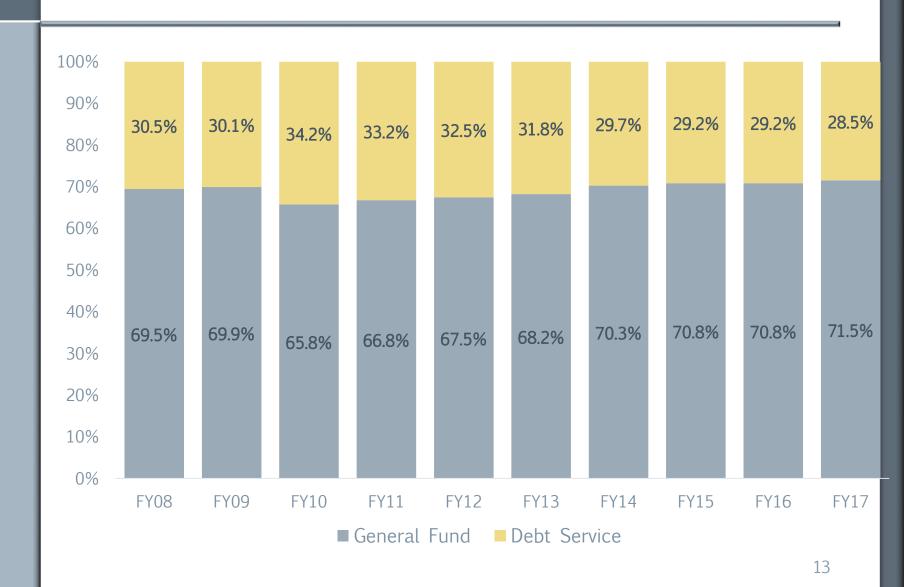
- Property tax rate is set each September by City Council (at time of annual budget adoption)
- > Tax rate has increased or stayed same every year since FY99, except for:
 - FY07 1.25¢ decrease
 - FY17 1.45¢ decrease

	FY16 Adopted	FY17 Adopted	Change
General Fund	56.46¢	56.01¢	-0.45¢
Debt Service	23.24¢	22.24¢	-1.00¢
Total Tax Rate	79.70¢	78.25¢	-1.45¢

Property Tax Rate Historical Distribution (¢/\$100 value)



Property Tax Rate Historical Distribution



Property Tax Exemptions

Property Tax Exemption

- Exemptions lower taxable value and liability for homeowner but also lower revenue to support city services
- > Current exemptions in Dallas include:
 - Residential homestead exemptions
 - Over-65/Disabled exemptions
 - Disabled veteran exemptions (sliding scale based on level of disability determined by VA)

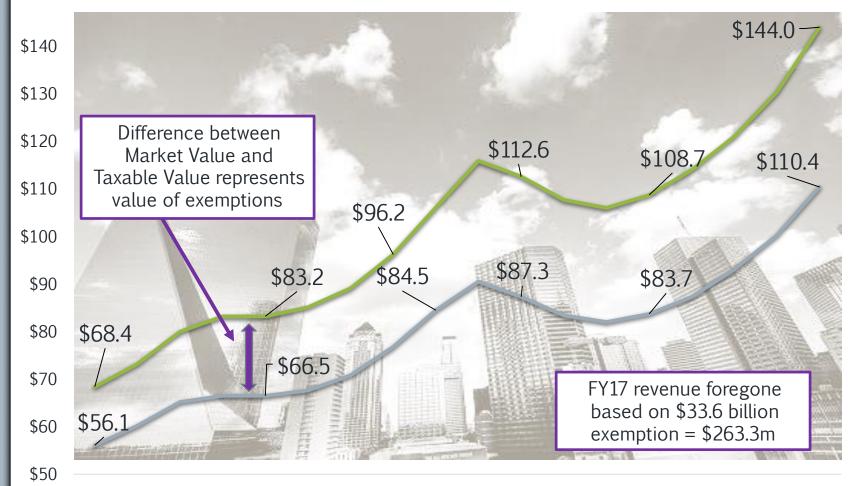
Property Tax Exemptions

Exemption	Tax Code Section	Taxing Unit	Total or Partial	Mandatory or Local Option	Amount
General Res. Homestead	11.13(n)	Cities, Counties, School Districts/Special Districts	Partial	Local Option	Up to 20% but not less than \$5,000
Age 65 or Older	11.13(d)	Cities, Counties, School Districts/Special Districts	Partial	Local Option	An amount adopted by taxing unit, not less than \$3,000
Disabled Veterans	11.22	Cities, Counties, School Districts/Special Districts	Partial	Mandatory	Amount determined by the percentage of service disability

Property Tax Exemption Analysis

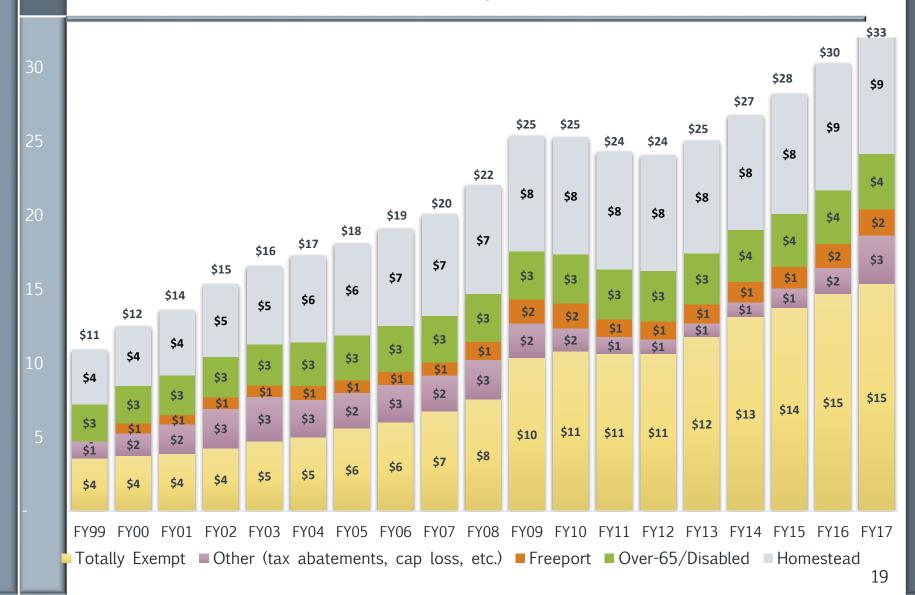
		Comparative City	Data - Reside	ntial Exemptions Offered					
City	HS Exempt	Over-65/Disabled Exemptions	Tax Levy Freeze	Comments					
Comparative Set									
Dallas, TX	20%	Ovr-65: \$64,000 Disabled: \$64,000	No	N/A					
Austin, TX	8%	Ovr-65: \$82,500 Disabled: \$82,500	No	Established homestead exemption in FY2016.					
Fort Worth, TX	20%	Ovr-65: \$40,000 Disabled: \$40,000	No	N/A					
Houston, TX	20%	Ovr-65: \$160,000 Disabled: \$160,000	No	Has Prop 1 that puts a cap on property tax growth to lower of: 1.)CPI plus growth in population or 2.)4.5%.					
San Antonio, TX	0%	Ovr-65: \$65,000 Disabled: \$12,500	Yes	Property tax levy freeze on homesteads owned by >65/disabled established in FY2006					
Area Suburbs									
Frisco, TX	0%	Ovr-65: \$70,000 Disabled: \$70,000	No	N/A					
Grand Prairie, TX	1%	Ovr-65: \$45,000 Disabled: \$30,000	Yes	Property tax levy freeze on homesteads owned by >65/disabled established in FY2005					
Irving, TX	20%	Ovr-65: \$30,000 Disabled: \$30,000	No	N/A					
Plano, TX	20%	Ovr-65: \$40,000 Disabled: \$40,000	Yes	Property tax levy freeze on homesteads owned by >65/disabled established in FY2003					
Richardson, TX	0%	Ovr-65: \$70,000 Disabled: \$70,000	No	N/A					

Market Value vs Taxable Value (\$ in billions)



FY00 FY01 FY02 FY03 FY04 FY05 FY06 FY07 FY08 FY09 FY10 FY11 FY12 FY13 FY14 FY15 FY16 FY17

Property Tax Exemptions Historical Value of Exemptions (\$ in billions)



Property Tax Exemptions Exemption History (% of total exemptions)



■ Totally Exempt ■ Freeport ■ Other (tax abatements, cap loss, etc.) ■ Over-65/Disabled ■ Homestead

20

Property Tax Levy Freeze - What is it?

- Ensures that a senior or disabled person will not have city tax bill any higher than what was paid in city taxes in year homeowner turns 65 or becomes disabled
 - Tax bill may fall below frozen amount but can never exceed amount set even if property value or tax rate increases
 - Frozen amount will be based on tax rate and property value in year homeowner is eligible
 - Frozen amount can increase for major home improvements
 - May transfer percent of tax paid to another homestead property

Creating a Local Tax Freeze

- > Requires official action to enact tax freeze
 - Cannot be repealed or rescinded once enacted
 - Should be approved by Council and forwarded to DCAD by July $1^{\rm st}$ due to extra DCAD workload created by changing an exemption
- Citizens can petition for an election to create local tax freeze if 5% of registered voters sign petition
- > Estimated revenue foregone is \$0.7m for each 1% growth in value
 - 2.85% (30 year average growth) = \$2.0m revenue foregone
 - 10.04% (FY17 growth) = \$7.0m revenue foregone

Over 65/Disabled Exemption

- Council approved \$64k exemption on September 17, 1986
- Council has flexibility to increase or decrease this exemption
 - There is no maximum amount related to this exemption; minimum amount is \$3k
 - Must be a dollar amount, not a percent
 - Should be approved by Council and forwarded to DCAD by July 1st due to extra DCAD workload created by changing an exemption

Legislative Session

Property Tax Related Legislation

- > Currently, it is difficult to tell which bills will be more successful than others in upcoming legislative session
- > SB 2, by Sen. Bettencourt and pushed by Lt. Gov. Patrick, will likely be major bill used for property tax reform from Senate
- > Based on bills filed to date, property tax legislation will largely focus on:
 - Exemptions
 - Revenue caps
 - Property appraisal board reforms
 - Some additional miscellaneous items
- > See appendix for bills filed to date
- City's legislative team will closely monitor all legislation related to property taxes and actively oppose legislation that limits local control and ability of City to serve Dallas residents

Property Tax Legislation: SB2

- Most robust bill of session relating to property tax will likely be SB2 by Sen. Bettencourt
 - SB2 is openly supported by Lt. Gov. Dan Patrick
 - SB2 is also product of Senate Select Committee on Property Tax Reform and Relief (committee has held hearings around state)
- > SB2's main provisions would:
 - Change rollback rate from 1.08 to 1.04
 - Increase exemption amount for BPP from \$500 to \$2,500
 - Create a Property Tax Administration Advisory Board

Next Steps

- Jan 3 briefed Budget, Finance, and Audit Committee
- Jan 17 brief Economic Development Committee
- > Spring monitor legislative session
- Spring brief City Council and consider action to provide additional tax relief to over-65 homeowners
- June 30 notify appraisal districts of any change in exemptions



Questions & Comments



Appendix A: Miscellaneous Information

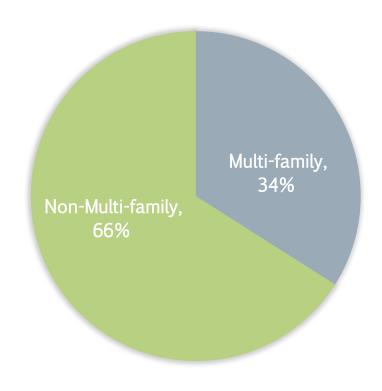
Appendix A: Totally Exempt Properties

City of Dallas – Estimated Breakdow	n of Totally Exempt P	roperties by Type
Type of Property	Number of Accounts	Percentage of Accounts
CITY OF DALLAS PROPERTY	5,312	43.30%
RELIGIOUS USE	2,620	21.40%
CHARITY	1,284	10.50%
OTHER PUBLIC PROPERTY	1,146	9.30%
SCHOOL PROPERTY	729	5.90%
STATE PROPERTY	309	2.50%
COUNTY PROPERTY	228	1.90%
PRIVATE SCHOOL	226	1.80%
FEDERAL PROPERTY	152	1.20%
CEMETARY	115	0.90%
YOUTH DEVELOPMENT ASSOCIATION	44	0.40%
MINERALS	35	0.30%
MISCELLANEOUS	24	0.20%
PRIMARILY CHARITABLE	25	0.20%
NONPROFIT COMMUNITY ORGANIGATIONS	11	0.10%
Total	12,260	100.00%

Note: Information from tax year 2015 and DCAD data only.

Appendix A: Multi-Family Properties

COMMERCIAL PROPERTY REPRESENTS 43.2% OF DALLAS TAX BASE VALUE

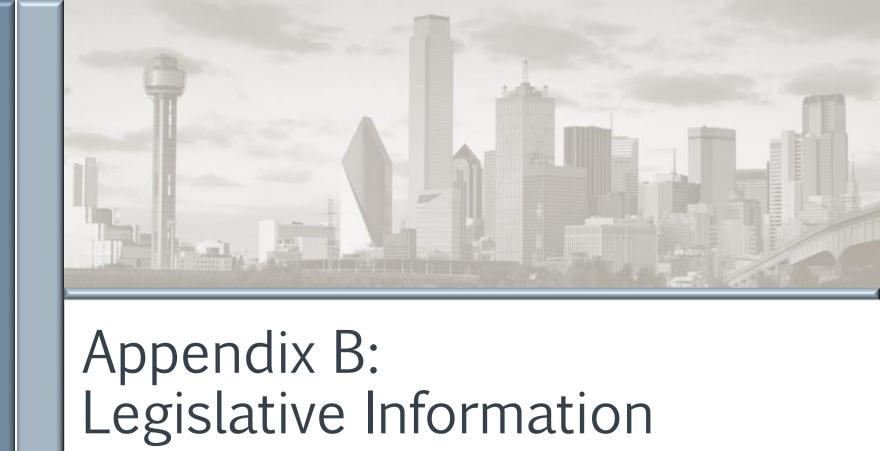


Note: Chart is based on DCAD data only.

Appendix A: Over-65 Population

- Projections from Texas Demographic Center (data not available for city)
- Over-65 population forecast to outpace growth in under-65 population
- Currently, Dallas has 58,855 properties with an over-65 exemption totaling \$3.3 billion of exempt value
- > This will increase as over-65 population grows

	State of Texas	State of Texas	Dallas County	Dallas County	DFW Metro	DFW Metro
Year	Age 65+	Age 0-64	Age 65+	Age 0-64	Age 65+	Age 0-64
2010	2,601,886	22,543,675	207,972	2,160,167	571,599	5,854,615
2015	3,225,614	24,469,670	240,254	2,256,605	729,185	6,388,711
2020	4,014,083	26,527,895	282,355	2,357,611	926,295	6,994,376
2025	4,971,750	28,727,557	334,885	2,455,023	1,182,069	7,680,512
2030	5,929,471	31,225,613	382,098	2,557,547	1,467,710	8,502,968
2035	6,736,701	34,155,554	416,214	2,671,481	1,742,175	9,512,535
2040	7,583,385	37,372,511	445,606	2,789,905	2,050,472	10,678,520
2045	8,418,096	40,998,069	471,412	2,911,438	2,363,528	12,054,555
2050	9,442,865	44,926,432	509,806	3,019,158	2,724,242	13,643,051
Growth from	6,217,251	20,456,762	269,552	762,553	1,995,057	7,254,340
2015 to 2050	193%	84%	112%	34%	274%	114%



Appendix B: Property Tax Bills - Caps

Bill	#	Author	Party	Caption
			,	•
НВ	44	Keough, M	(R)	This bill creates a 5% appraisal cap for all real property tax assessments.
НВ	167	Cecil, B		This bill creates a 5% appraisal cap for all real property tax assessments
		Metcalf,	,	
НВ	376	W W	(R)	This bill lowers the homestead cap from 10% to 5%.
НВ	586	Bohac, D	(R)	This bill lowers the homestead cap from 10% to 5%.
НВ	345	Canales, T	(D)	This bill changes the calculation of the rollback rate by lowering the M&O rate from 1.08 to 1.05 and providing for calculations with a "consumer price index" (defined) and "inflation rate" (defined) which will be set by the comptroller by August 1 of each year.
SB	172	Nichols, R	(R)	This bill lowers the homestead cap from 10% to 5% however, commissioners court may call for an election to raise the cap above 5% but not greater than 10%.
HJR	17	Keough, M		This bill proposes a constitutional amendment to authorize the legislature to limit the maximum appraised value of real property for ad valorem tax purposes to 105 percent or less of the appraised value of the property for the preceding tax year.
HJR	43	Bohac, D	(R)	This bill proposes a constitutional amendment to authorize the legislature to set a lower limit on the maximum appraised value of a residence homestead for ad valorem taxation.
HJR	30	Larson, L		This bill proposes a constitutional amendment to authorize the legislature to limit the maximum appraised value of property for ad valorem tax purposes in a tax year if in the preceding tax year the owner of the property disputed the appraisal of the property and the appraised value was lowered as a result.
HJR	33	Metcalf, W	(R)	This bill proposes a constitutional amendment to authorize the legislature to set a lower limit on the maximum appraised value of a residence homestead for ad valorem taxation.
SJR	19	Nichols, R		This bill proposes a constitutional amendment to authorize the legislature to limit the maximum appraised value of a residence homestead for ad valorem tax purposes to 105 percent or less of the appraised value of the property for the preceding tax year and to permit the voters of a county to establish a higher limitation not to exceed 110 percent on the maximum appraised value of a residence homestead in the county.
SJR	28	Creighton, B		This bill proposes a constitutional amendment to authorize the legislature to set a lower limit and provide for more than one limit on the maximum appraised value of a residence homestead for ad valorem taxation.

Appendix B: Property Tax Bills - Caps (Continued)

Bill	#	Author	Party	Caption
			•	·
НВ	301	Larson, L	(R)	This bill states that the value of property cannot be increased by a CAD if the property value was the result of an agreement between the property owner and the CAD or a result of an ARB hearing. If the CAD determines there is substantial evidence to raise the value, the value may not be increased by more than 5% and the value of all new improvements to the property.
НВ	455	Metcalf, W	(R)	This bill would allow individuals to appear before the ARB by telephone if they send an evidence affidavit prior to the hearing and notify the ARB on their protest that they intend to appear by telephone 10 days prior to their hearing.
HJR	18	Guillen, R	(D)	This bill proposes a constitutional amendment authorizing the governing bodies of certain political subdivisions to exempt from ad valorem taxation the real and tangible personal property of businesses during an initial period of operation in this state.
SB	15	Huffines, D	(R)	This bill provides for an exemption for a surviving spouse of a first responder killed or fatally injured for 100% of their homestead value if the spouse has not remarried.
SB	376	Creighton, B	(R)	This bill lowers the homestead cap from 10% to 3% if the home has a value of \$1 million or less or 5% if the home has a value of more than \$1 million.
SJR	1	Campbell, D	(R)	This bill proposes a constitutional amendment authorizing the legislature to provide for an exemption from ad valorem taxation of all or part of the market value of the residence homestead of the surviving spouse of a first responder who is killed or fatally injured in the line of duty.

Appendix B: Property Tax Bills - Exemptions

Bill		Author	Doub	Contion
DIII	#	Author	Party	Caption
НВ	150	Cecil, B	(5)	This bill increases the ability to receive a percentage disabled veterans exemption if the owner of the homestead received the property from a charitable organization at some cost to the veteran if the cost is not more than 50 percent of the good faith estimate of the market value.
НВ	217	Canales, T	(D)	This bill adds "disabled veteran" to the list of individuals that can qualify for tax deferral.
HJR	21	Bell, C	(5)	This bill proposes a constitutional amendment authorizing the legislature to provide for an exemption from ad valorem taxation of part of the market value of the residence homestead of a partially disabled veteran or the surviving spouse of a partially disabled veteran if the residence homestead was donated to the disabled veteran by a charitable organization for less than the market value of the residence homestead and harmonizing certain related provisions of the Texas Constitution.
SB	240	Creighton , B	(5)	This bill increases the ability to receive a percentage disabled veterans exemption if the owner of the homestead received the property from a charitable organization at some cost to the veteran if the cost is not more than 50 percent of the good faith estimate of the market value.
SJR	23	Creighton , B	(5)	This bill proposes a constitutional amendment authorizing the legislature to provide for an exemption from ad valorem taxation of part of the market value of the residence homestead of a partially disabled veteran or the surviving spouse of a partially disabled veteran if the residence homestead was donated to the disabled veteran by a charitable organization for less than the market value of the residence homestead and harmonizing certain related provisions of the Texas Constitution.
НВ	570	Button, A		This bill provides for an exemption for a surviving spouse of a first responder killed or fatally injured for 100% of their homestead value if the spouse has not remarried.
SB	15	Huffines, D		This bill provides for an exemption for a surviving spouse of a first responder killed or fatally injured for 100% of their homestead value if the spouse has not remarried.

Appendix B: Property Tax Bills - Exemptions (Continued)

Bill	#	Author	Party	Caption
		Goldm		
НВ	302	an, C	(R)	This bill raises the exemption threshold for mineral interests from \$500 to \$2000.
НВ	549	Anders on, R		This bill would allow the Dallas County Utility and Reclamation District to file an abatement application with the CAD in behalf of any residential property owners receiving an abatement.
НВ	626	Workm an, P	(5)	This bill states that a CAD must notify a taxing jurisdiction within 30 days of receiving a late application for an over 65 or disabled veteran homestead exemption and the taxing jurisdiction must refund an overpayment within 60 days.
НВ	758	Keough , M		This bill allows religious organizations who lease their facilities to receive a refund for taxes paid on those facilities.
HJR	49	Keough	(R)	This bill proposes a constitutional amendment authorizing the legislature to provide for the refund of ad valorem taxes imposed on property leased to a religious organization for use as an actual place of religious worship.
HJR	35	Button, A	(R)	This bill proposes a constitutional amendment authorizing the legislature to exempt from ad valorem taxation by one or more political subdivisions of this state a person's inventory held for sale at retail.
SB	97	Hall, B	(5)	This bill changes the deadline for the chief appraiser to accept a homestead application for a 100% totally disabled individual to one year after the date on which the Department of Veterans Affairs approves the application.

Appendix B: Property Tax Bills - County Appraisal Board Reforms

Bill	#	Author	Party	Caption
НВ	495	Phelan, D		This bill mandates election of the Board of Directors members of a CAD. It also mandates a 5 panel board with elections every two years.
НВ	566	Keough, M	/D\	This bill provides for election of ARB members. The ARB will consist of five elected members that serve two-year terms.
НВ	85	Keough, M	/D\	This bill removes the ability for a BOD of a CAD to contract with a tax office within or without of their district for purposes of appraisal.
НВ	139	Cecil, B		This bill allows the ARB to deliver a hearing notice by certified mail if the property owner requests it.
НВ	513	Davis, S		This bill mandates reappraisal in a disaster area by the chief appraiser with all taxing units in the affected area paying the cost of the reappraisal.

Appendix B: Property Tax Bills - Miscellaneous

		Affects Dallas' Prop			
Bill	#	Tax	Author	Party	Caption
НВ	182	yes	Bernal, D	(D)	This bill creates a study by the comptroller to determine the effect of sales disclosure.
НВ	198	Yes	Bernal, D	(D)	This bill makes installment payments mandatory for all homestead properties.
НВ	320	Yes	Canales, T	(D)	This bill lowers the recapture period for change of use on open space land from five years to two years.
НВ	379	Yes	Bernal, D	(D)	This bill states that a person may not file for a deed unless the deed conveys the sales price of the property.
НВ	386	Yes	Murphy, J	(R)	This bill changes the qualifications for receiving a chapter 313 limitation of value.
НВ	540	Yes	Metcalf, W	(R)	This bill states that there is no cap on attorneys fees for a 42.25 or 42.26 appeal if the property is the owner's homestead and the property owner prevailed in an appeal in the two prior years and was subject to attorney's fees limitations in those appeals.
НВ	598	yes	Koop, L	(R)	This bill would allow the county TAC to refer a dishonored check or credit card invoice to a private collections agency that may then charge a fee to the person responsible.
НВ	643	yes	Phillips, L	(R)	This bill removes the requirement that land be appraised as open space or timber land prior to receiving a wildlife management designation.
SB	175	Yes	Nichols, R	(R)	This bill states that land will still qualify as open space if it does not meet the degree of intensity but the owner is a member of the armed services stationed outside the state and will continue the use within 180 days after they are no longer deployed.

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 8

DEPARTMENT: Sustainable Development and Construction

City Attorney's Office

Water Utilities

CMO: Mark McDaniel, 670-3256

Larry Casto, 670-3491

MAPSCO: 69AD

SUBJECT

Authorize the (1) deposit of the amount awarded by the Special Commissioners in the condemnation proceedings styled <u>City of Dallas v. Linda Sue Reid, et al.</u>, Cause No. CC-16-03154-C, pending in Dallas County Court at Law No. 2, to acquire approximately 59,276 square feet of land located near the intersection of Seagoville Road and Interstate Highway 20 for the Southwest 120/96-inch Water Transmission Pipeline Project; and (2) settlement of the condemnation proceeding for an amount not to exceed the award - Not to exceed \$220,634 (\$216,145 being the amount of the award, plus closing costs and title expenses not to exceed \$4,489); an increase of \$8,679 from the amount Council originally authorized for this acquisition - Financing: Water Utilities Capital Construction Funds

BACKGROUND

On April 22, 2015, City Council authorized the acquisition of this property by Resolution No. 15-0763. The property owner was offered \$207,466 which was based on a written appraisal from an independent certified appraiser. The property owner did not accept the offer and the City filed an eminent domain proceeding to acquire the property. After a hearing on October 13, 2016, the Special Commissioners awarded the property owner \$216,145.

This item authorizes deposit of the amount awarded by the Special Commissioners for the property, which is \$8,679 more than the City Council originally authorized for this acquisition.

The City has no control over the Special Commissioners appointed by the judge or any award that is subsequently rendered by the Special Commissioners. The City, in order to acquire possession of the property and proceed with its improvements, must deposit the amount awarded by the Special Commissioners in the registry of the Court.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Authorized acquisition on April 22, 2015, by Resolution No. 15-0763.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

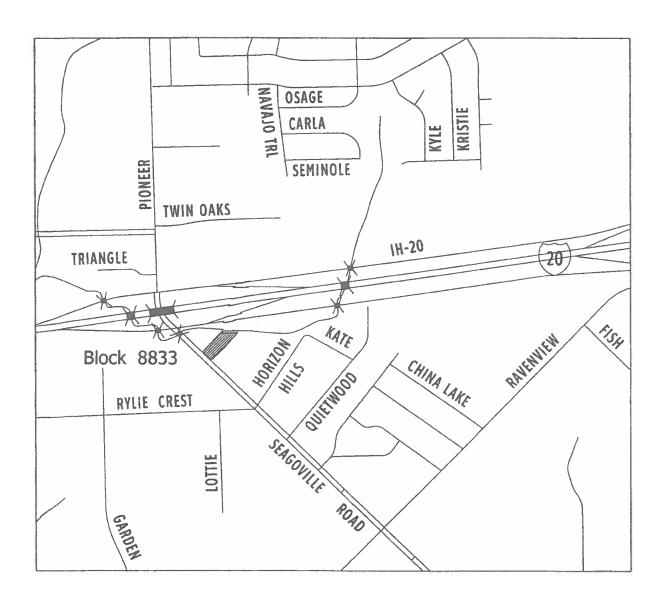
Water Utilities Capital Construction Funds - \$220,634 (\$216,145, plus closing costs and title expenses not to exceed \$4,489)

OWNER

Linda Sue Reid

MAP





SUBJECT: ///////

KEY FOCUS AREA:

Economic Vibrancy

AGENDA DATE:

January 25, 2017

COUNCIL DISTRICT(S):

Outside City Limits

DEPARTMENT:

Sustainable Development and Construction

Water Utilities

CMO:

Mark McDaniel, 670-3256

MAPSCO:

73V

SUBJECT

Authorize settlement in lieu of proceeding further with condemnation in <u>City of Dallas v. Nueva Vida/New Life Assembly Inc.</u>, Cause No. CC-16-03158-E, pending in Dallas County Court at Law No. 2, to acquire a tract of land containing approximately 17,755 square feet located in Dallas County for the Southwest 120/96-inch Water Transmission Pipeline Project - Not to exceed \$32,510, increased from \$100,490 (\$96,990, plus closing costs and title expenses not to exceed \$3,500) to \$133,000 (\$129,585, plus closing costs and title expenses not to exceed \$3,415) - Financing: Water Utilities Capital Construction Funds

BACKGROUND

This item authorizes a settlement for the acquisition of a tract of land containing approximately 17,755 square feet located in Dallas County for the Southwest 120/96-inch Water Transmission Pipeline Project. This settlement will allow acquisition of the property without further condemnation proceedings.

The first resolution approved on August 12, 2015, authorized the purchase and/or condemnation in the total amount of \$100,490. The settlement will avoid increased costs associated with construction delays, commissioners' costs, updated appraisal reports, court filing fees and uncertainty associated with possibility of commissioners' award being higher than the negotiated amount of \$133,000.

PRIOR ACTION/REVIEW (COUNCIL BOARDS, COMMISSIONS)

Authorized acquisition on August 12, 2015, by Resolution No. 15-1424.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Water Utilities Capital Construction Funds - \$32,510

Resolution No. 15-1424 \$100,490 Additional Amount (this action) \$32,510

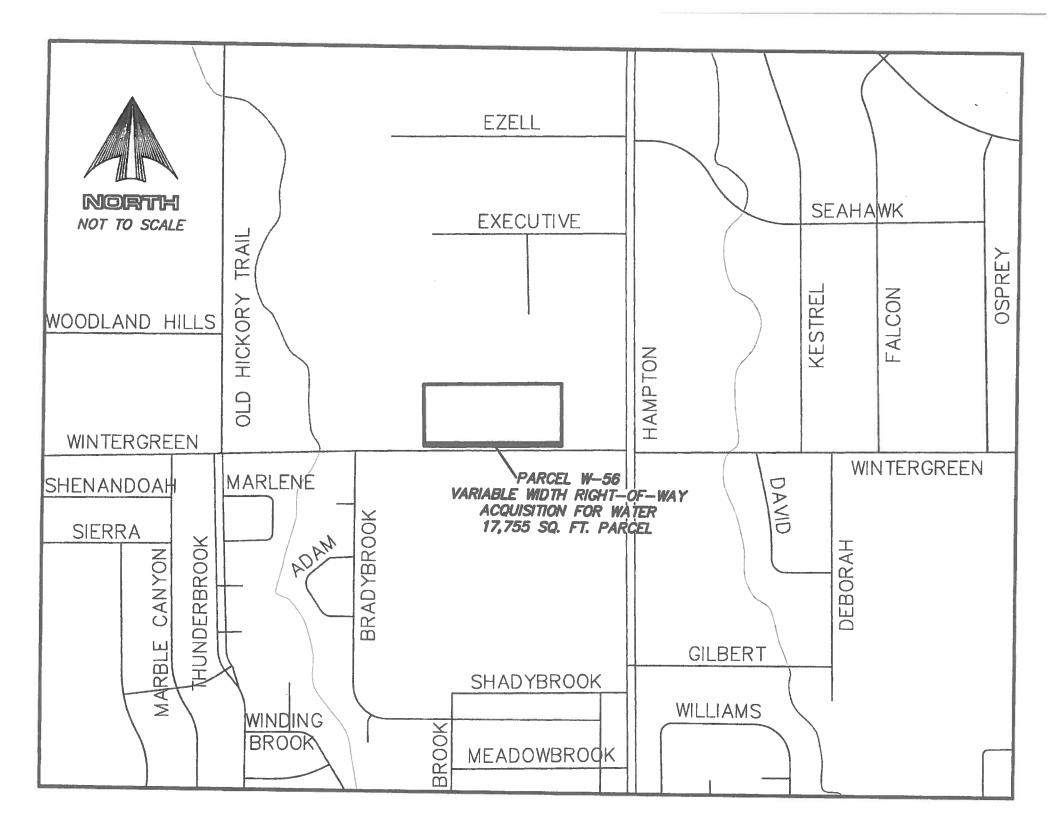
Total Authorized Amount \$133,000

OWNER

Nueva Vida/New Life Assembly, Inc.

Vicente Delgado, President

MAP



AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): Outside City Limits

DEPARTMENT: Sustainable Development and Construction

Water Utilities

CMO: Mark McDaniel, 670-3256

MAPSCO: 73V

SUBJECT

Authorize settlement in lieu of proceeding further with condemnation in <u>City of Dallas v. Vicente Delgado and Antonio Delgado, et al.</u>, Cause No. CC-16-03163-A, pending in Dallas County Court at Law No. 2, to acquire a tract of land containing approximately 1,931 square feet located in Dallas County for the Southwest 120/96-inch Water Transmission Pipeline Project - Not to exceed \$2,345, increased from \$11,655 (\$9,655, plus closing costs and title expenses not to exceed \$2,000) to \$14,000 (\$11,586, plus closing costs and title expenses not to exceed \$2,414) - Financing: Water Utilities Capital Construction Funds

BACKGROUND

This item authorizes a settlement for the acquisition of a tract of land containing approximately 1,931 square feet located in Dallas County for the Southwest 120/96-inch Water Transmission Pipeline Project. This settlement will allow acquisition of the property without further condemnation proceedings.

The first resolution approved on August 12, 2015, authorized the purchase and/or condemnation in the total amount of \$11,655. The settlement will avoid increased costs associated with construction delays, commissioners' costs, updated appraisal reports, court filing fees and uncertainty associated with possibility of commissioners' award being higher than the negotiated amount of \$14,000. The consideration is based on an independent appraisal.

PRIOR ACTION/REVIEW (COUNCIL BOARDS, COMMISSIONS)

Authorized acquisition on August 12, 2015, by Resolution No. 15-1428.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Water Utilities Capital Construction Funds - \$2,345

Resolution No. 15-1428 \$11,655 Additional Amount (this action) \$2,345

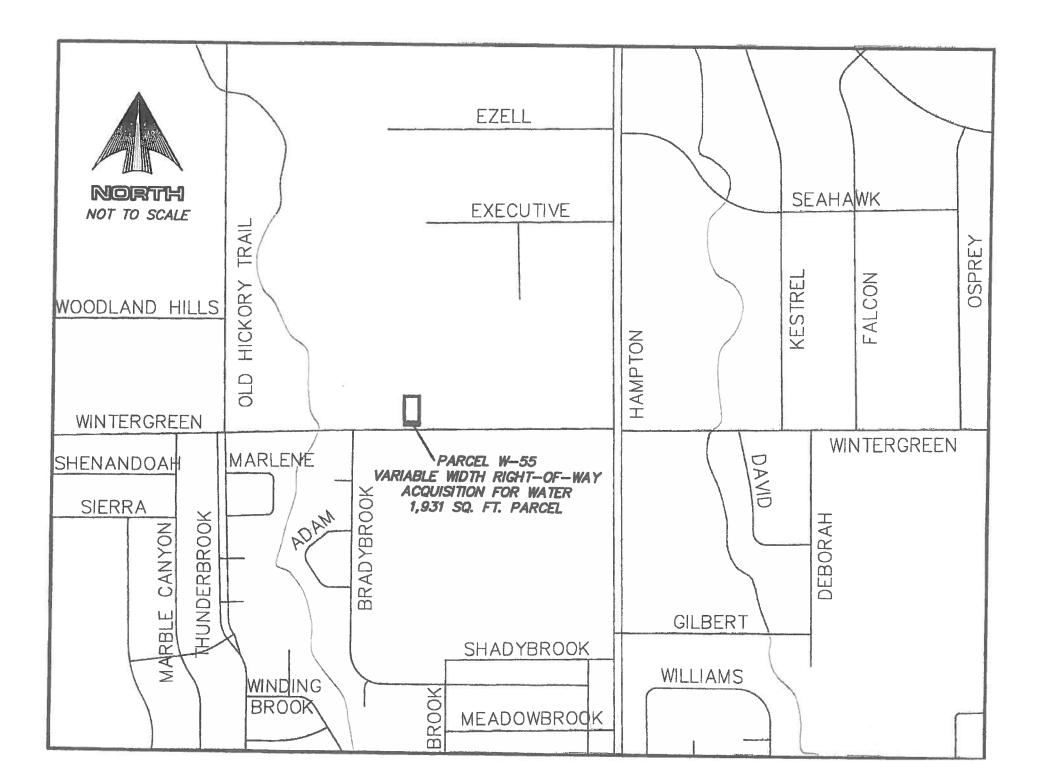
Total Authorized Amount \$14,000

OWNERS

Vicente Delgado

Antonio Delgado

MAP



AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): Outside City Limits

DEPARTMENT: Sustainable Development and Construction

Water Utilities

CMO: Mark McDaniel, 670-3256

MAPSCO: N/A

SUBJECT

Authorize acquisition from Brian Leigh Bader and Lisa Bader, of approximately 120,582 square feet of land located in Kaufman County for the Lake Tawakoni 144-inch Transmission Pipeline Project - Not to exceed \$123,500 (\$120,350, plus closing costs and title expenses not to exceed \$3,150) - Financing: Water Utilities Capital Construction Funds

BACKGROUND

This item authorizes the acquisition of approximately 120,582 square feet of land with a single family dwelling located in Kaufman County. This property will be used for the construction of a 144-inch raw water transmission line for the Lake Tawakoni 144-inch Transmission Pipeline Project. The consideration is based on an independent appraisal.

This acquisition is part of the right-of-way required to construct approximately 32 miles of pipeline from Lake Tawakoni to the Interim Balancing Reservoir located in Terrell, TX and then to the Eastside Water Treatment Plant located in Sunnyvale, TX. The new raw water pipeline will augment the existing 72-inch and 84-inch pipelines. The construction of this pipeline will give Dallas Water Utilities the ability to utilize the full capacity of both the Lake Tawakoni and the Lake Fork raw water supply to meet the current city needs and future water demands.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

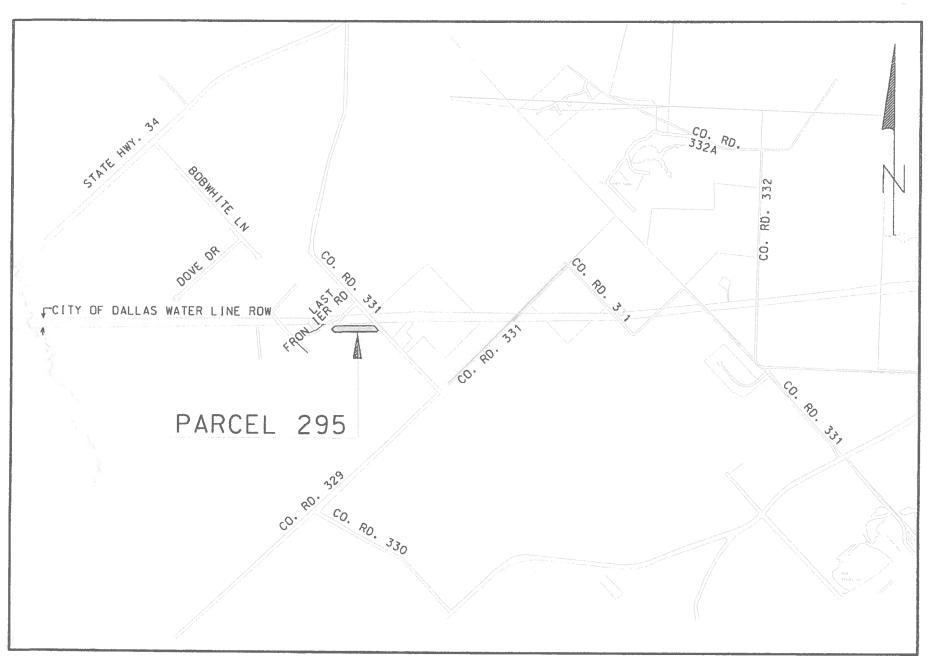
Water Utilities Capital Construction Funds - \$123,500 (\$120,350, plus closing costs and title expenses not to exceed \$3,150)

OWNERS

Brian Leigh Bader

Lisa Bader

MAP



VICINITY MAP APPROXIMATE SCALE 1"= 2000'

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 6

DEPARTMENT: Sustainable Development and Construction

Business Development & Procurement Services

CMO: Mark McDaniel, 670-3256

Elizabeth Reich, 670-7804

MAPSCO: 33Y

SUBJECT

Authorize an amendment for a five-year lease extension with E Avenue F, LLC, for approximately 9,747 square feet of office, showroom, and warehouse space located at 3131 Irving Boulevard, Suite 605 to be used by the Sales and Auction Division of Business Development and Procurement Services Department for the period February 1, 2017 through January 31, 2022 - Not to exceed \$419,063 - Financing: Current Funds (subject to annual appropriations)

BACKGROUND

This item authorizes an amendment to an existing five-year, three-month lease agreement with E Avenue F, LLC to extend the lease agreement for an additional five-year period for approximately 9,747 square feet of office, showroom, and warehouse space located at 3131 Irving Boulevard, Suite 605. The five-year extension will provide for the continued use of the City Store and Auction Sales.

The City Store and Auction Sales is a division of Business Development and Procurement Services and responsible for disposition of surplus, police confiscated and unclaimed property, Auto Pound unclaimed vehicles, and retired fleet.

Additionally, the City Store sells unusable City surplus and police unclaimed property through various methods of vending which ultimately result in the most value to the City. City Store personnel evaluate each price of property and determine the best method of sell (disposal), personnel uses storefront, internet, live or electronic based auctions to maximize revenue for each item. The adoption of this process fosters departmental collaboration to achieve efficiency, cost saving, revenue, and reduction of waste transported to the landfill.

BACKGROUND (Continued)

The use of store front, public auction, sealed bid process, recycle or property transfer, as cost avoidance, provided staff with the versatility to obtain the best value for the City. The existence of the City Store provides departments with central point for surplus property transfer; property can be delivered or a request for property pick up can be issued.

The estimated revenue generated from the sale of surplus property, unclaimed vehicles, and retired City fleet is included in the City Manager's annual revenue each fiscal year. The ultimate benefit of the City Store is that it fits into the City's green policy as a contributor to the City's recycling initiative. By allowing the general public to purchase reusable items and by strategically identifying recyclable property, the City Store is helping reduce the waste generated by the City which can end-up being deposited into City transfer stations and landfills. The property deemed not to fit for sell to the general public is sold through the City's recycling contract contributing positively to the manufacturing of new products from recycled material as well as generating revenue. The City Store adds value to the City as it generates revenue and contributes to the reduction of waste.

The amendment will begin on February 1, 2017 through January 31, 2022.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Authorized a lease agreement on October 25, 2006, by Resolution No. 06-3001.

Authorized an amendment to the lease agreement on October 26, 2011, by Resolution No. 11-2818.

Information about this about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

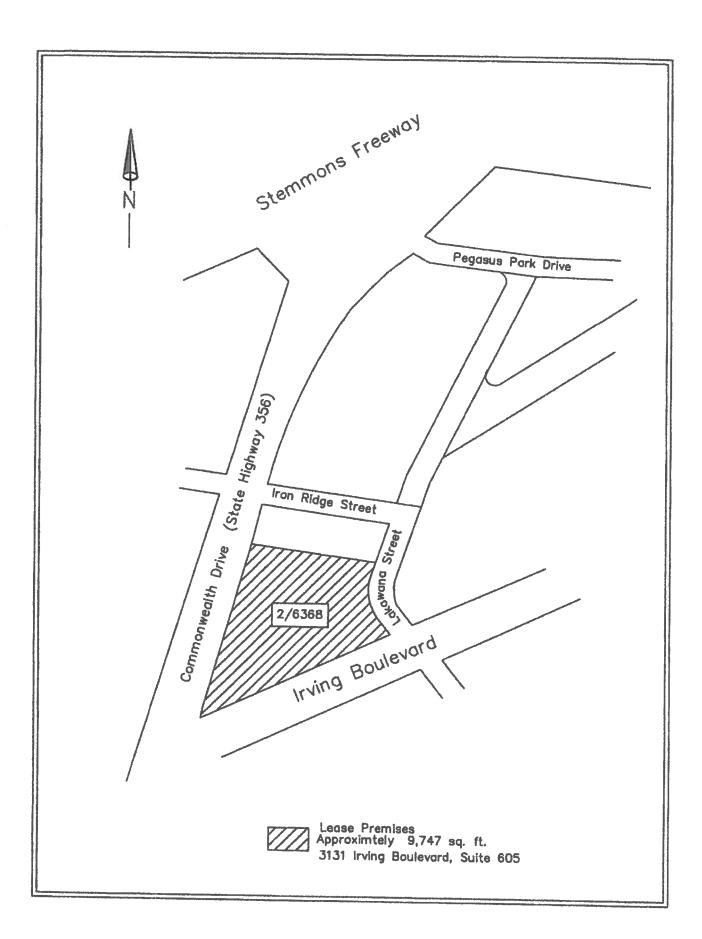
\$419,062.92 - Current Funds (subject to annual appropriations)

OWNER

E Avenue F, LLC

George Chang, Manager

MAP



AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 12

DEPARTMENT: Sustainable Development and Construction

CMO: Mark McDaniel, 670-3256

MAPSCO: 6 K

SUBJECT

A resolution accepting a landscape plan as required by Section 51P-921.112(e)(1) of Chapter 51P of the Dallas Development Code on property on the east line of Coit Road, north of Campbell Road - D167-012 - Financing: No cost consideration to the City

BACKGROUND

Section 51P-921.112(e)(1) of Chapter 51P of the Dallas Development Code requires a "landscape plan that includes the detention areas, access points, or buffer zones must be approved by council before the issuance of a building permit to authorize work for a single family home" within Planned Development District No. 921.

The attached application for the landscape plan was submitted on December 29, 2016, by Scarborough Lane Development for the owners of the property. The owners are CADG Dallas 163, LLC; CADG University Place AW 30, LLC; and CW-TAMU, LLC.

Planned Development District No. 921 for single family uses was created in August 2014. The proposed single family development will wrap a portion of the Texas A&M University Research area. On June 17, 2015, Council approved an amendment to Planned Development District No. 921 to allow for the development of a school in the Planned Development District as well as amend lot coverage, landscaping, and access points for the school. During this amendment the landscaping shown on the previously approved development plan was removed and the requirement for a City Council approved landscape plan was added.

The plans before Council for review include the entrances, detention areas, and buffer zones. The individual lots will meet the requirements within the planned development district and do not require a landscape plan approved by City Council. Staff has reviewed the landscape plans and recommends approval.

PRIOR ACTION / REVIEW (COUNCIL, BOARDS, COMMISSIONS)

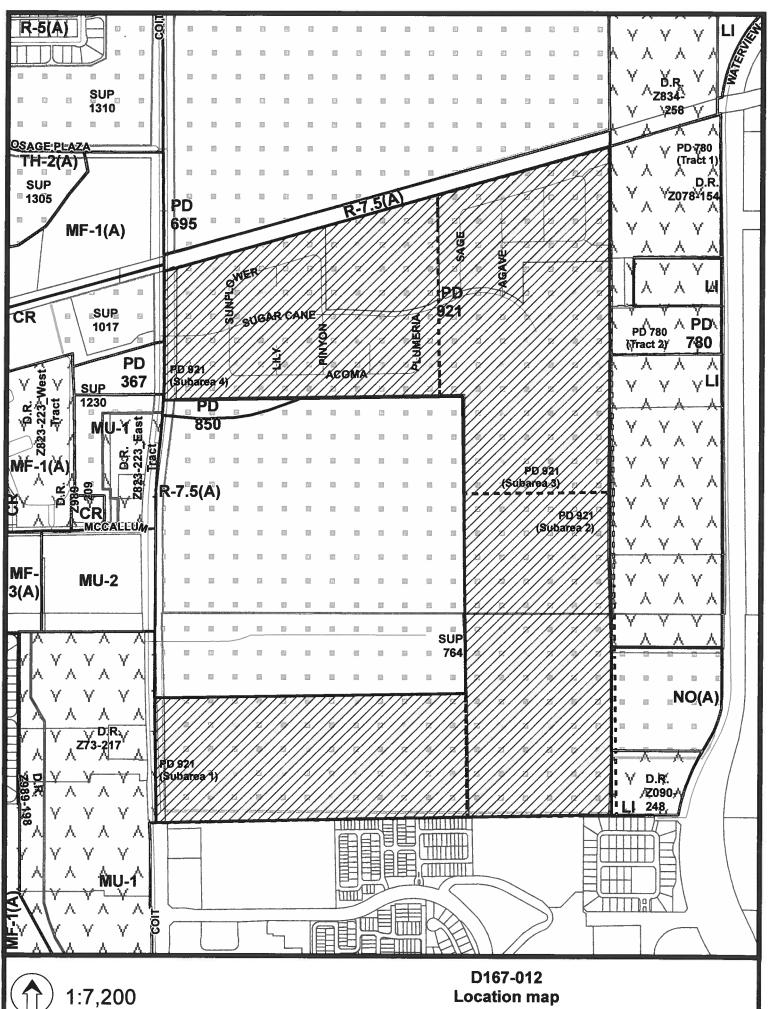
On August 27, 2014, the City Council created Planned Development District No. 921 by Ordinance No. 29430.

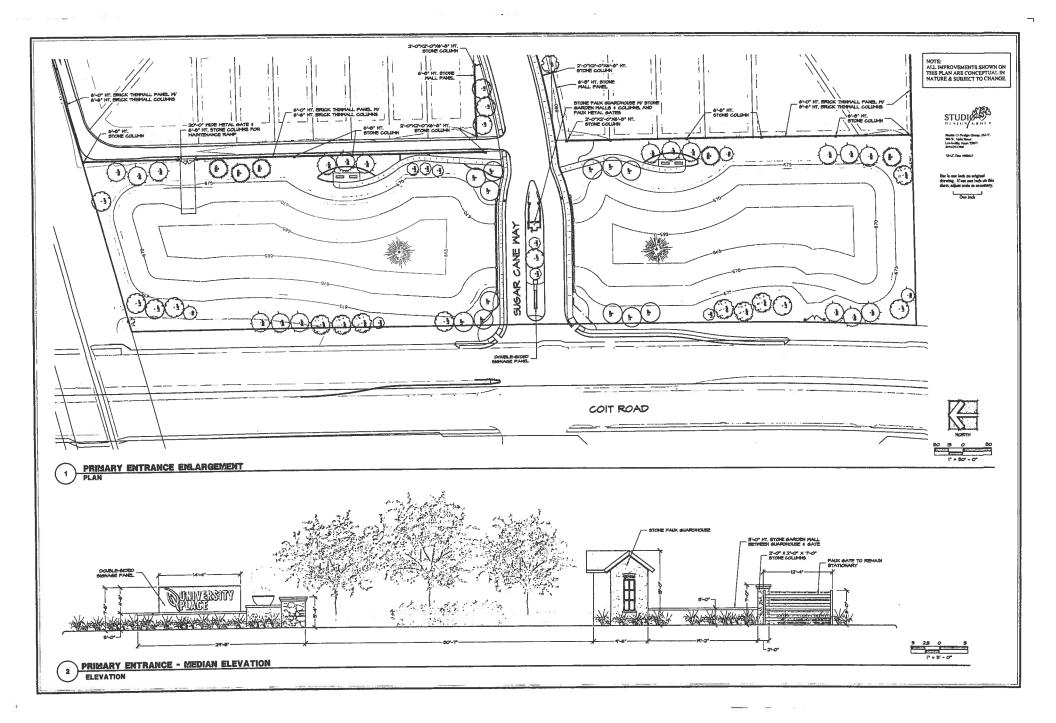
On June 17, 2015, the City Council approved an amendment to Planned Development District No. 921 by Ordinance No. 29787.

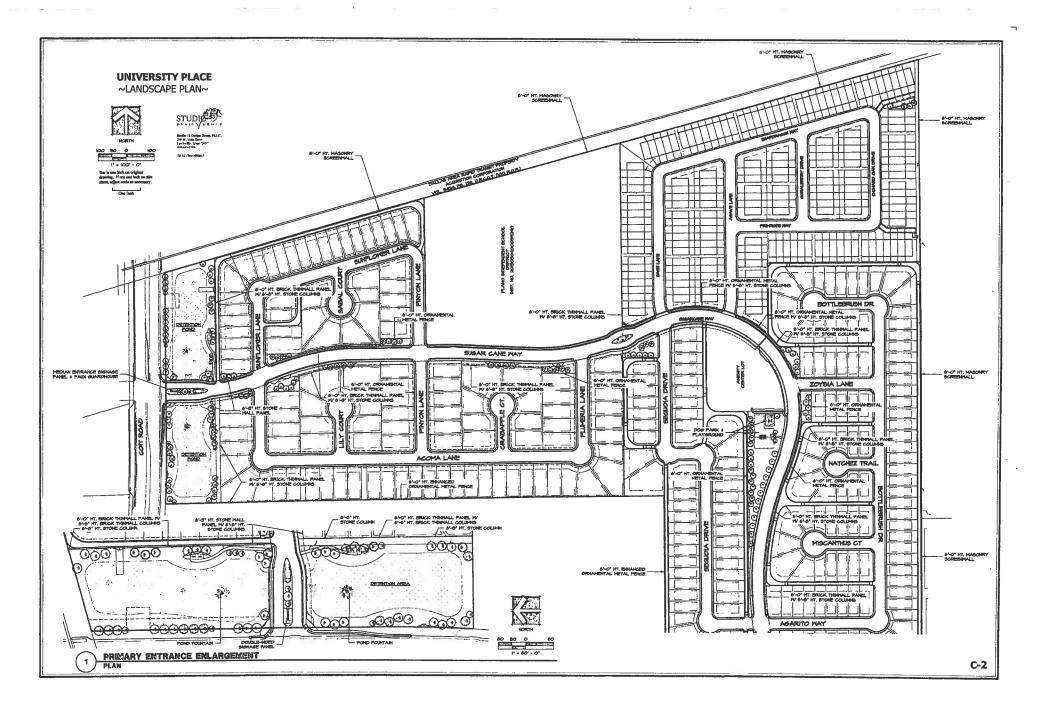
FISCAL INFORMATION

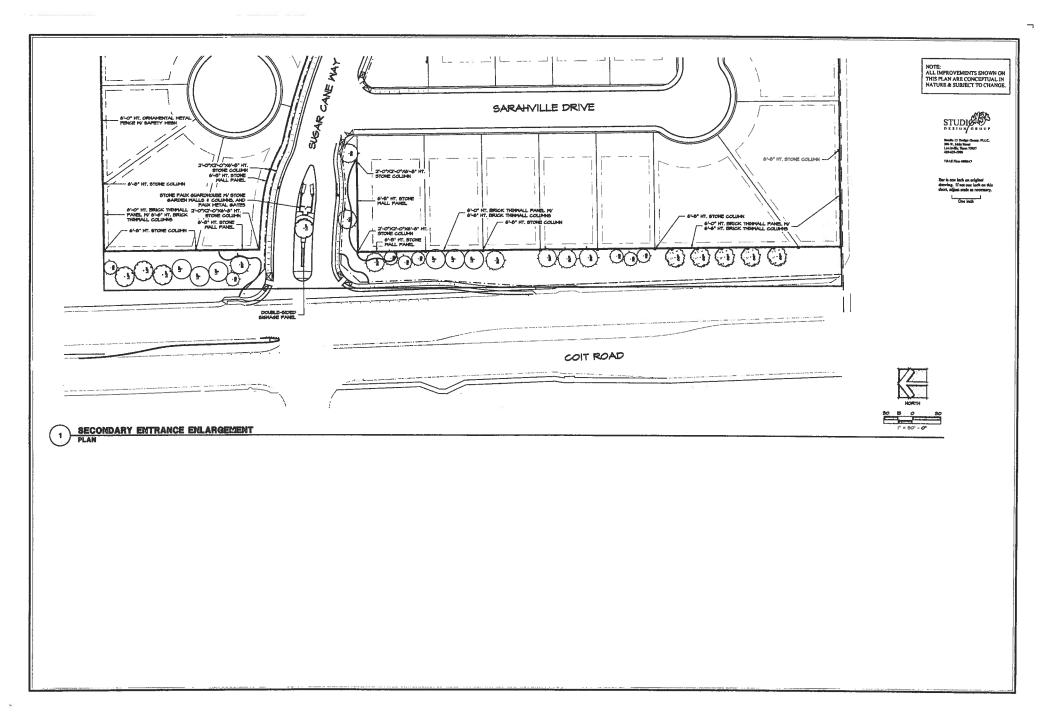
No cost consideration to the City.

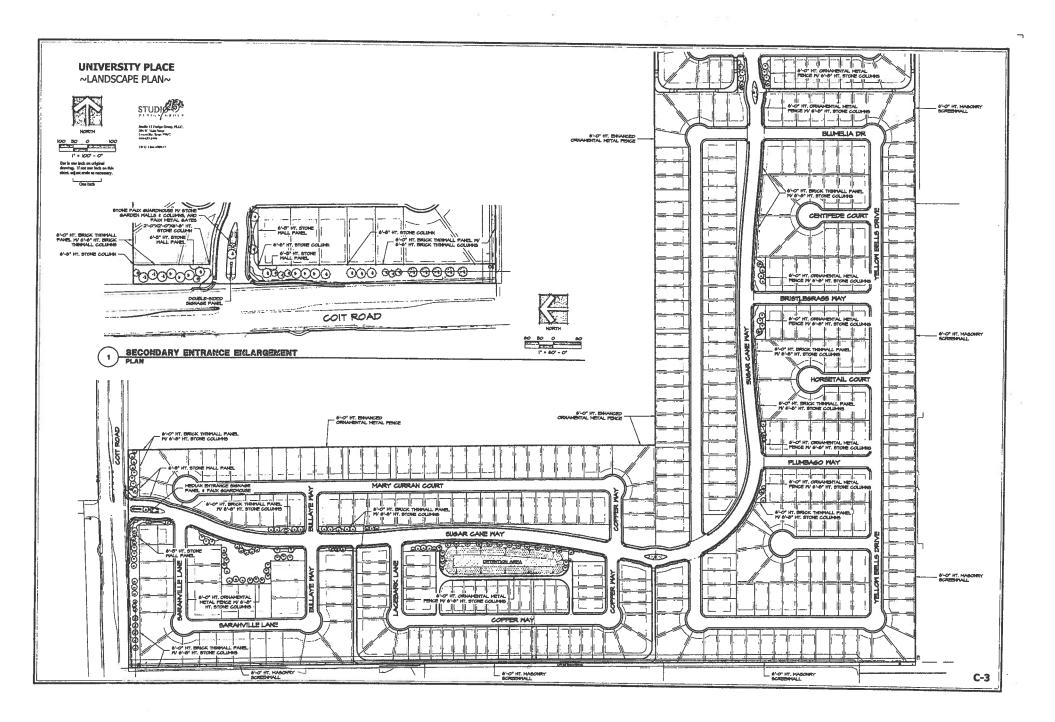
<u>MAP</u>













Department of Development Services 1500 Marilla Street Room 5B North Dallas, TX 75201 Phone 214.670,4209 Fax 214.670.4210

Development Plan / Minor Amendment Application

Applicant	Provide the following information. (Please print).					
		Repr	esentative	Owner		
Owner 🔁 🗀 Prospec	tive Buyer Scarb	Buyer Scarboremy		Individual		
Name: Mehrolad Manye	d (Name:	Take	Finch	Name:	CADE Dulles 168.LLC	
Address: 1800 Velly View, 4	3 Address:	16380	Addison Rd.	Address:	1000 Velly Vibr. 4300	
City/SUZip: Francis Branch TX	75254 City/St/Zip:	Addi	ion. TX 75001	City/St/Zip:	Ferneus Branch, Tk 75284	
Telephone (469) 892-7200	Telephone:		802-4660	Telephone:	(469) 592-7200	
Fax: (811) 586 - 3626	Fax:	(972	380-5960	Fax:	(81) 886-3626	
E-mall: laur @ (unturion	E-mail:	fand	12 landmark	E-mail:	lava@curturion	
american com interests on generalism						
Signature of Applicant Signature of Owner						
Signature of Applicant Signature of Owner						
PDD no. 92	pestion & evers street: E	. 614	(E (-E) - 1 - 0 -			
DNN Total ad Passants						
subdistrict no.	The state of the s					
Mapseo no.	required (the Lornal autron.					
Zoning map no.	THE STATE OF THE PARTY OF THE P					
Council district					Class of securety	
Census tract no.				Size of request: Date of the last City Council action:		
			Zoning tile number associated with that action:			
Lowing and number associated minimals pagets.						
Fee Schedule						
Development Plan Review				A		
\$600.00		Minor Amendment 9 \$825.00				
\$600.00 7 \$825.00						
	The following is to be completed by staff during application intake.					
The follow	ing is to be complete	ed by sta	iff during application in	take.		
- 37	ing is to be complete	ed by sta	The second secon	take. Amendment		
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Develop Statement of Reques Zoning map (1) (8 ½* Proper signatures Letter of authorization Ust of partners/princi 6 Development/Lands 1 8.5x11 copy of plan *6 correct and complete	ment Plan Review L x11") kles/officers cape plans* (folded)	<u> বিশ্ববাব্যব্য</u>	Minor Detailed summary of chan Zoning map (1) (8 ½"x11") Proper signatures Letter of authorization List of partners/principles/e 3 Development/Landscape	Amendment ges officers e/Sile plans*	(folded)	

Filing fee: Receipt No. Accepted by: AR D167-012 File No.: Planner:

CADG Dallas 163, LLC

1800 Valley View Lane, Suite 300 Farmers Branch, TX 75234

December 20, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re: Statement of Request, PD No. 921 Landscaping Plan Submittal

Based on the approved Planned Development District No. 921, Sec. 51P-921.112 Landscaping, (e) (2), CADG Dallas 163, LLC submits the included Landscaping plan for University Place. Per the Ordinance, this Landscape plan must be approved by City Council.

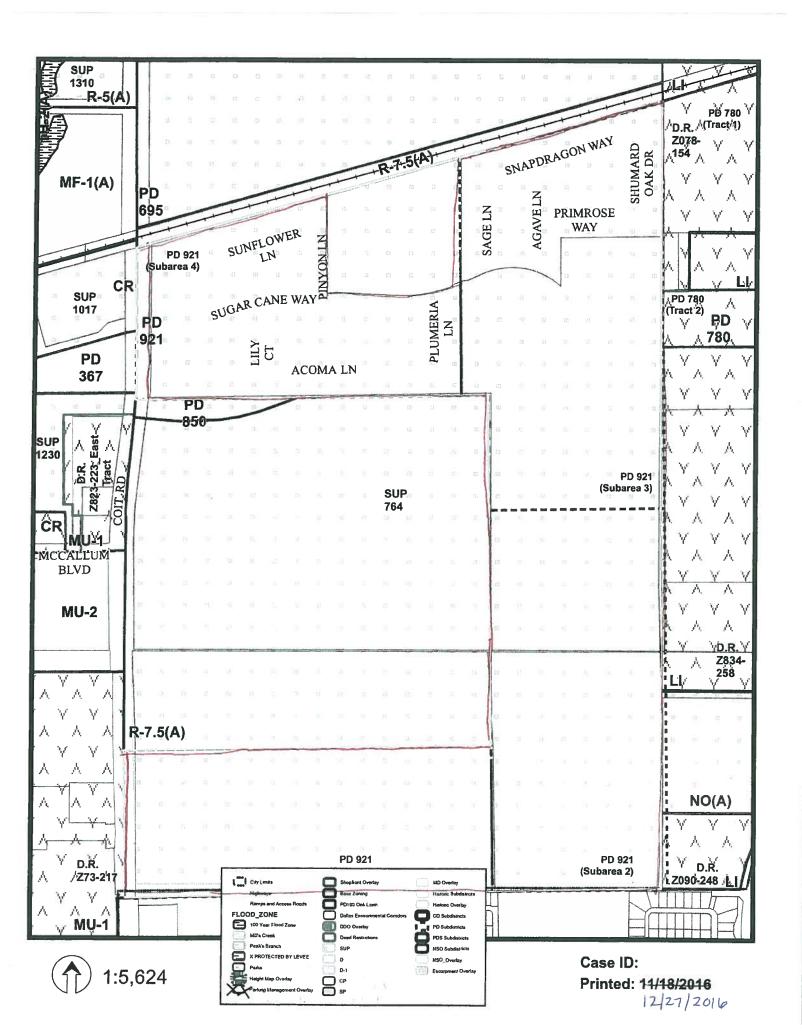
Please let me know if you have any questions regarding this matter.

Sincerely,

Mehrdad Moayedi

Manager

CADG Dallas 163, LLC



CADG Dallas 163, LLC

1800 Valley View Lane, Suite 300 Farmers Branch, TX 75234

December 20, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re; Letter of Authorization, PD No. 921 Landscaping Plan Submittal

CADG Dallas 163, LLC ("Owner") has authorized Scarborough Lane Development to act on the Owner's behalf regarding the submittal of Landscape plans to the Dallas City Council. This action is based on the approved Planned Development District No. 921, Sec. 51P-921.112 Landscaping, (e) (2).

Please let me know if you have any questions regarding this matter.

Sincerely,

Mehrdad Moayedi

Manager

CADG Dallas 163, LLC

CADG University Place AW 30, LLC

1800 Valley View Lane, Suite 300 Farmers Branch, TX 75234

December 28, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re: Letter of Authorization, PD No. 921 Landscaping Plan Submittal

CADG University Place AW 30, LLC ("Owner") has authorized Scarborough Lane Development to act on the Owner's behalf regarding the submittal of Landscape plans to the Dallas City Council. This action is based on the approved Planned Development District No. 921, Sec. 51P-921.112 Landscaping, (e) (2).

Please let me know if you have any questions regarding this matter.

Sincerely,

Mehrdad Moayedi

Manager

CADG University Place AW 30, LLC

8655 S. Priest Dr Tempe, AZ 85284

December 28, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re: Letter of Authorization, PD No. 921 Landscaping Plan Submittal

CW-TAMU, LLC ("Owner") has authorized Scarborough Lane Development to act on the Owner's behalf regarding the submittal of Landscape plans to the Dallas City Council. This action is based on the approved Planned Development District No. 921, Sec. 51P-921.112 Landscaping, (e) (2).

Please let me know if you have any questions regarding this matter.

Sincerely,

CW - TAMU, LLC, a Texas limited liability company,

By: Coronado West, LLC, a Delaware limited liability company,

It's Manager,

John Cork, President

1800 Valley View Lane, Suite 300 Farmers Branch, TX 75234

December 22, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re: List of Partners/Principals/Officers, PD No. 921 Landscaping Plan Submittal

I, Mehrdad Moayedi, am the sole member of the CADG Dallas 163, LLC.

Please let me know if you have any questions regarding this matter.

Sincerely,

Mehrdad Moayedi

Manager

CADG Dallas 163, LLC

1800 Valley View Lane, Suite 300 Farmers Branch, TX 75234

December 22, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re: List of Partners/Principals/Officers, PD No. 921 Landscaping Plan Submittal

I, Mehrdad Moayedi, am the sole member of the CADG University Place AW 30, LLC.

Please let me know if you have any questions regarding this matter.

Sincerely,

Mehrdad Moayedi

Manager

CADG University Place AW 30, LLC

8655 S. Priest Dr Tempe, AZ 85284

December 22, 2016

City of Dallas
Department of Development Services
1500 Marilla St. #5BN
Dallas, Texas 75201

Re: List of Partners/Principals/Officers, PD No. 921 Landscaping Plan Submittal

The following is a list of the members of CW-TAMU, LLC

50% Membership interest:

THE REGALO DEL MAR IRREVOCABLE TRUST, DATED JUNE 28, 2013

50% Membership Interest:

THE EL MOMENTO ES AHORA IRREVOCABLE TRUST, DATED JUNE 28, 2013

CW - TAMU, LLC, a Texas limited liability company,

By: Coronado West, LLC, a Delaware limited liability company,

It's Manager,

By: John Cork, President

KEY FOCUS AREA:

Economic Vibrancy

AGENDA DATE:

January 25, 2017

COUNCIL DISTRICT(S):

7

DEPARTMENT:

Sustainable Development and Construction

CMO:

Mark McDaniel, 670-3256

MAPSCO:

48R

SUBJECT

A resolution authorizing a Purchase and Sale Agreement to be prepared for the auctioned surplus property upon receiving the highest qualified bid sold absolute on approximately 161,848 square feet of unwanted and unneeded unimproved City-owned land located near the intersection of Forney Road and Olson Drive - Estimated Revenue: \$242,772

BACKGROUND

On January 14, 2009, by Resolution No. 09-0163, the City Council declared approximately 177,990 square feet of land unwanted and unneeded near the intersection of Forney Road and Olson Drive, and authorized its sale by public auction subject to a minimum reserve amount.

The property was for sale by sealed bid on March 24, 2009, July 7, 2009 and January 12, 2010, and no bids were received.

On April 28, 2010, by Resolution No. 10-1081, the City Council declared the property will be advertised for sale with no minimum bid specified.

On February 25, 2015, by Resolution No. 15-0405, approximately 16,169 square feet of City-owned land was sold to Union Pacific Railroad leaving a remainder of approximately 161,848 square feet.

This item authorizes the property to be sold by public auction with no minimum reserve amount.

Texas Local Government Code Section 253.008 authorizes municipalities to sell real property owned by the municipality at an advertised public auction. Section 272.001 states fair market value may be determined by the highest bid price obtained by a municipality at an advertised auction.

BACKGROUND (Continued)

The property will be advertised for sale by public auction with a reservation of all oil, gas and other minerals in and under the property and a restriction prohibiting the placement of industrialized housing.

Upon receipt of the highest qualified bid sold absolute, a Purchase and Sale Agreement, approved as to form by the City Attorney, will be prepared for the highest bidder. Staff will ensure the highest bidder is qualified to bid and be awarded the property. The property will be a sold by Deed without Warranty, approved as to form by the City Attorney.

The property will return to the tax rolls upon conveyance.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On January 14, 2009, City Council declared this property unwanted and unneeded and for sale by sealed bid by Resolution No. 09-0163.

On April 28, 2010, City Council authorized the property to be sold by public auction with no minimum bid requirements by Resolution No. 10-1081.

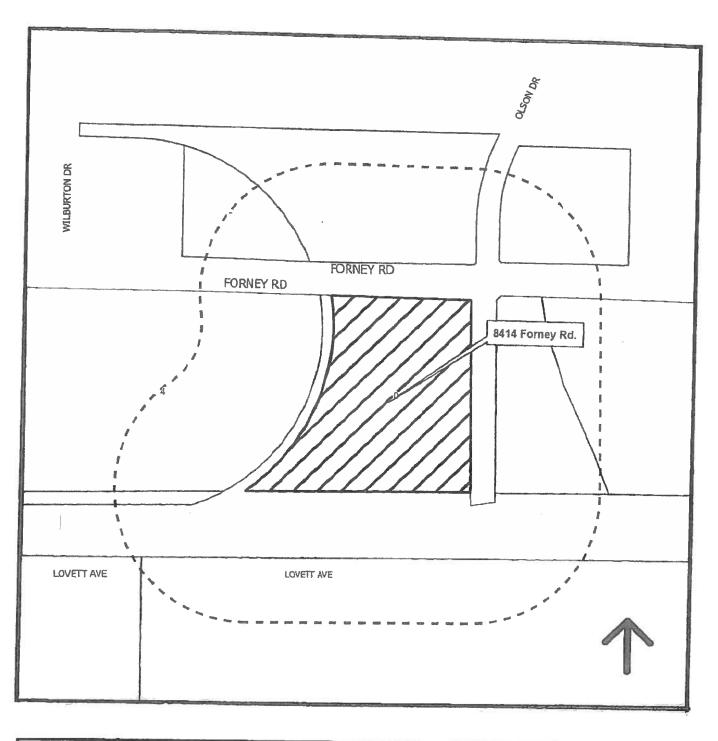
On February 25, 2015, City Council authorized approximately 16,169 square feet of land sold to Union Pacific Railroad Company by Resolution No. 15-0405.

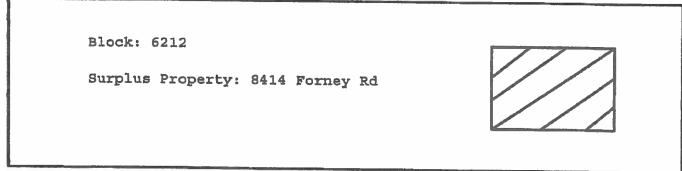
Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Estimated Revenue: \$242,772

MAP





AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 11

DEPARTMENT: Sustainable Development and Construction

CMO: Mark McDaniel, 670-3256

MAPSCO: 15Y

SUBJECT

An ordinance abandoning a portion of a sanitary sewer easement to CADG Forest Lane 18, LLC, the abutting owner, containing approximately 658 square feet of land, located near the intersection of Forest Lane and Creekway Drive - Revenue: \$5,400, plus the \$20 ordinance publication fee

BACKGROUND

This item authorizes the abandonment of a portion of a sanitary sewer easement to CADG Forest Lane 18, LLC, the abutting owner. The area will be included with the property of the abutting owner for the development of a residential shared access development. The cost for this abandonment is the minimum processing fee pursuant to the Dallas City Code, therefore, no appraisal is required.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

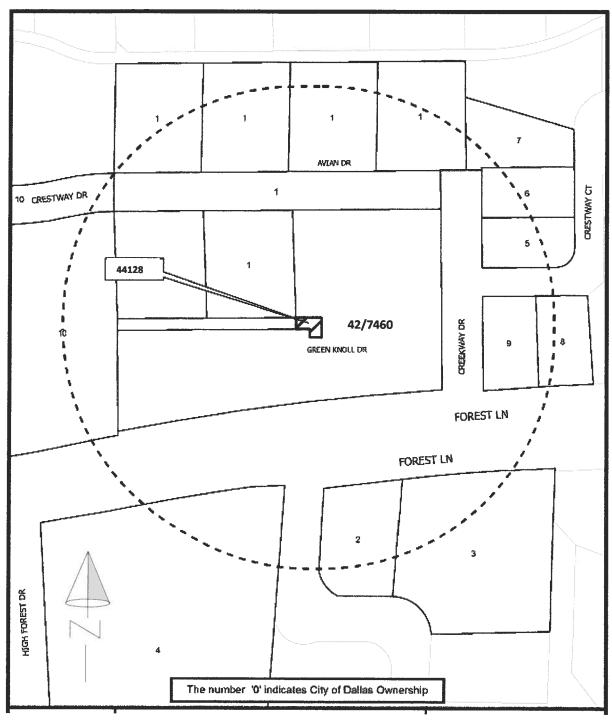
Revenue: \$5,400, plus the \$20 ordinance publication fee

OWNER

CADG Forest Lane 18, LLC

Mehrdad Moayedi

MAP



Abandonment Area:



|--|

An ordinance providing for the abandonment and relinquishment of a portion of a sanitary sewer easement, located in City Block 42/7460 in the City of Dallas and County of Dallas, Texas; providing for the quitclaim thereof to CADG Forest Lane 18, LLC; providing for the terms and conditions of the abandonment, relinquishment and quitclaim made herein; providing for the indemnification of the City of Dallas against damages arising out of the abandonment herein; providing for the consideration to be paid to the City of Dallas; providing for the payment of the publication fee; and providing an effective date for this ordinance.

0000000

WHEREAS, the City Council of the City of Dallas, acting pursuant to law and upon the request and petition of CADG Forest Lane 18, LLC, a Texas limited liability company; hereinafter referred to as GRANTEE, deems it advisable to abandon, relinquish and quitclaim the City of Dallas' right, title and interest in and to the hereinafter described tract of land to GRANTEE, and is of the opinion that, subject to the terms and conditions herein provided, said portion of easement is no longer needed for municipal use, and same should be abandoned, relinquished and quitclaimed to GRANTEE as hereinafter provided, for the consideration hereinafter stated; and

WHEREAS, the City Council of the City of Dallas is of the opinion that the best interest and welfare of the City will be served by abandoning, relinquishing and quitclaiming the same to GRANTEE for the consideration and subject to the terms and conditions hereinafter more fully set forth; Now, Therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That the City of Dallas hereby abandons and relinquishes all of its right, title and interest in and to the tract of land described in Exhibit A, attached hereto and made a part hereof; subject, however, to the conditions hereinafter more fully set out.

SECTION 2. That for and in monetary consideration of the sum of **FIVE THOUSAND FOUR HUNDRED AND NO/100 (\$5,400.00) DOLLARS** paid by **GRANTEE**, and the further consideration described in Section 8, the City of Dallas does by these presents **FOREVER QUITCLAIM** unto the said **GRANTEE**, subject to the conditions, reservations, and exceptions hereinafter made and with the restrictions and upon the covenants below stated, all its right, title and interest in and to the certain tract or parcel of land hereinabove described in Exhibit A. **TO HAVE AND TO HOLD** all of such right, title and interest in and to the property and premises, subject aforesaid, together with all and singular the rights, privileges, hereditaments and appurtenances thereto in any manner belonging unto the said **GRANTEE** forever.

SECTION 3. That upon payment of the monetary consideration set forth in Section 2, **GRANTEE** accepts the terms, provisions, and conditions of this ordinance.

SECTION 4. That the Chief Financial Officer is authorized to deposit the sum paid by **GRANTEE** pursuant to Section 2 above in the General Fund 0001, Department DEV, Balance Sheet 0519 and Department of Sustainable Development and Construction - Real Estate Division shall be reimbursed for the cost of obtaining the legal description, appraisal and other administrative costs incurred. The reimbursement proceeds shall be deposited in General Fund 0001, Department DEV, Unit 1183, Object 5011 and any remaining proceeds shall be transferred to the General Capital Reserve Fund 0625, Department BMS, Unit 8888, Revenue Source 8416.

SECTION 5. That the abandonment, relinquishment and quitclaim provided for herein are made subject to all present zoning and deed restrictions, if the latter exist, and are subject to all existing easement rights of others, if any, whether apparent or non-apparent, aerial, surface, underground or otherwise.

SECTION 6. That the terms and conditions contained in this ordinance shall be binding upon **GRANTEE**, its successors and assigns.

SECTION 7. That the abandonment, relinquishment and quitclaim provided for herein shall extend only to that interest the Governing Body of the City of Dallas may legally and lawfully abandon, relinquish and quitclaim.

That as a condition of this abandonment and as a part of the SECTION 8. consideration for the quitclaim to GRANTEE herein, GRANTEE, its successors and assigns, agree to indemnify, defend, release and hold harmless the City of Dallas as to any and all claims for damages, fines, penalties, costs or expenses to persons or property that may arise out of, or be occasioned by or from: (i) the use and occupancy of the area described in Exhibit A by GRANTEE, its successors and assigns; (ii) the presence, generation, spillage, discharge, release, treatment or disposition of any Hazardous Substance on or affecting the area set out in Exhibit A. (iii) all corrective actions concerning any discovered Hazardous Substances on or affecting the area described in Exhibit A, which GRANTEE, its successors and assigns agree to undertake and complete in accordance with applicable federal, state and local laws and regulations; and (iv) the abandonment, closing, vacation and quitclaim by the City of Dallas of the area set out in Exhibit A. GRANTEE, its successors and assigns hereby agree to defend any and all suits, claims, or causes of action brought against the City of Dallas on account of same, and discharge any judgment or judgments that may be rendered against the City of Dallas in connection therewith. For purposes hereof. "Hazardous Substance" means the following: (a) any "hazardous substances" under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601 et seq., as amended; (b) any "hazardous substance" under the Texas Hazardous Substances Spill Prevention and Control Act, TEX. WATER CODE, Section 26.261 et seq., as amended; (c) petroleum or petroleum-based products (or any derivative or hazardous constituents thereof or additives thereto), including without limitation, fuel and lubricating oils; (d) any "hazardous chemicals" or "toxic chemicals" under the Occupational Safety and Health Act, 29 U.S.C. Section 651 et seg., as amended; (e) any "hazardous waste" under the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended; and (f) any "chemical substance" under the Toxic Substance Control Act, 15 U.S.C. Section 2601 et seq., as amended. References to particular acts or codifications in this definition include all past and future amendments thereto, as well as applicable rules and regulations as now or hereafter promulgated thereunder. Construction of the City of Dallas before a certified copy of this ordinance shall be delivered to GRANTEE.

SECTION 9. That the City Secretary is hereby authorized and directed to certify a copy of this ordinance for recordation in the Deed Records of Dallas County, Texas, which certified copy shall be delivered to the Director of Department of Sustainable Development and Construction, or designee. Upon receipt of the monetary consideration set forth in Section 2, plus the fee for the publishing of this ordinance, which GRANTEE shall likewise pay, the Director of Department of Sustainable Development and Construction, or designee shall deliver to GRANTEE a certified copy of this ordinance. The Director of Department of Sustainable Development and Construction, or designee, shall be the sole source for receiving certified copies of this ordinance for one year after its passage.

SECTION 10. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM:	
LARRY E. CASTO	DAVID COSSUM
City Attorney	Director of Department of Sustainable Development and Construction
BY	BY
Assistant City Attorney	Assistant Director
Passed	

SECTION 9. That the City Secretary is hereby authorized and directed to certify a copy of this ordinance for recordation in the Deed Records of Dallas County, Texas, which certified copy shall be delivered to the Director of Department of Sustainable Development and Construction, or designee. Upon receipt of the monetary consideration set forth in Section 2, plus the fee for the publishing of this ordinance, which GRANTEE shall likewise pay, the Director of Department of Sustainable Development and Construction, or designee shall deliver to GRANTEE a certified copy of this ordinance. The Director of Department of Sustainable Development and Construction, or designee, shall be the sole source for receiving certified copies of this ordinance for one year after its passage.

SECTION 10. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM: LARRY E. CASTO	DAVID COSSUM
City Attorney	Director of Department of Sustainable
	Development and Construction
BY (Muls Assistant City Attorney	BY Jula Weliams R Assistant Director
Passed	

SHEET 1 OF 2

SANITARY SEWER EASEMENT ABANDONMENT BEING PART OF THE SANITARY SEWER EASEMENT CREATED IN LOT 3, BLOCK 42-A/7460 UNITY CHURCH ADDITION NO. 1 NOW LOCATED IN LOT 5P, BLOCK 42/7460, CRESTWAY FOREST ESTATES NO. 2 THOMAS DYKES SURVEY, ABSTRACT NO. 405 CITY OF DALLAS, DALLAS COUNTY, TEXAS

Being a 658 square foot tract or 0.015 acre of land located in the THOMAS DYKES SURVEY, Abstract No. 405, City of Dallas, Dallas County, Texas, and being a part of a 15' sanitary sewer easement formerly located in Lot 3, Block 42-A/7460, created by plat UNITY CHURCH ADDITION NO. 1, an Addition to the City of Dallas, Texas, recorded in Volume 77109, Page 51, of the Deed Records of Dallas County, Texas, now located in Lot 5P, Block 42A/7460, CRESTWAY FOREST ESTATES NO. 2, an Addition to the City of Dallas, Texas, recorded in Instrument No. 201600069635, Official Public Records of Dallas County, Texas, and being described in Tract 2, of a Warranty Deed with Vendor's Lien to CADG Forest Lane 18, L.L.C., recorded in Instrument No. 201400147113, Official Public Records, Dallas County, Texas, and being more particularly described as follows:

Commencing at a Mag nail with a 2" metal washer stamped "FOREST CRESTWAY ESTATES NO. 2 5310" found for corner at the intersection of the West line of Creekway Drive, a 50' right-of-way, created by plat recorded in Volume 791, Page 70, Map Records, Dallas County, Texas, and plat recorded in Volume 80074, Page 7, Deed Records, Dallas County, Texas, with the Northwest line of Forest Lane. a variable width right-of-way, created by deed recorded in Volume 1717, Page 70, Deed Records, Dallas County, Texas, and by deed recorded in Volume 72200, Page 370, Deed Records, Dallas County, Texas, and by said plat recorded in Volume 77109, Page 51, Deed Records, Dallas County, Texas, said point being at the Southeast corner of Lot 5L;

Thence South 86°46'00" West, along said Northwest line of Forest Lane, same being the Southeast line of said Lot 5L, a distance of 14.18' to a 1/2" iron rod with a 3 1/4" aluminum disk stamped "FOREST CRESTWAY ADDITION NO.2 5310" found for corner at the beginning of a tangent curve to the left, having a central angle of 02°40'46", a radius of 3085.42', and a chord bearing and distance of South 85°25'37" West, 144.28';

Thence Southwesterly, continuing along said Northwest line of Forest Lane, and said Southeast line of Lot 5L, and said curve to the left, an arc distance of 144.29' to a point at the intersection of the said Northwest line, with the East line of said 15' sanitary sewer easement:

Thence North 00°01'52" West, along said East line of the 15' sanitary sewer easement, passing at a distance of 66.56' the common boundary line of said Lots 5L and 5P, continuing a total distance of 81.56' to a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5310" set for corner at the PLACE OF BEGINNING of the tract described herein;

Thence South 89°58'08" West, passing through said Lot 5P, a distance of 15.00' to a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5310" set for corner in the Southerly West line of said 15' sanitary sewer easement;

Thence North 00°01'52' West, passing again through said Lot 5P, along said Southerly West line of the 15' sanitary sewer easement, a distance of 10.84' to a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5310" set at an interior 'ell' comer of said 15' sanitary sewer easement:

Thence South 89°58'08" West, along the Westerly South line of said 15' sanitary sewer easement, a distance of 18.00' to the most Northern Southwest corner of said 15' sanitary sewer easement, same being the Southeast corner of a former 15' alley right-of-way created in AUDUBON ESTATES ADDITION, SECOND SECTION, an Addition to the City of Dallas, Texas, recorded in Volume 791, Page 70, of the Deed Records of Dallas County, Texas, as abandoned under Ordinance No. 29793, recorded in Instrument No. 201600008250, Official Public Records, Dallas County, Texas:

Thence North 00°01'52" West, along the West line of said sanitary sewer easement, a distance 15.00' to a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5310" set at the Northwest corner of said 15' sanitary sewer easement;

Thence North 89°58'08" East, a distance of 33.00' to a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5310" set at the Northeast corner of said 15' sanitary sewer easement:

Thence South 00°01'52" East, along said East line of the 15' sanitary sewer easement, passing through said Lot 5P, a distance of 25.84' to the PLACE OF BEGINNING and containing 658 square feet or 0.015 of an acre of land.

LINE TABLE						
LINE	LENGTH	BEARING	LINE	LENGTH	BEARING	
L1	14.18'	S86°46'00"W	L5	33.00'	N89°58'08"E	
L2	10.84	N00°01'52"W	L6	25.84'	S00°01'52"E	
L3	18.00'	S89°58'08"W	L7	15.00'	S89°58'08"W	
L4	15.00'	N00°01'52"W	L8	81.56	N00°01'52"W	

CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CH. BEAR.	CHORD
C1	2°40'46"	3085.42'	144.29	S85°25'37"W	144.28'

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٨	10	77	F

BASIS OF BEARING IS THE NORTHWEST LINE OF FOREST LANE, BEING SOUTH 86°46'00" WEST, AS RECORDED IN VOL. 77109, PG. 51, DEED RECORDS, DALLAS COUNTY. TEXAS.

(FOR SPRG USE ONLY) REVIEWED BY: A. Rodrigue 2 11/15/16 DATE:_ SPRG NO:

CITY PLAN FILE NO. S134-091

A&W SURVEYORS, INC.

Professional Land Surveyors **TEXAS REGISTRATION NO. 100174-00** P.O. BOX 870029, MESQUITE, TX. 75187 PHONE: (972) 681-4975 FAX: (972) 681-4954 WWW.AWSURVEY.COM

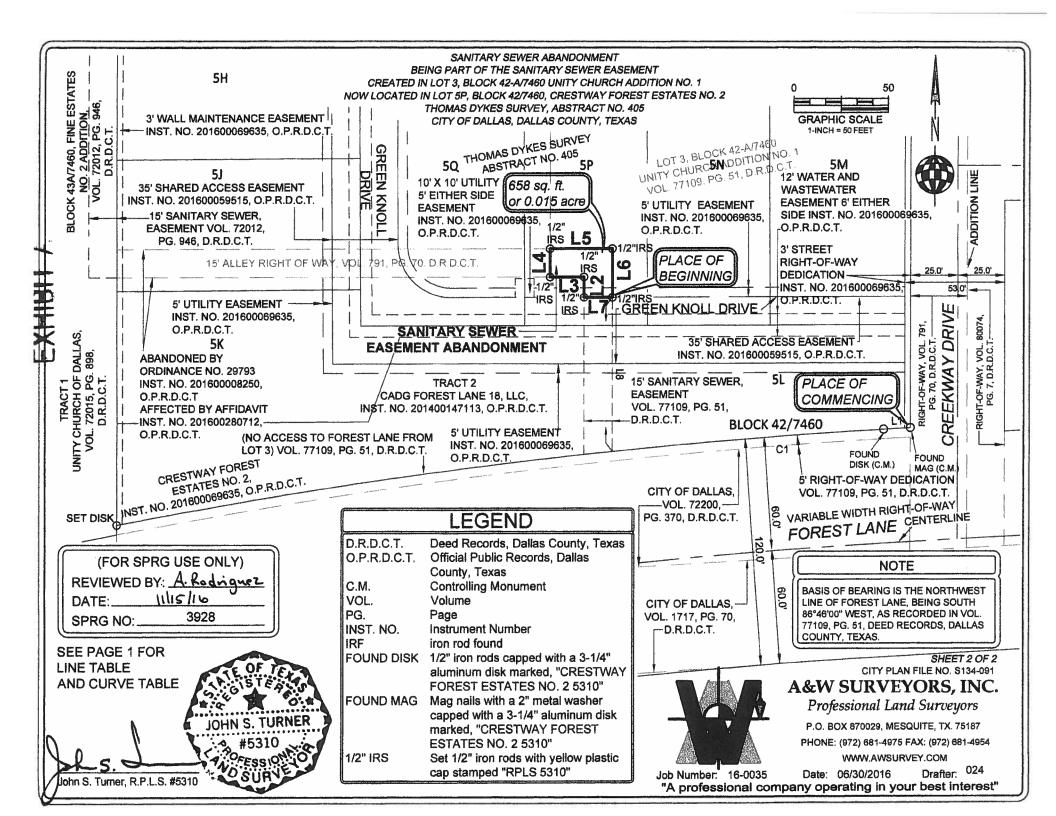
Date: 02/04/2016 Drafter: 024





Job Number: 16-0035

John S. Turner, R.P.L.S. #5310



KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 2

DEPARTMENT: Sustainable Development and Construction

CMO: Mark McDaniel, 670-3256

MAPSCO: 36W

SUBJECT

An ordinance abandoning a portion of a sanitary sewer easement to COG Dallas Homes, LLC, the abutting owner, containing approximately 8,510 square feet of land, located near the intersection of Moser Avenue and Fuqua Street - Revenue: \$5,400, plus the \$20 ordinance publication fee

BACKGROUND

This item authorizes the abandonment of a portion of a sanitary sewer easement to COG Dallas Homes, LLC, the abutting owner. The area will be included with the property of the abutting owner for the development of a shared access development of five attached single family units. The cost for this abandonment is the minimum processing fee pursuant to the Dallas City Code, therefore, no appraisal is required.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Revenue: \$5,400, plus the \$20 ordinance publication fee

OWNER

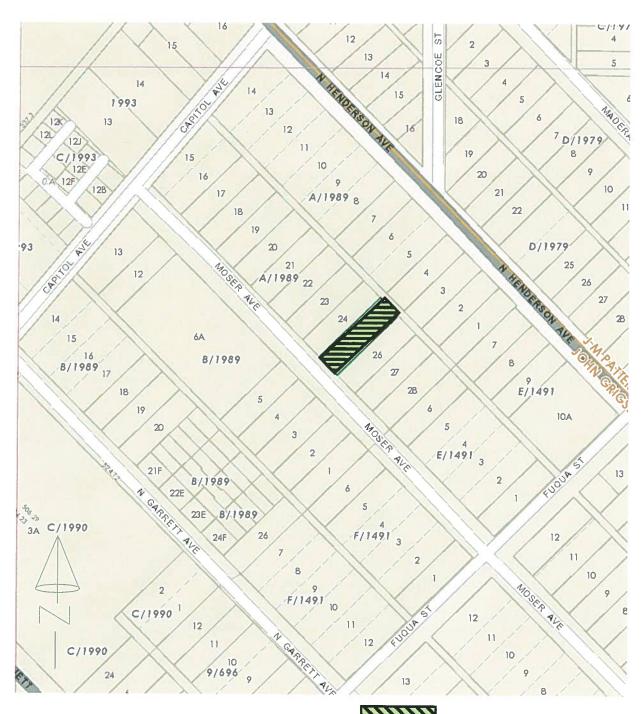
COG Dallas Homes, LLC

TRJ Services, LLC

Don Carroll, Managing Member

MAP

Attached



Abandonment area =

ONDINANCE NO.	ORDINA	NCE	NO.			
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An ordinance providing for the abandonment and relinquishment of a portion of a sanitary sewer easement, located in City Block A/1989 in the City of Dallas and County of Dallas, Texas; providing for the quitclaim thereof to COG Dallas Homes, LLC; providing for the terms and conditions of the abandonment, relinquishment and quitclaim made herein; providing for the indemnification of the City of Dallas against damages arising out of the abandonment herein; providing for the consideration to be paid to the City of Dallas; providing for the payment of the publication fee; and providing an effective date for this ordinance.

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WHEREAS, the City Council of the City of Dallas, acting pursuant to law and upon the request and petition of COG Dallas Homes, LLC, a Texas limited liability company; hereinafter referred to as GRANTEE, deems it advisable to abandon, relinquish and quitclaim the City of Dallas' right, title and interest in and to the hereinafter described tract of land to GRANTEE, and is of the opinion that, subject to the terms and conditions herein provided, said portion of sanitary sewer easement is no longer needed for municipal use, and same should be abandoned, relinquished and quitclaimed to GRANTEE as hereinafter provided, for the consideration hereinafter stated; and

WHEREAS, the City Council of the City of Dallas is of the opinion that the best interest and welfare of the City will be served by abandoning, relinquishing and quitclaiming the same to GRANTEE for the consideration and subject to the terms and conditions hereinafter more fully set forth; Now, Therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

GM/43832 1

SECTION 1. That the City of Dallas hereby abandons and relinquishes all of its right, title and interest in and to the tract of land described in Exhibit A, attached hereto and made a part hereof; subject, however, to the conditions hereinafter more fully set out.

SECTION 2. That for and in monetary consideration of the sum of **FIVE THOUSAND FOUR HUNDRED AND NO/100 (\$5,400.00) DOLLARS** paid by **GRANTEE**, and the further consideration described in Section 8, the City of Dallas does by these presents **FOREVER QUITCLAIM** unto the said **GRANTEE**, subject to the conditions, reservations, and exceptions hereinafter made and with the restrictions and upon the covenants below stated, all its right, title and interest in and to the certain tract or parcel of land hereinabove described in Exhibit A. **TO HAVE AND TO HOLD** all of such right, title and interest in and to the property and premises, subject aforesaid, together with all and singular the rights, privileges, hereditaments and appurtenances thereto in any manner belonging unto the said **GRANTEE** forever.

SECTION 3. That upon payment of the monetary consideration set forth in Section 2, **GRANTEE** accepts the terms, provisions, and conditions of this ordinance.

SECTION 4. That the Chief Financial Officer is authorized to deposit the sum paid by **GRANTEE** pursuant to Section 2 above in the General Fund 0001, Department DEV, Balance Sheet 0519 and Department of Sustainable Development and Construction - Real Estate Division shall be reimbursed for the cost of obtaining the legal description, appraisal and other administrative costs incurred. The reimbursement proceeds shall be deposited in General Fund 0001, Department DEV, Unit 1183, Object 5011 and any remaining proceeds shall be transferred to the General Capital Reserve Fund 0625, Department BMS, Unit 8888, Revenue Source 8416.

SECTION 5. That the abandonment, relinquishment and quitclaim provided for herein are made subject to all present zoning and deed restrictions, if the latter exist, and are subject to all existing easement rights of others, if any, whether apparent or non-apparent, aerial, surface, underground or otherwise.

SECTION 6. That the terms and conditions contained in this ordinance shall be binding upon **GRANTEE**, its successors and assigns.

GM/43832 2

SECTION 7. That the abandonment, relinquishment and quitclaim provided for herein shall extend only to that interest the Governing Body of the City of Dallas may legally and lawfully abandon, relinquish and quitclaim.

That as a condition of this abandonment and as a part of the SECTION 8. consideration for the quitclaim to GRANTEE herein, GRANTEE, its successors and assigns, agree to indemnify, defend, release and hold harmless the City of Dallas as to any and all claims for damages, fines, penalties, costs or expenses to persons or property that may arise out of, or be occasioned by or from: (i) the use and occupancy of the area described in Exhibit A by GRANTEE, its successors and assigns; (ii) the presence, generation, spillage, discharge, release, treatment or disposition of any Hazardous Substance on or affecting the area set out in Exhibit A, (iii) all corrective actions concerning any discovered Hazardous Substances on or affecting the area described in Exhibit A, which GRANTEE, its successors and assigns agree to undertake and complete in accordance with applicable federal, state and local laws and regulations; and (iv) the abandonment, closing, vacation and quitclaim by the City of Dallas of the area set out in Exhibit A. GRANTEE, its successors and assigns hereby agree to defend any and all suits, claims, or causes of action brought against the City of Dallas on account of same, and discharge any judgment or judgments that may be rendered against the City of Dallas in connection therewith. For purposes hereof. "Hazardous Substance" means the following: (a) any "hazardous substances" under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601 et seq., as amended; (b) any "hazardous substance" under the Texas Hazardous Substances Spill Prevention and Control Act, TEX. WATER CODE, Section 26.261 et seq., as amended; (c) petroleum or petroleum-based products (or any derivative or hazardous constituents thereof or additives thereto), including without limitation, fuel and lubricating oils; (d) any "hazardous chemicals" or "toxic chemicals" under the Occupational Safety and Health Act, 29 U.S.C. Section 651 et seg., as amended; (e) any "hazardous waste" under the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended; and

GM/43832 3

(f) any "chemical substance" under the Toxic Substance Control Act, 15 U.S.C. Section 2601 et seq., as amended. References to particular acts or codifications in this definition include all past and future amendments thereto, as well as applicable rules and regulations as now or hereafter promulgated thereunder.

SECTION 9. That the City Secretary is hereby authorized and directed to certify a copy of this ordinance for recordation in the Deed Records of Dallas County, Texas, which certified copy shall be delivered to the Director of Department of Sustainable Development and Construction, or designee. Upon receipt of the monetary consideration set forth in Section 2, plus the fee for the publishing of this ordinance, which GRANTEE shall likewise pay, the Director of Department of Sustainable Development and Construction, or designee shall deliver to GRANTEE a certified copy of this ordinance. The Director of Department of Sustainable Development and Construction, or designee, shall be the sole source for receiving certified copies of this ordinance for one year after its passage.

SECTION 10. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM:	
LARRY E. CASTO	DAVID COSSUM
City Attorney	Director of Department of Sustainable Development and Construction
BY	BY
Assistant City Attorney	Assistant Director
Passed	

GM/43832

(f) any "chemical substance" under the Toxic Substance Control Act, 15 U.S.C. Section 2601 et seq., as amended. References to particular acts or codifications in this definition include all past and future amendments thereto, as well as applicable rules and regulations as now or hereafter promulgated thereunder.

SECTION 9. That the City Secretary is hereby authorized and directed to certify a copy of this ordinance for recordation in the Deed Records of Dallas County, Texas, which certified copy shall be delivered to the Director of Department of Sustainable Development and Construction, or designee. Upon receipt of the monetary consideration set forth in Section 2, plus the fee for the publishing of this ordinance, which GRANTEE shall likewise pay, the Director of Department of Sustainable Development and Construction, or designee shall deliver to GRANTEE a certified copy of this ordinance. The Director of Department of Sustainable Development and Construction, or designee, shall be the sole source for receiving certified copies of this ordinance for one year after its passage.

SECTION 10. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM: LARRY E. CASTO City Attorney

DAVID COSSUM

Director of Department of Sustainable

Development and Construction

BY By N. Syse If
Assistant City Attorney

Assistant Director

Passed

EXHIBIT A

SANITARY SEWER RIGHT-OF-WAY ABANDONMENT V.S. BOWLES ADDITION LOT 25, BLOCK A/1989 JOHN GRIGSBY SURVEY, ABSTRACT NO. 495 CITY OF DALLAS, DALLAS COUNTY, TEXAS

Being a 8,510 square feet, 0.195 acre tract of land situated in the JOHN GRIGSBY SURVEY, ABSTRACT NO. 495, City of Dallas, Dallas County, Texas being all of the Sanitary Sewer Right—of—Way granted to the City of Dallas, by Minnie Bowles in deed recorded in Volume 1605, Page 637, Deed Records, Dallas County, Texas, (D.R.D.C.T.), said City of Dallas Right-of-Way covering a 6-inch sanitary sewer line running through the northeast portion of Lot 25, Block A/1989, of V.S. Bowles Addition, an addition to the City of Dallas. according to the Plat thereof recorded in Volume 2, Page 247, Map Records, Dallas County, Texas (M.R.D.C.T.) as shown on Dallas Department of Public Works Sanitary Sewer Plan File No. 411Q-133 Sheet 1 of 1, dated May 1929, and being that tract of land conveyed by General Warranty Deed to COG Dallas Hornes, LLC, as recorded in Instrument No. 201600047578, Official Public Records, Dallas County, Texas (O.P.R.D.C.T.) and being more particularly described as follows:

BEGINNING at a 1/2-inch iron rod found for the most southern corner of said Lot 25, Block A/1989, said corner being the most western corner of Lot 26, Block A/1989, by General Warranty Deed to Four Mad Ox. LLC, as recorded in Instrument No. 201100332139, (O.P.R.D.C.T.) of said V.S. Bowles Addition, said corner being the western corner of a tract of land conveyed by COG Dallas Homes, LLC, same being in the northeast line of Moser Avenue (a 60 foot right-of-way created in Volume 2, Page 247, M.R.D.C.T.);

THENCE North 45 degrees 07 minutes 20 seconds West, along the northeast line of said Moser Avenue, and along the southwest line of said Lot 25, Block A/1989, a distance of 50.11 feet to a 1/2-inch iron pipe found for a corner, said corner being the most western corner of said Lot 25, Block A/1989, same being the most southern corner of Lot 24, Block A/1989 of said V.S. Bowles Addition, said corner being the southwest corner of a tract of land conveyed by General Warranty Deed to Dimension D + B, LLC, tract as recorded in Instrument Number 201500335199, (O.P.R.D.C.T.);

THENCE North 44 degrees 22 minutes 12 seconds East, departing the northeast line of said Moser Avenue. along the common line between said Lot 24, Block A/1989 and said Lot 25, Block A/1989, a distance of 170.00 feet to a 5/8—inch iron rod with a 3—1/4—inch aluminum disk set in concrete stamped, "Crestfield Place, Blue Star R.P.L.S. 5596", said corner being the most northern corner of said Lot 25, Block A/1989, same being the most eastern corner of said Lot 24, Block A/1989, and said Dimension tract, said corner also being in the southwest line of (a 15 foot Alley created in Volume 2, Page 247, M.R.D.C.T.);

THENCE South 45 degrees 11 minutes 32 seconds East, along the common line between said 15 foot Alley and said Lot 25, Block A/1989, a distance of 50.00 feet to a 1/2-inch iron rod found for a corner, said corner being the most eastern corner of said Lot 25, Block A/1989, same being the most northern corner of said Lot 26, Block A/1989, said Four Mad Ox tract:

THENCE South 44 degrees 20 minutes 04 seconds West, departing the southwest line of said 15 foot Alley. along the common line between said Lot 25, Block A/1989 and said Lot 26, Block A/1989, a distance of 170.06 feet to the POINT OF BEGINNING, containing 8,510 square feet or 0.195 acres of land, more or less.

Reference Bearing:

The basis of bearings for this survey is the Texas State Plane Coordinate System Grid, North Central Zone

(4202), North American Datum 1983(2011)



(FOR S.P.R.G use only)

REVIEWED BY: A. Rodique 2

DATE: 11/17/16

S.P.R.G. NO.: 3873

CITY PLAN FILE NO. S156-121

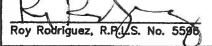


BLUE STAR LAND SURVEYING

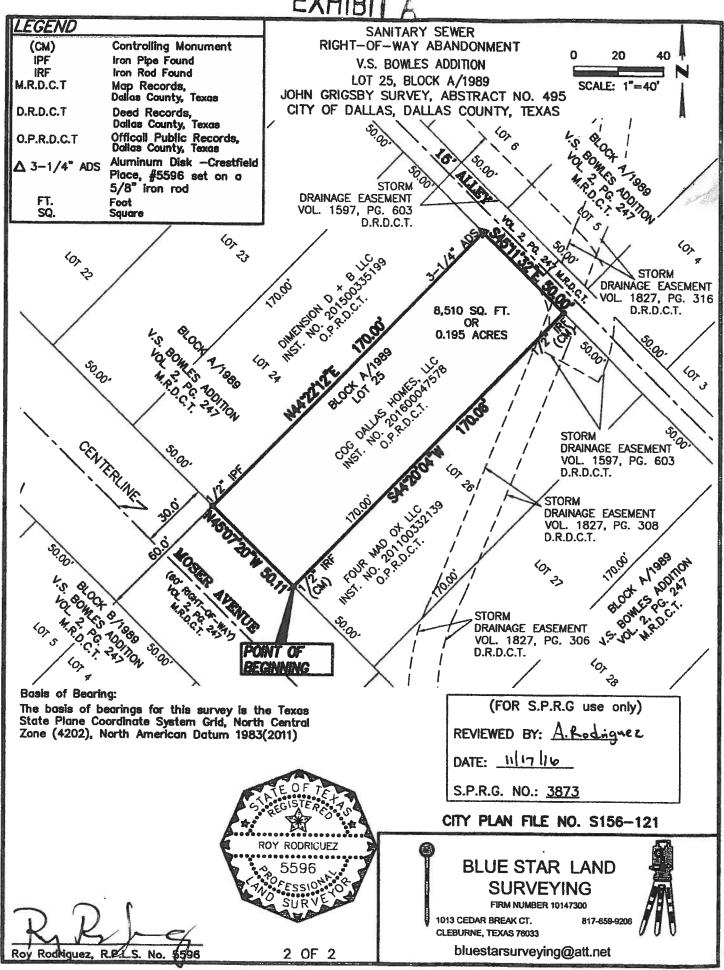
FIRM NUMBER 10147300

1013 CEDAR BREAK CT. **CLEBURNE, TEXAS 76033** 817-659-9206

bluestarsurveying@att.net



EXHIBITA



KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 9

DEPARTMENT: Sustainable Development and Construction

CMO: Mark McDaniel, 670-3256

MAPSCO: 37B

SUBJECT

An ordinance abandoning a portion of a utility easement to C.C. Young Memorial Home, the abutting owner, containing approximately 2,957 square feet of land, located near the intersection of Lawther Drive and Mockingbird Lane - Revenue: \$5,400, plus the \$20 ordinance publication fee

BACKGROUND

This item authorizes the abandonment of a portion of a utility easement to C.C. Young Memorial Home, the abutting owner. The area will be included with the property of the abutting owner for expansion of the current facility. The owner has dedicated a water and wastewater easement containing approximately 10,037 square feet. The cost for this abandonment is the minimum processing fee pursuant to the Dallas City Code, therefore, no appraisal is required.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Revenue: \$5,400, plus the \$20 ordinance publication fee

OWNER

C.C. Young Memorial Home

Kent L. Shields, President

MAP

Attached



Abandonment Area:

ORDINANCE	NO.	

An ordinance providing for the abandonment and relinquishment of a portion of a utility easement, located in City Block 2965 in the City of Dallas and County of Dallas, Texas; providing for the quitclaim thereof to C.C. Young Memorial Home; providing for the terms and conditions of the abandonment, relinquishment and quitclaim made herein; providing for the conveyance of a new easement, if needed, to the City of Dallas and the relocation of existing facilities; providing for the indemnification of the City of Dallas against damages arising out of the abandonment herein; providing for the consideration to be paid to the City of Dallas; providing a future effective date for the abandonment, relinquishment and quitclaim made herein; providing for the payment of the publication fee; and providing an effective date for this ordinance.

0000000

WHEREAS, the City Council of the City of Dallas, acting pursuant to law and upon the request and petition of C.C. Young Memorial Home, a Texas non-profit corporation; hereinafter referred to as GRANTEE, deems it advisable to abandon, relinquish and quitclaim the City of Dallas' right, title and interest in and to the hereinafter described tract of land to GRANTEE, and is of the opinion that, subject to the terms and conditions herein provided, said portion of easement is no longer needed for municipal use, and same should be abandoned, relinquished and quitclaimed to GRANTEE as hereinafter provided, for the consideration hereinafter stated; and

WHEREAS, the City Council of the City of Dallas is of the opinion that the best interest and welfare of the City will be served by abandoning, relinquishing and quitclaiming the same to **GRANTEE** for the consideration and subject to the terms and conditions hereinafter more fully set forth; **Now, Therefore,**

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

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SECTION 1. That the City of Dallas hereby abandons and relinquishes all of its right, title and interest in and to the tract of land described in Exhibit A, attached hereto and made a part hereof; subject, however, to the conditions and future effective date hereinafter more fully set out.

SECTION 2. That for and in monetary consideration of the sum of **FIVE THOUSAND FOUR HUNDRED AND NO/100 (\$5,400.00) DOLLARS** paid by **GRANTEE**, and the further consideration described in Sections 8 and 9, the City of Dallas does by these presents **FOREVER QUITCLAIM** unto the said **GRANTEE**, subject to the conditions, reservations, future effective date and exceptions hereinafter made and with the restrictions and upon the covenants below stated, all its right, title and interest in and to the certain tract or parcel of land hereinabove described in Exhibit A. **TO HAVE AND TO HOLD** all of such right, title and interest in and to the property and premises, subject aforesaid, together with all and singular the rights, privileges, hereditaments and appurtenances thereto in any manner belonging unto the said **GRANTEE** forever.

SECTION 3. That upon payment of the monetary consideration set forth in Section 2, **GRANTEE** accepts the terms, provisions, and conditions of this ordinance.

SECTION 4. That the Chief Financial Officer is authorized to deposit the sum paid by **GRANTEE** pursuant to Section 2 above in the General Fund 0001, Department DEV, Balance Sheet 0519 and Department of Sustainable Development and Construction - Real Estate Division shall be reimbursed for the cost of obtaining the legal description, appraisal and other administrative costs incurred. The reimbursement proceeds shall be deposited in General Fund 0001, Department DEV, Unit 1183, Object 5011 and any remaining proceeds shall be transferred to the General Capital Reserve Fund 0625, Department BMS, Unit 8888, Revenue Source 8416.

SECTION 5. That the abandonment, relinquishment and quitclaim provided for herein are made subject to all present zoning and deed restrictions, if the latter exist, and are subject to all existing easement rights of others, if any, whether apparent or non-apparent, aerial, surface, underground or otherwise.

SECTION 6. That the terms and conditions contained in this ordinance shall be binding upon **GRANTEE**, its successors and assigns.

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SECTION 7. That the abandonment, relinquishment and quitclaim provided for herein shall extend only to that interest the Governing Body of the City of Dallas may legally and lawfully abandon, relinquish and quitclaim.

SECTION 8. That as a condition of this abandonment and as a part of the consideration for the quitclaim to GRANTEE herein, GRANTEE, its successors and assigns, agree to indemnify, defend, release and hold harmless the City of Dallas as to any and all claims for damages, fines, penalties, costs or expenses to persons or property that may arise out of, or be occasioned by or from: (i) the use and occupancy of the area described in Exhibit A by GRANTEE, its successors and assigns; (ii) the presence, generation, spillage, discharge, release, treatment or disposition of any Hazardous Substance on or affecting the area set out in Exhibit A, (iii) all corrective actions concerning any discovered Hazardous Substances on or affecting the area described in Exhibit A, which GRANTEE, its successors and assigns agree to undertake and complete in accordance with applicable federal, state and local laws and regulations; and (iv) the abandonment, closing, vacation and quitclaim by the City of Dallas of the area set out in Exhibit A. GRANTEE, its successors and assigns hereby agree to defend any and all suits, claims, or causes of action brought against the City of Dallas on account of same, and discharge any judgment or judgments that may be rendered against the City of Dallas in connection therewith. For purposes hereof, "Hazardous Substance" means the following: (a) any "hazardous substances" under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601 et seq., as amended; (b) any "hazardous substance" under the Texas Hazardous Substances Spill Prevention and Control Act, TEX. WATER CODE, Section 26.261 et seq., as amended; (c) petroleum or petroleum-based products (or any derivative or hazardous constituents thereof or additives thereto), including without limitation, fuel and lubricating oils; (d) any "hazardous chemicals" or "toxic chemicals" under the Occupational Safety and Health Act, 29 U.S.C. Section 651 et seq., as amended; (e) any "hazardous waste" under the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended; and (f) any "chemical substance" under the Toxic Substance Control Act, 15 U.S.C. Section 2601 et seq., as amended.

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References to particular acts or codifications in this definition include all past and future amendments thereto, as well as applicable rules and regulations as now or hereafter promulgated thereunder.

SECTION 9. That this abandonment, relinquishment and quitclaim of the City's right, title and interest in and to said portion of utility easement shall not become effective until and unless: (i) the existing installations and facilities are relocated, at GRANTEE's expense, to the new easement, if needed, to be provided by GRANTEE and acceptable to the Director of Department of Sustainable Development and Construction, as is hereinafter provided; and (ii) plans for the construction and relocation of installations within the new easement are approved by the Director of Department of Sustainable Development and Construction; and (iii) said construction and relocation of installations are completed, approved and accepted in writing by the Director of Department of Sustainable Development and Construction. All work shall be done at the sole cost of GRANTEE and to the satisfaction of the Director of Department of Sustainable Development and Construction.

SECTION 10. That the City Secretary is hereby authorized and directed to certify a copy of this ordinance for recordation in the Deed Records of Dallas County, Texas, which certified copy shall be delivered to the Director of Department of Sustainable Development and Construction, or designee. Upon receipt of the monetary consideration set forth in Section 2, plus the fee for the publishing of this ordinance, which GRANTEE shall likewise pay, the Director of Department of Sustainable Development and Construction, or designee shall deliver to GRANTEE a certified copy of this ordinance. The Director of Department of Sustainable Development and Construction, or designee, shall be the sole source for receiving certified copies of this ordinance for one year after its passage.

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SECTION 11. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

DAVID COSSUM
Director of Department of Sustainable Development and Construction
BY
Assistant Director

SECTION 11. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

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APP	ROVE	D AS	TO	FORM
LAR	RY E.	CAST	ГО	
City	Attor	ney		

Passed

DAVID C	JSS	UM		
Director	of	Department	of	Sustainable
Developn	nent	and Constru	ctio	n

BY	Benin	N.	Som	5 II	-
	Assist	tant C	ity Atto	rney	

Assistant Director

EXHIBIT A

UTILITY EASEMENT ABANDONMENT LOT 1, BLOCK 2965 C.C. YOUNG MEMORIAL HOME ADDITION D.A. MURDOCK SURVEY, ABSTRACT NO. 997

CITY OF DALLAS, DALLAS COUNTY, TEXAS

Being a 2,957 square foot tract or parcel of land situated in the D.A. Murdock Survey, Abstract No. 997, City of Dallas, Dallas County, Texas, being a part of Lot 1, Block 2965, C.C. Young Memorial Home Addition, an addition to the City of Dallas according to the plat recorded in Volume 99048, Page 143, Deed Records, Dallas County, Texas, and being part of a 10' Utility Easement created by Volume 5676, Page 132, Deed Records, Dallas County, Texas, and being a part of a tract of land conveyed to C.C. Young Memorial Home by Warranty Deed recorded in Volume 5471, Page 572, Deed Records, Dallas County, Texas, and being more particularly described as follows:

COMMENCING at a 1/2" iron rod found for corner at the intersection of the northwesterly right-of-way line of East Mockingbird Lane (a variable width right-of-way) and the southwesterly right-of-way line of West Lawther Drive (a 90 foot right-of-way), said rod being the beginning of a curve to the left;

THENCE in a northeasterly direction along the southwesterly right-of-way line of said West Lawther Drive and said curve to the left whose chord bears North 06° 36' 21" East a distance of 60.67 feet, having a radius of 318.10 feet, a central angle of 10° 56' 42" and an arc length of 60.77 feet to a 1/2" iron rod found for corner at the end of said curve to the left and the beginning of a compound curve to the left;

THENCE in a northwesterly direction along the southwesterly right-of-way line of said West Lawther Drive and said compound curve to the left whose chord bears North 25° 12' 40" West a distance of 247.01 feet, having a radius of 278.31 feet, a central angle of 52° 41' 20" and an arc length of 255.93 feet to a 1/2" iron rod found for corner at the end of said compound curve to the left;

THENCE North 51° 33' 20" West continuing along the southwesterly right-of-way line of said West Lawther Drive a distance of 305.56 feet to a 1/2" iron rod with yellow plastic cap stamped "RLG INC" set for corner and the **POINT OF BEGINNING**;

THENCE South 46° 08' 00" West, departing the southwesterly right-of-way line of said West Lawther Drive, a distance of 296.35 feet to a 1/2" iron rod with yellow plastic cap stamped "RLG INC" set for corner;

THENCE North 43° 52' 00" West a distance of 10.00 feet to a 1/2" iron rod with yellow plastic cap stamped "RLG INC" set for corner;

THENCE North 46° 08' 00" East a distance of 295.02 feet to a 1/2" iron rod with yellow plastic cap stamped "RLG INC" set for corner on the southwesterly right-of-way line of said West Lawther Drive:

(For Reviewed	SPRG use only) Bv:
Date:	3-17-16
SPRG NO.	: 3637

EXHIBIT A

UTILITY EASEMENT ABANDONMENT LOT 1, BLOCK 2965 C.C. YOUNG MEMORIAL HOME ADDITION D.A. MURDOCK SURVEY, ABSTRACT NO. 997 CITY OF DALLAS, DALLAS COUNTY, TEXAS

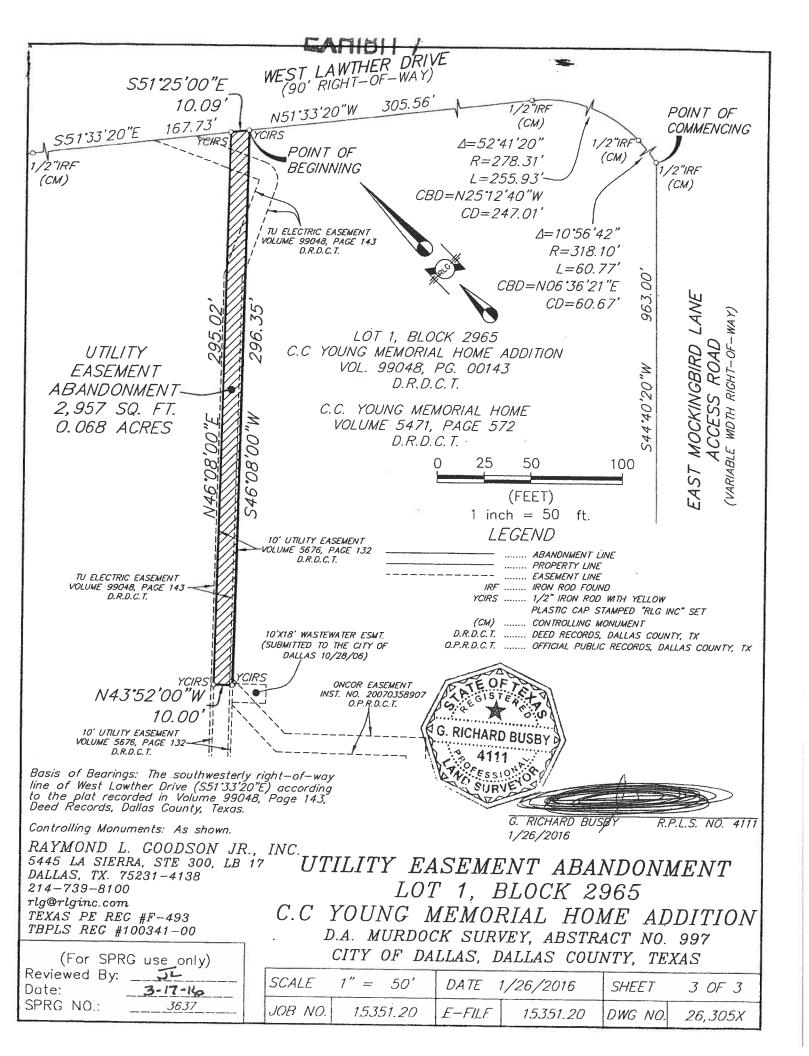
THENCE South 51° 25' 00" East along the southwesterly right-of-way line of said West Lawther Drive, a distance of 10.09 feet to the POINT OF BEGINNING and containing 2,957 square feet or 0.068 acres, more or less.

Basis of Bearings: The southwesterly right-of-way line of West Lawther Drive (S51°33'20"E) according to the plat recorded in Volume 99048, Page 143, Deed

Records, Dallas County, Texas.

G. Richard Busby R.P.L.S. NO. 4111 1/26/2016

(For SPRG use only) Reviewed By: Date: SPRG NO .:



KEY FOCUS AREA:

Economic Vibrancy

AGENDA DATE:

January 25, 2017

COUNCIL DISTRICT(S):

All

DEPARTMENT:

Sustainable Development and Construction

CMO:

Mark McDaniel, 670-3256

MAPSCO:

N/A

<u>SUBJECT</u>

An ordinance amending Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code; an ordinance amending Chapter 53 "Dallas Building Code," of the Dallas City Code; an ordinance amending Chapter 54 "Dallas Plumbing Code," of the Dallas City Code; an ordinance amending Chapter 55 "Dallas Mechanical Code," of the Dallas City Code; an ordinance amending Chapter 57 "Dallas One-and Two-Family Dwelling Code," of the Dallas City Code; an ordinance amending Chapter 59 "Dallas Energy Conservation Code," of the Dallas City Code; an ordinance amending Chapter 60 "Dallas Fuel and Gas Code," of the Dallas City Code; an ordinance amending Chapter 61 "Dallas Green Construction Code," of the Dallas City Code; to adopt the 2015 International Codes with regional and local amendments regulating construction work in the City; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date - Financing: No cost consideration to the City

BACKGROUND

Construction codes are written by national and international model code development organizations, with opportunity for input from building and fire officials, the construction industry and building material suppliers. The codes are then reviewed by regional entities such as the North Central Texas Council of Governments (NCTCOG) who have committees for that purpose made up of local construction industry representatives and city building, fire and health officials.

The Building Inspection Advisory, Examining and Appeals Board reviews and makes recommendation on adoption of the Codes before they are presented to City Council. The board is made up of architects, engineers, and contractors in various specialties and construction trades.

PRIOR ACTION / REVIEW (COUNCIL, BOARDS, COMMISSIONS)

The Building Inspection Advisory, Examining and Appeals Board reviewed and recommended adoption of the codes on September 20, 2016.

Information about this item was provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

No cost consideration to the City.

ORDINANCE NO.

An ordinance amending Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code, as amended, by amending Sections 101, 102, 103, 104, 208, 301, 302, 303, 304, 306, 1001, 1003, 1101, 1102, 1103, and 1106; correcting temporary structure definition from 31 days to 30 days; providing that appeals of the building official's decisions be filed within 15 days; clarifying that defenses to permits include all types of reroofing work; providing that book exchange structures do not require a construction permit; clarifying that defenses to construction permits are not exemptions to the application process for work authorizations in conservation districts or for certificates of appropriateness in historic districts; requiring verification of a home repair license for oneand two-family dwelling remodeling work; clarifying that the most recent version of LEED standards must be followed in lieu of specific versions; adding additional factors to the board's list of considerations to suspend a person's ability to secure permits; restating a plan review fee for kitchen and equipment layout plans; clarifying when a reinspection fee is appropriate; requiring an application fee for all board actions in lieu of only appeals; clarifying fees associated with work performed without the required permit; restating the building official's authority to issue stop work orders; providing a requirement to have city approved plans available at job sites; deleting the practice of allowing a certificate of compliance in lieu of an inspection for water heater replacement and for inspection for singlefamily and duplex reroof projects; adding a requirement that email addresses be listed on applications for certificates of occupancy; deleting references to phasing of Green Building Program; deleting references to expedited plan review for Green Building Program; provides for a registration exemption for homeowners performing work on homestead property; clarifying details on contractor registration applications; requiring certain residential contractors to provide a home repair license at renewal of registration; moving provisions and definitions from the construction codes to Chapter 52; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Section 101, "Title; Scope," of Subchapter 1, "Title and Scope," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended by adding a new Subsection 101.4, "Referenced Codes and Standards," to read as follows:

"101.4 Referenced codes and standards. The codes and standards referenced in this chapter are considered part of the requirements of this chapter to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the City of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards is considered to reference the amendments as well. Any reference made to NFPA 70 or the ICC Electrical Code means the Dallas Electrical Code, as amended. References made to the International Building Code, International Mechanical Code, the International Plumbing Code, the International Fire Code, the International Energy Conservation Code, the International Fuel Gas Code, the International Existing Building Code, the International Residential Code and the International Green Construction Code respectively mean the Dallas Building Code, the Dallas Mechanical Code, the Dallas Plumbing Code, the Dallas Existing Building Code, the Dallas One- and Two-Family Dwelling Code and the Dallas Green Construction Code, as amended. Where differences occur between provisions of this chapter and referenced codes and standards, the provisions of this chapter apply.

101.4.1 Similar provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this chapter or the International Codes listed in Section 101.4, as applicable, the provisions of this chapter or the International Codes listed in Section 101.4 take precedence over the provisions in the referenced code or standard."

SECTION 2. That Subsection 102.3, "Definitions," of Section 102, "Purpose of the Codes," of Subchapter 1, "Title and Scope," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"102.3 Definitions. For the purpose of the codes:

APARTMENT HOUSE means any multiple dwelling unit or portion thereof not defined as a multiple building townhouse.

BUILDING CODE means Chapter 53 of the Dallas City Code based on the International Building Code as adopted by this jurisdiction.

BUILDING PERMIT means a permit issued to perform work described in Section 301, excluding permits to erect signs, barricade public property or public ways, or move or demolish structures.

BUILDING SERVICE EQUIPMENT means the plumbing, mechanical, electrical, and elevator equipment, including, but not limited to, wiring, fixtures, and other accessories that provide sanitation, lighting, heating, ventilation, cooling, refrigeration, fire-fighting, and transportation facilities essential for the occupation of the structure for its designated use and occupancy.

<u>CHANGE OF OCCUPANCY means a change from one occupancy classification to another occupancy classification in a building or tenancy or portion thereof.</u>

COMMERCIAL DWELLING SITE means three or more dwelling units on a lot.

DEVELOPMENT CODE means Chapters 51, 51A and 51P of the *Dallas City Code*.

ELECTRICAL CODE means Chapter 56 of the *Dallas City Code* based on the *National Electrical Code* as adopted by this jurisdiction.

ENERGY CODE means Chapter 59 of the *Dallas City Code* based on the *International Energy Conservation Code* as adopted by this jurisdiction.

EXISTING BUILDING CODE means Chapter 58 of the *Dallas City Code* based on the *International Existing Building Code* as adopted by this jurisdiction.

FIRE CODE means Chapter 16 of the *Dallas City Code* based on the *International Fire Code* as adopted by this jurisdiction.

FUEL GAS CODE means Chapter 60 of the Dallas City Code based on the International Fuel Gas Code as adopted by this jurisdiction.

GREEN BUILDING means structures and their surrounding landscapes designed, constructed, and maintained to decrease energy and water usage and costs, to improve the efficiency and longevity of building systems, and to decrease the burdens imposed on the environment and public health.

GREEN BUILT TEXAS means an initiative of the Homebuilders Association of Greater Dallas that provides climate-specific guidelines and verification systems for residential and multifamily green buildings.

GREEN BUILT TEXAS-CERTIFIABLE means a proposed project that is not required to be registered with the Home Builders Association of Greater Dallas but is planned, designed, and constructed to meet or exceed a certified rating using version 2.0 of the Green Built Texas rating system.

GREEN CONSTRUCTION CODE means Chapter 61 of the *Dallas City Code* as adopted by this jurisdiction.

HOME REPAIR means the addition, improvement, remodeling, repair, or replacement to an existing single-family or duplex dwelling or to the fixtures, land, or other permanent structures that are part of the premises on which the dwelling is located, and includes, but is not limited to, addition, improvement, remodeling, repair, or replacement of driveways, swimming pools, porches, garages, landscaping, fences, roofs, floor covering, and central heat and air conditioning. Home repair does not include addition, improvement, remodeling, repair, or replacement of removable appliances or furnishings (as illustrated by, but not limited to, stoves, refrigerators, window air conditioners, and draperies).

HOME REPAIR LICENSE means a license issued under Article X, "Home Repair," of Chapter 50, "Consumer Affairs," of the Dallas City Code.

LEED means the Leadership in Energy and Environmental Design green building rating systems which are nationally accepted standards for green buildings developed by the USGBC.

LEED-CERTIFIABLE means a proposed project that is not required to be registered with the USGBC but is planned, designed, and constructed to meet or exceed a certified rating using the most recent versions of LEED NC (new construction) [version 2.2 to present], LEED CS (core and shell) [version 2.0 to present], LEED CI (commercial interiors) [version 2.0 to present], LEED for schools [version 2007], LEED for healthcare, LEED for retail [version 2], or LEED for homes.

MECHANICAL CODE means Chapter 55 of the Dallas City Code based on the International Mechanical Code as adopted by this jurisdiction.

MULTIPLE DWELLING means any structure or portion thereof that contains more than one dwelling unit.

MULTIPLE BUILDING TOWNHOUSE means a multiple dwelling unit located on a commercial dwelling site and constructed with a maximum of two units located between exterior walls or fire walls complying with Section 706 of the Dallas Building Code in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

PLUMBING CODE means Chapter 54 of the Dallas City Code based on the International Plumbing Code as adopted by this jurisdiction.

PROPOSED PROJECT means, for purposes of the green building program, the erection of any new structure for which a person, firm, or corporation is required to obtain a building permit.

RESIDENTIAL CODE means Chapter 57 of the *Dallas City Code* based on the *International Residential Code* as adopted by this jurisdiction.

SINGLE BUILDING TOWNHOUSE means a multiple dwelling unit located on a commercial dwelling site and constructed with more than two units between exterior walls or fire walls complying with Section 706 with each unit extending from its foundation to its roof and that has a yard or public way on at least two sides.

TEMPORARY STRUCTURE means any new structure erected for <u>30</u> [31] days or less.

TENT means any structure, enclosure or shelter constructed of fabric or other pliable material supported by any manner except by air or the contents protected by the material.

TOWER STRUCTURE means a structure other than a building that has a height normally greater than its largest horizontal dimension. Examples of tower structures include antenna supports, chimneys, tank supports, sign supports, equipment supports, and other structures as determined by the building official.

TOWNHOME means a dwelling located on a single-family or duplex dwelling site and constructed in a group of abutting structures separated by property lines with each dwelling extending from its foundation to its roof and has a yard or public way on at least two sides.

USGBC means the U.S. Green Building Council, a nonprofit organization comprised of leaders from the building industry formed to encourage sustainability by promoting buildings that are environmentally responsible, profitable, and healthy places to live and work.

VALUE OR VALUATION means the total value of all work, including materials and labor, for which a permit is issued, as well as all finish work, painting, roofing, electrical, gas, plumbing, heating, air conditioning, elevators, fire extinguishing systems, and any other permanent systems, and includes any work which does not require a permit under Section 301.2 and which is marked out on any submitted plans or applications as not included as part of the subject project.

WORK OF ART[-] means p[P]aintings, mural decorations, stained glass, statutes, bas-reliefs or other sculptures, monuments, fountains, arches or other structures of a permanent or temporary character intended for ornament or commemoration."

SECTION 3. That Subsection 103.1, "General," of Section 103, "Scope of the Codes," of

Subchapter 1, "Title and Scope," of Chapter 52, "Administrative Procedures for the Construction

Codes," of the Dallas City Code is amended to read as follows:

"103.1 General. The provisions of the codes apply to the construction, quality of materials,

alteration, installation, moving, demolition, repair, use, occupancy, location, relocation, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. This includes the [and] maintenance of all structures and building service equipment. [, except that industrialized structures shall be governed as follows:]

- 103.1.1 Detached one- and two-family dwellings no more than three stories. Detached one- and two-family dwellings and townhomes not more than three stories above grade plane in height with a separate means of egress and their accessory structures may comply with the Dallas One- and Two-Family Dwelling Code.
 - 103.1.1.1 Live/work units. Live/work units located in townhouses and complying with the requirements of Section 419 of the *Dallas Building Code* shall be permitted to be constructed in accordance with the *Dallas One- and Two-Family Dwelling Code*. Fire suppression required by Section 419.5 of the *Dallas Building Code* where constructed under the *Dallas One- and Two-Family Dwelling Code* shall be permitted to conform to Section P2904 of the *Dallas One- and Two-Family Dwelling Code*.
 - 103.1.1.2 Owner-occupied lodging houses. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the *Dallas One- and Two-Family Dwelling Code* where equipped with a fire sprinkler system in accordance with Section P2904 of the *Dallas One- and Two-Family Dwelling Code*.

Exception: A sprinkler system is not required for a lodging house which complies with Section 903.2.13 of the Dallas Building Code.

- 103.1.2 Detached one- and two-family dwellings more than three stories. Detached oneand two-family dwellings more than three stories above grade plane in height with a separate means of egress and their accessory structures must comply with the Dallas Building Code.
- 103.1.3 Single building townhouse. A single building townhouse must comply with the Dallas Building Code as an R-2 occupancy.

103.1.4 Industrialized structures. Industrial structures shall be governed as follows:

- 1. The installation, moving, demolition, repair, location, and maintenance of all commercial and residential industrialized (modular) structures and building service equipment shall comply with the codes.
- 2. The construction, use, and occupancy of new commercial and residential industrialized structures shall comply with the Texas Industrialized Housing and Buildings Act (Article 5221f, Vernon's Texas Civil Statutes), as amended.
- 3. The use and occupancy of relocated commercial industrialized structures shall comply with the Texas Industrialized Housing and Buildings Act (Article 5221f, Vernon's Texas Civil Statutes), as amended, and the *Dallas Existing Building Code*, as applicable.

4. The use and occupancy of relocated residential industrialized structures (industrialized housing) shall comply with the *Dallas Existing Building Code*."

SECTION 4. That Subsection 104.4, "Additions and Alterations to Existing Structures," of Section 104, "Application of the Codes to Existing Structures and Building Service Equipment," of Subchapter 1, "Title and Scope," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"104.4 Additions and alterations to existing structures. No addition or alteration may be made to an existing structure when the existing structure is not in full compliance with the codes, unless the addition or alteration will result in the existing structure being no more hazardous, based on life safety, fire safety, and sanitation, than before the addition or alteration was undertaken. All newly constructed elements, components, structures, and portions thereof, systems, and spaces shall comply with the requirements of this code."

SECTION 5. That Subsection 208.1, "General," of Section 208, "Appeal Procedure," of Subchapter 2, "Organization and Enforcement," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"208.1 General. Any person aggrieved by a decision or ruling of the building official or a chief code administrator[, or by the action of a registered electrician under the provisions of the eodes,] may appeal to the board. An appeal must be made by filing with the building official a written notice specifying the grounds for the appeal and by paying the appropriate fee in accordance with Section 303.5.18. The appeal must be filed within 15 days of the decision or ruling of the building official or a chief code administrator. The building official shall transmit to the board all of the papers constituting the record of the action being appealed. The board shall, within a reasonable time, hold a public hearing on the matter and render a decision either sustaining, modifying, or reversing the action appealed. A decision of the board must be by a concurring vote of a majority of the members present. Every decision of the board must be in writing, indicate the record of the vote, and be promptly filed in the offices of the building official and the city secretary. A decision of the board will be open to public inspection."

SECTION 6. That Subsection 301.2, "Defenses," of Section 301, "Permits," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"301.2 Defenses. It is a defense to prosecution under Section 301.1.1 that the act is included in one of the enumerated categories listed in this subsection. Each of the following separate

paragraphs - building, plumbing, mechanical, electrical, <u>signs</u>, <u>moved structures</u>, <u>tents</u>, <u>demolitions</u>, and other – must be consulted for the type of work involved. No permit is required for the following:

301.2.1 Building.

- 1. Painting, papering, paneling, floor coverings, cabinets, moldings, countertops, and similar finish work.
- 2. Erection of one-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, that are located on property that contains a single-family or duplex premises and that do not exceed 200 square feet (18.58 m²) in floor area.
- 3. Erection of one-story detached patio covers with an area less than 200 square feet (18.58 m²) on single-family or duplex premises.
- 4. Addition of storm windows, screens, shutters, rain gutters, or insulation to a building.
- 5. Addition of trim or siding to single-family or duplex premises.
- 6. Erection of fences not serving as a pool enclosure not over four feet high in a front yard, nor over six feet high elsewhere.
- 7. Reroofing [of single-family or duplex premises,] if the value of work does not exceed \$500.
- 8. Interior remodeling of nonload bearing components of single-family or duplex premises that does not add floor area.
- 9. Erection of movable cases, containers, and partitions not over 69 inches (1,752.6 mm) high.
- 10. Attaching window awnings to exterior walls of single-family homes or single-family garages where the awnings project not more than 54 inches (1,374.6 mm) from any wall.
- 11. Erection of structures, boots, sets, and scenery used for motion pictures, conventions, television shows, theater shows, and similar temporary uses.
- 12. Erection of retaining walls that are not over four feet (1,219 mm) in height measured from the bottom of the footing to the top of the wall, unless the walls are supporting a surcharge or impounding Class I, II, or IIIA liquids.
- 13. Construction of platforms and decks on property that contains a single-family or duplex premises that do not exceed 200 square feet (18.58 m²) in area, are not more than 30 inches (762 mm) in height above grade at any point, are not attached to a

dwelling, are not be located in violation of the clearance of overhead service drop conductors, and do not serve the exit door required by Section R311.4 of the *Dallas One- and Two-Family Dwelling Code*.

- 14. <u>Book exchange structures as defined by Chapter 51A of the *Dallas City Code* [Reserved].</u>
- 15. Paving or grading on a property that is less than two acres in size and that that is classified as a single-family or duplex premises.
- 16. Erection of freestanding detached carports of 200 square feet (18.58 m²) or less that are accessory to a single-family or duplex premises.
- 17. Excavations less than four feet (1,219 mm) in depth below existing grade.
- 18. Replacement of exterior or interior doors, hinges, hardware, and decorative trim, provided the following conditions are met:
 - 18.1. The replacement door is of the same size and required type.
 - 18.2. The replacement door does not require any modification to existing wall framing.
 - 18.3. The existing door is not a component of a fire-resistive rated construction element.
- 19. Replacement of exterior or interior windows, provided the following conditions are met:
 - 19.1. The replacement window is of the same size, required type, and thickness.
 - 19.2. The replacement window does not require any modification to the existing wall frame or window frames.
 - 19.3. The existing glazing is not a component of a fire-resistive rated construction element.
 - 19.4. The existing glazing is not required to be safety glazed.

Exception: 19.4 is omitted for single-family and duplex premises.

20. Erection or installation of shade cloth structures that are constructed for non-commercial nursery or agricultural purposes and that do not include building service equipment or systems.

- 21. Erection or installation of swings and other playground equipment accessory to single-family or duplex premises.
- 22. New construction or renovation work on county owned buildings or facilities if the work is done by county personnel or by county personnel acting as the general contractor. Documentation approved by the building official is required to use this defense. The construction work must comply with the codes and must be inspected by a registered professional engineer or architect licensed in the State of Texas. The population of Dallas County must equal or exceed 3.3 million as listed by the U.S. Census Bureau data for the application of this provision.
- 23. Work involving a structure, the title of which is vested in the United States or the State of Texas and that is devoted exclusively to governmental use.
- 24. Storage racks eight feet (2,438 mm) or less in height.
- 25. Freestanding satellite dishes not exceeding one meter in diameter that do not exceed 12 feet (3,657 mm) in height.
- 26. Installation of prefabricated swimming pools accessory to single-family or duplex premises in which the pool wall is completely above adjacent grade, the pool capacity does not exceed 5,000 gallons (18,927 L), and the pool depth is less than 24 inches (610 mm).
- 27. Erection of temporary structures in conjunction with a special events permit issued under Chapter 42A of the Dallas City Code that meets all of the following criteria:
 - 27.1. The temporary structures must cover an area of 120 square feet or less, including connecting areas and spaces with a common means of egress or entrance that are used or are intended to be used for a gathering of 10 persons or less.
 - 27.2. The temporary structures must not exceed 12 feet (3,657 mm) in height.
 - 27.3. The temporary structures, including stages, platforms, reviewing/observation stands or towers, must not be more than 30 inches (762 mm) above grade or over any basement or story, and cannot be part of an accessible route.
- 28. Conveyances or stages, platforms, or reviewing or observation stands or towers that are part of conveyance mounted equipment.
- 29. Temporary structures that could be considered equipment such as:
 - 29.1. Scaffolding for sound, lighting, or timers.
 - 29.2. Prefabricated platforms.

- 29.3. Prefabricated bleachers provided that all of the following are met:
 - 29.3.1. Must be less than 6 feet in height.
 - 29.3.2. The bleachers are unroofed.
 - 29.3.3. There are no enclosed spaces under or attached to the bleacher seating.
 - 29.3.4. An approved fire safety plan includes approval of evacuation of the bleacher seating.
- 29.4. Amusement rides.
- 30. Flagpoles that support an appurtenance weighing less than 150 pounds (68 kg), provided it is not more than 75 feet (22,680 mm) tall if mounted on the ground or not more than 25 feet (7620 mm) taller than the building if mounted on a building.
- 31. A tower under 75 feet (22,860 mm) in height that meets the following conditions:
 - 31.1. Tower structures used primarily for the support of amateur and citizen's band radio or private television antennae.
 - 31.2. Tower structures on real property owned, leased, held or used, or dedicated for use by a public utility for rendering its service, such as tower structures used primarily for the transmission of electrical power by a public utility or the conveyance of communications over a telephone wire-line system operated by a public utility.
 - 31.3. High mast tower structures or antennae built on land on, along, or adjacent to streets, roads, highways, and bridges maintained by the state or a political subdivision of the state.
 - 31.4. Tower structures constructed or placed on land or other structures owned, leased, held, or dedicated for use by the state or federal government or any political subdivision thereof, which land or other structures are used by the governmental entity primarily for rendering fire, police, or other pubic protection services or utility services whether or not the tower structure is used jointly by the governmental entity and another public or private person or entity for other and additional public or private purposes.
- 32. A work of art.
- 33. Installation of storm shelters accessory to single-family or duplex premises when less than 200 square feet in area with no utilities; not attached to any other structures; and not funded by the local, state or federal government.

34. Erection of structures used as tool and storage sheds that do not exceed 200 square feet, raised planting beds, bed covers, and similar structures that are located on property with an urban garden use as defined in the Dallas Development Code.

301.2.2 Plumbing.

- 1. Maintenance, repair, or replacement in kind of accessible p-traps or replacement in kind of plumbing fixtures where no change in "rough-in" is involved, except that a permit is required for the replacement of boilers and water heaters.
- 2. Repairs or repiping of any plumbing system on a single-family or duplex premises, which does not exceed \$1,000.00 excluding gas piping.
- 3. Installation of storm water drains for one-family, two-family, or multifamily dwellings.
- 4. Installation of steam, hot, or chilled water piping within comfort heating or cooling equipment.
- 5. Replacement in kind of any fitting, valve, or plumbing fixture that does not change the number of fixtures or the location of a fixture "rough-in" except that a permit is required if a utility release is necessary.
- 6. Maintenance, alteration, repair or service in kind of an irrigation system downstream the discharge side of a zone control valve.
- 7. Installation of equipment for or by a public utility in the generation, transmission, sale, and use of energy or in the transmission of intelligence as outlined in its franchise.

301.2.3 Mechanical.

- 1. Installation of a portable heating appliance, portable ventilating equipment, portable evaporative cooler, or portable comfort cooling unit.
- 2. Replacement of any component part of assembly of an appliance that does not alter its original design and complies with other applicable requirements of the codes.
- 3. Installation of a unit refrigerating system or any refrigerating equipment that is a part of equipment for which a permit has been issued pursuant to the requirements of this chapter.
- 4. Maintenance or repair of permanent gas or solid-fuel furnaces where no change in ducts, flues, electrical, plumbing, or gas "rough-in" is involved.

- 5. Installation of bathroom exhaust fans in single-family or duplex premises.
- 6. Installation of kitchen exhaust fans and dryer exhaust fans in single-family or duplex premises.
- 7. Replacement in kind of the condensate piping to an approved condensate disposal system that does not change the "rough-in" of the condensate piping.
- 8. Replacement of permanent electric heating, ventilating, or air-conditioning equipment where no change in "rough-in" is required.
- 9. Relocation or addition of any outlet or associated connection to an existing heating, ventilating, or air-conditioning duct system in a single-family or duplex premises, if the value of the work does not exceed \$500.
- 10. Installation of approved fire-extinguishing equipment in a self-contained grease removal device and hood installed in accordance with the *Dallas Mechanical Code*.
- 11. Installation of self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

301.2.4 Electrical.

- 1. The restoration on a temporary basis of electrical service under emergency conditions when approval of the work is obtained from the building official before commencing the work, inspection of the work is made in accordance with this chapter, and a permit is obtained as soon as practicable.
- 2. Replacement of lamps, branch or feeder circuit breakers rated 30 amperes or less, or branch or feeder circuit fuses rated 30 amperes or less, or the connection of portable electrical equipment to permanently installed receptacles.
- 3. Installation of equipment for or by a public utility in the generation, transmission, sale, and use of energy or in the transmission of intelligence as outlined in its franchise.
- 4. Work involved in the manufacturing, repair, or testing of electrical equipment or apparatus in the course of manufacture.
- 5. Maintenance, repair, relocation, or replacement of any existing light fixture, receptacle, switch, ceiling fan, circuit breaker, or other electrical device or equipment where no change in electrical service or service disconnection is involved, if the value of work does not exceed \$1,000.
- 6. Installation of not more than six new 120-volt or one new 240-volt electrical outlets or devices for any lighting fixture, receptacle, switch, ceiling fan, or residential

appliance within an existing occupied single-tenant space or structure, by extension of an existing circuit or by installation of not more than one new circuit, provided that no change in electrical service or service disconnection is involved.

301.2.5 Signs.

- 1. The changing of words on a sign that is designed with interchangeable words.
- 2. Normal maintenance to replace worn parts and repainting deteriorated paint without word change.
- 3. Memorial signs or tablets, names of buildings and dates of erection when cut into any masonry surface or when constructed of bronze or other noncombustible materials.
- 4. Government signs such as flags, insignia, legal notices or informational, directional or traffic signs that are legally required or necessary to the essential functions of government agencies.
- 5. Signs listed in the sign regulations of the *Dallas Development Code* as not requiring permits.

301.2.6 Moved structures.

- 1. A structure not more than 12 feet (3657 mm) in width, not more than 40 feet (12,192 mm) in length and not more than 13½ feet (4145.3 mm) in height when loaded, provided the truck, trailer or other vehicle on which the structure is transported is equipped with rubber tires and complies with the Texas Transportation Code.
- 2. A structure, or superheavy or oversized equipment, being moved over any state or federal highway within the city when:
 - 2.1. It is being moved under a Texas Highway Department permit;
 - 2.2. The moving route is confined to a state or federal highway; or
 - 2.3. The destination is outside the city.

301.2.7 Tents.

- 1. Tent with a floor area of less than 400 square feet (37.1612 m²), including all connecting areas or spaces with a common means of egress or entrance.
- 2. Tent with an occupant load of less than 10 persons.
- 3. Tent which is included as part of a special events permit.

301.2.8 Demolitions.

- 1. Demolition of a fence or swimming pool.
- 2. <u>Demolition work performed in conjunction with remodeling, alteration or repair of a structure for which a building permit is obtained.</u>
- 3. Demolition of a structure with a total floor area of less than 120 square feet (11.148 m²).

301.2.9 Other.

- 1. Repair or replacement in kind of any automatic fire-extinguishing system head that does not alter the existing system design or operation.
- 2. Installation, repair, or replacement of landscaping materials, except that a permit is required to authorize the installation of landscaping that is required by:
 - 2.1. A city ordinance.
 - 2.2. A city board as a condition to the granting of relief requested by an applicant.
 - 2.3. A deed restriction instrument accepted by city council resolution."

SECTION 6. That Subsection 301.3, "Defense Does Not Authorize Violation of Codes or Ordinances," of Section 301, "Permits," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"301.3 Defense does not authorize violation of codes or ordinances. A defense to a permit requirement of this chapter does not grant authorization for any work to be done in a manner that violates the codes or any other law or ordinance of the city. A defense to a permit requirement of this chapter also does not grant authorization for any work that requires a work authorization or a certificate of appropriateness for work in a conservation district or historic district, respectively."

SECTION 8. That Paragraph 301.4.1, "General," of Subsection 301.4, "Application for Permits," of Section 301, "Permits," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

- "301.4.1 General. To obtain a permit, an applicant shall first file an application in writing on a form furnished for that purpose by the building inspection division. An application must contain the following information:
 - 1. Identification and description of the work to be covered by the permit.
 - 2. Description of the land on which the proposed work is to be done, by street address or similar description that will readily identify and definitely locate the proposed structure or work.
 - 3. Indication of the use or occupancy for which any proposed structure is intended.
 - 4. Signature of the applicant or an authorized agent, who may be required to submit evidence to indicate such authority, together with a verification of the truth and correctness of the information in the application.
 - 5. Attachment of plans, diagrams, computations, specifications, and other data as required.
 - 6. The name, address, and telephone number of the industrialized builder, if applicable.
 - 7. <u>Documentation showing proof of a current home repair license in accordance with Article X, Chapter 50, "Consumer Affairs," of the Dallas City Code, if applicable.</u>
 - 8. Other information required by the building official necessary for issuance of the permit.
 - 301.4.1.1 Information on braced wall design. For buildings and structures utilizing braced wall design, and where required by the building official, braced wall lines shall be identified on the construction documents. Pertinent information including, but not limited to, bracing methods, location, and length of braced wall panels and foundation requirements of braced wall panels at top and bottom shall be provided."

SECTION 9. That Paragraph 301.4.6, "Other Types of Work," of Subsection 301.4, "Application for Permits," of Section 301, "Permits," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"301.4.6 Other types of work. For application requirements for permits to:

- 1. Move structures, see Chapter 37 of the Dallas Building Code; and
- 2. [Erect signs, see Chapter 36 of the Dallas Building Code; and

- 3.] Demolish structures, see Chapter 40 of the *Dallas Building Code*.
- 301.4.6.1 Sign permits. No person, firm or corporation may erect, construct, alter, rebuild, enlarge, extend, convert, maintain, replace, relocate, remove, or demolish a sign or alter or change words or rearrange neon tubing on a sign or cause the same to be done without first obtaining a separate sign permit for each sign. All work done under a sign permit shall be in conformity with all requirements of all applicable laws and ordinances.
 - 301.4.6.1.1 Application. To obtain a sign permit, the applicant shall file an application in writing on a form furnished for that purpose. Every application shall:
 - 1. Identify and describe the work to be covered by the permit for which application is made;
 - Describe the land on which the proposed work is to be done by lot, block, tract, and house and street address, or similar description that will readily identify and definitely locate the proposed work;
 - 3. Be accompanied by plans and specifications as required in this code and all applicable laws and ordinances;
 - 4. State the valuation of the proposed work;
 - 5. Be signed by the owner of the property on which the sign is to be located; and
 - 6. Give such other information as may reasonably be required.
 - 301.4.6.1.2 Plans and specifications. With each application for a sign permit, not less than two sets of plans and specifications shall be submitted, and all drawings, specifications and accompanying data shall bear the name and address of the designer.

<u>Drawings</u> and specifications may be required to bear the official seal of an engineer duly qualified and registered under the laws of the State of Texas.

- 301.4.6.1.3 Fees. In addition to filing an application in accordance with Section 301.4.6.1.1, the applicant shall pay all applicable fees required by Section 303 before a sign permit is issued.
- 301.4.6.1.4 Expiration. Every sign permit issued under the provisions of this code shall expire by limitation and become null and void if the work authorized by the permit is not commenced within 120 days from the date the permit is issued, or if, at any time after the work has commenced, the work authorized by the permit is suspended or abandoned for a period of 120 days. Before work can be recommenced, another sign permit shall be obtained, and the permit fee shall be one half the amount

required for a new permit for the work, provided that no changes have been made or will be made in the original plans and specifications for such work and provided that suspension or abandonment of the work has not exceeded one year.

301.4.6.1.5 Suspension or revocation. The building official may, in writing, suspend or revoke a sign permit issued under provisions of this code whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any law or ordinance.

301.4.6.1.6 Inspections. All signs for which a permit is required are subject to inspection by the *building official*. A pier inspection and a final inspection are required for all detached signs.

301.4.6.2 <u>Tent permits.</u> A person who desires to erect and maintain a tent shall file a written application for a *tent* permit with the *building official* on a form furnished for that purpose.

301.4.6.2.1 Application. The application shall include all of the following:

- 1. Three copies of a plan drawn to scale showing the location of each *tent* and permanent improvement on the premises, the number of off-street parking spaces as required by the *Dallas Development Code*, and adequate details regarding the seating capacity and the location of exits in each *tent*.
- 2. If the *tent* is to be erected in or adjacent to a residentially zoned district, an approved petition, on a form provided by the building official, signed by all owners of land within 100 feet (30 480 mm), including streets and alleys, measured from the boundary of the premises on which the *tent* is to be erected.
- 3. A fee as specified in Section 303.
- 4. Any additional information required by the *building official* to ensure the provision of adequate safeguards for the preservation of public health, peace, comfort, and safety.

301.4.6.2.2 Issuance of permit.

301.4.6.2.2.1 Maximum duration of permit. The building official may issue a tent permit for a period not to exceed 30 consecutive days.

Exception: The building official may extend a tent permit for additional 30-day periods if the tent is located on public property and being used for a demonstrated public purpose and does not create a threat to the public safety. In no event may a tent permit be issued for more than a total of nine months within any 12-consecutive-month period. A fee in the amount of the initial

tent permit fee shall be paid for each 30-day period a tent permit is extended.

301.4.6.2.3 Limit on permits on same property within any 12-consecutive-month period. A *tent* permit may not be issued for the same property more than once in any 12-consecutive-month period.

Exception: More than one *tent* permit may be issued for the same property in a 12-consecutive-month period if the total time period for all *tent* permits issued on that property does not exceed 60 days in any 12-consecutive-month period.

301.4.6.2.4 Multiple tents under one permit. A tent permit may be issued for more than one tent if all tents are on the same property at the same time for the same event or purpose and meet the provisions of Section 3904.5 of the Dallas Building Code.

301.4.6.3 Reroofing permits. New roof coverings must not be applied without first obtaining a permit. An application for a permit to reroof must include a list of sites to be used for the disposal of reroofing debris. A final inspection and approval must be obtained from the building official when the reroofing is complete. No final inspection may be performed or approval of work given until proof of the disposal of the reroofing debris at a city of Dallas landfill or transfer station is submitted to the building official."

SECTION 10. That Subparagraph 301.4.7.1, "General," of Paragraph 301.4.7, "Plans and Specifications," of Subsection 301.4, "Application for Permits," of Section 301, "Permits," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"301.4.7.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical reports, and other data shall be submitted in two or more sets with each permit application. The construction documents shall be prepared by a registered design professional where required by the statutes of the state of Texas. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with the codes.

[Plans, engineering computations, diagrams, and other data shall be submitted on suitable material in two or more sets with each application for a permit. The building official may require plans, computations, and specifications to be prepared and designed by an engineer or architect licensed by the state of Texas. The building official may waive the

submission of plans and computations upon finding that the nature of the work applied for is such that a review of plans and computations is not necessary to obtain compliance with the codes.]"

SECTION 11. That Subparagraph 301.4.7.7, "Green Building Standard Documentation," of Paragraph 301.4.7, "Plans and Specifications," of Subsection 301.4, "Application for Permits," of Section 301, "Permits," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"301.4.7.7 Green building standard documentation. For construction activity subject to Subchapter 10, an applicant must submit documentation that:

- 1. demonstrates the construction activity will comply with the requirements of Subchapter 10, and
- 2. includes any other documentation the building official deems necessary.

301.4.7.7.1 Acceptable standards. The building official may accept documentation from the most recent versions of any LEED NC (new construction) [version 2.2 to present], LEED CS (core and shell) [version 2.0 to present], LEED CI (commercial interiors) [version 2.0 to present], LEED for schools [version 2007], LEED for healthcare, LEED for retail [version 2], LEED for homes, Green Built Texas [version 2.0], or another approved equivalent."

SECTION 12. That Subsection 302.9, "Suspension of Permit Privileges," of Section 302, "Application for and Issuance of Permit; Retention of Plans; Suspension or Revocation; Suspension of Permit Privileges," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"302.9 Suspension of permit privileges.

302.9.1 General. The building official may provide notice of intent to suspend a contractor's permit privileges or registration for one or more of the causes listed in Sections 302.9.3 or 1106.1 for due cause. The contractor may appeal the suspension to [request that] the building inspection advisory, examining, and appeals board for [hold] a public hearing for the purpose of determining whether a person's ability to secure permits should be suspended.

The contractor must file the appeal within 15 days of the date of the notice to suspend. Failure to timely file the appeal shall result in the suspension being final [for one or more of the causes listed in Section 302.9.3].

- 302.9.2 Notice. Upon receipt of an appeal t[T]he building official shall give notice of the hearing in the official newspaper of the city not later than the 10th day before the scheduled date of the hearing. The building official shall also mail written notice of the hearing to the address of the person affected as shown on the most recent application for a permit or certificate of occupancy. The notice must be sent not later than the 10th day before the scheduled date of the hearing by certified mail with a five-day return requested. The fact that the return receipt is not signed by the addressee shall not affect the validity of the notice. If the mailed notice is returned undelivered, the hearing shall be continued to a date not earlier than the 11th day after the date of the return; however, no new notices shall be required and the board may proceed to take action in the absence of the person affected when the hearing is continued.
- **302.9.3 Determining factors.** The board may suspend a person's ability to secure permits to perform work at one or more locations for a definite time period not to exceed two years if, based on the evidence presented at the hearing, it determines that:
 - 1. the person or person's agent has knowingly provided false or incorrect information on previous applications for permits;
 - 2. the person or person's agent has failed to make reasonable and continuous progress to complete work authorized by an existing or previous permit; [of]
 - 3. the person or person's agent has been grossly negligent in the performance of work authorized by an existing or previous permit;
 - 4. the person or person's agent failed to secure permits prior to commencement of work necessitating such permit;
 - 5. the person or person's agent failed to request all inspections as may be established by Section 304;
 - 6. the person or person's agent failed to provide the building official accurate revisions of registration information, including any change of address, email address, or telephone number and/or licensees.
- **302.9.4 Reinstatement fee.** A person whose ability to secure permits has been suspended under this section shall pay a nonrefundable reinstatement fee before that person may apply for any new permits after the period of suspension expires. The amount of the reinstatement fee may not exceed the administrative costs incurred by the city to effect the suspension."

SECTION 13. That Subsection 303.1, "General," of Section 303, "Fees," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"303.1 General. Fees required for permits and related activities under this chapter and the codes shall be assessed in accordance with this section. <u>Unless otherwise authorized by the building</u> official, applicable fees shall be paid upon the application for a permit."

SECTION 14. That Paragraph 303.5.1, "Plan Reviews," of Subsection 303.5, "Other Fees," of Section 303, "Fees," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"303.5.1 Plan reviews.

303.5.1.1 Plans check. In addition to any plan review fees required under Sections 303.5.1.2, 303.5.1.3, 303.5.1.4, 303.5.1.5, [ef] 303.5.1.6, or 303.5.1.7, a nonrefundable plans check fee of \$0.012 for each square foot of building area or \$150.00, whichever is greater, shall be paid upon application for any permit for which the building inspection division performs a plans check. After plans have been reviewed and a permit issued, a plans check addendum fee of \$25.00 an hour shall be paid for each substitution or addition to the plans that requires a separate review.

303.5.1.2 Fire sprinkler plans. In addition to any plan review fees required under Sections 303.5.1.1, 303.5.1.3, 303.5.1.4, 303.5.1.5, [ex] 303.5.1.6, or 303.5.1.7, a nonrefundable fire or sprinkler plan review fee of \$0.008 for each square foot of sprinklered building area or \$150.00, whichever is greater, shall be paid upon application for any permit for which the building inspection division performs a review of fire sprinkler plans that involve the installation of a new fire sprinkler system, the addition of 20 or more sprinkler heads to an existing fire sprinkler system, or the removal or relocation of 100 or more sprinkler heads in an existing fire sprinkler system.

303.5.1.3 Site plans. In addition to any plan review fees required under Sections 303.5.1.1, 303.5.1.2, 303.5.1.4, 303.5.1.5, [ex] 303.5.1.6, or 303.5.1.7, a nonrefundable site plan review fee of \$0.004 for each square foot of building area or area to be paved or graded, or \$50.00, whichever is greater, shall be paid for each site plan reviewed by the building inspection division.

303.5.1.4 Plan review fees for fire alarm systems. In addition to any plan review fees required under Sections 303.5.1.1, 303.5.1.2, 303.5.1.3, 303.5.1.5, [ex] 303.5.1.6, or

- <u>303.5.1.7</u>, plans for fire alarm systems shall be accompanied by a nonrefundable review fee based on the following:
 - 1. \$75 for each fire alarm system, per building, with 10 or fewer alarm initiating devices or signaling devices.
 - 2. \$100 for each fire alarm system, per building, with 11 to 25 alarm initiating devices or signaling devices.
 - 3. \$150 for each fire alarm system, per building, with 26 to 150 alarm initiating devices or signaling devices.
 - 4. \$300 for each fire alarm system, per building, with more than 150 alarm initiating devices or signaling devices.
 - 303.5.1.4.1 Resubmittal fees involving approved fire alarm plans. Any resubmittal of approved plans must pay a new plan review fee based on the total number of new or changed alarm initiating or signaling devices. The cause for resubmittal may be due to, but not limited to, architectural, field, construction, or contractor changes.
 - 303.5.1.4.2 Resubmittal fees involving denied fire alarm plans. If the city denies a fire alarm permit, the first resubmittal of the denied plans is free. Each subsequent resubmittal of denied plans must pay ½ of the original plan review submittal fee.
- **303.5.1.5 Irrigation permit fee.** In addition to any plan review fees required under Sections 303.5.1.1, 303.5.1.2, 303.5.1.3, 303.5.1.4, [ef] 303.5.1.6, or 303.5.1.7, a fee of \$120.00 shall be paid for review of the irrigation system design and required inspections per Title 30, *Texas Administrative Code* Chapter 344, Rules of Landscape Irrigation.
- **303.5.1.6 Other plan review fees.** In addition to any plan review fees required under Sections 303.5.1.1, 303.5.1.2, 303.5.1.3, 303.5.1.4, [ef] 303.5.1.5, or 303.5.1.7, a fee of \$150.00 shall be paid for review of underground firelines, dry chemical systems, gaseous systems, and the review of any other miscellaneous systems.
- 303.5.1.7 Health plan review fees. In addition to any plan review fees required under Sections 303.5.1.1, 303.5.1.2, 303.5.1.3, 303.5.1.4, 303.5.1.5, or 303.5.1.6, a nonrefundable plans check fee of \$200.00 shall be paid upon application for any permit for which the building inspection division performs a health plans review."

SECTION 15. That Paragraph 303.5.7, "Reinspection Fee," of Subsection 303.5, "Other Fees," of Section 303, "Fees," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"303.5.7 Reinspection fee. A reinspection fee will be assessed for each inspection or reinspection when the portion for which inspection is called is not complete, when corrections called for are not made, or when access to perform the inspection is not provided. The fee is \$75.00 for each reinspection. No fee is required for reinspection of work that is rejected the first time for failure to comply with the codes. A fee of \$75.00 may be charged for, but not limited to, the following reasons:

- 1. the inspection called for is not ready when the inspector arrives;
- 2. no building address or permit card is clearly posted;
- 3. city approved plans are not on the job site available to the inspector;
- 4. the building is locked or work otherwise not available for inspection when called;
- 5. the job site is red-tagged twice for the same item;
- 6. the original red tag has been removed from the job site; or
- 7. failure to maintain erosion control, trash control, or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site."

SECTION 16. That Paragraph 303.5.18, "Fee for Appeal to the Advisory, Examining, and Appeals Board," of Subsection 303.5, "Other Fees," of Section 303, "Fees," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"303.5.18 Fee for appeal to the advisory, examining, and appeals board. A nonrefundable fee of \$600.00 must be paid when filing an appeal to or requesting any other decision by the advisory, examining, and appeals board."

SECTION 17. That Subsection 303.7, "Beginning Work without a Permit," of Section 303, "Fees," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows: "303.7 [Beginning w] Work without a permit.

303.7.1 Investigation. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special investigation shall be made before a

permit may be issued for such work.

303.7.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this chapter or the codes nor from penalty prescribed by law.

303.7.3 Stop work order. Whenever any work is being done contrary to the provisions of the codes, the building official may order the work stopped by written notice served on any persons engaged in the doing or causing such work to be done. No work may proceed until:

- 1. the building official authorizes the work to proceed; or
- 2. an appeal is perfected before the Building Inspection Advisory, Examining, and Appeals Board resolving the stop work order, or a finding that there is no cause for the continuation of the stop work order.

[If work for which a permit is required by this chapter or the codes is started prior to obtaining a permit, the fee specified shall be doubled. The payment of a doubled fee does not relieve a person from fully complying with the requirements of the codes in the execution of work nor from other penalties prescribed in this chapter or the codes. An inspector is empowered to stop work that has been started without a permit having been obtained in violation of this chapter or the codes and to order any and all persons engaged in the work to stop and desist until every required permit is obtained. This action does not relieve a person from other penalties which may be applicable under this chapter or the codes.]"

SECTION 18. That Subsection 304.1, "General," of Section 304, "Inspections," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"304.1 General.

- **304.1.1** Work subject to inspection. All construction or work for which a permit is required shall be subject to inspection by the building official and shall remain accessible and exposed for inspection purposes until approved by the building official. In addition, certain types of construction must have continuous inspection as specified in Section 305 of this chapter.
- **304.1.2** Violation of city code or ordinance. Approval as a result of an inspection shall not be construed as approval of a violation of any provision of the codes or another city ordinance. Any inspection presuming to give authority to violate or cancel any provision of the codes or another ordinance is not valid.
- **304.1.3 Duty of permit applicant.** It is the duty of the permit applicant to cause the work to

remain accessible and exposed for inspection purposes. Neither the building official nor the city shall be liable for any expense entailed in the removal or replacement of any material required to allow inspection.

- 304.1.3.1 City approved plans. The city approved plans, as required by this code, shall be available on the job site at the time of inspection.
- 304.1.3.2 Manufacturer's installation instructions. Manufacturer's or industrialized builder's installation instructions, as required by this code, shall be available on the job site at the time of inspection.
- **304.1.4 Lot survey.** A survey of the lot <u>and its improvements</u> may be required by the building official to verify that the structure <u>and any of its components are</u> [is] located in accordance with the approved plans."

SECTION 19. That Subsection 304.4, "Approval Required," of Section 304, "Inspections," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"304.4 Approval required. No work shall be done on any part of the structure or premises beyond the point indicated in each successive inspection without first obtaining the written approval of the building official. The building official, upon notification, shall make a requested inspection and shall either indicate that the portion of the construction being inspected is satisfactory as completed or notify the permit holder or the permit holder's agent how the construction fails to comply with the codes. Any portion that does not comply with the codes must be corrected and must not be covered or concealed until authorized by the building official. There shall be a final inspection and approval of every structure or portion of a structure when completed and prior to occupancy and use, and after demolition work has been completed.

[304.4.1 Water heater replacement. On single-family and duplex properties where the responsible master plumber finds the water heater installation to be in conformity with the Dallas Plumbing Code, the responsible master plumber may provide a certificate of compliance to the plumbing inspector in lieu of an inspection. Installation of the water heater will receive a green tag once the form has been received by the plumbing inspector.

304.4.1.1 Plumbing code compliance. The chief plumbing code administrator shall determine whether a plumbing installation complies with the *Dallas Plumbing Code*.

304.4.2 Reroofing. On single family and duplex properties where a registered contractor with a current home repair license finds the reroofing installation to be in conformity with the Dallas Energy Conservation Code and either the Dallas Building Code, the Dallas One- and Two Family Dwelling Code, or the Dallas Existing Building Code, as applicable, the registered contractor may provide the building official with a certificate of compliance in lieu

of an inspection. The installation will receive a green tag once the form and a landfill receipt has been received by the building official.

304.4.2.1 Building code compliance. The chief building code administrator shall determine whether a reroofing installation complies with the Dallas Energy Conservation Code and either the Dallas Building Code, the Dallas One and Two Family Dwelling Code, or the Dallas Existing Building Code, as applicable.]"

SECTION 20. That Paragraph 306.3.1, "Application Requirements," of Subsection 306.3, "Application for a Certificate of Occupancy," of Section 306, "Certificate of Occupancy," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

- "306.3.1 Application requirements. A person seeking a certificate of occupancy shall submit an application to the building official on a form approved by the building official. The application must include the following information:
 - 1. The [name and] address of the use or occupancy.
 - 2. The name (DBA) of the proposed use or occupancy.
 - 3. The name, address, email address, and telephone number of the owner of the structure and land.
 - 4[3]. The name, address, <u>email address</u>, and telephone number of the operator (<u>tenant</u>) of the use or occupancy.
 - 5. The name, address, e-mail address, and telephone number of the applicant if different than the operator or tenant.
 - 6[4]. A description of the use or occupancy that will be operated.
 - <u>7[5]</u>. Any other information, plans, diagrams, computations, specifications, or other data or supporting documents the building official deems necessary, including an affidavit containing a detailed description of the use or occupancy that will be operated, the goods or services offered or produced, the hours of operation, and whether a city, county, state, or federal license, permit, or registration is required to operate the use or occupancy."

SECTION 21. That Paragraph 306.4.2, "Application Not Submitted in Conjunction with an Application for a Construction Permit," of Subsection 306.4, "Expiration of Application," of

Section 306, "Certificate of Occupancy," of Subchapter 3, "Permits and Inspections," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

- "306.4.2 Application not submitted in conjunction with an application for a construction permit. An application for a certificate of occupancy that is not submitted in conjunction with an application for a construction permit shall expire and be void *ab initio* if:
 - 1. no inspection is requested by the applicant before the 120th day after the date of its release for inspections [filing] unless one or more extensions are granted under Subsection 306.4.3, in which case the application shall be void *ab initio* if no inspection is requested by the applicant during the extended time period(s);
 - 2. no action is taken by the applicant before the 30th day after the building official gives the applicant written notice that additional information, plans, diagrams, computations, specifications, or other data or supporting documents are necessary for issuance of the certificate of occupancy; or
 - 3. no action is taken by the applicant before the 30th day after the building official gives the applicant written notice that corrections and a reinspection are necessary for issuance of the certificate of occupancy."

SECTION 22. That Section 1001, "Purpose; Administration; Phases," of Subchapter 10, "Green Building Program," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"SECTION 1001 PURPOSE; ADMINISTRATION; COMPLIANCE [PHASES]

- 1001.1 Purpose. The purpose of the green building program is to reduce the use of natural resources, create healthier and more sustainable living environments, and minimize the negative environmental impacts of development in Dallas and the North Texas region. The program addresses all new residential and commercial buildings within the city.
- 1001.2 Administration. The green building program is administered by the division of building inspection.
- 1001.3 Compliance. [Phases. The green building program consists of two phases.
 - 1001.3.1 Phase 1. Phase 1 becomes effective October 1, 2009, and includes requirements for energy efficiency, water conservation, and cool roofs for proposed projects affecting less than 50,000 square feet of floor area in a single 12 month period. Proposed projects

affecting 50,000 or more square feet of floor area in a single 12 month period must meet the requirements of Section 4303.4 of the Dallas Building Code.

1001.3.2 Phase 2 becomes effective October 1, 2013. Phase 2 applies to all proposed projects.] Proposed projects must:

- 1. Comply with the minimum requirements of the Dallas Green Construction Code;
- 2. Be LEED-certifiable:
- 3. Be Green Built Texas-certifiable; or
- 4. Be certifiable under an equivalent green building standard."

SECTION 23. That Subsection 1002.1, "One- and Two-Family Dwellings," of Section 1002, "Program Requirements," of Subchapter 10, "Green Building Program," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"1002.1 One- and two-family dwellings. Proposed projects must comply with the requirements in Section 328[6] of the Dallas One- and Two-Family Dwelling Code."

SECTION 24. That Section 1003, "Expedited Plan Review," of Subchapter 10, "Green Building Program," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"SECTION 1003

RESERVED. [EXPEDITED PLAN REVIEW.

1003.1 Expedited plan review of green building projects. An expedited plan review is available for proposed projects that meet the requirements of Sections 1003.1.1 and 1003.1.2. An applicant is not required to register a proposed project with the LEED or Green Built Texas programs to receive an expedited plan review.

1003.1.1 Phase 1. In order to receive an expedited plan review, an applicant must provide a checklist from LEED, Green Built Texas, or another approved green building standard demonstrating the proposed project is eligible to obtain certification under the selected standard.

1003.1.2 Phase 2. In order to receive an expedited plan review, an applicant must provide a checklist demonstrating the project:

- 1. Complies with the minimum requirements of the 2012 International Green Construction Code or ANSI/ASHRAE/USGBC/IES Standard 189.1-2011; or
- 2. Is eligible to obtain a LEED silver or higher certification, or an equivalent certification under another approved green building standard.]"

SECTION 25. That Subsection 1101.1, "Definitions," of Section 1101, "Contractors Defined," of Subchapter 11, "Registration of Miscellaneous Contractors," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"1101.1 Definitions. In this subchapter, "contractor" means:

COMMERCIAL GENERAL CONTRACTOR means a person engaged in the business of constructing a commercial structure, building, or other improvement for the owner or developer and who retains a construction labor force or uses subcontractors.

CONCRETE/ASPHALT/PAVING CONTRACTOR means a person engaged in the business of grout and shotcrete work; constructing or paving streets, highways, and public sidewalks; concrete sealing, coating, waterproofing, or damp proofing; and paving residential driveways, commercial parking lots, and other private parking areas.

DEMOLITION CONTRACTOR means a person engaged in the business of site preparation, such as excavating and grading, demolition of buildings and other structures, earth moving, and land clearing for all types of sites (e.g., building, nonbuilding, mining). This includes blasting, building demolition, foundation digging (i.e., excavation), concrete breaking and cutting for demolition, foundation drilling, and trenching.

ENERGY CODE PROVIDER means a person not employed by the city of Dallas and engaged in the business of reviewing plans or making inspections for verification of compliance with the *Dallas Energy Conservation Code* and reporting such compliance to the building official.

FENCE CONTRACTOR means a person engaged in the business of constructing, erecting, altering, and repairing metal or wooden fences, walls, corrals, runs, nailings, cribs, game court enclosures, guard rails and barriers, playground game equipment, backstops, posts, flagpoles, and gates, excluding masonry walls.

FOUNDATION CONTRACTOR means a person engaged in the business of pouring and finishing concrete foundations and structural elements. This also includes grout and shotcrete

work, concrete pouring and finishing, concrete pumping (i.e., placement), and mud-jacking, and includes gunite contractors and footing and foundation concrete contractors.

GAS WELL CONTRACTOR means a person engaged in the business of drilling, installing, or repairing gas wells and pumps by boring, drilling, excavating, casing, cementing, or any other method.

GAS WELL PROVIDER means a person not employed by the city of Dallas and is engaged in the business of reviewing plans or making inspections for verification of compliance with the Dallas Development Code and reporting such compliance to the building official.

GREEN BUILDING PROVIDER means a person not employed by the city of Dallas and engaged in the business of reviewing plans or making inspections for verification of compliance with the green building program and reporting such compliance to the building official.

LANDSCAPE CONTRACTOR means a person that is engaged in the business of constructing, maintaining, repairing, installing, or subcontracting the development of landscape systems and facilities. A landscape contractor prepares and grades plots and areas of land for the installation of any architectural, horticultural, and decorative treatment or arrangement.

POOL CONTRACTOR means a person engaged in the business of constructing swimming pools, spas, or hot tubs, including installation of solar heating equipment using those trades or skills necessary for such construction.

RESIDENTIAL GENERAL CONTRACTOR means a person <u>engaged in the business of</u> [who] constructing[s] residential structures, buildings, or other improvements on property that is not the contractor's homestead.

ROOF CONTRACTOR means a person engaged in the business of installing and repairing products and surfaces that seal, waterproof, and weatherproof structures. This work is performed to prevent water or its derivatives, compounds, or solids from penetrating such protection and gaining access to material or space beyond. In the course of this work, the contractor examines and/or prepares surfaces and uses the following material: asphaltum, pitch, tar, felt, glass fabric, urethane foam, metal roofing systems, flax, shakes, shingles, roof tile, slate, or any other roofing, waterproofing, or membrane materials or a combination thereof.

SIGN CONTRACTOR means a person engaged in the business of constructing, erecting, altering, and repairing non-electrical signs.

[TREE SERVICE CONTRACTOR means a person engaged in the business of tree service work that includes cutting, trimming, pruning, removing, grinding, or otherwise modifying established trees in accordance with the ANSI A300 Standard Practice for Trees, Shrubs, and Other Woody Plant Maintenance and the ANSI Z-133.1 Safety Standards.]"

SECTION 26. That Subsection 1102.1, "General," of Section 1102, "Registration Required," of Subchapter 11, "Registration of Miscellaneous Contractors," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"1102.1 General. It is unlawful for any person, firm, or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, or demolish any building, sign, or structure in the city, or cause the same to be done, unless such person, firm, or corporation is the holder of a valid registration with the city to perform such work. Such person, firm, or corporation shall be referred to as "registrant." A contractor listed in Section 1101 who is not registered by the city may not obtain any permit required by this chapter for work defined in Section 1101. In extending the rights and privileges of such registration, the city makes no statement of the technical competency of those so registered, and no manner of license is proffered.

1102.1.1 Exemption for homeowner. A homeowner's registration is required for work to be performed on an existing structure when the person performing the work is the owner of the structure who resides therein as his homestead, and is not assisted by any other person for remuneration. The homeowner shall be termed a "registrant" for the purposes of such a project after proper registration. All requirements for permits for the work and all other applicable provisions of the Dallas Construction Codes shall remain in force."

SECTION 27. That Subsection 1103.1, "General," of Section 1103, "Application for Registration," of Subchapter 11, "Registration of Miscellaneous Contractors," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"1103.1 General. To register with the city as a contractor listed in Section 1101 to perform work described in Section 1101, a person shall apply to the building inspection division in writing on forms furnished for that purpose. The contractor may apply in person or send an agent to apply on behalf of the contractor. The application must include:

- 1. If the registrant is a firm or corporation, t[T]he [contractor's] name, mailing [local] address, email address, and telephone number of the firm or corporation;
- 2. The name, <u>mailing [local]</u> address, <u>email address</u>, and telephone number of <u>the contractor</u> <u>or</u> the contractor's agent who applies on behalf of the contractor, if applicable;
- 3. If the registrant is a firm or corporation, the name, mailing address, and e-mail address of a responsible person of the firm or corporation who is a person authorized to bind the firm or corporation in legal agreements;

- 4. If the registrant is an individual, the name, mailing address, e-mail address, and telephone number of the individual;
- 5. Any other information that may reasonably be required to properly identify the contractor or the contractor's agent; and
- <u>6</u>[4]. The name, address, and telephone number of the contractor's place of business.

1103.1.1 Residential contractor. Except as provided in Section 50-135 of the *Dallas City Code*, to register or renew a registration with the city, residential contractors whose work includes any remodeling or additions to a single-family or duplex structure must have a current home repair license issued under Chapter 50 of the *Dallas City Code*."

SECTION 28. That Subsection 1106.2, "Appeal," of Section 1106, "Suspension; Revocation," of Subchapter 11, "Registration of Miscellaneous Contractors," of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code is amended to read as follows:

"1106.2 Appeal. The contractor may appeal the decision of the building official to the advisory, examining, and appeals board. The appeal's process shall be in accordance with Section 302.9."

SECTION 29. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 30. That Chapter 52 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a

requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 31. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 32. That this ordinance shall take effect [30 days after passage] in accordance with the Charter of the City of Dallas, and it is accordingly so ordained.

Passed	
Assistan	t City Attorney
Ву	
LARRY E. CASTO), City Attorney
APPROVED AS TO	O FORM:

ORDINANCE NO.	

An ordinance amending Chapter 53, "Dallas Building Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of the International Building Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, demolition, use, and maintenance of construction work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 53, "Dallas Building Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Building Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

- 1. Page xix, "Legislation," is deleted.
- 2. Chapter 1, "Scope and Administration," of the 2015 International Building Code is deleted and replaced with a new Chapter 1, "Scope and Administration," to read as follows:

"CHAPTER 1 SCOPE AND ADMINISTRATION

SECTION 101 GENERAL

101.1 Title. These regulations shall be known as the *Dallas Building Code*, hereinafter referred to as "this code"

101.2 Administrative procedures. Except as otherwise specified in this chapter, all provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to this code."

3. That Subsection 201.3, "Terms Defined in Other Codes," of Section 201, "General," of Chapter 2, "Definitions," of the 2015 International Building Code is amended to read as follows:

"201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the <u>Dallas</u> [International] Energy Conservation Code, <u>Dallas</u> [International] Fuel Gas Code, <u>Dallas</u> [International] Fire Code, <u>Dallas</u> [International] Mechanical Code, [of] <u>Dallas</u> [International] Plumbing Code or Chapter 52, "Administrative Procedures for the Construction Codes," of the <u>Dallas City Code</u>, as amended, such terms shall have the meanings ascribed to them as in those codes."

4. Section 202, "Definitions," of Chapter 2, "Definitions," of the 2015 International Building Code is amended by alphabetically adding or amending the following definitions to read as follows:

"AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered *incapable of self-preservation* by the services provided. This group may include, but is not limited to, the following:

Colonic centers
Dialysis centers
Psychiatric centers
Sedation dentistry
Surgery centers

ASSISTED LIVING FACILITY. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services.

ATRIUM. An opening connecting three [two] or more stories other than enclosed stairways, elevators, hoistways, escalators, plumbing, electrical, air-conditioning or other equipment, which is closed at the top and not defined as a mall. Stories, as used in this definition, do not include balconies within assembly groups or mezzanines that comply with Section 505.

CODE OFFICIAL. The building official.

CONVENIENCE STAIRS. Private circular stairs, other than a required exit, within a single tenant space and complying with Section 1011.9, Exception 2. Other stairs may also be considered convenience stairs if they are not required as exits and comply with all other applicable provisions of this code.

EXPOSURE, (Fire). The surrounding location at a fire incident that may be vulnerable to the fire itself. It includes effects from flames, radiant heat flux, convection currents, flying brands, runoff, or exposure to the harmful effects of combustion gases or smoke. The size and range of a fire exposure depends on the severity of the fire causing the exposure.

EXPOSURE PROTECTION. A fire protection measure afforded to locations vulnerable to adjacent fire hazards (radiant heat, convection currents, flying brands, explosion effects or exposure to the harmful effects of combustion gases). Exposure protection may be in the form of active (water sprays) or passive (separation distances, fireproofing) fire protection measures. The term fire-resistive is the preferred term in the construction codes. A properly installed and approved fire-resistive assembly may always be considered to provide exposure protection but all types of exposure protection are not equivalent to a fire-resistive assembly.

EXTERIOR WALL COVERING. A material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather-resisting barrier, insulation or for aesthetics, including but not limited to, veneers, siding, exterior insulation and finish systems, architectural trim and embellishments such as cornices, soffits, facias, gutters and leaders. For the purpose of Chapter 14, exterior wall coverings of Group R means the surfaces of walls and ceilings that are above, below, alongside or adjacent to exterior exitways, exterior stairs or exterior balconies. Except for dwellings that are detached and freestanding, exterior wall covering finish requirements apply to all surfaces within 10 feet (3048 mm), measured vertically or horizontally in any direction of any exterior exitway, exterior stair or exterior balcony. Group R railings and balustrades are included in this definition.

FIRE AREA, BUILDING. The aggregate floor area of all stories enclosed and bounded by fire walls or exterior walls of a building. Areas of the building not provided with surrounding walls must be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above."

FIRE AREA, OCCUPANCY. The aggregate floor area enclosed and bounded by *fire walls*, *fire barriers*, *exterior walls* or *horizontal assemblies* of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

FIREPROOF. Common trade name for materials used to provide resistance to a fire exposure. Essentially nothing is fireproof, but some materials are resistant to the effects of a fire (heat, flame, etc.) for limited periods. Independent testing agencies such as UL and NIST test submitted materials for a standard fire test exposure for fireproof ratings. NFPA recommends the term fire resistive in place of fireproof.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified standby personnel when required by the fire chief, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FRENCH DOORS. Double doors, sometimes called double-hinged patio doors, that provide access from a dwelling interior to the exterior in which each of the two doors are hinged and closable so that the edge of one door closes immediately adjacent to the edge of the other door with no partition between the doors. A French door is either one of the two doors.

HIGH-RISE BUILDING. A building <u>having floors used for human occupancy</u> [with an occupied floor] located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

KEYED DEAD BOLT. A door lock that is not in the doorknob, that locks by a bolt in the doorjamb, that has a bolt with at least a 1 inch throw if installed after September 1, 1993, and that is operated from the exterior by a key, card or combination and operated from the interior by a knob or level without a key, card or combination. The term includes a doorknob lock that contains a bolt with at least a 1 inch throw.

KEYLESS DEAD BOLT. A door lock not in the doorknob that locks:

- 1. with a bolt with a 1 inch throw into a strike plate screwed into the portion of the doorjamb surface that faces the edge of the door when the door is closed or into a metal doorjamb that serves as the strike plate, operable only by knob or lever from the door's interior and not in any manner from the door's exterior, and that is commonly known as a keyless dead bolt;
- 2. by a drop bolt system operated by placing a central metal plate over a metal doorjamb restraint which protrudes from the doorjamb and which is affixed to the doorjamb frame by means of three case-hardened screws at least 3 inches in length. One half of the central plate must overlap the interior surface of the door and the other half of the central plate must overlap the doorjamb when the plate is placed over the doorjamb restraint. The drop bolt system must prevent the door from being opened unless the central plate is lifted off the doorjamb restraint by a person who is on the interior side of the door; or
- 3. by a metal bar or metal tube that is placed across the entire interior side of the door and secured in place at each end of the bar or tube by heavy-duty metal screw hooks. The screw hooks must be at least 3 inches in length and must be screwed into the door frame stud or wall stud on each side of the door. The bar or tube must be capable of being secured to both of the screw hooks and must be permanently attached in some way to the door frame stud or wall stud. When secured to the screw hooks, the bar or tube must prevent the door from being opened unless the bar or tube is removed by a person who is on the interior side of the door. The term does not include a chain latch, flip latch,

surface-mounted slide bolt, mortise door bolt, surface-mounted barrel bolt, surface-mounted swing bar door guard, spring-loaded night latch, foot bolt or other lock or latch.

POOL. Any man made permanently installed or non-portable structure, basin, chamber or tank containing an artificial body of water that is used for swimming, diving, aquatic sports or other aquatic activity other than a *residential pool* and that is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use. The pool may be either publicly or privately owned. The term does not include a spa or a decorative fountain that is not used as a pool or pools with depths of 18 inches or less. References within the standard to various types of pools are defined by the following categories:

- 1. Class A pool—Any pool used with or without a fee, for accredited competitive aquatic events such as Federation Internationale De Natation Amateur (FINA), United States Swimming, United States Diving, National Collegiate Athletic Association (NCAA) or National Federation of State High School Associations (NFSHSA) events. A class A pool may also be used for recreation.
- 2. Class B pool—Any pool used for public recreation and open to the general public with or without a fee.
- 3. Class C pool—Any pool operated for and in conjunction with:
 - 1.1. Lodging such as hotels, motels, apartments, condominiums or mobile home parks;
 - 1.2. Property owners' associations, private organizations or clubs; or
 - 1.3. A school, college or university while being operated for academic or continuing education classes.

The use of such a pool would be open to occupants, members or students and their guests, but not open to the general public.

2. Class D pool—A wading pool with a maximum water depth of 24 inches at any point.

POOL YARD OR SPA YARD. An area that has a *pool or spa yard enclosure* and that contains a *pool* or *spa*.

POOL YARD OR SPA YARD ENCLOSURE. A fence, wall or combination of fences, walls, gates, windows or doors that completely surround a pool or spa.

POOLS, STATE LAW. Refers to 25 Texas Administrative Code, Chapter 265, Subchapter L, "Standards for Swimming Pools and Spas," which went into effect on September 1, 2004 (except Section 265.190, "Suction Outlets and Return Inlets at Post-10/01/99 and Pre-10/01/99 Pools and Spas," which had an effective date of January 1, 2005).

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PREMISES. A lot or unplatted tract of land that is reflected in the plat books of the building inspection division of the city. Refer to Section 51-4.601 or Section 51A-4.601 of the Dallas Development Code.

PUBLIC POOL OR SPA. See the definition of Pool.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

RESIDENTIAL POOL OR SPA. A pool or spa that is located on private property under the control of the property owner or the owner's tenant and that is intended for use by not more than two resident families or their guests. It includes a pool or spa serving only a single-family home or a duplex.

SPA. A constructed permanent or portable structure that is 2 feet or more in depth and that has a surface area of 250 square feet or less or a volume of 3,250 gallons or less and that is intended to be used for bathing or other recreational uses and is not drained and refilled after each use. It may include, but is not limited to, hydrojet circulation, hot water, cold water, mineral baths, air induction bubbles or any combination thereof. A spa as referred to in this code is not a business establishment such as a day spa or health spa. Industry terminology for a spa includes, but is not limited to, "hydrotherapy pool," "whirlpool," "hot spa," hot tub," etc. A spa does not include a residential spa.

[BS] SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the responsible registered design professional of record and [approved by] the building official as having the competence necessary to inspect a particular type of construction requiring special inspection.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the fire chief. When utilized, the number required shall be as directed by the fire chief.

TYPE C UNIT, FHA. A dwelling unit designed and constructed to be adaptable in accordance with the Fair Housing Act Design Manual—1996 (updated 1998)."

- 5. Paragraph 303.1.3, "Associated with Group E Occupancies," of Subsection 303.1, "Assembly Group A," of Section 303, "Assembly Group A," of Chapter 3, "Use and Occupancy Classification," of the 2015 International Building Code is amended to read as follows:
 - "303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy except when applying the assembly requirements of Chapters 10 and 11."
- 6. Subsection 304.1, "Business Group B," of Section 304, "Business Group B," of Chapter 3, "Use and Occupancy Classification," of the 2015 International Building Code is amended to read as follows:
- "304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers

Ambulatory care facilities

Animal hospitals, kennels and pounds

Ranks

Barber and beauty shops

Car wash

Civic administration

Clinic, outpatient

Dry cleaning and laundries: pick-up and delivery stations and self-service

Educational occupancies for students above the 12th grade

Electronic data processing

Fire stations

Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities not more than 2,500 square feet (232 m²) in area.

Laboratories: testing and research

Motor vehicle showrooms

Police stations with detention facilities for five or less

Post offices

Print shops

Professional services (architects, attorneys, dentists, physicians, engineers, etc.)

Radio and television stations

Telephone exchanges

Training and skill development not in a school or academic program (this shall include, but not be limited to, tutoring centers, martial arts studios, gymnastics and similar uses regardless of the ages served, and where not classified as a Group A occupancy)."

7. Subsection [F] 307.1, "High-Hazard Group H," of Section 307, "High-Hazard Group H," of Chapter 3, "Use and Occupancy Classification," of the 2015 International Building Code is amended to read as follows:

"[F] 307.1 High-hazard Group H. High-hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in *control areas* complying with Section 414, based on the maximum allowable quantity limits for *control areas* set for in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the <u>Dallas</u> [International] Fire Code. Hazardous materials stored, or used on top of roofs or canopies shall be classified as outdoor storage or use and shall comply with the <u>Dallas</u> [International] Fire Code.

[F] 307.1.1 Uses other than Group H. An occupancy that stores, uses or handles hazardous materials as described in one or more of the following items shall not be classified as Group H, but shall be classified as the occupancy that it most nearly resembles.

- 1. Buildings and structure occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 of the <u>Dallas</u> [International] Fire Code.
- 2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the <u>Dallas</u> [International] Fire Code.
- 3. Closed piping system containing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.
- 4. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher in closed systems employing equipment *listed* by an approved testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour fire barriers constructed in accordance with Section 707 or 1-hour horizontal assemblies constructed in accordance with Section 711, or both. See also Chapter 12 of the Dallas Fire Code.
- 5. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).
- 6. Liquor stores and distributors without bulk storage.

- 7. Refrigeration systems.
- 8. The storage or utilization of materials for agricultural purposes on the premises.
- 9. Stationary batteries utilized for facility emergency power, uninterruptable power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and *ventilation* is provided in accordance with the <u>Dallas</u> [International] Mechanical Code.
- 10. Corrosive personal or household products in their original packaging used in retail display.
- 11. Commonly used corrosive building materials.
- 12. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the <u>Dallas</u> [International] Fire Code.
- 13. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per *control area* in Group M or S occupancies complying with Section 414.2.5.
- 14. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the <u>Dallas</u> [International] Fire Code.
- [F] 307.1.2 Hazardous materials. Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the <u>Dallas</u> [International] Fire Code."
- 8. Paragraph 310.5.1, "Care Facilities Within a Dwelling," of Subsection 310.5, "Residential Group R-3," of Section 310, "Residential Group R," of Chapter 3, "Use and Occupancy Classification," of the 2015 International Building Code is amended to read as follows:
 - "310.5.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the Dallas One- and Two-Family Dwelling [International Residential] Code provided an

automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the <u>Dallas One- and Two-Family Dwelling</u> [International Residential] Code.

Exception: A facility equivalent to a dwelling unit and which complies with Section 903.2.13 may omit the sprinkler system."

- 9. Paragraph 310.5.2, "Lodging Houses," of Subsection 310.5, "Residential Group R-3," of Section 310, "Residential Group R," of Chapter 3, "Use and Occupancy Classification," of the 2015 International Building Code is amended to read as follows:
 - "310.5.2 Lodging houses. Owner-occupied lodging houses with five or fewer guest rooms shall be permitted to be constructed in accordance with the <u>Dallas One- and Two-Family Dwelling [International Residential]</u> Code."
- 10. Subsection [F] 402.5, "Automatic Sprinkler System," of Section 402, "Covered Mall and Open Mall Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "[F] 402.5 Automatic sprinkler system. Covered and open mall buildings and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with all of the following:
 - 1. The automatic sprinkler system shall be complete and operative throughout occupied space in the mall building prior to occupancy of any of the tenant spaces. Unoccupied, but used tenant spaces shall be similarly protected unless provided with approved alternative protection. Protection of unoccupied and unused tenant spaces shall be subject to the approval of the building official and the fire marshal.
 - 2. Sprinkler protection for the *mall* of a covered mall building shall be independent from that provided for tenant spaces or anchor buildings.
 - 3. Sprinkler protection for the tenant spaces of an *open mall building* shall be independent from that provided for *anchor buildings*.
 - 4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an *open mall*.
 - 5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

Exception: An automatic sprinkler system shall not be required in spaces or areas of open parking garages separated from the covered or open mall building in accordance with Section 402.4.2.3 and constructed in accordance with Section 406.5."

- 11. Paragraph [F] 402.7.3, "Emergency Power," of Subsection [F] 402.7, "Emergency Systems," of Section 402, "Covered Mall and Open Mall Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is deleted.
- 12. Subsection 403.1, "Applicability," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:

"403.1 Applicability. High-rise buildings shall comply with Sections 403.2 through 403.6.

Exception: The provisions of Sections 403.2 through 403.6 shall not apply to the following buildings and structures:

- 1. Airport traffic control towers in accordance with Section 412.3.
- 2. Open parking garages in accordance with Section 406.5 if the open parking garage is used exclusively for the parking or storage of private passenger motor vehicles or if all other occupancies are located on the ground level tier only.
- 3. Open air [The] portions of [a] buildings containing a Group A-5 occupancy in accordance with Section 303.6. This exception does not apply to enclosed concourses or accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.
- 4. Special industrial occupancies in accordance with Section 503.1.1.
- 5. Buildings with:
 - 5.1. A Group H-1 occupancy;
 - 5.2. A Group H-2 occupancy in accordance with Section 415.8, 415.9.2, 415.9.3 or 426.1; or,
 - 5.3. A Group H-3 occupancy in accordance with Section 415.8."

- 13. Subsection [F] 403.3, "Automatic Sprinkler System," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "[F] 403.3 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 403.3.3.

Exception: An automatic sprinkler system shall not be required in spaces or areas of [:

- 1.] $o[\Theta]$ pen parking garages in accordance with Section 406.5.
- [2. Telecommunications equipment buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1 hour fire barriers constructed in accordance with Section 707 or not less than 2 hour horizontal assemblies constructed in accordance with Section 711, or both.]
- **[F] 403.3.1 Number of sprinkler risers and system design.** Each sprinkler system zone in buildings that are more than 420 feet (128 000 mm) in *building height* shall be supplied by no fewer than two risers. Each riser shall supply sprinklers on alternate floors. If more than two risers are provided for a zone, sprinklers on adjacent floors shall not be supplied from the same riser.
 - [F] 403.3.1.1 Riser location. Sprinkler risers shall be placed in *interior exit stairways* and ramps that are remotely located in accordance with Section 1007.1.
- [F] 403.3.2 Water supply to required fire pumps. In buildings that are more than 120 feet (36.5 m) [420 feet (128 000 mm)] in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections.

[F] 403.3.3 Secondary water supply. An automatic secondary on-site water supply having a capacity not less than the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for *high-rise buildings* assigned to Seismic Design Category C, D, E or F as determined by Section 1613. An additional fire pump shall not be required for the secondary water supply unless needed to provide the minimum design intake pressure at the suction side of the fire pump supplying the *automatic sprinkler system*. The secondary water supply shall have a duration of not less than 30 minutes.

[F] 403.3.4 Fire pump room. Fire pumps shall be located in rooms protected in accordance with Section 913.2.1."

- 14. Subparagraph 403.5.3.1, "Stairway Communication System," of Paragraph 403.5.3, "Stairway Door Operation," of Subsection 403.5, "Means of Egress and Evacuation," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is deleted.
- 15. Paragraph 403.5.4, "Smokeproof Enclosures," of Subsection 403.5, "Means of Egress and Evacuation," of Section 403, "High-Rise Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
 - "403.5.4 Smokeproof enclosures. Every required interior exit stairway serving floors more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall be a smokeproof enclosure in accordance with Sections 909.20 and 1023.11 [1023.10]. In any building that includes a scissor stair as described in Exception 1 of Section 1007.1.1, both exit stairs of the dual enclosure structure must be a smokeproof enclosure or pressurized stairway in accordance with Section 909.20.

Exception: Smokeproof enclosures or pressurized stairs shall not be required in non-underground (see Section 405) buildings protected throughout by an approved automatic sprinkler system. This exception does not apply to a building in which scissor stairs are used as two exits in accordance with Section 1007.1.1. Any smokeproof enclosures or pressurized stairs installed as a substitute for a requirement, a reduction of a requirement or an increase in the limits of other requirements of this code is considered a required system."

- 16. Subsection [F] 404.3, "Automatic Sprinkler Protection," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "[F] 404.3 Automatic sprinkler protection. An approved automatic sprinkler system shall be installed throughout the entire building.

Exception[s]:

- [1. That area of a building adjacent to or above the atrium need not be sprinklered provided that portion of the building is separated from the atrium portion by not less than 2 hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.
- 2.] Where the ceiling of the *atrium* is more than 55 feet (16 764 mm) above the floor, sprinkler protection at the ceiling of the *atrium* is not required."
- 17. Subsection 404.5, "Smoke Control," of Section 404, "Atriums," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "404.5 Smoke control. A smoke control system shall be installed in accordance with Section 909.

[Exception: In other than Group I-2, and Group I-1, Condition 2, smoke control is not required for atriums that connect only two stories.]"

- 18. Subsection 404.6, "Enclosure of Atriums," of Section 404, "Atriums," of Chapter
- 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "404.6 Enclosure of atriums. Atrium spaces shall be separated from adjacent spaces by a 1-hour fire barrier constructed in accordance with Section 707 or a horizontal assembly constructed in accordance with Section 711, or both.

Exceptions:

1. A *fire barrier* is not required where a glass wall forming a smoke partition is provided. The glass wall shall comply with all of the following:

- 1.1. Automatic sprinklers are provided along both sides of the separation wall and doors, or on the room side only if there is not a walkway on the *atrium* side. The sprinklers shall be located between 4 inches and 12 inches (102 mm and 305 mm) away from the glass and at intervals along the glass not greater than 6 feet (1829 mm). The sprinkler system shall be designed so that the entire surface of the glass is wet upon activation of the sprinkler system without obstruction;
- 1.2. The glass wall shall be installed in a gasketed frame in a manner that the framing system deflects without breaking (loading) the glass before the sprinkler system operates; and
- 1.3. Where glass doors are provided in the glass wall, they shall be either *self-closing* or automatic-closing.
- 2. A fire barrier is not required where a glass-block wall assembly complying with Section 2110 and having a ³/₄-hour fire protection rating is provided.
- 3. A *fire barrier* is not required between the *atrium* and the adjoining spaces of any three floors of the *atrium* provided such spaces are accounted for in the design of the smoke control system and if the height of the smoke layer interface is maintained above the minimum 6 feet as required in Section 909.8.1. Smoke control analysis must include all relevant information including but not limited to the design fire, height of smoke layer interface, air handler capacity in cubic feet per minute (CFM) and *atrium* volume of air changes per hour (ACH) using the methods of NFPA 92B.
 - 3.1. In other than Group R occupancies, other approaches to smoke management with equivalent results may be considered with the approval of the *building* official and the fire code official.
 - 3.2. In Group R occupancies, a smoke reservoir enclosed by glass walls complying with Section 404.6, Exception 1 is required to the extent that the smoke layer interface drops below 6 feet in height as required in Section 909.8.1."
- 19. Paragraph 405.7.2, "Smokeproof Enclosure," of Subsection 404.7, "Means of Egress," of Section 405, "Underground Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:

- "405.7.2 Smokeproof enclosure. Every required stairway serving any floor levels more than 30 feet (9144 mm) below the finished floor of its level of exit discharge shall comply with the requirements for a smokeproof enclosure as provided in Section 1023.11 [1023.10]."
- 20. Paragraph 406.3.5, "Carports," of Subsection 406.3, "Private Garages and Carports," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
 - "406.3.5 Carports. Carports shall be open on at least two sides. Carport floor surfaces shall be of an *approved* noncombustible material. Carports not open on at least two sides shall be considered a garage and shall comply with the requirements for private garages.

Exception: Asphalt surfaces shall be permitted at ground level in carports.

The area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids to a drain or toward the main vehicle entry doorway.

406.3.5.1 Carport separation. A separation is not required between a Group R-3 and U carport, provided the carport is entirely open on two or more sides and there are not enclosed areas above.

A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm)."

21. Table 406.5.4, "Open Parking Garages Area and Height," of Paragraph 406.5.4, "Area and Height," of Subsection 406.5, "Open Parking Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is deleted and replaced with a new Table 406.5.4, "Open Parking Garages Area and Height," to read as follows:

"TABLE 406.5.4 OPEN PARKING GARAGES AREA AND HEIGHT

TYPE OF CONSTRUCTION	AREA PER TIER (square feet)	HEIGHT (in tiers)
IA	Unlimited	Unlimited

IB	Unlimited	Unlimited
IIA	Unlimited	Unlimited
IIB	50,000 ^a	8 tiers
IV	50,000	4 tiers

For SI: 1 square foot -0.0929 m^2 .

22. Paragraph 406.5.5, "Area and Height Increases," of Subsection 406.5, "Open Parking Garages," of Section 406, "Motor-Vehicle-Related Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:

"406.5.5 Area and height increases. The allowable area and height of open parking garages shall be increased in accordance with the provisions of this section. Garages with sides open on three-fourths of the building's perimeter are permitted to be increased by 25 percent in area and one tier in height. Garages with sides open around the entire building's perimeter are permitted to be increased by 50 percent in area and one tier in height. For a side to be considered open under the above provisions, the total area of openings along the side shall not be less than 50 percent of the interior area of the side at each tier and such openings shall be equally distributed along the length of the tier. For purposes of calculating the interior area of the side, the height shall not exceed 7 feet (2134 mm).

Allowable tier areas in Table 406.5.4 shall be increased for open parking garages constructed to heights less than the table maximum. The gross tier area of the garage shall not exceed that permitted for the higher structure. No fewer than three sides of each such larger tier shall have continuous horizontal openings not less than 30 inches (762 mm) in clear height extending for not less than 80 percent of the length of the sides and no part of such larger tier shall be more than 200 feet (60 960 mm) horizontally from such an opening. In addition, each such opening shall face a street or yard accessible to a street with a width of not less than 30 feet (9144 mm) for the full length of the opening, and standpipes shall be provided in each such tier.

Open parking garages of Type II construction, with all sides open, shall be unlimited in allowable area where the building height does not exceed 75 feet (22 860 mm). For a side to be considered open, the total area of openings along the side shall not be less than 50 percent of the interior area of the side at each tier and such openings shall be equally distributed along the length of the tier. For purposes of calculating the interior area of the side, the height shall not exceed 7 feet (2134 mm). All portions of tiers shall be within 200 feet (60 960 mm) horizontally from such openings or other natural ventilation openings as defined in Section 406.5.2. These openings shall be permitted to be provided in courts with a minimum dimension of 20 feet (6096 mm) for the full width of the openings.

^a See additional provisions in Section 406.5.5."

All portions of the open parking garage must be within 130 feet of a standpipe.

Exception: Where a building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, standpipes may be omitted in accordance with Section 905."

- 23. Subsection 406.8, "Repair Garages," of Section 406, "Motor-Vehicle-Related
- Occupancies," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "406.8 Repair garages. Repair garages shall be constructed in accordance with the <u>Dallas</u> [<u>International</u>] Fire Code and Sections 406.8.1 through 406.8.6. <u>This occupancy shall include uses as defined in Section 202.</u> This occupancy shall not include motor fuel-dispensing facilities, as regulated in Section 406.7.
 - **406.8.1 Mixed uses.** Mixed uses shall be allowed in the same building as a repair garage subject to the provisions of Section 508.1.
 - **406.8.2 Ventilation.** Repair garages shall be mechanically ventilated in accordance with the <u>Dallas</u> [International] Mechanical Code. The ventilation system shall be controlled at the entrance to the garage.
 - **406.8.3 Floor surface.** Repair garage floors shall be of concrete or similar noncombustible and nonabsorbent materials.
 - **Exception:** Slip-resistant, nonabsorbent, *interior floor finishes* having a critical radiant flux not more than 0.45 W/cm², as determined by NFPA 253, shall be permitted.
 - **406.8.4 Heating equipment.** Heating equipment shall be installed in accordance with the <u>Dallas [International]</u> Mechanical Code.
 - [F] 406.8.5 Gas detection system. Repair garages used for the repair of vehicles fueled by nonodorized gases such as hydrogen and nonodorized LNG, shall be provided with a flammable gas detection system.
 - [F] 406.8.5.1 System design. The flammable gas detection system shall be *listed* or approved and shall be calibrated to the types of fuels or gases used by vehicles to be repaired. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the lower flammable limit (LFL). Gas detection shall be provided in lubrication or chassis service pits of repair garages used for repairing non-odorized LNG-fueled vehicles.
 - [F] 406.8.5.1.1 Gas detection system components. Gas detection system control units shall be *listed* and *labeled* in accordance with UL 864 or UL 2017. Gas

detectors shall be *listed* and *labeled* in accordance with UL 2075 for use with the gases and vapors being detected.

[F] 406.8.5.2 Operation. Activation of the gas detection system shall result in all of the following:

- 1. Initiation of distinct audible and visual alarm signals in the repair garage.
- 2. Deactivation of all heating systems located in the repair garage.
- 3. Activation of the mechanical *ventilation* system, where the system is interlocked with gas detection.
- [F] 406.8.5.3 Failure of the gas detection system. Failure of the gas detection system shall result in the deactivation of the heating system, activation of the mechanical *ventilation* system where the system is inter-locked with the gas detection system and cause a trouble signal to sound in an *approved* location.
- [F] 406.8.6 Automatic sprinkler system. A repair garage shall be equipped with an automatic sprinkler system in accordance with Section 903.2.9.1."
- 24. Subsection [F] 411.4, "Automatic Sprinkler System," of Section 411, "Special Amusement Buildings," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "[F] 411.4 Automatic sprinkler system. Special amusement buildings shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. Where the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means.

Exception: Automatic sprinklers are not required where the total floor area of a temporary special amusement building is less than 7,500 [1,000] square feet (690 [93] m²), [and] the exit access travel distance from any point to an exit is less than 50 feet (15 240 mm) and the temporary use does not exceed 30 days in any 12-month period."

- 25. Subsection 420.2, "Separation Walls," of Section 420, "Groups I-1, R-1, R-2, R-3 and R-4," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "420.2 Separation walls. Walls separating dwelling units in the same building, walls separating sleeping units in the same building and walls separating dwelling or sleeping units from other

occupancies contiguous to them in the same building shall be constructed as *fire partitions* in accordance with Section 708. Walls separating dwelling or sleeping units from portions of the same occupancy contiguous to them, but not part of the same dwelling or sleeping units, shall be constructed as *fire partitions* in accordance with Section 708."

- 26. Subsection 420.3, "Horizontal Separation," of Section 420, "Groups I-1, R-1, R-2, R-3 and R-4," of Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended to read as follows:
- "420.3 Horizontal separation. Floor assemblies separating dwelling units in the same buildings, floor assemblies separating sleeping units in the same building and floor assemblies separating dwelling or sleeping units from other occupancies contiguous to them in the same building shall be constructed as horizontal assemblies in accordance with Section 711. Floor assemblies separating dwelling or sleeping units from portions of the same occupancy contiguous to them, but not part of the same dwelling or sleeping units, shall be constructed as horizontal assemblies in accordance with Section 711."
- 27. Chapter 4, "Special Detailed Requirements Based on Use and Occupancy," of the 2015 International Building Code is amended by adding a new Section 427, "Aircraft Noise Attenuation Requirements," to read as follows:

"SECTION 427 AIRCRAFT NOISE ATTENUATION REQUIREMENTS

- **427.1 Definitions.** The following words and terms shall, for the purposes of this chapter, and as used elsewhere in this code, have the meanings shown herein.
- A-WEIGHTED SOUND LEVEL. An A-weighted sound level is a sound level in the 1,000 to 6,000 Hz frequency range that is increased by 10 dB if the noise event occurs between 10:00 p.m. and 7:00 a.m. The A-weighted sound level reflects the greater intrusiveness of sounds that the ear perceives as louder compared to other frequencies. "dBA" or "dB(A)" indicate a sound level measurement has been A-weighted.
- **DAY-NIGHT AVERAGE SOUND LEVEL.** The day-night average sound level is the noise exposure in areas around airports (abbreviated as "DNL" in text and " L_{dn} " in equations). DNL is a measure of the average A-weighted sound level of all aircraft flights occurring in a 24-hour period.
- 427.2 Aircraft noise zone. All land with a DNL noise contour of 65 dBA or greater, as shown on the aircraft noise maps available for review at the Division of Building Inspection, is subject

to these regulations. A building that is only partly located within an aircraft noise zone is also subject to these regulations.

427.3 Noise insulation.

427.3.1 Certification of plans prior to issuance of building permit. A registered Texas engineer who has demonstrable knowledge of acoustical engineering shall certify that the plans and specifications comply with the noise insulation standards of Section 427.3.2. The *building official* shall not issue a building permit for any *building* within an aircraft noise zone unless the plans and specifications for the *building* meet the noise insulation standards of Section 427.3.2.

Exception: The plans and specifications may be prepared and certified by a member of the National Council of Acoustical Consultants or another organization approved by the *building official*.

- 427.3.2 Noise insulation standards. New buildings of the following occupancies shall be constructed with sound insulation or other means to achieve a DNL of 45 dBA or less inside the building: Group E occupancies; Group I-1, I-2 and I-4 occupancies; and Group R occupancies. If the cost of modifications to an existing building is 75 percent or more of the total assessed improvement value of the site, the building shall also meet this standard. Garages and similar accessory buildings that do not include living space are exempt from this requirement."
- 28. Table 504.4, "Allowable Number of Stories Above Grade Plane," of Subsection 504.4, "Number of Stories," of Section 504, "Building Height and Number of Stories," of Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended to read as follows:

"TABLE 504.4^{a, b}
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE

	TYPE OF CONSTRUCTION									
OCCUPANCY CLASSIFICATION	SEE FOOTNOTES	TYI	PE I	TYP	E II	TYP	E III	TYPE IV	TYF	EV
		A	В	A	В	A	В	HT	A	В
A-1	NS	UL	5	3	2	3	2	3	2	1
	S	UL	6	4	3	4	3	4	3	2
A-2	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-3	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-4	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-5	NS	UL	UL	UL	UL	UL	UL	UL	UL	UL

	S	UL								
В	NS	UL	11	5	3	5	3	5	3	2
_	S	UL	12	6	4	6	4	6	4	3
Eiri	NS	UL	5	3	2	3	2	3	1	1
_	S	UL	6	4	3	4	3	4	2	2
F-1	NS	UL	11	4	2	3	2	4	2	1
	S	UL	12	5	3	4	3	5	3	2
F-2	NS	UL	11	5	3	4	3	5	3	2
	S	UL	12	6	4	5	4	6	4	3
H-1	NSc, d	1	1	1	1	1	1	1	1	NP
	S	1			ļ					
H-2	NS ^{c, d}	UL	3	2	1	2	1	2	1	1
	S	1								
H-3	NS ^{c, d}	UL	6	4	2	4	2	4	2	1
	S	1		ŀ						
H-4	NS ^{c, d}	UL	7	5	3	5	3	5	3	2
	S	UL	8	6	4	6	4	6	4	3
H-5	NS ^{c, d}	4	4	3	3	3	3	3	3	2
	S	1]]				
I-1 Condition 1	NS ^{d, e}	UL	9	4	3	4	3	4	3	2
_	S	UL	10	5	4	5	4	5	4	3
I-1 Condition 2	NS ^{d, e}	UL	9	4	3	4	3	4	3	2
	S	UL	10	5	l					
I-2	NS ^{d, f}	UL	4	2	1	1	NP	1	1	NP
	S	UL	5	3						
I-3	NS ^{d, e}	UL	4	2	1	2	1	2	2	1
	S	UL	5	3	2	3	2	3	3	2
I-4	NS ^{d, g}	UL	5	3	2	3	2	3	1	1
	S	UL	6	4	3	4	3	4	2	2
M	NS	UL	11	4	2	4	2	4	3	1
	S	UL	12	5	3	5	3	5	4	2
R-1	NS d, h	UL	11	4	4	4	4	4	3	2
	S13R	4	4						4	3
	S	UL	12	5	5	5	5	5	4	3
R-2	NS d, h	UL	11	4	4	4	4	4	3	2
	S13R	4	4	4	ļ	ļ	ļ		4	3
	S	UL	12	5	5	5	5	5	4	3
R-3	NS d, h	UL	11	4	4	4	4	4	3	3
	S13R	4	4		ļ		_		4	4
	S	UL	12	5	5	5	5	5	4	4
R-4	NS d, h	UL	11	4	4	4	4	4	3	2
	S13R	4	4	ļ	ļ				4	3
	S	UL	12	5	5	5	5	5	4	3
S-1	NS	UL	11	4	2	3	2	4	3	1
	S	UL	12	5	3	4	3	5	4	2
S-2	NS	UL	11	5	3	4	3	4	4	2
	S	UL	12	6	4	5	4	5	5	3
U	NS	UL	5	4	2	3	2	4	2	1
	S	UL	6	5	3	4	3	5	3	2

Note: UL = Unlimited; NP = Not Permitted; NS = Buildings not equipped throughout with an automatic sprinkler system; <math>S = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section

903.3.1.1; S13R = Buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.2.

- a. See Chapters 4 and 5 for specific exceptions to the allowable height in this chapter.
- b. See Section 903.2 for the minimum thresholds for protection by an automatic sprinkler system for specific occupancies.
- c. New Group H occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.5.
- d. The NS value is only for use in evaluation of existing building height in accordance with the <u>Dallas</u> [International] Existing Building Code.
- e. New Group I-1 and I-3 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6. For new Group I-1 occupancies, Condition 1, see Exception 1 of Section 903.2.6.
- f. New and existing Group I-2 occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.6 and Section 1103.5 of the <u>Dallas</u> [International] Fire Code.
- g. For new Group I-4 occupancies, see Exceptions 2 and 3 of Section 903.2.6.
- h. New Group R occupancies are required to be protected by an automatic sprinkler system in accordance with Section 903.2.8.
- i. For Group E occupancies and rooms normally occupied by pre-kindergarten, kindergarten, or first grade students.
- j. For Group E child day care facilities see Section 308.6.1. All other child day care facilities must comply with the I-4 provisions of this code."
- 29. Paragraph 506.3.1, "Minimum Percentage of Perimeter," of Subsection 506.3, "Frontage Increase," of Section 506, "Building Area," of Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended to read as follows:
 - "506.3.1 Minimum percentage of perimeter. To qualify for an area factor increase based on frontage, a building shall have not less than 25 percent of its perimeter on a public way or open space. Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved fire lane. In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway meeting the requirements for fire department access from the street or an approved fire lane shall be provided for hose lay measurement pathway requirements."
- 30. Subsection 507.4, "Sprinklered, One-Story Buildings," of Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended to read as follows:
- "507.4 Sprinklered, one-story buildings. The area of a Group A-4 building no more than one story above grade plane of other than Type V construction, or the area of a Group B, F, M or S building no more than one story above grade plane of any construction type, shall not be limited where the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

Exceptions:

- 1. Buildings and structures of Type I and II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.3 and 903.3.1.1 and Chapter 32 of the <u>Dallas</u> [International] Fire Code.
- 2. The automatic sprinkler system shall not be required in areas occupied by athletes during their competitive event for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that:
 - 2.1. Exit doors directly to the outside are provided for occupants of the participant sports areas; and
 - 2.2. The building is equipped with a *fire alarm system* with *manual fire alarm boxes* installed in accordance with Section 907.
- **507.4.1** Mixed occupancy buildings with Groups A-1 and A-2. Group A-1 and A-2 occupancies of other than Type V construction shall be permitted within mixed occupancy buildings of unlimited area complying with Section 507.3, provided all of the following criteria are met:
 - 1. Group A-1 and A-2 occupancies are separated from other occupancies as required for separated occupancies in Section 508.4.4 with no reduction allowed in the *fire-resistance rating* of the separation based upon the installation of an *automatic sprinkler system*;
 - 2. Each area of the portions of the building used for Group A-1 or A-2 occupancies shall not exceed the maximum allowable area permitted for such occupancies in Section 503.1; and
 - 3. Exit doors from Group A-1 and A-2 occupancies shall discharge directly to the exterior of the building."
- 31. Section 507, "Unlimited Area Buildings," of Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended by adding a new Subsection 507.14, "Unlimited Area Based on Types of Construction," to read as follows:
- "507.14 Unlimited area based on types of construction. The area of any five-story or less Type IIA, three-story or less Type IIB, or three-story or less Type IV building, except one housing Group H, Division 1, 2 or 3 occupancies, is unlimited if the building is provided with an approved automatic sprinkler system throughout as specified in Chapter 9. These provisions do not apply to covered and open mall buildings, anchor buildings, or motion picture theaters.

Exception: Unlimited area buildings may house Group H, Division 2 and 3 as specified in Section 507.8."

32. Paragraph 508.2.3, "Allowable Building Area," of Subsection 508.2, "Accessory Occupancies," of Section 508, "Mixed Use and Occupancy," of Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended to read as follows:

"508.2.3 Allowable building area. The allowable area of the building shall be based on the applicable provisions of Section 506 for the main occupancy of the building. Aggregate accessory occupancies shall not occupy more than 10 percent of the floor area of the story in which they are located and shall not exceed the tabular values for nonsprinklered buildings in Table 506.2 for each such accessory occupancy.

Exception: Aggregate accessory occupancies in a building provided throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 shall not occupy more than 20 percent of the area of the story in which they are located and shall not exceed the tabular values in Table 506.2 without building area increases in accordance with Section 506 for such accessory occupancies."

33. Subsection 510.2, "Horizontal Building Separation Allowance," of Section 510, "Special Provisions," of Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended to read as follows:

"510.2 Horizontal building separation allowance. A building shall be considered as separate and distinct buildings for the purpose of determining area limitations, continuity of *fire walls*, limitation of number of *stories* and type of construction where all of the following applicable conditions are met:

- 1. The buildings are separated with a horizontal assembly having a fire-resistance rating of not less than 3 hours. In a structure protected throughout both above and below the horizontal assembly with an approved automatic sprinkler system in accordance with Section 903.3.1.1, the horizontal assembly may be of a minimum 2-hour fire-resistance rating.
- 2. The building below the *horizontal assembly* is of Type IA construction.
- 3. Shaft, stairway, ramp and escalator enclosures through the horizontal assembly shall have not less than a 2-hour fire-resistance rating with opening protectives in accordance with Section 716.5.

Exception: Where the enclosure walls below the *horizontal assembly* have not less than the [a 3-hour] *fire-resistance rating* as required by Condition 1 with opening protectives in accordance with Section 716.5. the enclosure walls extending above the *horizontal assembly* shall be permitted to have a 1-hour *fire-resistance rating*, provided:

- 1. The building above the *horizontal assembly* is not required to be of Type I construction;
- 2. The enclosure connects fewer than four stories: and
- 3. The enclosure opening protectives above the *horizontal assembly* have a *fire* protection rating of not less than 1 hour.
- 4. The building or buildings above the *horizontal assembly* shall be permitted to have multiple Group A occupancy uses, each with an *occupant load* of less <u>than</u> 300, or Group B, M, R or S occupancies.
- 5. The building below the *horizontal assembly* shall be protected throughout by an *approved* sprinkler system in accordance with Section 903.3.1.1, and shall be permitted to be any occupancy allowed by this code except Group H.
- 6. The maximum *building height* in feet (mm) shall not exceed the limits set forth in Section 504.3 for the building having the smaller allowable height as measured from the *grade plane*."
- 34. Chapter 5, "General Building Heights and Areas," of the 2015 International Building Code is amended by adding a new Section 511, "Area Limits," to read as follows:

"SECTION 511 AREA LIMITS

- **511.1** Area limits. All floor area must comply with Sections 511.1.1 and 511.1.2.
 - **511.1.1 Occupancy fire areas.** Occupancy fire areas must be limited in accordance with Sections 903.2.1 through 903.2.10.1.
 - **511.1.2 Building fire areas.** Building fire areas must be limited in accordance with Section 903.2.13."
- 35. Table 601, "Fire-Resistance Rating Requirements for Building Elements (Hours)," of Section 601, "General," of Chapter 6, "Types of Construction," of the 2015 International Building Code is amended to read as follows:

"TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS)

BUILDING	TV	PE I		E II			TYPE	TVE	TE X7
ELEMENT	111		TYPE II TYPE III		E III	IV	TYPE V		
	A	В	A	В	A	В	HT	A ^d	В
Primary structural frame ^f (see Section 202)	3ª	2ª	1	0	A 1	0	НТ	1	0
Bearing walls Exterior ^{e, f_g} Interior	3 3ª	2 2ª	1	0	2 1	2 0	2 1/HT	1 1	0 0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior ^d	0	0	0	0	0	0	See Section 602.4.6	0	0
Floor construction and associated secondary members (see Section 202)	2	2	1	0	1	0	нт	1	0
Roof construction and associated secondary members ^g (See Section 202)	1 ½ ^b	1 ^{b,c}	1 ^{b,c}	Oc	1 ^{6,c}	0	нт	1 ^{6,0}	0

For SI: 1 foot = 304.8 mm.

- a. Roof supports: Fire-resistance ratings of primary structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
- b. Except in Group F-1, H, M and S-1 occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
- c. In all occupancies, heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.
- d. Not less than the fire-resistance rating required by other sections of this code.
- e. Not less than the fire-resistance rating based on fire separation distance (see Table 602).
- f. Not less than the fire-resistance rating as referenced in Section 704.10.

- g. In all occupancies, when the building is protected throughout by an approved automatic sprinkler system in accordance with Section 903.3.1.1, roof construction and the structural frame supporting the roof only may be of unprotected noncombustible materials or heavy-timber construction complying with Section 602.4. This provision may be used for roof construction, nonbearing partitions and nonbearing exterior walls in lieu of fire-retardant treated wood in a building meeting the requirements of Section 603.1, Item 1."
- 36. Table 602, "Fire-Resistance Rating Requirements for Exterior Walls Based on Separation Distance," of Section 602, "Construction Classification," of Chapter 6, "Types of Construction," of the 2015 International Building Code is amended to read as follows:

"TABLE 602 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE^{a, d, g, j}

FIRE SEPARATION DISTANCE = X (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H ^e	OCCUPANCY GROUP F-1, M, S-1 ^f	OCCUPANCY GROUP A, B, E, F-2, I, R, S-2, U ^{h,i}
$X < 5^b$	All	3	2	1
$5 \le X < 10$	IA	3	2	1
	Others	2	1	1
$10 \le X < 30$	IA, IB	2	1	1°
	IIB, VB	1	0	0
	Others	1	1	1°
X ≥ 30	All	0	0	0

For SI: 1 foor = 304.8 mm.

- a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
- b. See Section 706.1.1 for party walls.
- c. Open parking garages complying with Section 406 shall not be required to have a fire-resistance rating.
- d. The fire-resistance rating of an exterior wall is determined based upon the fire separation distance of the exterior wall and the story in which the wall is located.
- e. For special requirements for Group H occupancies, see Section 415.6.
- f. For special requirements for Group S aircraft hangars, see Section 412.4.1.
- g. Where Table 705.8 permits nonbearing exterior walls with unlimited area of unprotected openings, the required fire-resistance rating for the exterior walls is 0 hours.
- h. For special requirements on Group R-2, R-3 and Group U carports, see Section 406.3.5.1.
- i. Exterior walls of carports open on all sides and constructed entirely of noncombustible materials are not required to have a fire-resistance rating. Distance between individual carports and imaginary property lines must be a minimum of 3 feet. All carport projections must comply with Section 705.2.
- j. In buildings provided throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, Table 602 3-hour exterior wall protection may be reduced to 2-hour protection, Table 602 2-hour protection may be reduced to 1-hour protection. Table 602 1-hour protection cannot be reduced."
- 37. Subsection 603.1, "Allowable Materials," of Section 603, "Combustible Material in Type I and II Construction," of Chapter 6, "Types of Construction," of the 2015 International Building Code is amended to read as follows:

"603.1 Allowable materials. Combustible materials shall be permitted in buildings of Type I or II construction in the following applications in accordance with Sections 603.1.1 through 603.1.3:

- 1. Fire-retardant-treated wood shall be permitted in:
 - 1.1. Nonbearing partitions where the required *fire-resistance rating* is 2 hours or less.
 - 1.2. Nonbearing *exterior walls* where fire-resistance rated construction is not required.
 - 1.3. Roof construction, including girders, trusses, framing and decking.

Exception: In buildings of Type IA construction exceeding two *stories above* grade plane, fire-retardant-treated wood is not permitted in roof construction where the vertical distance from the upper floor to the roof is less than 20 feet (6096 mm).

2. Thermal and acoustical insulation, other than foam plastics, having a *flame spread index* of not more than 25.

Exceptions:

- 1. Insulation placed between two layers on non-combustible materials without an intervening airspace shall be allowed to have a *flame spread index* of not more than 100.
- 2. Insulation installed between a finished floor and solid decking without intervening airspace shall be allowed to have a *flame spread index* of not more than 200.
- 3. Foam plastics in accordance with Chapter 26.
- 4. Roof coverings that have an A, B or C classification.
- 5. Interior floor finish and floor covering materials installed in accordance with Section 804.
- 6. Millwork such as doors, door frames, window sashes and frames.
- 7. Interior wall and ceiling finishes installed in accordance with Sections 801 and 803.
- 8. Trim installed in accordance with Section 806.
- 9. Where not installed greater than 15 feet (4572 mm) above grade, show windows, nailing or furring strips and wooden bulkheads below show windows, including their frames, aprons and show cases.

- 10. Finish flooring installed in accordance with Section 805.
- 11. Partitions dividing portions of stores, offices or similar places occupied by one tenant only that do not establish a *corridor* serving an *occupant load* of 30 or more shall be permitted to be constructed of *fire-retardant-treated wood*, 1-hour fire-resistance-rated construction or of wood panels or similar light construction up to 6 feet (1829 mm) in height.
- 12. Stages and platforms constructed in accordance with Sections 410.3 and 410.4, respectively.
- 13. Combustible *exterior wall coverings*, balconies and similar projections and bay or oriel windows or similar appendages in accordance with Chapter 14.
- 14. Blocking such as handrails, millwork, cabinets and window and door frames.
- 15. Light-transmitting plastics as permitted by Chapter 26.
- 16. Mastics and caulking materials applied to provide flexible seals between components of exterior wall construction.
- 17. Exterior plastic veneer installed in accordance with Section 2605.2.
- 18. Nailing or furring strips as permitted by Section 803.11.
- 19. Heavy timber as permitted by Note c to Table 601 and Sections 602.4.7 and 1406.3.
- 20. Aggregates, component materials and admixtures as permitted by Section 703.2.2.
- 21. Sprayed fire-resistant materials and intumescent and mastic fire-resistant coatings, determined on the basis of *fire-resistance* tests in accordance with Section 703.2 and installed in accordance with Sections 1705.14 and 1705.15, respectively.
- 22. Materials used to protect penetrations in fire-resistance-rated assemblies in accordance with Section 714.
- 23. Materials used to protect joints in fire-resistance-rated assemblies in accordance with Section 715.
- 24. Materials allowed in the concealed spaces of buildings of Types I and II construction in accordance with Section 718.5.
- 25. Materials exposed within plenums complying with Section 602 of the <u>Dallas</u> [International] Mechanical Code.

- 26. Wall construction of freezers and coolers of less than 1,000 square feet (92.9 m²), in size, lined on both sides with noncombustible materials and the building is protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- **603.1.1 Ducts.** The use of nonmetallic ducts shall be permitted where installed in accordance with the limitations of the <u>Dallas</u> [<u>International</u>] <u>Mechanical Code</u>.
- **603.1.2 Piping.** The use of combustible piping materials shall be permitted where installed in accordance with the limitations of the <u>Dallas</u> [<u>International</u>] Mechanical Code and the <u>Dallas</u> [<u>International</u>] Plumbing Code.
- **603.1.3 Electrical.** The use of electrical wiring methods with combustible insulation, tubing, raceways and related components shall be permitted where installed in accordance with the limitations of this code."
- 38. Subsection 703.4, "Automatic Sprinklers," of Section 703, "Fire-Resistance Ratings and Fire Tests," of Chapter 7, "Fire and Smoke Protection Features," of the 2015 International Building Code is amended to read as follows:
- "703.4 Automatic sprinklers. Under the prescriptive fire-resistance requirements of this code, the *fire-resistance rating* of a building element, component or assembly shall be established without the use of *automatic sprinklers* or any other fire suppression system being incorporated as part of the assembly tested in accordance with the fire exposure, procedures, and acceptance criteria specified in ASTM E 119 or UL 263. However, this section shall not prohibit or limit the duties and powers of the *building official* allowed by Chapter 52 [Sections 104.10 and 104.11]."
- 39. Table 705.8, "Maximum Area of Exterior Wall Openings Based on Fire Separation Distance and Degree of Opening Protection," of Subsection 705.8, "Openings," of Section 705, "Exterior Walls," of Chapter 7, "Fire and Smoke Protection Features," of the 2015 International Building Code is amended to read as follows:

"TABLE 705.8

MAXIMUM AREA OF EXTERIOR WALL OPENINGS BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION

FIRE SEPARATION DISTANCE (feet)	DEGREE OF OPENING PROTECTION	ALLOWABLE AREA
0 to less than 3 ^{b, c, k}	Unprotected, Nonsprinklered (UP, NS)	Not Permitted ^{k_1}
	Unprotected, Sprinklered (UP, S) ⁱ	Not Permitted ^{k_1}
	Protected (P)	Not Permitted ^{k_1}
	Unprotected, Nonsprinklered (UP,	Not Permitted

3 to less than 5 ^{d,e}	NS)	
	Unprotected, Sprinklered (UP, S) ⁱ	15 %
	Protected (P)	15%
	Unprotected, Nonsprinklered (UP,	10% ^h
5 to less than 10 ^{e, f, j}	NS)	
	Unprotected, Sprinklered (UP, S) ⁱ	25%
	Protected (P)	25%
	Unprotected, Nonsprinklered (UP,	15% ^h
10 to less than 15e, f, g	NS)	
	Unprotected, Sprinklered (UP, S) ⁱ	45%
	Protected (P)	45%
	Unprotected, Nonsprinklered (UP,	25%
15 to less than 20 ^{f, g}	NS)	
	Unprotected, Sprinklered (UP, S) ⁱ	75%
	Protected (P)	75%
	Unprotected, Nonsprinklered (UP,	45%
20 to less than 25 ^{f, g}	NS)	
	Unprotected, Sprinklered (UP, S) ⁱ	No Limit
	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP,	70%
25 to less than 30 ^{f, g}	NS)	
	Unprotected, Sprinklered (UP, S)	No Limit
	Protected (P)	No Limit
	Unprotected, Nonsprinklered (UP,	No Limit
30 or greater	NS)	
•	Unprotected, Sprinklered (UP, S)	No Limit
	Protected (P)	No Limit

For SI: 1 foot = 304.8 mm.

UP, NS = Unprotected openings in buildings not equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

UP, S = Unprotected openings in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

- P = Openings protected with an opening protective assembly in accordance with Section 705.8.2.
- a. Values indicated are the percentage of the area of the exterior wall, per story.
- b. For the requirements for fire walls of buildings with differing heights, see Section 706.6.1.
- c. For openings in a fire wall for buildings on the same lot, see Section 706.8.
- d. The maximum percentage of unprotected and protected openings shall be 25 percent for Group R-3 occupancies.
- e. Unprotected openings shall not be permitted for openings with a fire separation distance of less than 15 feet for Group H-2 and H-3 occupancies.
- f. The area of unprotected and protected openings shall not be limited for Group R-3 occupancies, with a fire separation distance of 5 feet or greater.
- g. The area of openings in an open parking structure with a fire separation distance of 10 feet or greater shall not be limited.
- h. Includes buildings accessory to Group R-3.
- i. Not applicable to Group H-1, H-2 and H-3 occupancies.
- j. For special requirements for Group U occupancies, see Section 406.3.5 [406.3.2].
- k. For openings between S-2 parking garage and Group R-2 building, see Section 705.3, Exception 2.
- <u>Carports open on all sides and constructed entirely of noncombustible materials may have openings and the openings shall not require protection.</u> Distance between individual carports and imaginary property lines shall be 3 feet minimum. All carport projections shall comply with Section 705.2 of this code."

40. Table 706.4, "Fire Wall Fire-Resistance Ratings," of Subsection 706.4, "Fire-Resistance Rating," of Section 706, "Fire Walls," of Chapter 7, "Fire and Smoke Protection Features," of the 2015 International Building Code is amended to read as follows:

"TABLE 706.4 FIRE WALL FIRE-RESISTANCE RATINGS^c

GROUP	FIRE-RESISTANCE RATING (hours)
A, B, E, H-4, I, R-1, R-2, U	3ª
F-1, H-3 ^b , H-5, M, S-1	3
H-1, H-2	4 ^b
F-2, S-2, R-3, R-4	2

- a. In Type II or V construction, walls shall be permitted to have a 2-hour fire-resistance rating.
- b. For Group H-1, H-2 or H-3 buildings, also see Sections 415.7 and 415.8.
- c. In buildings protected throughout by an automatic sprinkler system in accordance with Section 903.3.1.1, 4-hour and 3-hour fire walls may be reduced by 1 hour when separating other than a Group H occupancy. This reduction shall also apply for fire walls required by Section 503.1."
- 41. Paragraph 712.1.9, "Two-Story Openings," of Subsection 712.1, "General," of Section 712, "Vertical Openings," of Chapter 7, "Fire and Smoke Protection Features," of the 2015 International Building Code is amended to read as follows:
 - "712.1.9 Two-story openings. In other than Groups I-2 and I-3, a vertical opening that is not used as one of the applications listed in this section shall be permitted if the opening complies with all of the items below:
 - 1. Does not connect more than two stories.
 - 2. Does not penetrate a horizontal assembly that separates fire areas or smoke barriers that separate smoke compartments.
 - 3. Is not concealed within the construction of a wall or a floor/ceiling assembly.
 - 4. Is not open to a corridor in Group I and \underline{H} [\mathbb{R}] occupancies.
 - 5. Is not open to a corridor on nonsprinklered floors.
 - 6. Is separated from floor openings and air transfer openings serving other floors by construction conforming to required shaft enclosures."

- 42. Subsection 713.13, "Waste and Linen Chutes and Incinerator Rooms," of Section
- 713, "Shaft Enclosures," of Chapter 7, "Fire and Smoke Protection Features," of the 2015 International Building Code is amended to read as follows:
- "713.13 Waste and linen chutes and incinerator rooms. Waste and linen chutes shall comply with the provisions of NFPA 82 including the requirements for venting, Chapter 5 and shall meet the requirements of Sections 713.13.1 through 713.13.6. Incinerator rooms shall meet the provisions of Sections 713.13.4 through 713.13.5.

Exception: Chutes serving and contained within a single dwelling unit.

- 713.13.1 Waste and linen. A shaft enclosure containing a recycling, or waste or linen chute shall not be used for any other purpose and shall be enclosed in accordance with Section 713.4. Openings into the shaft, from access rooms and discharge rooms, shall be protected in accordance with this section and Section 716. Openings into chutes shall not be located in *corridors*. Doors into chutes shall be self-closing. Discharge doors shall be self- or automatic-closing upon the actuation of a smoke detector in accordance with Section 716.5.9.3, except that heat-activated closing devices shall be permitted between the shaft and the discharge room.
- 713.13.2 Materials. A shaft enclosure containing a waste, recycling, or linen chute shall be constructed of materials as permitted by the building type of construction.
- 713.13.3 Chute access rooms. Access openings for waste or linen chutes shall be located in rooms or compartments enclosed by not less than 1-hour *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. Openings into the access rooms shall be protected by opening protectives having a *fire protection rating* of not less than ³/₄ hour. Doors shall be self- or automatic-closing upon the detection of smoke in accordance with Section 716.5.9.3.
- 713.13.4 Chute discharge room. Waste or linen chutes shall discharge into an enclosed room separated by *fire barriers* with a *fire-resistance rating* not less than the required fire rating of the shaft enclosure and constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance with Section 711, or both. Openings into the discharge room from the remainder of the building shall be protected by opening protectives having a *fire protection rating* equal to the protection required for the shaft enclosure. Doors shall be self- or automatic-closing upon the detection of smoke in accordance with Section 716.5.9.3. Waste chutes shall not terminate in an incinerator room. Waste and linen rooms that are not provided with chutes need only comply with Table 509.
- 713.13.5 Incinerator room. Incinerator rooms shall comply with Table 509.
- 713.13.6 Automatic sprinkler system. An approved automatic sprinkler system shall be installed in accordance with Section 903.2.11.2."

- 43. Paragraph 901.6.1, "Automatic Sprinkler Systems," of Subsection 901.6, "Supervisory Service," of Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended by adding a new Subparagraph 901.6.1.1, "Standpipe Testing," to read as follows:
 - "901.6.1.1 Standpipe testing. Maintenance of standpipes shall be as per Section 905.11."
- 44. Section 901, "General," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended by adding a new Subsection 901.9, "Systems Out Of Service," to read as follows:
- "901.9 Systems out of service. Where a required fire protection system is out of service, or in the event of an excessive number of activations, the fire department and the fire code official shall be notified immediately, and where required by the fire code official, the building must either be evacuated or standby personnel shall be provided for all occupants left unprotected until the protection has been returned to service.

Where utilized, *standby personnel* shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires."

- 45. Subsection [F] 903.1, "General," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 903.1 General. Automatic sprinkler systems shall comply with this section.
 - **[F] 903.1.1 Alternative protection.** Alternative *automatic fire-extinguishing systems* complying with Section 904 shall be permitted <u>in addition to</u> [instead of] automatic sprinkler protection where recognized by the applicable standard <u>or as</u> [and] *approved* by the fire code official.
 - 903.1.2 Separation. Areas of buildings protected by automatic sprinklers shall be separated from unsprinklered areas by fire barriers complying with Section 707 having a minimum fire-resistance rating of 2 hours.

Exceptions:

- 1. Open parking garages in accordance with Section 406.5.
- 2. Special application, spray booth and kitchen hood suppression systems."
- 46. Subsection [F] 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic sprinklers must not be installed in elevator machine rooms, elevator machine spaces and elevator hoistways other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage is not allowed within the elevator machine room. Signage must be provided at the entry to the elevator machine room indicating "ELEVATOR MACHINERY NO STORAGE ALLOWED."
 - [Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainer of the building by not less than 1 hour fire barriers constructed in accordance with Section 707 or not less than 2 hour horizontal assemblies constructed in accordance with Section 711, or both.]
 - [F] 903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. For Group A-1, A-2, A-3 and A-4 occupancies, the automatic sprinkler system shall be provided throughout the floor area where the fire area containing the Group A-1, A-2, A-3 or A-4 occupancy is located, and throughout all stories from the Group A occupancy to, and including, the levels of exit discharge serving the Group A occupancy. For Group A-5 occupancies, the automatic sprinkler system shall be provided in the spaces indicated in Section 903.2.1.5.
 - [F] 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for fire areas containing Group A-1 occupancies and intervening floors of the building where one of the following conditions exists:
 - 1. The fire area exceeds 12,000 square feet (1115 m²);
 - 2. The fire area has an occupant load of 300 or more;

- 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies; or
- 4. The fire area contains a multitheater complex.
- [F] 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for fire areas containing Group A-2 occupancies and intervening floors of the building where one of the following conditions exists:
 - 1. The fire area exceeds 5,000 square feet (464.5 m²);
 - 2. The fire area has an occupant load of 100 or more; or
 - 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
- [F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for fire areas containing Group A-3 occupancies and intervening floors of the building where one of the following conditions exists:
 - 1. The fire area exceeds 12,000 square feet (1115 m²);
 - 2. The fire area has an occupant load of 300 or more; or
 - 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
- [F] 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for fire areas containing Group A-4 occupancies and intervening floors of the building where one of the following conditions exists:
 - 1. The fire area exceeds 12,000 square feet (1115 m²);
 - 2. The fire area has an occupant load of 300 or more; or
 - 3. The *fire area* is located on a floor other than a *level of exit discharge* serving such occupancies.
- [F] 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 1,000 square feet (93 m²).
- [F] 903.2.1.6 Assembly occupancies on roofs. Where an occupied roof has an assembly occupancy with an *occupant load* exceeding 100 for Group A-2 and 300 for other Group A occupancies, all floors between the occupied roof and the *level of exit discharge* shall

be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

Exception: Open parking garages of Type I or Type II construction.

903.2.1.7 Multiple fire areas. An automatic sprinkler system shall be provided where multiple fire areas of Group A-1, A-2, A-3, or A-4 occupancies share exit or exit access components and the combined occupant load of these fire areas is 300 or more.

[F] 903.2.2 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

- 1. Four or more care recipients are incapable of self-preservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
- 2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the *level of exit discharge*, an *automatic sprinkler system* shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest *level of exit discharge*, including the *level of exit discharge*.

[F] 903.2.3 Group E. An automatic sprinkler system shall be provided for Group E occupancies as follows:

- 1. Throughout all Group E fire areas greater than 12,000 square feet (1115 m²) in area.
- 2. Throughout every portion of educational buildings below the lowest *level of exit discharge* serving that portion of the building.

Exception: An *automatic sprinkler system* is not required in any area below the lowest *level of exit discharge* serving that area where every classroom throughout the building has not fewer than one exterior *exit* door at ground level.

[F] 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

- 1. A Group F-1 fire area exceeds 12,000 square feet (1115 m²).
- 2. A Group F-1 fire area is located more than three stories above grade plane.

- 3. The combined area of all Group F-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
- 4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²).
- [F] 903.2.4.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain wood-working operations in excess of 2,500 square feet (232 m²) in area that generate finely divided combustible waste or use finely divided combustible materials.
- [F] 903.2.5 Group H. Automatic sprinkler systems shall be provided in high-hazard occupancies as required in Sections 903.2.5.1 through 903.2.5.3.
 - [F] 903.2.5.1 General. An automatic sprinkler system shall be installed in Group H occupancies.
 - [F] 903.2.5.2 Group H-5 occupancies. An automatic sprinkler system shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall not be less than that required by this code for the occupancy hazard classifications in accordance with Table 903.2.5.2.

Where the design area of the sprinkler system consists of a *corridor* protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

- [F] 903.2.5.3 Pyroxylin plastics. An automatic sprinkler system shall be provided in buildings, or portions thereof, where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg).
- [F] 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

- 1. An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1 Condition 1 facilities.
- 2. An automatic sprinkler system is not required where Group I-4 day care facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.
- 3. In buildings where Group I-4 day care is provided on levels other than the *level of* exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors

between the level of care and the level of *exit discharge*, and all floors below the *level of exit discharge* other than areas classified as an open parking garage.

- [F] 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:
 - 1. A Group M fire area exceeds 12,000 square feet (1115 m²).
 - 2. A Group M fire area is located more than three stories above grade plane.
 - 3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
 - 4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m²).
 - [F] 903.2.7.1 High-piled storage. An automatic sprinkler system shall be provided in accordance with the <u>Dallas</u> [International] Fire Code in all buildings of Group M where storage of merchandise is in high-piled or rack storage arrays.
- **[F] 903.2.8 Group R.** An *automatic sprinkler system* installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R *fire area*.

Exception: A dwelling, townhome or townhouse which complies with Section 903.2.13.

- [F] 903.2.8.1 Group R-3. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies.
- **[F] 903.2.8.2 Group R-4 Condition 1.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.3 shall be permitted in Group R-4 Condition 1 occupancies.
- **[F] 903.2.8.3 Group R-4 Condition 2.** An *automatic sprinkler system* installed in accordance with Section 903.3.1.2 shall be permitted in Group R-4 Condition 2 occupancies. Attics shall be protected in accordance with Section 903.2.8.3.1 or 903.2.8.3.2.
 - [F] 903.2.8.3.1 Attics used for living purposes, storage or fuel-fired equipment. Attics used for living purposes, storage or fuel-fired equipment shall be protected throughout with an *automatic sprinkler system* installed in accordance with Section 903.3.1.2.
 - [F] 903.2.8.3.2 Attics not used for living purposes, storage or fuel-fired equipment. Attics not used for living purposes, storage or fuel-fired equipment shall be protected in accordance with one of the following:

- 1. Attics protected throughout by a heat detector system arranged to activate the building fire alarm system in accordance with Section 907.2.10.
- 2. Attics constructed of noncombustible materials.
- 3. Attics constructed of fire-retardant-treated wood framing complying with Section 2303.2.
- 4. The *automatic sprinkler system* shall be extended to provide protection throughout the attic space.
- [F] 903.2.8.4 Care facilities. An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in care facilities with five or fewer individuals in a single-family dwelling.
- [F] 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:
 - 1. A Group S-1 fire area exceeds 12,000 square feet (1115 m²).
 - 2. A Group S-1 fire area is located more than three stories above grade plane.
 - 3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m²).
 - 4. A Group S-1 *fire area* used for the storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).
 - 5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m²). This use must also comply with the applicable provisions of Chapter 32, "High-Pile Combustible Storage," of the Dallas Fire Code due to the presence of Group A plastics used in upholstered furniture and mattresses.
 - [F] 903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:
 - 1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 10,000 square feet (929 m²).
 - 2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding 12,000 square feet (1115 m²).
 - 3. Buildings with repair garages servicing vehicles parked in basements.

- 4. A Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m²).
- [F] 903.2.9.2 Bulk storage of tires. Buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet (566 m³) shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- <u>903.2.9.3 Self-service storage facility.</u> An *automatic sprinkler system* must be installed throughout all self-service storage facilities.
- [F] 903.2.10 Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 406.6 where either of the following conditions exists:
 - 1. Where the *fire area* of the enclosed parking garage exceeds 12,000 square feet (1115 m²); or
 - 2. Where the enclosed parking garage is located beneath other groups.

Exception: Enclosed parking garages located beneath Group R-3 occupancies.

- [F] 903.2.10.1 Commercial parking garages. An automatic sprinkler system shall be provided throughout buildings used for storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (4464 m²).
- [F] 903.2.11 Specific building areas and hazards. In all occupancies other than Group U, an *automatic sprinkler system* shall be installed for building design or hazards in the locations set forth in Sections 903.2.11.1 through 903.2.11.8 [903.2.11.6].
 - **[F] 903.2.11.1 Stories without openings.** An automatic sprinkler system shall be installed throughout all stories, including basements, of all buildings where the floor area exceeds 1,500 square feet (139.4 m²) and where there is not provided not fewer than one of the following types of exterior wall openings:
 - 1. Openings below grade that lead directly to ground level by an exterior *stairway* complying with Section 1009 or an outside ramp complying with Section 1010. Openings shall be located in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the *story* on at least one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240 mm).
 - 2. Openings entirely above the adjoining ground level totaling at least 20 square feet (1.86 m²) in each 50 linear feet (15 240 mm), or fraction thereof, of *exterior wall* in the story on at least one side. The required openings shall be distributed such that the lineal distance between adjacent openings does not exceed 50 feet (15 240

- mm). The height of the bottom of the clear opening shall not exceed 44 inches (1118 mm) measured from the floor.
- **[F] 903.2.11.1.1 Opening dimensions and access.** Openings shall have a minimum dimension of not less than 30 inches (762 mm). Such openings shall be accessible to the fire department from the exterior and shall not be obstructed in a manner that fire fighting or rescue cannot be accomplished from the exterior.
- [F] 903.2.11.1.2. Openings on one side only. Where openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22 860 mm) from such openings, the story shall be equipped throughout with an approved automatic sprinkler system, or openings as specified above shall be provided on at least two sides of the story.
- [F] 903.2.11.1.3 Basements. Where any portion of a basement is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, or where walls, partitions or other obstructions are installed that restrict the application of water from hose streams, the basement shall be equipped throughout with an approved automatic sprinkler system.
- [F] 903.2.11.2 Rubbish and linen chutes. An automatic sprinkler system shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes shall have additional sprinkler heads installed at alternate floors and at the lowest intake. Where a rubbish chute extends through a building more than one floor below the lowest intake, the extension shall have sprinklers installed that are recessed from the drop area of the chute and protected from freezing in accordance with Section 903.3.1.1. Such sprinklers shall be installed at alternate floors, beginning with the second level below the last intake and ending with the floor above the discharge. Chute sprinklers shall be accessible for servicing.
- [F] 903.2.11.3 Buildings 55 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories other than penthouses in compliance with Section 1510 [with an occupant load of 30 or more] located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exception[s]:

- [4.] Open parking structures <u>in compliance with Section 406.5</u>, <u>having no</u> other occupancies above the subject garage.
- 2. Occupancies in Group F-2.
- [F] 903.2.11.4 Ducts conveying hazardous exhausts. Where required by the <u>Dallas</u> [International] Mechanical Code, automatic sprinklers shall be provided in ducts conveying hazardous exhaust or flammable or combustible materials.

- **Exception:** Ducts where the largest cross-sectional diameter of the duct is less than 10 inches (254 mm).
- [F] 903.2.11.5 Commercial cooking operations. An automatic sprinkler system shall be installed in commercial kitchen exhaust and duct systems where an automatic sprinkler system is used to comply with Section 904.
- [F] 903.2.11.6 Other required suppression systems. In addition to the requirements of Section 903.2, the provisions indicated in Table 903.2.11.6 also require the installation of a fire suppression system for certain buildings and areas.
- 903.2.11.7 High-piled combustible storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 of the *Dallas Fire Code* to determine if those provisions apply.
- 903.2.11.8 Spray booths and rooms. New and existing spray booths and spraying rooms must be protected by an approved automatic fire-extinguishing system.
- [F] 903.2.12 During construction. Automatic sprinkler systems required during construction, alteration and demolition operations shall be provided in accordance with Chapter 33 of the <u>Dallas</u> [International] Fire Code.
- 903.2.13 Building fire areas. Any qualified building area must provide a minimum number of fire walls throughout the building such that no building fire area exceeds the limits of the number listed in Table 903.2.13. Qualified building area is the total allowable area which has been determined first by the methods of increase as given in Section 506 without using the increases for sprinklers.

Exception: Fire walls are not required in accordance with this section in any of the following cases:

- 1. Buildings that have an approved automatic sprinkler system installed throughout in accordance with Sections 903.3.1.1 and 903.3.1.2.
- 2. Open air portions of Group A, Division 5 occupancies.
- 3. Open parking garages complying with Section 406.5.
- 4. Buildings of Type I or Type II construction used exclusively for noncombustible contents or the storage of noncombustible material not packed or crated in combustible material.
- 5. The floor area of existing nonsprinklered buildings housing other than Group H occupancies may be increased by not more than 5 percent. The floor area increase must not exceed 2,500 square feet (232.25 m²). Not more than one increase in floor area is permitted under this exception."

47. Subsection [F] 903.2, "Where Required," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended by adding a new Table 903.2.13, "Building Fire Area Limits (Sq. Ft.)," to read as follows:

"TABLE 903.2.13 BUILDING FIRE AREA LIMITS (SQ. FT.)

GROUP	TYPE OF CONSTRUCTION								
	TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
	A	В	A	В	A	В	нт	A	В
A ¹	25,000	25,000	15,000	8,500	14,000	8,500	15,000	11,500	5,500
A ^{2, 3}	25,000	25,000	15,000	8,500	15,000	8,500	15,000	15,000	5,500
A ⁴ , F, M, S-1, S-2 ⁵	25,000	25,000	15,000	10,000	15,000	10,000	15,000	15,000	7,500
A-4 ⁶	@	@	@	@	@	@	@	@	@
A-5 ⁷ , B ⁸ ,	35,000	35,000	20,000	15,000	20,000	15,000	20,000	15,000	7,500
B ⁹	25,000	25,000	15,000	10,000	15,000	10,000	15,000	15,000	7,500
H, I-1, I-3, I-4	0	0	0	0	0	0	0	0	0
I-2	0	0	0	0	0	NP	0	0	NP
R	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500	7,500
U^{10}	@	@	@	@	@	@	@	@	@
U ^{11, 12}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

For SI: 1 foot = 305 mm, 1 square foot = 0.0929 m².

NP: Not Permitted NA: Not Applicable

- 1. Assembly with a stage and occupant load of 1,000 or more.
- 2. Assembly with a stage and occupant load of less than 1,000.
- 3. Assembly without a stage with occupant load of 300 or more.
- 4. Assembly without a stage with occupant load of less than 300.
- 5. Open parking garages. See Sections 406.3, 403.1, and 903.2.13, Exception 3.
- 6. Indoor sports, see Footnote 1, 2, 3 or 4, as appropriate.
- Stadiums, reviewing stands, amusement park structures not with other A occupancy. See Sections 903.2.13 and 403.1.
- 8. Office buildings, police and fire stations, buildings with rooms used for education beyond 12th grade with less than 50 persons.
- 9. All other B occupancies.
- 10. Private garages and carports. See Section 406.3.
- 11. Fences over 6 feet high, tanks, sheds and agricultural buildings not classifiable in other occupancies.
- 12. Towers, See Section 412."
- 48. Subsection [F] 903.3, "Installation Requirements," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 903.3 Installation requirements. Automatic sprinkler systems shall be designed and installed in accordance with Sections 903.3.1 through 903.3.8.
 - [F] 903.3.1 Standards. Sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1 unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable.
 - [F] 903.3.1.1 NFPA 13 sprinkler systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an *automatic sprinkler system* in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 except as provided in Sections 903.3.1.1.1 and 903.3.1.1.2.
 - [F] 903.3.1.1.1 Exempt locations. When approved by the fire code official, a[A]utomatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, of fire-resistance-rated construction or contains electrical equipment.
 - 1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
 - 2. A room or space where sprinklers are considered undesirable because of the nature of the contents, when *approved* by the fire code official.

- 3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a *fire-resistance* rating of not less than 2 hours.
- 4. [Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
- 5. Fire service access] E[e]levator machine rooms, [and] machinery spaces and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
- [6. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.]
- [FF] 903.3.1.1.2. Residential systems. Residential sprinkler systems installed in accordance with Sections 903.3.1.2 and 903.3.1.3 will be recognized for the purposes of exceptions or reductions, commonly referred to as "trade-offs," only if permitted by other provisions of this code. [Bathrooms. In Group R occupancies, other than Group R 4 occupancies, sprinklers shall not be required in bathrooms that do not exceed 55 square feet (5 m²) in area and are located within individual dwelling units or sleeping units, provided that walls and ceilings, including the walls and ceilings behind a shower enclosure or tub, are of noncombustible or limited combustible materials with a 15 minute thermal barrier rating.]
- [F] 903.3.1.2 NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height in buildings not exceeding 60 feet (18 288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13R. Refer also to Section 903.3.1.1.2.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 shall be measured from the horizontal assembly creating separate buildings.

[F] 903.3.1.2.1 Balconies and decks. Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of *dwelling units* and *sleeping units* where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

- [F] 903.3.1.2.2 Open-ended corridors. Sprinkler protection shall be provided in open-ended corridors and associated exterior stairways and ramps as specified in Section 1027.6, Exception 3.
- 903.3.1.2.3 Attics and attached garages. Sprinkler protection is required in attic spaces of buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages.
- [F] 903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3, Group R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D. Refer also to Section 903.3.1.1.2.
- 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.
 - 903.3.1.4.1 Attics. Only dry-pipe, preaction or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

- 1. the attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building;
- 2. adequate heat is provided for freeze protection in accordance with the applicable referenced NFPA standard, and
- 3. the attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.
- 903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.
- [F] 903.3.2 Quick-response and residential sprinklers. Where automatic sprinkler systems are required by this code, quick-response or residential automatic sprinklers shall be installed in the following areas in accordance with Section 903.3.1 and their listings:
 - 1. Throughout all spaces within a smoke compartment containing care recipient *sleeping* units in Group I-2 in accordance with this code.

- 2. Throughout all spaces within a smoke compartment containing treatment rooms in ambulatory care facilities.
- 3. Dwelling units and sleeping units in Group I-1 and R occupancies.
- 4. Light-hazard occupancies as defined in NFPA 13.

[F] 903.3.3 Obstructed locations. Automatic sprinklers shall be installed with due regard to obstructions that will delay activation or obstruct the water distribution pattern. Automatic sprinklers shall be installed in or under covered kiosks, displays, booths, concession stands, or equipment that exceeds 4 feet (1219 mm) in width. Not less than a 3-foot (914 mm) clearance shall be maintained between automatic sprinklers and the top of piles of combustible fibers.

Exception: Kitchen equipment under exhaust hoods protected with a fire-extinguishing system in accordance with Section 904.

[F] 903.3.4 Actuation. Automatic sprinkler systems shall be automatically actuated unless specifically provided for in this code.

[F] 903.3.5 Water supplies. Water supplies for *automatic sprinkler systems* shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the <u>Dallas [International]</u> Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi (69 Pa) safety factor. Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 12 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction. Refer to Section 507.4 for additional design requirements.

[F] 903.3.5.1 Domestic services. Where the domestic service provides the water supply for the *automatic sprinkler system*, the supply shall be in accordance with this section.

[F] 903.3.5.2 [Residential e] Combination services. In all NFPA 13 and 13R designs, a[A] single combination water supply shall be allowed provided that the domestic demand is added to the sprinkler demand as required by NFPA 13, 13R, and 13D. Combination services four inches and larger shall be subject to the acceptance tests contained in the installation standards. Acceptance tests shall be witnessed and approved by the fire code official.

- [F] 903.3.6 Hose threads. Fire hose threads and fittings used in connection with *automatic* sprinkler systems shall be as prescribed by the fire code official.
- [F] 903.3.7 Fire department connections. Fire department connections for automatic sprinkler systems shall be installed in accordance with Section 912.
- [F] 903.3.8 Limited area sprinkler systems. Limited area sprinkler systems shall be in accordance with the standards listed in Section 903.3.1 except as provided in Sections 903.3.8.1 through 903.3.8.5.
 - **903.3.8.1 Number of sprinklers.** Limited area sprinkler systems shall not exceed six sprinklers in any single *fire area*.
 - **903.3.8.2 Occupancy hazard classification.** Only areas classified by NFPA 13 as Light Hazard or Ordinary Hazard Group 1 shall be permitted to be protected by limited area sprinkler systems.
 - 903.3.8.3 Piping arrangement. Where a limited area sprinkler system is installed in a building with an automatic wet standpipe system, sprinklers shall be supplied by the standpipe system. Where a limited area sprinkler system is installed in a building without an automatic wet standpipe system, water shall be permitted to be supplied by the plumbing system provided that the plumbing system is capable of simultaneously supplying domestic and sprinkler demands.
 - 903.3.8.4 Supervision. Control valves shall not be installed between the water supply and sprinklers unless the valves are of an *approved* indicating type that are supervised or secured in the open position.
 - 903.3.8.5 Calculations. Hydraulic calculations in accordance with NFPA 13 shall be provided to demonstrate that the available water flow and pressure are adequate to supply all sprinklers installed in any single *fire area* with discharge densities corresponding to the hazard classification."
- 49. Subsection [F] 903.4, "Sprinkler System Supervision and Alarms," of Section 903, "Automatic Sprinkler Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 903.4 Sprinkler system supervision and alarms. All v[V] alves on the building side of the water meter controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

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- 1. Automatic sprinkler systems protecting one- and two-family dwellings.
- 2. Limited area sprinkler systems in accordance with Section 903.3.8.
- 3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
- 4. Jockey pump control valves that are sealed or locked in the open position.
- 5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
- 6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

Sprinkler and standpipe system water-flow detectors must be provided for each floor tap to the sprinkler system and must cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves must be electrically supervised to initiate a supervisory signal at the central station upon tampering.

[F] 903.4.1 Monitoring. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an *approved* supervising station or, where *approved* by the fire code official, shall sound an audible signal at a *constantly attended location*.

Exceptions:

- 1. Underground key or hub valves in roadway boxes provided by the municipality or public utility are not required to be monitored.
- 2. Backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

[F] 903.4.2 Alarms. A weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection [An approved audible device, located on the exterior of the building in an approved location,]

shall be connected to <u>every</u> [each] automatic sprinkler system. Such sprinkler waterflow 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. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

- [F] 903.4.3 Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in high-rise-buildings."
- 50. Subsection [F] 905.2, "Installation Standard," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig (69 kPa) and a maximum of 40 psig (276 kPa) air pressure with a high/low alarm. Fire department connections for standpipe systems shall be in accordance with Section 912."
- 51. Subsection [F] 905.3, "Required Installations," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 905.3 Required installations. Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.9 [905.3.8]. Standpipe systems are allowed to be combined with automatic sprinkler systems.

Exception: Standpipe systems are not required in Group R-3 occupancies.

[F] 905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where the floor level of the highest *story* is located more than 30 feet (9144 mm) above the lowest level of fire department vehicle access, or where the floor level of the lowest *story* is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.

Exceptions:

- 1. Class I standpipes are allowed in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. Class I manual standpipes are allowed in *open parking garages* where the highest floor is located not more than 150 feet (45 720 mm) above the lowest level of fire department vehicle access.

- 3. Class I manual dry standpipes are allowed in *open parking garages* that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
- 4. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
- 5. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - 5.1. Recessed loading docks for four vehicles or less.
 - 5.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

[F] 905.3.2 Group A. Class I automatic wet standpipes shall be provided in nonsprinklered Group A buildings having an *occupant load* exceeding 1,000 persons.

Exceptions:

- 1. Open air seating spaces without enclosed spaces.
- 2. Class I automatic dry and semiautomatic dry standpipes or manual wet standpipes are allowed in buildings that are not high rise buildings.]

[F] 905.3.3 Covered and open mall buildings. Covered mall and open mall buildings shall be equipped throughout with a standpipe system where required by Section 905.3.1. Mall buildings not required to be equipped with a standpipe system by Section 905.3.1 shall be equipped with Class I hose connections connected to the *automatic sprinkler system* sized to deliver water at 250 gallons per minute (946.4 L/min) at the most hydraulically remote hose connection while concurrently supplying the automatic sprinkler system demand. The standpipe system shall be designed to not exceed a 50 pounds per square inch (psi) (345 kPa) residual pressure loss with a flow of 250 gallons per minute (946.4 L/min) from the fire department connection to the hydraulically most remote hose connection. Hose connections shall be provided at each of the following locations:

- 1. Within the mall at the entrance to each *exit* passageway or *corridor*.
- 2. At each floor-level landing within *interior exit stairways* opening directly on the mall.
- 3. At exterior public entrances to the mall of a covered mall building.
- 4. At public entrances at the perimeter line of an open mall building.

- 5. At other locations as necessary so that the distance to reach all portions of a tenant space does not exceed 200 feet (60 960 mm) from a hose connection.
- [F] 905.3.4 Stages. Stages greater than 1,000 square feet in area (93 m²) shall be equipped with a Class III wet standpipe system with 1½-inch and 2½-inch (38 mm and 64 mm) hose connections on each side of the stage.

Exception: Where the building or area is equipped throughout with an *automatic* sprinkler system, a 1½-inch (38 mm) hose connection shall be installed in accordance with NFPA 13 or in accordance with NFPA 14 for Class II or III standpipes.

- [F] 905.3.4.1 Hose and cabinet. The 1½-inch (38 mm) hose connections shall be equipped with sufficient lengths of 1½-inch (38 mm) hose to provide fire protection for the stage area. Hose connections shall be equipped with an approved adjustable fog nozzle and be mounted in a cabinet or on a rack.
- [F] 905.3.5 Underground buildings. Underground buildings shall be equipped throughout with a Class I automatic wet or manual wet standpipe system.
- **[F] 905.3.6 Helistops and heliports.** Buildings with a rooftop *helistop* or *heliport* shall be equipped with a Class I or III standpipe system extended to the roof level on which the *helistop* or *heliport* is located in accordance with Section 2007.5 of the <u>Dallas</u> [International] Fire Code.
- [F] 905.3.7 Marinas and boatyards. Standpipes in marinas and boatyards shall comply with Chapter 36 of the <u>Dallas</u> [International] Fire Code.
- [F] 905.3.8 Rooftop gardens and landscaped roofs. Buildings or structures that have rooftop gardens or landscaped roofs and that are equipped with a standpipe system shall have the standpipe system extended to the roof level on which the rooftop garden or landscaped roof is located.
- 905.3.9 Buildings exceeding 10,000 square feet. In buildings exceeding 10,000 square feet (929.03 m²) per story, Class I automatic wet or manual wet standpipes must be provided where any portion of the building's interior area is more than 200 feet (60 960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access.

Exceptions:

- 1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
- 2. R-2 occupancies of four stories or less in height having no interior corridors."

52. Subsection [F] 905.4, "Location of Class I Standpipe Hose Connections," of Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:

"[F] 905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

- 1. In every required [interior] exit stairway, a hose connection shall be provided for each story above or below grade. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
- 2. On each side of the wall adjacent to the exit opening of a horizontal exit.

Exception: Where floor areas adjacent to a *horizontal exit* are reachable from an [*interior*] exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the *horizontal exit*.

3. In every *exit* passageway, at the entrance from the *exit* passageway to other areas of a building.

Exception: Where floor areas adjacent to an *exit* passageway are reachable from an [interior] exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the *exit* passageway to other areas of the building.

- 4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.
- 5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way [a] hose connection [shall be] located to serve the roof or at the highest landing of an *interior exit stairway* with access to the roof provided in accordance with Section 1011.12
- 6. Where the most remote portion of a nonsprinklered floor or *story* is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or *story* is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in *approved* locations.

- 7. When required by this chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at 200 foot intervals along major corridors thereafter, or as otherwise approved by the fire code official.
- [F] 905.4.1 Protection. Risers and laterals of Class I standpipe systems not located within an *interior exit stairway* shall be protected by a degree of *fire resistance* equal to that required for vertical enclosures in the building in which they are located.

Exception: In buildings equipped throughout with an approved automatic sprinkler system, laterals that are not located within an interior exit stairway are not required to be enclosed within fire-resistance-rated construction.

[F] 905.4.2 Interconnection. In buildings where more than one standpipe is provided, the standpipes shall be interconnected in accordance with NFPA 14.

905.4.3 Additional requirements. All Class I standpipes must be:

- 1. Filled with water at all times; or
- 2. Supervised with a minimum of 10 psig (69 kPA) air pressure with a high/low alarm."
- 53. Section 905, "Standpipe Systems," of Chapter 9, "Fire Protection Systems," of the

2015 International Building Code is amended by adding a new Subsection 905.11, "Standpipe

Testing," to read as follows:

- "905.11 Standpipe testing. Building owners/managers shall use a licensed fire protection contractor to test and certify standpipe systems. In addition to the standpipe systems testing and maintenance requirements of NFPA 25, the following additional requirements shall be applied to the testing that is required every 5 years:
 - 1. The piping between the fire department connection (FDC) and the standpipe shall be hydrostatically tested for all FDCs on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
 - 2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the contractor shall connect a hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water (at an approved rate and pressure) through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Verify that check valves function properly and that there are no closed control valves on the system.
 - 3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25.

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- 4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDCs.
- 5. Upon successful completion of standpipe test, the contractor shall place an appropriate service tag as per the State of Texas provisions.
- 6. The contractor shall follow the procedures required by the State of Texas with regard to appropriate tags denoting noncompliance, impairment or any deficiencies noted during the testing, including the required notification of the local authority having jurisdiction.
- 7. Additionally, records of the testing shall be maintained by the owner and contractor, as required by the State of Texas and NFPA 25.
- 8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
- 9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official."
- 54. Subsection [F] 907.1, "General," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 907.1 General. This section covers the application, installation, performance and maintenance of fire alarm systems and their components. <u>Provisions of the Dallas Fire Code</u> govern in the event of conflicts between this section and the corresponding section of the <u>Dallas Fire Code</u>.
 - [F] 907.1.1 Construction documents. Construction documents for fire alarm systems 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, the <u>Dallas</u> [International] Fire Code, and relevant laws, ordinances, rules and regulations, as determined by the fire code official.
 - [F] 907.1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following where applicable to the system being installed:

- 1. A floor plan that indicates the use of all rooms.
- 2. Locations of alarm-initiating devices.
- 3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
- 4. Design minimum audibility level for occupant notification.
- 5. Location of fire alarm control unit, transponders and notification power supplies.
- 6. Annunciators.
- 7. Power connection.
- 8. Battery calculations.
- 9. Conductor type and sizes.
- 10. Voltage drop calculations.
- 11. Manufacturers' data sheets indicating model numbers and listing information for equipment, devices and materials.
- 12. Details of ceiling height and construction.
- 13. The interface of fire safety control functions.
- 14. Classification of the supervising station.
- [F] 907.1.3 Equipment. Systems and components shall be *listed* and *approved* for the purpose for which they are installed. Where such systems are installed, they must be designed, installed and maintained in accordance with this code and the applicable NFPA standards.
 - 907.1.3.1 Prohibited equipment. Smoke generating devices activated by a burglar alarm, motion detector, tamper alarm or other type of intruder alarms are prohibited in all buildings.
- 907.1.4 Design standards. All new or replaced fire alarm systems (including fire alarm control panel replacements) must comply with the requirements of Section 907 and shall be addressable and in accordance with Section 907.6.3. Alarm systems utilizing more than 20 alarm initiating devices shall be analog addressable.

Exception: Existing systems need not comply unless the total building or fire alarm system remodel or expansion initiated after the effective date of this code exceeds 30 percent of the building area. When cumulative building remodel or expansion exceeds 50 percent of the building area, all existing systems shall comply within 18 months of permit application. The owner or operator of the facility shall maintain documentation of the amount of fire alarm system remodel or expansion. The documentation must be submitted with each fire alarm system plan submittal or upon request from the fire code official.

907.1.5 Area separation walls/fire walls. Area separation walls/fire walls must not be used to reduce or eliminate fire alarm requirements.

Exception: Adjacent spaces are considered separate areas for fire alarm purposes if separated by minimum fire-rated construction as required in this code to define separate buildings. Separating walls cannot have openings that permit occupant communication between the spaces."

55. Paragraph [F] 907.2.1, "Group A," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:

"[F] 907.2.1 Group A. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an [where the] occupant load of [due to the assembly occupancy is] 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Activation of fire alarm notification appliances must:

- 1. Cause illumination of the *means of egress* with light of not less than 1 foot candle (11 lux) at the walking surface level, and
- 2. Stop any conflicting or confusing sounds and visual distractions.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section

- 903.3.1.1, and automatic fire detection in paths of egress, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.
- [F] 907.2.1.1 System initiation in Group A occupancies with an occupant load of 1,000 or more. Activation of the fire alarm in Group A occupancies with an occupant load of 1,000 or more shall initiate a signal using an emergency voice/alarm communications system in accordance with Section 907.5.2.2.

Exception: Where approved, the prerecorded announcement is allowed to be manually deactivated for a period of time, not to exceed 3 minutes, for the sole purpose of allowing a live voice announcement from an approved, constantly attended location.

- [F] 907.2.1.2 Emergency voice/alarm communication captions. Stadiums, arenas and grandstands required to caption audible public announcements shall be in accordance with Section 907.5.2.2.4."
- 56. Paragraph [F] 907.2.2, "Group B," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
 - "[F] 907.2.2 Group B. A manual fire alarm system and automatic fire detection in paths of egress shall be installed in Group B occupancies where one of the following conditions exists:
 - 1. The combined Group B occupant load of all floors is 500 or more.
 - 2. The Group B occupant load is more than 100 persons above or below the lowest level of exit discharge.
 - 3. The *fire area* contains an ambulatory care facility.

Exception: Manual fire alarm boxes and automatic fire detection in paths of egress are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

[F] 907.2.2.1 Ambulatory care facilities. *Fire areas* containing ambulatory care facilities shall be provided with an electronically supervised automatic smoke detection system installed within the ambulatory care facility and in public use areas outside of tenant spaces, including public *corridors* and elevator lobbies.

[Exception: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, provided the occupant notification appliances will activate throughout the notification zones upon sprinkler waterflow.]"

- 57. Paragraph [F] 907.2.3, "Group E," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
 - "[F] 907.2.3 Group E. A manual fire alarm system and automatic fire detection in paths of egress that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. Group E day care occupancies shall have a smoke detector in all areas used by children. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. Unless separated by a minimum of 100 feet (30 480 mm) of open space, all buildings, whether portable buildings or the main building, will be considered one building for fire alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

- 1. A manual fire alarm system with automatic fire detection in paths of egress is not required in Group E educational and day care occupancies with an occupant load of 30 [50] or less when provided with an approved automatic sprinkler system.
- 2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.
- 3. [Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
 - 3.1 Interior corridors are protected by smoke detectors.
 - 3.2 Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.

- 3.3 Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
- 4.] Manual fire alarm boxes <u>and fire detection in paths of egress</u> shall not be required in Group E <u>educational</u> occupancies where all of the following apply:
 - 31[4.1]. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
 - <u>32</u>[4.2]. The emergency voice/alarm communication system will activate on sprinkler water flow.
 - 33[4.3]. Manual activation is provided from a normally occupied location.
- 4. Residential in-home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2½ years of age or younger, see Section 907.2.6.)
- 907.2.3.1 Exterior alarm-signaling device. Alarm-sharing devices must be mounted on the exterior of the building in all common use/gathering areas."
- 58. Paragraph [F] 907.2.6, "Group I," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code Code is amended by adding a new Subparagraph 907.2.6.4, "Institutional Group I-4 Day Care Facilities," to read as follows:
 - "907.2.6.4 Group I-4 day care facilities. A manual fire alarm system and automatic fire detection in paths of egress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group I-4 day care facility occupancies. Group I-4 day care facility occupancies shall have smoke detectors in all areas used by children. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system."
- 59. Paragraph [F] 907.2.7, "Group M," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:

"[F] 907.2.7 Group M. A manual fire alarm system and an automatic fire protection system in paths of ingress that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group M occupancies where one of the following conditions exists:

- 1. The combined Group M occupant load of all floors is 500 or more persons.
- 2. The Group M occupant load is more than 100 persons above or below the lowest level of exit discharge.

Exceptions:

- 1. A manual fire alarm system is not required in covered or open mall buildings complying with Section 402.
- 2. Manual fire alarm boxes and an automatic fire detection system in paths of egress are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will automatically activate throughout the notification zones upon sprinkler waterflow.
- [F] 907.2.7.1 Occupant notification. During times that the building is occupied, the initiation of a signal from a manual fire alarm box, [ex] from a waterflow switch or automatic fire detection system shall not be required to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2."
- 60. Paragraph [F] 907.2.13, "High-Rise Buildings," of Subsection [F] 907.2, "Where Required—New Buildings and Structures," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
 - "[F] 907.2.13 High-rise buildings. [High-rise] B[b]uildings with a floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection/fire alarm system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

- 1. Airport traffic control towers in accordance with Sections 412 and 907.2.22.
- 2. Open parking garages in accordance with Section 406.5.
- 3. Open air portions of b[B]uildings with an occupancy in Group A-5 in accordance with Section 303.6, however this exception does not apply to enclosed concourses or accessory use areas including, but not limited to, skyboxes, restaurants and similarly enclosed areas [303.1].
- 4. Low-hazard special occupancies in accordance with Section 503.1.1.
- 5. Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.
- 6. In Group I-1 and I-2 occupancies, the alarm shall sound at a *constantly attended location* and occupant notification shall be broadcast by the emergency voice/alarm communication system.
- **[F] 907.2.13.1 Automatic smoke detection.** Automatic smoke detection in high-rise buildings shall be in accordance with Sections 907.2.13.1.1 and 907.2.13.1.2.
 - [F] 907.2.13.1.1 Area smoke detection. Area smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall activate the emergency voice/alarm communication system in accordance with Section 907.5.2.2. In addition to smoke detectors required by Sections 907.2.1 through 907.2.10, smoke detectors shall be located as follows:
 - 1. In each mechanical equipment, electrical transformer, telephone equipment or similar room which is not provided with sprinkler protection.
 - 2. In each elevator machine room, machinery room, control room and control space and in elevator lobbies.
 - 3. In all interior corridors serving as a means of egress for an occupant load of 10 or more in Group R-1 and R-2 occupancies.
 - [M] 907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located [as follows:
 - 4.] <u>i</u>[I]n the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet <u>and per NFPA 72</u>. The actuation of any such detector must shut down the affected air-handling units or operate dampers to prevent the

- recirculation of smoke. Controls allowing the manual restarting of airhandling equipment during an alarm condition must be provided.
- [2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air inlet openings.]
- [F] 907.2.13.2 Fire department communication system. Where a wired communication system is approved in lieu of an emergency responder radio coverage system in accordance with Section 510 of the <u>Dallas</u> [International] Fire Code, the wired fire department communication system shall be designed and installed in accordance with NFPA 72 and shall operate between a fire command center complying with Section 911, elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside interior exit stairways. The fire department communication device shall be provided at each floor level within the interior exit stairway."
- 61. Paragraph [F] 907.4.2, "Manual Fire Alarm Boxes," of Subsection [F] 907.4, "Initiating Devices," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
 - "[F] 907.4.2 Manual fire alarm boxes. Where a manual fire alarm system is required by another section of this code, it shall be activated by alarm boxes installed in accordance with Sections 907.4.2.1 through 907.4.2.6. Manual fire alarm actuating devices must be an approved double action type.
 - **[F] 907.4.2.1 Location.** Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each *exit*. In buildings not protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the *exit access* travel distance to the nearest box does not exceed 200 feet (60 960 mm).
 - **[F] 907.4.2.2 Height.** The height of the manual fire alarm boxes shall be not less than 42 inches (1067 mm) and not more than 48 inches (1372 mm) measured vertically, from the floor level to the activating handle or lever of the box.
 - [F] 907.4.2.3 Color. Manual fire alarm boxes shall be red in color.

Exception: Other colors may be acceptable if red does not provide a contrast with the surrounding background, when approved by the fire code official.

[F] 907.4.2.4 Signs. Where approved existing fire alarm systems are not monitored by a supervising station, an approved permanent sign shall be installed adjacent to each manual fire alarm box that reads: WHEN ALARM SOUNDS CALL FIRE DEPARTMENT.

Exception: Where the manufacturer has permanently provided this information on the manual fire alarm box.

- [F] 907.4.2.5 Protective covers. The fire code official is authorized to require the installation of *listed* manual fire alarm box protective covers to prevent malicious false alarms or to provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. A protective cover that emits a local alarm signal shall not be installed unless *approved* by the fire code official. Protective covers shall not project more than that permitted by Section 1003.3.3.
- [F] 907.4.2.6 Unobstructed and unobscured. Manual fire alarm boxes shall be accessible, unobstructed, unobscured and visible at all times."
- 62. Subparagraph [F] 907.5.2.2, "Emergency Voice/Alarm Communication Systems," of Paragraph [F] 907.5.2, "Alarm Notification Appliances," of Subsection [F] 907.5, "Occupant Notification Systems," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
 - "[F] 907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404 of the Dallas [International] Fire Code. In high-rise buildings, the system shall operate on at least the alarming floor, the floor above and the floor below and identify on an annunciator the zone or address from which the alarm signal originated. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:
 - 1. Elevator groups.
 - 2. Interior exit stairways.
 - 3. Each floor.

4. Areas of refuge as defined in Chapter 2.

Exception: In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

- [F] 907.5.2.2.1 Manual override. A manual override for emergency voice communication shall be provided on a selective and all-call basis for all paging zones.
- [F] 907.5.2.2.2 Live voice messages. The emergency voice/alarm communication system shall have the capability to broadcast live voice messages by paging zones on a selective and all-call basis.
- [F] 907.5.2.2.3 Alternate uses. The emergency voice/alarm communication system shall be allowed to be used for other announcements, provided the manual fire alarm use takes precedence over any other use.
- [F] 907.5.2.2.4 Emergency voice/alarm communication captions. Where stadiums, arenas and grandstands are required to caption audible public announcements in accordance with Section 1108.2.7.3, the emergency/voice alarm communication system shall be captioned. Prerecorded or live emergency captions shall be from an approved location constantly attended by personnel trained to respond to an emergency.
- [F] 907.5.2.2.5 Emergency power. Emergency voice/alarm communications systems shall be provided with an approved emergency power source [in accordance with Section 2702. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72]."
- 63. Subparagraph [F] 907.5.2.3, "Visible Alarms," of Paragraph [F] 907.5.2, "Alarm Notification Appliances," of Subsection [F] 907.5, "Occupant Notification Systems," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
 - "[F] 907.5.2.3 Visible alarms. Visible alarm notification appliances shall be provided in accordance with Sections 907.5.2.3.1 through 907.5.2.3.3. <u>Visual alarm notification appliances must be provided where an existing fire alarm system is upgraded, altered or a new fire alarm system is installed.</u>

Exceptions:

- 1. Visible alarm notification appliances are not required in storage areas of Group S occupancies [alternations, except where an existing fire alarm system is upgraded or replaced, or a new fire alarm system is installed].
- 2. Visible alarm notification appliances shall not be required in *exits* as defined in Chapter 2.
- 3. Visible alarm notification appliances shall not be required in elevator cars.
- 4. Visual alarm notification appliances are not required in critical care areas of Group I-2 Condition 2 occupancies that are in compliance with Section 907.2.6, Exception 2.

[F] 907.5.2.3.1 Public use areas and common use areas. Visible alarm notification appliances shall be provided in *public use areas* and *common use areas*.

Exception: Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with not less than 20-precent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing-impaired employee(s).

- [F] 907.5.2.3.2 Groups I-1 and R-1. Group I-1 and R-1 dwelling units or sleeping units in accordance with Table 907.5.2.3.2 shall be provided with a visible alarm notification appliance, activated by both the in-room smoke alarm and the building fire alarm system.
- [F] 907.5.2.3.3 Group R-2. In Group R-2 occupancies required by Section 907 to have a fire alarm system, all *dwelling units* and *sleeping units* shall be provided with the capability to support visible alarm notification appliances in accordance with Chapter 10 of ICC A117.1. Such capability shall be permitted to include the potential for future interconnection of the building fire alarm system with the unit smoke alarms, replacement of audible appliances with combination audible/visible appliances, or future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances."
- 64. Paragraph [F] 907.6.1, "Wiring," of Subsection [F] 907.6, "Installation and Monitoring," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended by adding a new Subparagraph 907.6.1.1, "Installation," to read as follows:

"[F] 907.6.1.1 Installation. All fire alarm systems must be installed in such a manner that the failure of any single alarm initiating device or a single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All initiating circuit conductors must be Class "A" wired with a minimum of 6 feet of separation between supply and return circuit conductors. All fire alarm systems must be wired as follows: IDC – Class A style – D; SLC – Class A style 6; NAC Class B style Y. Provide a minimum 6 foot (1829 mm) separation between supply and return loops in all Class C wired circuits.

Exception: The IDC from an addressable device used to monitor the status of a suppression system may be wired Class B, Style B provided the addressable device is located within 10 feet of the suppression system device."

65. Paragraph [F] 907.6.6, "Monitoring," of Subsection [F] 907.6, "Installation and Monitoring," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:

"[F] 907.6.6 Monitoring. Fire alarm systems required by this chapter, by other chapters of this code, or by the <u>Dallas</u> [International] Fire Code shall be monitored by an approved central station, remote supervising station, or proprietary supervising station as defined in [accordance with] NFPA 72, or a local alarm which gives audible and visual signals at a constantly attended location. A constantly attended location is defined as being occupied by 2 or more persons whose responsibility it is to monitor the fire alarm system.

Exception: Monitoring by a supervising station is not required for:

- 1. Single- and multiple-station smoke alarms required by Section 907.2.11.
- 2. Smoke detectors in Group I-3 occupancies.
- 3. Automatic sprinkler systems in one- and two-family dwellings.
- [F] 907.6.6.1 Automatic telephone-dialing devices. Automatic telephone-dialing devices used to transmit an emergency alarm shall not be connected to any fire department telephone number unless *approved* by the fire chief.
- **[F] 907.6.6.2 Termination of monitoring service.** Termination of fire alarm monitoring services shall be in accordance with Section 901.9 of the <u>Dallas</u> [International] Fire Code."

- 66. Subsection [F] 907.7, "Acceptance Tests and Completion," of Section 907, "Fire Alarm and Detection Systems," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 907.7 Acceptance tests and completion. Upon completion of the installation, the fire alarm system and all fire alarm components shall be tested <u>and approved</u> in accordance with NFPA 72 and Section 901.5 of the *Dallas Fire Code*.
 - [F] 907.7.1 Single- and multiple-station alarm devices. When the installation of the alarm devices is complete, each device and interconnecting wiring for multiple-station alarm devices shall be tested in accordance with the smoke alarm provisions of NFPA 72.
 - **[F] 907.7.2 Record of completion.** A record of completion in accordance with NFPA 72 verifying that the system has been installed and tested in accordance with the *approved* plans and specifications shall be provided.
 - [F] 907.7.3 Instructions. Operating, testing and maintenance instructions and record drawings ("as-builts") and equipment specifications shall be provided at an approved location."
- 67. Subsection [F] 910.1, "General," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 910.1 General. Where required by this code, smoke and heat vents or mechanical smoke exhaust [removal] 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. Where areas of buildings are equipped with early suppression fast-response (ESFR) sprinklers, only manual smoke and heat vents shall be required within these areas. Automatic smoke and heat vents are prohibited."
- 68. Subsection [F] 910.2, "Where Required," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:

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"[F] 910.2 Where required. Smoke and heat vents [or a mechanical smoke removal system] shall be installed in the roofs of buildings or portions thereof occupied for the uses as required by Sections 910.2.1 through 910.2.4 [and 910.2.2].

Exceptions:

- 1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an approved automatic sprinkler system.
- 2. Only manual s[S]moke and heat removal shall [not] be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
- 3. Only manual s[S]moke and heat removal shall [not] be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50(m*S)^{1/2} or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

910.2.1 Group F-1 or S-1. Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system installed in accordance with Section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than 50,000 square feet (4645 m²) of undivided area. In occupied portions of a building equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

Exception: Group S-1 aircraft repair hangars.

[F] 910.2.2 High-piled combustible storage. Smoke and heat removal required by Table 3206.2 of the *Dallas* [International] Fire Code for buildings and portions thereof containing high-piled combustible storage shall be installed in accordance with Section 910.3 in unsprinklered buildings. In buildings and portions thereof containing high-piled combustible storage equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, a smoke and heat removal system shall be installed in accordance with Section 910.3 or 910.4. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

910.2.3 Group H. Smoke and heat vents or a mechanical smoke removal system shall be installed in buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

- Exception: Buildings of noncombustible construction containing only noncombustible materials.
- 2. In areas of buildings in Group H used for storing Class 2, 3 and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials."

- 69. Subsection 910.3, "Smoke and Heat Vents," of Section 910 "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended by adding a new Paragraph 910.3.4, "Vent Operation," to read as follows:
 - "[F] 910.3.4 Vent operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.4.1 through 910.3.4.2.
 - [F] 910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100°F (approximately 38°C) greater than the temperature rating of the sprinklers installed.

Exception: Manual only system per Section 910.2.

[F] 910.3.4.2 Nonsprinklered buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (38°C) and 220°F (104°C) above ambient.

Exception: Listed gravity-operated drop out vents."

70. Subsection [F]910.4, "Mechanical Smoke Removal Systems," of Section 910, "Smoke and Heat Removal," of Chapter 9, "Fire Protection Systems," of the 2015 International Fire Code is amended to read as follows:

- "[F] 910.4 Mechanical smoke removal systems. Mechanical smoke removal systems shall be designed and installed in accordance with Sections 910.4.1 through 910.4.7.
 - **910.4.1** Automatic sprinklers required. The building shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.
 - 910.4.2 Exhaust fan construction. Exhaust fans that are part of a mechanical smoke removal system shall be rated for operation at 221°F (105°C). Exhaust fan motors shall be located outside of the exhaust fan air stream.
 - 910.4.3 System design criteria. The mechanical smoke removal system shall be sized to exhaust the building at a minimum rate of two air changes per hour based upon the volume of the building or portion thereof without contents. The capacity of each exhaust fan shall not exceed 30,000 cubic feet per minute (14.2 m³/sec).
 - 910.4.3.1 Makeup air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be [manual or] automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.
 - 910.4.4 Activation. The mechanical smoke removal system shall be activated <u>automatically</u> by the <u>automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided [only].</u>

Exception: Manual only systems per Section 910.2."

- 71. Subsection [F]912.2, "Location," of Section 912, "Fire Department Connections," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F]912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other fire apparatus. Fire apparatus access roads shall be required within 50 feet (15 240 mm) of any fire department hose connections.

 A [The location of] fire department hose connection[s] shall be located within 400 feet (122 m) of a fire hydrant and approved by the fire chief.
 - **[F] 912.2.1 Visible location.** Fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as otherwise *approved* by the fire <u>code official</u> [ehief].
 - [F] 912.2.2 Existing buildings. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall

be indicated by an *approved* sign mounted on the street front or on the side of the building. Such sign shall have the letters "FDC" not less than 6 inches (152 mm) high and words in letters not less than 2 inches (51 mm) high or an arrow to indicate the location. Such signs shall be subject to the approval of the fire code official.

- 912.2.3 Remote and free-standing fire department connections. Free-standing fire department connections shall be internally and externally galvanized, permanently marked with the address being served, or portion thereof, and provided with approved locking caps/covers. Means to service the drain/check valve shall be provided."
- 72. Subsection [F] 913.1, "General," of Section 913, "Fire Pumps," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- [F] 913.1 General. Where provided, fire pumps shall be installed in accordance with this section and NFPA 20. When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 feet in width and 6 feet 8 inches in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1 of the Dallas Fire Code.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1 of the *Dallas Fire Code*.

- 73. Subsection [F] 913.4, "Valve Supervision," of Section 913, "Fire Pumps," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended to read as follows:
- "[F] 913.4 Valve supervision. Where provided, the fire pump suction, discharge and bypass valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by one of the following methods:
 - 1. Central-station, proprietary or remote-station signaling service.
 - 2. Local signaling service that will cause the sounding of an audible signal at a constantly attended location.
 - 3. Locking valves open, when approved by the fire code official.

- 4. Sealing of valves and *approved* weekly recorded inspection where valves are located within fenced enclosures under the control of the owner, when approved by the fire code official.
- [F] 913.4.1 Test outlet valve supervision. Fire pump test outlet valves shall be supervised in the closed position."
- 74. Section 913, "Fire Pumps," of Chapter 9, "Fire Protection Systems," of the 2015 International Building Code is amended by adding a new Subsection [F] 913.6, "Pump Supervision," to read as follows:
- "[F] 913.6 Pump supervision. Where the pump room is not constantly attended, the fire pump shall transmit a supervisory signal to indicate loss of power, phase reversal and pump running conditions in accordance with NFPA 20."
- 75. Subsection 1001.1, "General," of Section 1001, "Administration," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1001.1 General. Buildings or portions thereof shall be provided with a means of egress system as required by this chapter. The provisions of this chapter shall control the design, construction and arrangement of means of egress components required to provide an approved means of egress from structures and portions thereof. Provisions of this code shall govern in the event of conflicts between this chapter and the corresponding chapter of the Dallas Fire Code."
- 76. Paragraph 1004.1.2, "Areas Without Fixed Seating," of Subsection 1004.1, "Design Occupant Load," of Section 1004, "Occupant Load," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
 - "1004.1.2 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.2. For areas without fixed seating, the occupant load shall be not less than that number determined by dividing the floor area under consideration by the occupant load factor assigned to the function of the space as set forth in Table 1004.1.2. Where an intended function is not listed in Table 1004.1.2, the building official shall establish a function based on a listed function that most nearly resembles the intended function.

[Exception: Where approved by the building official, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design occupant load.]"

- 77. Subsection 1004.5, "Outdoor Areas," of Section 1004, "Occupant Load," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1004.5 Outdoor areas. Yards, patios, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

Exceptions:

- 1. Outdoor areas used exclusively for service of the building need only have one *means* of egress.
- 2. The occupant load of the outdoor area need not be added to the building's total occupant load if:
 - 2.1 The [Both] outdoor areas are located at grade and associated with Group R-3 and individual dwelling units of Group R-2. Means of egress must be provided from the outdoor area in accordance with this chapter.
 - 2.2 The outdoor areas are not located at grade and associated with Group R-3 and individual dwelling units of Group R-2 and the outdoor area occupies not more than 10 percent of the area of the dwelling unit of a nonsprinklered building or not less than 20 percent of the area of the dwelling unit of a building provided throughout with an approved automatic sprinkler system. Means of egress must be provided from the outdoor area in accordance with this chapter."
- 78. Subsection 1009.1, "Accessible Means of Egress Required," of Section 1009, "Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1009.1 Accessible means of egress required. Accessible means of egress shall comply with this section. Accessible spaces shall be provided with not less than one accessible means of egress. Where more than one means of egress are required by Section 1006.2 or 1006.3 from any accessible space, each accessible portion of the space shall be served by not less than two accessible means of egress.

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Exceptions:

- 1. Accessible *means of egress* are not required to be provided in <u>alterations to</u> existing buildings.
- 2. One accessible *means of egress* is required from an *accessible mezzanine* level in accordance with Section 1009.3, 1009.4 or 1009.5.
- 3. In assembly areas with sloped or stepped aisles or stepped aisles, one accessible means of egress is permitted where the common path of egress travel is accessible and meets the requirements in Section 1029.8.
- 4. Accessible means of egress may satisfy this section if designed in accordance with Article 9102, "Architectural Barriers," of Vernon's Texas Civil Statutes and the "Texas Accessibility Standards of the Architectural Barriers Act," adopted by the Texas Commission on Licensing and Regulation and built in accordance with a state certified plan, including any variances or waivers granted by the state."
- 79. Subsection 1009.5, "Platform Lifts," of Section 1009, "Accessible Means of Egress," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1009.5 Platform lifts. Platform (wheelchair) lifts shall be permitted to serve as part of an accessible means of egress where allowed as part of a required accessible route in Section 1109.8 except for Item 10. Standby power for the platform lift shall be provided in accordance with Chapter 27.
 - 1009.5.1 Openness. Platform lifts on an accessible means of egress shall not be installed in a fully enclosed hoistway."
- 80. Subsection 1010.1, "Doors," of Section 1010, "Doors, Gates and Turnstiles," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1010.1 Doors. Means of egress doors shall meet the requirements of this section. Doors serving a means of egress system shall meet the requirements of this section and Section 1022.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section.

Means of egress doors shall be readily distinguishable from the adjacent construction and finishes such that the doors are easily recognizable as doors. Mirrors or similar reflecting materials shall not be used on means of egress doors. Means of egress doors shall not be concealed by curtains, drapes, decorations or similar materials.

Security and electronic locking devices affecting *means of egress* shall be subject to approval by the building official and subject to inspections by the fire code official.

1010.1.1 Size of doors. The required capacity of each door opening shall be sufficient for the occupant load thereof and shall provide a minimum clear width of 32 inches (813 mm). Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees (1.57 rad). Where this section requires a minimum clear width of 32 inches (813 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 32 inches (813 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. Means of egress doors in a Group I-2 occupancy used for the movement of beds shall provide a clear width not less than 41½ inches (1054 mm). The height of door openings shall not be less than 80 inches (2032 mm).

Exceptions:

- 1. The minimum and maximum width shall not apply to door openings that are not part of the required *means of egress* in Group R-2 and R-3 occupancies.
- 2. Door openings to resident *sleeping units* in Group I-3 occupancies shall have a clear width of not less than 28 inches (711 mm).
- 3. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.
- 4. Width of door leaves in revolving doors that comply with Section 1010.1.4.1 shall not be limited.
- 5. Door openings within a dwelling unit or sleeping unit shall not be less than 78 inches (1981 mm) in height.
- 6. Exterior door openings in *dwelling units* and *sleeping units*, other than the required *exit* door, shall not be less than 76 inches (1930 mm) in height.
- 7. In other than Group R-1 occupancies, the minimum widths shall not apply to interior egress doors within a dwelling unit or sleeping unit that is not required to be an Accessible unit, Type A unit or Type B unit.
- 8. Door openings required to be *accessible* within *Type B units* shall have a minimum clear width of 31.75 inches (806 mm).

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- 9. Doors to walk-in freezers and coolers less than 1,000 square feet (93 m²) in area shall have a maximum width of 60 inches (1524 mm).
- 10. In Group R-1 dwelling units or sleeping units not required to be Accessible units, the minimum width shall not apply to doors for showers or saunas.
- 1010.1.1.1 Projections into clear width. There shall not be projections into the required clear width lower than 34 inches (864 mm) above the floor or ground. Projections into the clear opening width between 34 inches (864 mm) and 80 inches (2032 mm) above the floor or ground shall not exceed 4 inches (102 mm).

Exception: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the floor.

1010.1.2 Door swing. Egress doors shall be of the pivoted or side-hinged swinging type.

- 1. Private garages, office areas, factory and storage areas with an *occupant load* of 10 or less.
- 2. Group I-3 occupancies used as a place of detention.
- 3. Critical or intensive care patient rooms within suites of health care facilities.
- 4. Doors within or serving a single dwelling unit in Groups R-2 and R-3.
- 5. In other than Group H occupancies, revolving doors complying with Section 1010.1.4.1.
- 6. In other than Group H occupancies, special purpose horizontal sliding, accordion or folding door assemblies complying with Section 1010.1.4.3.
- 7. Power-operated doors in accordance with Section 1010.1.4.2.
- 8. Doors serving a bathroom within an individual sleeping unit in Group R-1.
- 9. In other than Group H occupancies, manually operated horizontal sliding doors are permitted in a *means of egress* from spaces with an *occupant load* of 10 or less.
- **1010.1.2.1 Direction of swing.** Pivot or side-hinged swinging doors shall swing in the direction of egress travel where serving a room or area containing an occupant load of 50 or more persons or a Group H occupancy.

1010.1.3 Door opening force. The force for pushing or pulling open interior swinging egress doors, other than fire doors, shall not exceed 5 pounds (22 N). These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position. For other swinging doors, as well as sliding and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15 pound (67 N) force.

1010.1.3.1 Location of applied forces. Forces shall be applied to the latch side of the door.

1010.1.4 Special doors. Special doors and security grilles shall comply with the requirements of Sections 1010.1.4.1 through 1010.1.4.4.

1010.1.4.1 Revolving doors. Revolving doors shall comply with the following:

- 1. Revolving doors shall comply with the BHMA A156.27 and shall be installed in accordance with the manufacturer's instructions.
- 2. Each revolving door shall be capable of *breakout* in accordance with BHMA A156.27 and shall provide an aggregate width of not less than 36 inches (914 mm).
- 3. A revolving door shall not be located within 10 feet (3048 mm) of the foot or top of *stairways* or escalators. A dispersal area shall be provided between the *stairways* or escalators and the revolving doors.
- 4. The revolutions per minute (rpm) for a revolving door shall not exceed the maximum rpm as specified in BHMA A156.27. Manual revolving doors shall comply with Table 1010.1.4.1(1). Automatic or power-operated revolving doors shall comply with Table 1010.1.4.1(2).
- 5. An emergency stop switch shall be provided near each entry point of a revolving door within 48 inches (1220 mm) of the door and between 24 inches (610 mm) and 48 inches (1220 mm) above the floor. The activation area of the emergency stop switch button shall be not less than 1 inch (25 mm) in diameter and shall be red.
- 6. Each revolving door shall have a side-hinged swinging door which complies with Section 1010.1 in the same wall and within 10 feet (3048 mm) of the revolving door.
- 7. Revolving doors shall not be part of an *accessible route* required by Section 1009 and Chapter 11.

1010.1.4.1.1 Egress component. A revolving door used as a component of a *means of egress* shall comply with Section 1010.1.4.1 and the following three conditions:

- 1. Revolving doors shall not be given credit for more than 50 percent of the minimum width or required capacity.
- 2. Each revolving door shall be credited with a capacity based on not more than 50-person *occupant load*.
- 3. Each revolving door shall provide for egress in accordance with BHMA A156.27 with a *breakout* force of not more than 130 pounds (578 N).

1010.1.4.1.2 Other than egress component. A revolving door used as other than a component of a *means of egress* shall comply with Section 1010.1.4.1. The *breakout* force of a revolving door not used as a component of a *means of egress* shall not be more than 180 pounds (801 N).

Exception: A *breakout* force in excess of 180 pounds (801 N) is permitted if the collapsing force is reduced to not more than 130 pounds (578 N) when not less than one of the following conditions is satisfied:

- 1. There is a power failure or power is removed to the device holding the door wings in position.
- 2. There is an actuation of the *automatic sprinkler system* where such system is provided.
- 3. There is an actuation of a smoke detection system that is installed in accordance with Section 907 to provide coverage in areas within the building that are within 75 feet (22 860 mm) of the revolving doors.
- 4. There is an actuation of a manual control switch, in an approved location and clearly identified, that reduces the *breakout* force to not more than 130 pounds (578 N).

1010.1.4.2 Power-operated doors. Where means of egress doors are operated or assisted by power, the design shall be such that in the event of power failure, the door is capable of being opened manually to permit means of egress travel or closed where necessary to safeguard means of egress. The forces required to open these doors manually shall not exceed those specified in Section 1010.1.3, except that the force to set the door in motion shall not exceed 50 pounds (220 N). The door shall be capable of swinging open from any position to the full width of the opening in which such door is installed when a force is applied to the door on the side from which egress is made. Power-operated swinging doors, power-operated sliding doors and power-operated

folding doors shall comply with BHMA A156.10. Power-assisted swinging doors and low-energy power-operated swinging doors shall comply with BHMA A156.19.

Exceptions:

- 1. Occupancies in Group I-3.
- 2. Horizontal sliding doors complying with Section 1010 .1.4.3.
- 3. For a biparting door in the emergency break-out mode, a door leaf located within a multiple-leaf opening shall be exempt from the minimum 32-inch (813 mm) single-leaf requirements of Section 1008.1.1, provided a minimum 32-inch (813 mm) clear opening is provided when the two biparting leaves meeting in the center are broken out.

1010.1.4.3 Horizontal sliding doors. In other than Group H occupancies, horizontal sliding doors permitted to be a component of a *means of egress* in accordance with Exception 6 to Section 1010.1.2 shall comply with all of the following criteria:

- 1. The doors shall be power operated and shall be capable of being operated manually in the event of power failure.
- 2. The doors shall be openable by a simple method from both sides without special knowledge or effort.
- 3. The force required to operate the door shall not exceed 30 pounds (133 N) to set the door in motion and 15 pounds (67 N) to close the door or open it to the minimum required width.
- 4. The door shall be openable with a force not to exceed 15 pounds (67 N) when a force of 250 pounds (1100 N) is applied perpendicular to the door adjacent to the operating device.
- 5. The door assembly shall comply with the applicable *fire protection rating* and, where rated, shall be self-closing or automatic closing by smoke detection in accordance with Section 716.5.9.3, shall be installed in accordance with NFPA 80 and shall comply with Section 716.
- 6. The door assembly shall have an integrated standby power supply.
- 7. The door assembly power supply shall be electrically supervised.
- 8. The door shall open to the minimum required width within 10 seconds after activation of the operating device.

1010.1.4.4 Security grilles. In Groups B, F, M and S, horizontal sliding or vertical security grilles are permitted at the main *exit* and shall be openable from the inside without the use of a key or special knowledge or effort during periods that the space is occupied. The grilles shall remain secured in the full-open position during the period of occupancy by the general public. Where two or more *means of egress* are required, not more than one-half of the *exits* or *exit access doorways* shall be equipped with horizontal sliding or vertical grilles.

1010.1.5 Floor elevation. There shall be a floor or landing on each side of a door. Such floor or landing shall be at the same elevation on each side of the door. Landings shall be level except for exterior landings, which are permitted to have a slope not to exceed 0.25 unit vertical in 12 units horizontal (2-percent slope).

- 1. Doors serving individual *dwelling units* in Groups R-2 and R-3 where the following apply:
 - 1.1. A door is permitted to open at the top step of an interior *flight* of *stairs*, provided the door does not swing over the top step.
 - 1.2. Screen doors and storm doors are permitted to swing over *stairs* or landings.
- 2. Exterior doors as provided for in Section 1003.5, Exception 1, and Section 1022.2, which are not on an accessible route.
- 3. In Group R-3 occupancies not required to be Accessible units, Type A units or Type B units, the landing at an exterior doorway shall not be more than 73/4 inches (197 mm) below the top of the threshold, provided the door, other than an exterior storm or screen door, does not swing over the landing.
- 4. Variations in elevation due to differences in finish materials, but not more than ½ inch (12.7 mm).
- 5. Exterior decks, patios or balconies that are part of *Type B* dwelling units, have impervious surfaces and that are not more than 4 inches (102 mm) below the finished floor level of the adjacent interior space of the dwelling unit.
- 6. Doors serving equipment spaces not required to be *accessible* in accordance with Section 1103.2.9 and serving an occupant load of five or less shall be permitted to have a landing on one side to be not more than 7 inches (178 mm) above or below the landing on the egress side of the door.

1010.1.6 Landings at doors. Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). When a landing serves an occupant load of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

Exception: Landing length in the direction of travel in Groups R-3 and U and within individual units of Group R-2 need not exceed 36 inches (914 mm).

1010.1.7 Thresholds. Thresholds at doorways shall not exceed ¾ inch (19.1 mm) in height above the finished floor or landing for sliding doors serving dwelling units or ½ inch (12.7 mm) above the finished floor or landing for other doors. Raised thresholds and floor level changes greater than ¼ inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

Exceptions:

- 1. In occupancy Group R-2 or R-3, threshold heights for sliding and side-hinged exterior doors shall be permitted to be up to 7¾ inches (197 mm) in height if all of the following apply:
 - 1.1. The door is not part of the required means of egress.
 - 1.2. The door is not part of an accessible route as required by Chapter 11.
 - 1.3. The door is not part of and Accessible unit, Type A unit or Type B unit.
- 2. In Type B units, where Exception 5 to Section 1010.1.5 permits a 4-inch (102 mm) elevation change at the door, the threshold height on the exterior side of the door shall not exceed 4¾ inches (120 mm) in height above the exterior deck, patio or balcony for sliding doors or 4½ inches (114 mm) above the exterior deck, patio or balcony for other doors.
- 1010.1.8 Door arrangement. Space between two doors in a series shall be 48 inches (1219 mm) minimum plus the width of a door swinging into the space. Doors in a series shall swing either in the same direction or away from the space between the doors.

- 1. The minimum distance between horizontal sliding power-operated doors in a series shall be 48 inches (1219 mm).
- 2. Storm and screen doors serving individual *dwelling units* in Groups R-2 and R-3 need not be spaced 48 inches (1219 mm) from the other door.

- 3. Doors within individual *dwelling units* in Groups R-2 and R-3 other than within *Type A dwelling units*.
- 1010.1.9 Door operations. Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.
 - **1010.1.9.1 Hardware.** Door handles, pulls, latches, locks and other operating devices on doors required to be *accessible* by Chapter 11 shall not require tight grasping, tight pinching or twisting of the wrist to operate.
 - 1010.1.9.2 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (846 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

- 1010.1.9.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:
 - 1. Places of detention or restraint.
 - 2. In buildings in occupancy Group A having an *occupant load* of 300 or less, Groups B, F, M and S, and in *places of religious worship*, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided:
 - 2.1. The locking device is readily distinguishable as locked.
 - 2.2. A readily visible durable sign is posted on the egress side or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN THIS SPACE IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background.
 - 2.3. The use of the key-operated locking device is revocable by the *building* official for due cause.
 - 3. Where egress doors are used in pairs, *approved* automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface mounted hardware.

- 4. Doors from individual *dwelling* or *sleeping units* of Group R occupancies having an *occupant load* of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
- 4. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.

1010.1.9.4 Bolt locks. Manually operated flush bolts or surface bolts are not permitted.

Exceptions:

- 1. On doors not required for egress in individual dwelling units or sleeping units.
- 2. Where a pair of doors serves a storage or equipment room, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf.
- 3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress capacity requirements and the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. The inactive leaf shall not contain doorknobs, panic bars or similar operating hardware.
- 5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress capacity requirements and the inactive leaf shall not contain doorknobs, panic bars or similar operating hardware."

1010.1.9.5 Unlatching. The unlatching of any door or leaf shall not require more than one operation.

- 1. Places of detention or restraint.
- 2. Where manually operated bolt locks are permitted by Section 1010.1.9.4.

- 3. Doors with automatic flush bolts as permitted by Section 1010.1.9.3, Item 3.
- 4. Doors from individual dwelling units and sleeping units of Group R occupancies as permitted by Section 1010.1.9.3, Item 4.
- 1010.1.9.5.1 Closet and bathroom doors in Group R-4 occupancies. In Group R-4 occupancies, closet doors that latch in the closed position shall be openable from inside the closet, and bathroom doors that latch in the closed position shall be capable of being unlocked from the ingress side.
- 1010.1.9.6 Controlled egress doors in Groups I-1 and I-2. Electric locking systems, including electromechanical locking systems and electromagnetic locking systems, shall be permitted to be locked in the means of egress in Group I-1 or I-2 occupancies where the clinical needs of persons receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved automatic smoke* or *heat detection system* installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:
 - 1. The door locks shall unlock on actuation of the automatic sprinkler system or automatic fire detection system.
 - 2. The door locks shall unlock on loss of power controlling the lock or lock mechanism.
 - 3. The door locking system shall be installed to have the capability of being unlocked by a switch located at the *fire command center*, a nursing station or other approved location. The switch shall directly break power to the lock.
 - 4. A building occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an exit.
 - 5. The procedures for unlocking the doors shall be described and approved as part of the emergency planning and preparedness required by Chapter 4 of the *Dallas* [International] Fire Code.
 - 6. All clinical staff shall have the keys, codes or other means necessary to operate the locking systems.
 - 7. Emergency lighting shall be provided at the door.
 - 8. The door locking system units shall be listed in accordance with UL 294.

- 1. Items 1 through 4 shall not apply to doors to areas occupied by persons who, because of clinical needs, require restraint or containment as part of the function of a psychiatric treatment area.
- 2. Items 1 through 4 shall not apply to doors to areas where a *listed* egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 hospital.

1010.1.9.7 Delayed egress. Delayed egress locking systems shall be permitted to be installed on doors serving any occupancy except Group A, E and H in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907. The locking system shall be installed and operated in accordance with all of the following:

- 1. The delay electronics of the delayed egress locking system shall deactivate upon actuation of the *automatic sprinkler system* or *automatic fire detection system*, allowing immediate, free egress.
- The delay electronics of the delayed egress locking system shall deactivate upon loss of power controlling the lock or lock mechanism, allowing immediate free egress.
- 3. The delayed egress locking system shall have the capability of being deactivated at the *fire command center* and other *approved* locations.
- 4. An attempt to egress shall initiate an irreversible process that shall allow such egress in not more than 15 seconds when a physical effort to exit is applied to the egress side door hardware for not more than 3 seconds. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the delay electronics have been deactivated, rearming the delay electronics shall be by manual means only.

Exception: Where approved, a delay of not more than 30 seconds is permitted on a delayed egress door.

5. The egress path from any point shall not pass through more than one delayed gress locking system.

Exception: In Group I-2 or I-3 occupancies, the egress path from any point in the building shall pass through not more than two delayed egress locking systems provided the combined delay does not exceed 30 seconds.

6. A sign shall be provided on the door and shall be located above and within 12 inches (305 mm) of the door exit hardware:

- 6.1. For doors that swing in the direction of egress, the sign shall read: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS.
- 6.2. For doors that swing in the opposite direction of egress, the sign shall read: PULL UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS. 6.3. The sign shall comply with the visual character requirements in ICC A117.1.

Exception: Where approved, in Group I occupancies, the installation of a sign is not required where care recipients who because of clinical needs require restraint or containment as part of the function of the treatment area.

- 7. Emergency lighting shall be provided on the egress side of the door.
- 8. The delayed egress locking system units shall be listed in accordance with UL 294.
- 1010.1.9.8 Sensor release of electrically locked egress doors. The electric locks on sensor released doors located in a *means of egress* in buildings with an occupancy in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 are permitted where installed and operated in accordance with all of the following criteria:
 - 1. The sensor shall be installed on the egress side, arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
 - 2. Loss of power to the lock or locking system shall automatically unlock the doors.
 - 3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct interruption of power to the lock—independent of other electronics—and the doors shall remain unlocked for not less than 30 seconds.
 - 4. Activation of the building *fire alarm system*, where provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
 - 5. Activation of the building automatic sprinkler system or fire detection system, where provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.

6. The door locking system units shall be listed in accordance with UL 294.

1010.1.9.9 Electromagnetically locked egress doors/electronic locking devices. Doors in all occupancies are permitted to be equipped with approved, listed electronic locks which must be installed in accordance with this section if the building is protected throughout with an automatic sprinkler system, a fire alarm system, a smoke detection system or with UL 268 smoke detectors installed on each interior side of all doors provided with electronic locks. The locking system units shall be listed in accordance with UL 294.

Exception: Electronic strikes or electronic mortise locks that do not impede egress are not subject to these requirements.

1010.1.9.9.1 Ability to exit. Regardless of the location of the device or the level of security desired, the ability to exit at the option of the individual, not the controlling authority, must always be provided.

Exceptions:

- 1. Locations for occupants needing self-protection because of reduced mental capacities such as mental or Alzheimer care hospitals may have release mechanisms as further specified in Section 1010.1.9.9.4.
- 2. Locations where national security interests are present with approval of the building official.
- 3. Modified arrangements may be made for nursery and obstetric areas, assisted living facilities and other similar facilities with approval of the building official.

(Note: For interior locations such as elevator lobbies, access includes passage into and through the tenant space being secured to provide access to the stairway. If access through the secured area is not desired, another exiting method such as providing a public corridor to the stairway should be utilized.)

1010.1.9.9.2 General. Electronic locking devices installed in such a manner that the method of unrestricted exiting relies upon electricity or electronics instead of mechanical means shall comply with the provisions set forth in this section. General guidelines for such installation are as follows:

1. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

- Access to exits, even in non-fire situations, shall be available to all individuals, even those individuals that are considered as unauthorized.
 Manually activated release mechanisms shall be made available. For specific provisions and exceptions, see Section 1010.1.9.9.4.
- 3. For emergency situations, buildings shall be provided with an automatic release mechanism as specified in Section 1010.1.9.9.5.
- 4. Once released, the door shall swing freely as a push/pull door. For specific provisions and exceptions, see Section 1010.1.9.9.6.
- 5. Request to exit buttons, break glass boxes and emergency pull boxes, with their required signs, shall be installed in accordance with Sections 1010.1.9.9.4 and 1010.1.9.9.7.
- 6. All devices used in a fire rated/fire door situation shall be approved for such use.

1010.1.9.9.3 Permits and inspections. A separate permit is required to install electronic security devices. Permits will be issued as SE permits and the fee will be based on the value of the work. Delayed egress locks meeting the criteria set forth in Section 1010.1.9.7 will not require separate permits. Electronic security devices shall be approved by the building official and shall be functionally tested by the fire marshal.

1010.1.9.9.4 Access to exits/manual release mechanisms. Passage through the secured door shall be provided.

(Note: Under usual circumstances, passage by individuals on the inside, going to the outside, is made available. Controls are usually installed to prevent unauthorized entry. Examples of such installations are the lobby entrance doors where exiting is by pushing the exit button.)

Normal passage shall be provided with the use of an approved button installed in accordance with Section 1010.1.9.9.7.

Other acceptable normal release methods for all other occupancies may include options as follows:

- 1. Pushing on or making contact with an approved electronic release bar. Such bars shall be installed such that they will fail in the released position should the electrical connection with the bar be lost.
- 2. Where panic or fire exit hardware is required by Section 1010.1.10, operation of the listed panic or fire exit hardware also releases the electromagnetic lock.

3. Use of an approved motion detector. Upon detection of an approach, the device will unlatch. When using a motion detector, a release button in accordance with Section 1010.1.9.9.7 is still required to be installed in case of failure or inaccurate detection of the motion device.

When access to the exits requires passage through the device, manual release mechanisms shall be made available.

(Note: Examples of such installations that shall provide a manual override method are as follows:

- 1. Elevator lobbies on full floor tenants. Access to the exit stairs is controlled and the exit path is through the device and tenant space. To permit access to the stairs, a manual override system shall be installed.
- 2. Warehouses/factories where employees are required to enter and exit through one point. Use of other building exits are undesired and controlled. A manual override system shall still be installed at the controlled exits.
- 3. Secured systems where employee ingress/egress is monitored at all secured doors. A manual override system shall still be installed at each door.
- 4. Occupancies like jewelry stores where the desire is to buzz entry and exit.

 Buzzing entry is acceptable. Buzzing exit may be used but a manual override system shall still be installed at the door.)

When passage of individuals is undesired, unless other approved exits are available, access at the option of the individual shall be provided. Acceptable release methods may include options as follows:

- 1. An emergency pull box or a break glass emergency box may be located adjacent to the door to activate the release in an emergency. Choice of box shall be approved by the fire chief so as not to be confused with any other alarm boxes. An approved sign shall be adjacent to the box with the appropriate message such as "Pull to Open Door" or "Break Glass to Open Door."
- 2. When approved by the building official, a release button will not be required for buildings provided with an approved automatic sprinkler system throughout with monitored 24-hour security personnel on site, if a means for two-way communication with security such as intercom or telephone is provided in an approved location. Controls shall be provided

- at the security station for unlatching the electronic device. The two-way communication system shall be wired through a supervised circuit as defined in the *Dallas Fire Code*.
- 3. In I Occupancies provided with an approved automatic sprinkler system throughout, the release button will not be required provided a control for releasing the device is provided at a nurse station and a deactivation method, e.g. a keyed control, a control pad or card reader, is provided at the door and staff is supplied with the appropriate tool or knowledge to operate the release mechanism.

<u>1010.1.9.9.5</u> Automatic release mechanisms. Electronic locking devices shall have automatic releasing that complies with the following:

- 1. Automatically release upon activation of the smoke detection or fire alarm system, if provided. The control devices shall remain unlocked until the system has been reset.
- 2. When the area of concern has a sprinkler system, automatically release upon activation of a waterflow alarm or trouble signal. The control devices shall remain unlocked until the system is reset.
- 3. Automatically release upon loss of electrical power to the building or to the electronic device. Locking mechanisms shall not be provided with emergency backup power such as generators or batteries.
- 4. Automatically release upon activation of a manual release mechanism as specified in Section 1010.1.9.9.4 and as further specified in Section 1010.1.9.9.7.

Manually resetting the devices is not required. Automatically resetting the devices may be done by zone.

1010.1.9.9.5.1 Zone control. Deactivation of the device(s) may be zone controlled as follows:

- 1. All devices on the same floor as the source of activation in fully sprinklered buildings.
- 2. All devices on the same floor as the source of activation of the smoke detection system plus one floor below and all floors above in unsprinklered buildings.

(Note: When security is still desired after the automatic release of the system, or when positive latching is necessary for fire door installation, it is

still possible to maintain security provided the appropriate combination of devices is installed. As an example, use of panic hardware or doorknobs that provide mechanical exiting at all times, but do not function from the exterior unless electronically activated, will still provide a secured door. It will provide the required manual exiting but entry by card or code is not available until the system resets.

No such provision of restricting entry can be used when passage through the device is necessary for access to the exit. As an example, when the elevator lobby is secured from the exit stairs by a full floor tenant, upon automatic activation those devices shall release and access be provided through the tenant space to the stairs. A manual locking system cannot be installed to insure security.)

1010.1.9.9.6 Door swing freely/single exit motion. Doors shall swing freely when the device is released.

(Note: It is required that the exit motion require only one activity. With normal doors, one activity is pushing the mechanical panic bar or turning the mechanical doorknob. With an electronic device, one motion is pushing the button; therefore, pushing the button and pushing a panic bar or turning a doorknob would be two activities. An acceptable alternative is to use a motion detector (push button is still required). The motion detector will release the device upon approach and turning the doorknob is now just one activity. The push button is only necessary should the motion device fail. Another option is to use an electronic panic bar. One motion, pushing the bar, is for exiting but entry is controlled. Or, use of an electronic doorknob where exiting is always mechanical but the entry side does not engage without electronic activation.)

Exception: When doors are required to have positive latching, the building official and fire chief shall determine:

- 1. if a double motion to exit, i.e. the release of the electronic device then the operation of a door knob or push bar, is an acceptable exit means; or
- 2. if the latch should be designed to fail in the secure position; or
- 3. whether to deny the usage of the locks.

1010.1.9.9.7 Request to exit buttons/break glass boxes/emergency pull boxes. Exit buttons, break glass boxes and emergency pull boxes shall be installed as follows:

1. Button. The release button shall be red in color and at least a 2-inch mushroom switch or two-inch square lexan palm button.

- 2. Location. The button, break glass box or emergency pull box shall be located 40 inches (1016 mm) to 48 inches (1219 mm) vertically above the floor and within five feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device.
- 3. Sign. An approved sign shall be adjacent to the button, break glass box or emergency pull box with the words "Push to Exit" or "Pull to Exit" as applicable. Sign lettering shall be white on a red background and at least one inch (25 mm) in height and shall have a stroke of not less than ¹/₈ inch (3.2 mm).
- 4. Activation. When operated, the manual unlocking device shall result in direct interruption of power to the device, independent of the access control system electronics, and the device shall remain unlocked for a minimum of 30 seconds. It shall not be required that the release mechanism be constantly held, such as holding down the button, to get out.

(Note: When buzzing someone out, holding down the button is acceptable; however, the manual release device installed at the door, even those required in the occupancy using buzzing, shall not require constant holding down to exit.)

5. Time delay. Exit devices in accordance with this section shall not possess a time delay option.

[1010.1.9.9 Electromagnetically locked egress doors. Doors in the means of egress in buildings with an occupancy in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 and doors to tenant spaces in Group A, B, E, I-1, I-2, I-4, M, R-1 or R-2 shall be permitted to be locked with an electromagnetic locking system where equipped with hardware that incorporates a built in switch and where installed and operated in accordance with all of the following:

- 1. The hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.
- 2. The hardware is capable of being operated with one hand.
- 3. Operation of the hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.
- 4. Loss of power to the locking system automatically unlocks the door.
- 5. Where panie or fire exit hardware is required by Section 1010.1.10, operation of the panie or fire exit hardware also releases the electromagnetic lock.

6. The locking system units shall be listed in accordance with UL 294.]

1010.1.9.10 Locking arrangements in correctional facilities. In occupancies in Groups A-2, A-3, A-4, B, E, F, I-2, I-3, M and S within correctional and detention facilities, doors in *means of egress* serving rooms or spaces occupied by persons whose movements are controlled for security reasons shall be permitted to be locked where equipped with egress control devices that shall unlock manually and by not less than one of the following means:

- 1. Activation of an automatic sprinkler system installed in accordance with Section 903.3.1.1.
- 2. Activation of an approved manual fire alarm box.
- 3. A signal from a constantly attended location.

1010.1.9.11 Stairway doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

- 1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
- 2. This section shall not apply to doors arranged in accordance with Section 403.5.3.
- 3. In *stairways* serving other than a high-rise building [not more than four stories], doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon a signal from the *fire command center*, if present, or a signal by emergency personnel from a single location inside the main entrance to the building.
- 4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006.3.2.
- 5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the *dwelling unit* is from a single exit stairway where permitted in Section 1006.3.2.

1010.1.10 Panic and fire exit hardware. Doors serving a Group H occupancy and doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy shall not be provided with a latch or lock other than panic hardware or fire exit hardware.

Exceptions:

- 1. A main exit of a Group A occupancy shall be permitted to be locking in accordance with Section 1010.1.9.3, Item 2.
- 2. Doors serving a Group A or E occupancy shall be permitted to be electromagnetically locked in accordance with Section 1010.1.9.9.

Electrical rooms with equipment rated 1,200 amperes or more and over 6 feet (1829 mm) wide, and that contain overcurrent devices, switching devices or control devices with exit or exit access doors, shall be equipped with panic hardware or fire exit hardware. The doors shall swing in the direction of egress travel.

1010.1.10.1 Installation. Where panic or fire exit hardware is installed, it shall comply with the following:

- 1. Panic hardware shall be listed in accordance with UL 305.
- 2. Fire exit hardware shall be listed in accordance with UL 10C and UL 305.
- 3. The actuating portion of the releasing device shall extend not less than one-half of the door leaf width.
- 4. The maximum unlatching force shall not exceed 15 pounds (67 N).
- **1010.1.10.2 Balanced doors.** If balanced doors are used and panic hardware is required, the panic hardware shall be the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side."
- 81. Paragraph 1011.5.2, "Riser Height and Tread Depth," of Subsection 1011.5, "Stair Treads and Risers," of Section 1011, "Stairways," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
 - "1011.5.2 Riser height and tread depth. Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the nosings of adjacent treads. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's nosing. Winder treads shall have a minimum

tread depth of 11 inches (279 mm) between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline and a minimum tread depth of 10 inches (254 mm) within the clear width of the *stair*.

Exceptions:

- 1. Spiral stairways in accordance with Section 1011.10.
- 2. Stairways connecting stepped aisles to cross aisles or concourses shall be permitted to use the riser/tread dimension in Section 1029.13.2.
- 3. In Group R-3 occupancies; within *dwelling units* in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual *dwelling units* in Group R-2 occupancies; the maximum riser height shall be 7³/₄ inches (197 mm); the minimum tread depth shall be 10 inches (254 mm); the minimum *winder* tread depth at the walkline shall be 10 inches (254 mm); and the minimum *winder* tread depth shall be 6 inches (152 mm). A *nosing* projection not less than ³/₄ inch (19.1 mm) but not more than 1¹/₄ inches (32 mm) shall be provided on *stairways* with solid risers where the tread depth is less than 11 inches (279 mm).
- 4. See Section 403.1 of the <u>Dallas</u> [International] Existing Building Code for the replacement of existing stairways.
- 5. In Group I-3 facilities, *stairways* providing access to guard towers, observation stations and control rooms, not more than 250 square feet (23 m²) in area, shall be permitted to have a maximum riser height of 8 inches (203 mm) and a minimum tread depth of 9 inches (229 mm).
- 6. Private curved stairways used as convenience stairways may be provided with a minimum width of run of not less than 10 inches (254 mm) measured 6 inches (152.4 mm) from the interior radius and a maximum width of run of not more than 18 inches (457.2 mm) measured 6 inches (152.4 mm) from the exterior radius."
- 82. Subsection 1011.9, "Curved Stairways," of Section 1011, "Stairways," of Chapter
- 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1011.9 Curved stairways. Curved stairways with winder treads shall have treads and risers in accordance with Section 1011.5 and the smallest radius shall be not less than twice the minimum width or required capacity of the stairway.

- 1. The radius restriction shall not apply to curved stairways in Group R-3 and within individual dwelling units in Group R-2.
- 2. Private curved stairways may be used as convenience stairways, provided the width of the stairway is not less than 44 inches (1711.6 mm) with the interior radius not less than 44 inches (1711.6 mm). In all cases the stairway must comply with Chapter 6 and the structural provisions of this code."
- 83. Subsection 1012.1, "Scope," of Section 1012, "Ramps," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1012.1 Scope. The provisions of this section shall apply to ramps used as a component of a means of egress.

- 1. Ramped *aisles* within assembly rooms or spaces shall comply with the provisions in Section 1029.
- 2. Curb ramps shall comply with ICC A117.1 or with Section 1101.2.
- 3. Vehicle ramps in parking garages for pedestrian exit access shall not be required to comply with Sections 1012.3 through 1012.10 where they are not an accessible route serving accessible parking spaces, other required accessible elements or part of an accessible means of egress."
- 84. Subsection 1013.5, "Internally Illuminated Exit Signs," of Section 1013, "Exit Signs," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1013.5 Internally illuminated exit signs. Electrically powered, self-luminous and photoluminescent exit signs shall be listed and labeled in accordance with UL 924 and shall be installed in accordance with the manufacturer's instructions and Chapter 27. Exit signs shall be illuminated at all times. <u>Photoluminescent exit signs require plans and documents demonstrating</u> a sufficient source of activation in any given 24-hour period."
- 85. Subsection 1016.2, "Egress Through Intervening Spaces," of Section 1016, "Exit Access," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:

"1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

- 1. Exit access through an enclosed elevator lobby is permitted. Access to not less than one of the required exits shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of exit access travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the exit unless direct access to an exit is required by other sections of this code.
- 2. Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such adjoining rooms or areas and the area served are accessory to one or the other, are not a Group H occupancy and provide a discernible path of egress travel to an *exit*.

Exception: Means of egress are not prohibited through adjoining or intervening rooms or spaces in a Group H, S or F occupancy where the adjoining or intervening rooms or spaces are the same or a lesser hazard occupancy group.

- 3. An exit access shall not pass through a room that can be locked to prevent egress.
- 4. Means of egress from dwelling units or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.
- 5. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

- 1. Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.
- 2. Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:
 - 2.1. The stock is of the same hazard classification as that found in the main retail area.
 - 2.2. Not more than 50 percent of the exit access is through the stockroom.
 - 2.3. The stockroom is not subject to locking from the egress side.
 - 2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by full- or partial-height fixed walls or similar construction that will

maintain the required width and lead directly from the retail area to the exit without obstructions.

- 3. In a building protected throughout by an approved automatic sprinkler system, one exit may pass through a kitchen or storeroom provided:
 - 3.1. The exit door must be visible upon entering the kitchen or storeroom and must be clearly marked and identifiable as an exit; and
 - 3.2. The required *exit* width through the kitchen or storeroom must be permanently marked and must be maintained clear and unobstructed.

1016.2.1 Multiple tenants. Where more than one tenant occupies any one floor of a building or structure, each tenant space, *dwelling unit* and *sleeping unit* shall be provided with access to the required *exits* without passing through adjacent tenant spaces, *dwelling units* and *sleeping units*.

Exception: The *means of egress* from a smaller tenant space shall not be prohibited from passing through a larger adjoining tenant space where such rooms or spaces of the smaller tenant occupy less than 10 percent of the area of the larger tenant space through which they pass; are the same or similar occupancy group; a discernible path of egress travel to an exit is provided; and the *means of egress* into the adjoining space is not subject to locking from the egress side. A required means of egress serving the larger tenant space shall not pass through the smaller tenant space or spaces."

86. Table 1017.2, "Exit Access Travel Distance," of Subsection 1017.2, "Limitations," of Section 1017, "Exit Access Travel Distance," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:

"TABLE 1017.2 EXIT ACCESS TRAVEL DISTANCE²

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A, E, [F-1,] M, R[, S-1]	200	250 ^b
I-1	Not Permitted	250 ^b
B, F-1, S-1	200	300°
F-2, S-2, U	300	400°
H-1	Not Permitted	75 ^d
H-2	Not Permitted	100 ^d
H-3	Not Permitted	150 ^d
H-4	Not Permitted	175 ^d
H-5	Not Permitted	200°
I-2, I-3, I-4	Not Permitted	200°

For SI: 1 foot = 304.8 mm.

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a. See the following sections for modifications to exit access travel distance requirements:

Section 402.8: For the distance limitation in malls.

Section 404.9: For the distance limitation through an atrium space.

Section 407.4: For the distance limitation in Group I-2.

Sections 408.6.1 and 408.8.1: For the distance limitations in Group I-3.

Section 411.4: For the distance limitation in special amusement buildings.

Section 412.7: For the distance limitations in aircraft manufacturing facilities.

 $Section \ 1006.2.2.2: For \ the \ distance \ limitation \ in \ refrigeration \ machinery \ rooms.$

Section 1006.2.2.3: For the distance limitation in refrigerated rooms and spaces.

Section 1006.3.2: For buildings with one exit.

Section 1017.2.2: For increased distance limitation in Groups F-1 and S-1.

Section 1029.7: For increased limitation in assembly seating.

Section 3103.4: For temporary structures.

Section 3104.9: For pedestrian walkways.

- b. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.
- c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- d. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.1."
 - 87. Subsection 1020.1, "Construction," of Section 1020, "Corridors," of Chapter 10,

"Means of Egress," of the 2015 International Building Code is amended to read as follows:

"1020.1 Construction. Corridors shall be fire-resistance rated in accordance with Table 1020.1.1. The corridor walls required to be fire-resistance rated shall comply with Section 708 for fire partitions.

- 1. A *fire-resistance rating* is not required for *corridors* in an occupancy in Group E where each room that is used for instruction has not less than one door opening directly to the exterior and rooms for assembly purposes have not less than one-half of the required *means of egress* doors opening directly to the exterior. Exterior doors specified in this exception are required to be at ground level.
- 2. A fire-resistance rating is not required for corridors contained within a dwelling unit or sleeping unit in an occupancy in Groups I-1 and R.
- 3. A fire-resistance rating is not required for corridors in open parking garages.
- 4. A fire-resistance rating is not required for corridors in an occupancy in Group B that is a space requiring only a single means of egress complying with Section 1006.2.
- 5. Corridors adjacent to the exterior walls of buildings shall be permitted to have unprotected openings on unrated exterior walls where unrated walls are permitted by Table 602 and unprotected openings are permitted by Table 705.8.

- 6. Corridor walls and ceilings within a single tenant space as listed in Table 1020.1.2 and meeting all of the following conditions:
 - 1. Approved automatic smoke-detection is installed along the path of egress within the corridor.
 - 2. The actuation of any detector must activate self-annunciating alarms audible in all areas served by the *corridor*.
 - 3. The smoke detection system must be connected to an approved automatic fire alarm system where such a system is provided."
- 88. Table 1020.1, "Corridor Fire-Resistance Rating," of Subsection 1020.1, "Construction," of Section 1020, "Corridors," of Chapter 10, "Means of Egress," of the 2015 International Building Code is renumbered as Table 1020.1.1 and amended to read as follows:

"TABLE 1020.1<u>.1</u> CORRIDOR FIRE-RESISTANCE RATING

OCCUPANCY	NCY OCCUPANT LOAD REQUIRED FIRE-RESISTANCE RATING (hours)		
	SERVED BY CORRIDOR	Without sprinkler system	With sprinkler system ^c
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A , B , E , F , M , S , U	Greater than 30	1	0
R₫	Greater than 10	Not Permitted	0.5
I-2a, I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1 ^b

- a. For requirements for occupancies in Group I-2, see Sections 407.2 and 407.3.
- b. For a reduction in the *fire-resistance rating* for occupancies in Group I-3, see Section 408.8.
- c. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.
- d. In Group R, Divisions 2 and 4 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2, standard ½ inch gypsum wallboard may be substituted for Type X gypsum in construction of the corridor. Corridor openings must be protected with approved self-closing 1¾ inch solid-core door installations or approved equivalent. See Section 717 for requirements on fire and smoke dampers."
- 89. Subsection 1020.1, "Construction," of Section 1020, "Corridors," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended by adding a new Table 1020.1.2, "Corridor Fire-Resistance Rating of Single Tenant Space," to read as follows:

"TABLE 1020.1.2

CORRIDOR FIRE-RESISTANCE RATING OF SINGLE TENANT SPACE

CATEGORY	NATURE OF	REQUIRED FIRE-RESISTANCE RATING (hours)	
	OCCUPANCY SERVED	Without smoke detectors	With smoke detectors
	BY CORRIDOR		
I	Uses and occupancies	1	0
	except those listed in		
	Categories II and III		
II ^{a, b}	Building and other	1	1
	structures that represent a		
	substantial hazard to		
	human life in the event of		
	failure, including but not		
	limited to:		
	Buildings and other		
	structures whose		
	primary occupancy is		
	public assembly with		
	an occupant load		
	greater than 300.		
	Buildings and other		
	structures containing		
	elementary school,		
	secondary school, or		
	day care facilities with		
	an occupant load		
	greater than 250.	1	
	Buildings and other		
	structures containing		
	adult education		
	facilities such as		
	colleges and		
	universities, with an		
	occupant load greater than 500.		
	Group I-2 occupancies with an occupant load		
	of 50 or more resident		
	care recipients but not		84
	having surgery or		
	emergency treatment		
	facilities.		
	Group I-3 occupancies.		
	Any other occupancy		
	with an occupant load		
	greater than 5,000,		
	Power-generating		
	stations, water		
	treatment facilities for		
	potable water, waste		
	water treatment		
	facilities and other		
	public utility facilities		

	not included in Risk		
	Category III.		
	Buildings and other		
	structures not included		
	in Risk Category III		
	containing quantities		
	of toxic or explosive		
	materials that exceed		
	maximum allowable		
1	quantities per control		
	area as given in Table		
	307.1(1) or per		
	outdoor control area in		
	accordance with the		
	Dallas Fire Code and	1	
	are sufficient to pose a		
	threat to the public if		
	released.		
III ^{a,b}	Buildings and other	1	1
	structures designated as		
	essential facilities,		
	including but not limited		
	to:		
	Group I-2 occupancies		•
	having surgery or		
	emergency treatment		
	facilities.		
	Fire, rescue,		
	ambulance and police		
	stations and		
	emergency vehicle		
	garages.		
	Designated		
	earthquake, hurricane		
	or other emergency		
	shelters.		
	Designated emergency		
	preparedness,		
€	communications and	*=	187
	operations centers and		1
	other facilities required		
	for emergency		
£	response.		
	Power-generating		
	stations and other		
	public utility facilities		
	required as emergency	l	
	backup facilities	İ	
1	required as emergency		
	backup facilities for		1
	Risk Category III		
	structures.		İ
	Buildings and other	ĺ	
	structures containing		
	Su uctures containing	1	<u> </u>

quantities of highly	
toxic materials that	
exceed maximum	
allowable quantities	
per control area in	
accordance with the	
Dallas Fire Code and	
are sufficient to pose a	
threat to the public if	
released.	
Aviation control	
towers, air traffic	
control centers and	
emergency aircraft	
hangars.	
Buildings and other	
structures having	
critical national	
defense functions.	
Water storage facilities	
and pump structures	
required to maintain	
water pressure for fire	
suppression.	

- a. For the requirements for occupancies in Group I-2, see Section 407.2.
- b. For the requirements for occupancies in Group I-3, see Section 408.8."
 - 90. Subsection 1020.4, "Dead Ends," of Section 1020, "Corridors," of Chapter 10,

"Means of Egress," of the 2015 International Building Code is amended to read as follows:

"1020.4 Dead ends. Where more than one exit or exit access doorway is required, the exit access shall be arranged such that there are no dead ends in corridors more than 20 feet (6096 mm) in length.

- 1. In occupancies in Group I-3 of Condition 2, 3 or 4, the dead end in a *corridor* shall not exceed 50 feet (15 240 mm).
- 2. In occupancies in Groups B, E, F, I-1, M, R-1, R-2, R-4, S and U, where the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, the length of the dead-end *corridors* shall not exceed 50 feet (15 240 mm).
- 3. A dead-end *corridor* shall not be limited in length where the length of the dead-end *corridor* is less than 2.5 times the least width of the dead-end *corridor*.

- 4. In a Group I, Division 2 occupancy building used as a hospital or nursing home and equipped throughout with an approved automatic sprinkler system, the maximum dead end distance may not exceed 30 feet (9144 mm)."
- 91. Subsection 1023.11, "Smokeproof Enclosures," of Section 1023, "Interior Exit Stairways and Ramps," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1023.11 Smokeproof enclosures. Where required by Section 403.5.4, [of] 405.7.2 or 1007.1.1, interior exit stairways and ramps shall be smokeproof enclosures in accordance with Section 909.20.
 - 1023.11.1 Termination and extension. A smokeproof enclosure shall terminate at an exit discharge or a public way. The smokeproof enclosure shall be permitted to be extended by an exit passageway in accordance with Section 1023.3. The exit passageway shall be without openings other than the fire door assembly required by Section 1023.3.1 and those necessary for egress from the exit passageway. The exit passageway shall be separated from the remainder of the building by 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.

Exceptions:

- 1. Openings in the *exit passageway* serving a *smokeproof enclosure* are permitted where *the exit passageway* is protected and pressurized in the same manner as the *smokeproof enclosure*, and openings are protected as required for access from other floors.
- 2. The *fire barrier* separating the *smokeproof enclosure* from the *exit passageway* is not required, provided the *exit passageway* is protected and pressurized in the same manner as the *smokeproof enclosure*.
- 3. A smokeproof enclosure shall be permitted to egress through areas on the level of exit discharge or vestibules as permitted by Section 1028.
- 1023.11.2 Enclosure access. Access to the stairway or ramp within a smokeproof enclosure shall be by way of a vestibule or an open exterior balcony.

Exception: Access is not required by way of a vestibule or exterior balcony for *stairways* and *ramps* using the pressurization alternative complying with Section 909.20.5."

- 92. Subparagraph 1029.1.1, "Spaces Under Grandstands and Bleachers," of Paragraph 1029.1.1, "Bleachers," of Subsection 1029.1, "General," of Section 1029, "Assembly," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
 - "1029.1.1.1 Spaces under grandstands and bleachers. Where spaces under grandstands or bleachers are used for purposes other than ticket booths less than 100 square feet (9.29 m²) and toilet rooms, such spaces shall be separated by fire barriers complying with Section 707 and horizontal assemblies complying with Section 711 with not less than 1-hour fire-resistance-rated construction.

Exceptions:

- 1. Spaces less than 1000 square feet and built to prevent the extension of fire and hot gases through penetrations in walls and floors; built to block the freepassage of fire and hot gases within a concealed space; and equipped with openings of either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8 inches (34.9 mm) in thickness or an equivalent, or doors/shutters in compliance with Section 716.5.3 with a fire protection rating of not less than 20 minutes.
- 2. Spaces equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1."
- 93. Subsection 1030.1, "General," of Section 1030, "Emergency Escape and Rescue," of Chapter 10, "Means of Egress," of the 2015 International Building Code is amended to read as follows:
- "1030.1 General. In addition to the means of egress required by this chapter, provisions shall be made for emergency escape and rescue openings in Group I-1 and R[R-2] occupancies [in accordance with Tables 1006.3.2(1) and 1006.3.2(2) and Group R-3 occupancies]. Basements and sleeping rooms below the fourth story above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, emergency escape and rescue openings shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way.

- 1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.
- 2. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior exit balcony that opens to a public way.
- 3. Basements without habitable spaces and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape and rescue openings.
- 4. In other than Group R-3 occupancies, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2."
- 94. Subsection 1101.2, "Design," of Section 1101, "General," of Chapter 11,

"Accessibility," of the 2015 International Building Code is amended to read as follows:

"1101.2 Design. Buildings and facilities shall be designed and constructed to be *accessible* in accordance with this code and ICC A117.1.

Exceptions:

- 1. Components of projects regulated by and registered with the Architectural Barriers

 Division of the Texas Department of Licensing and Regulation shall be deemed to be
 in compliance with the requirements of this chapter.
- 2. FHA Type C dwelling units designed and constructed in accordance with the Fair Housing Act Design Manual—1996 (Updated 1998) will be considered in compliance with the applicable requirements of this chapter."
- 95. Subsection 1102.1, "Definitions," of Section 1102, "Definitions," of Chapter 11,

"Accessibility," of the 2015 International Building Code is amended to read as follows:

"1102.1 Definitions. The following terms are defined in Chapter 2:

ACCESSIBLE.

ACCESSIBLE ROUTE.

ACCESSIBLE UNIT.

AREA OF SPORT ACTIVITY.

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CIRCULATION PATH.

COMMON USE.

DETECTABLE WARNING.

EMPLOYEE WORK AREA.

FACILITY.

INTENDED TO BE OCCUPIED AS A RESIDENCE.

MULTILEVEL ASSEMBLY SEATING.

MULTISTORY UNIT.

PUBLIC ENTRANCE.

PUBLIC-USE AREAS.

RESTRICTED ENTRANCE.

SELF-SERVICE STORAGE FACILITY.

SERVICE ENTRANCE.

SITE.

TYPE A UNIT.

TYPE B UNIT.

TYPE C UNIT, FHA.

WHEELCHAIR SPACE."

96. Paragraph 1103.2.5, "Construction Site," of Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:

"1103.2.5 Construction sites. Structures, sites and equipment directly associated with the actual processes of construction including, but not limited to, scaffolding, bridging, materials hoists, materials storage, [of] construction trailers or portable toilet units provided for use

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exclusively by construction personnel on a construction site are not required to comply with this chapter."

- 97. Subsection 1103.2, "General Exceptions," of Section 1103, "Scoping Requirements," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended by adding a new Paragraph 1103.2.15, "Restricted Occupancy Spaces," to read as follows:
 - "1103.2.15 Restricted occupancy spaces. Vertical access (elevators and platform lifts) is not required for the second floor of two-story control buildings located within a chemical manufacturing facility where the second floor is restricted to employees and does not contain common areas or employment opportunities not otherwise available in *accessible* locations within the same building."
- 98. Subsection 1106.1, "Required," of Section 1106, "Parking and Passenger Loading Facilities," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:
- "1106.1 Required. Where parking is provided, accessible parking spaces shall be provided in compliance with Table 1106.1, except as required by Sections 1106.2 through 1106.4 and as required by the Dallas Development Code. Where more than one parking facility is provided on a site, the number of parking spaces required to be accessible shall be calculated separately for each parking facility.

Exception: This section does not apply to parking spaces used exclusively for buses, trucks, other delivery vehicles, law enforcement vehicles or vehicular impound and motor pools where lots accessed by the public are provided with an *accessible* passenger loading zone."

- 99. Subsection 1107.2, "Design," of Section 1107, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:
- "1107.2 Design. Dwelling units and sleeping units that are required to be Accessible units, Type A units and Type B units shall comply with the applicable portions of Chapter 10 of ICC A117.1. Units required to be Type A units are permitted to be designed and constructed as Accessible units. Units required to be Type B units are permitted to be designed and constructed as Accessible units or as Type A units. Units required to be FHA Type C units are permitted to be designed and constructed as Accessible units, Type A units or Type B units.

- 1107.2.1 Alternate design. FHA Type C dwelling units designed and constructed with the following items in accordance with the Fair Housing Act Design Manual—1996 (Updated 1998) are considered in compliance with the fair housing requirements of this chapter.
 - 1107.2.1.1 Multifamily dwellings. All covered multifamily dwellings built for first occupancy after March 13, 1991 with a building entrance on an accessible route must be designed and constructed in such a manner that:
 - 1. The public and common use areas are readily *accessible* to and useable by handicapped persons;
 - 2. All the doors designed to allow passage into and within all premises are sufficiently wide to allow passage by handicapped persons in wheelchairs; and
 - 3. All premises within covered multifamily dwelling units contain the following features of adaptable design:
 - 3.1. An accessible route into and through the covered dwelling unit;
 - 3.2. <u>Light switches, electrical outlets, thermostats and other environmental</u> controls in accessible locations;
 - 3.3. Reinforcements in bathroom walls to allow later installation of grab bars around the toilet, tub, shower stall and shower seat, where such facilities are provided; and
 - 3.4. Usable kitchens and bathrooms such that an individual in a wheelchair can maneuver about the space."
- 100. Subsection 1107.6, "Group R," of Section 1107, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:
- "1107.6 Group R. Accessible units, Type A units, [and] Type B units and FHA Type C units shall be provided in Group R occupancies in accordance with Sections 1107.6.1 through 1107.6.4.
 - 1107.6.1 Group R-1. Accessible units and Type B units shall be provided in Group R-1 occupancies in accordance with Sections 1107.6.1.1 and 1107.6.1.2.
 - 1107.6.1.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1107.6.1.1. Where buildings contain more than 50 dwelling units or sleeping units, the number of Accessible units shall be determined per building. Where

buildings contain 50 or fewer dwelling units or sleeping units, all dwelling units and sleeping units on a site shall be considered to determine the total number of Accessible units. Accessible units shall be dispersed among the various classes of units.

1107.6.1.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

1107.6.2 Group R-2. Accessible units, Type A units, [and] Type B units, and FHA Type C units shall be provided in Group R-2 occupancies in accordance with Sections 1107.6.2.1 through 1107.6.2.3. Fire walls are not considered in the determination of the number of dwelling units in a structure.

1107.6.2.1 Live/work units. In *live/work units* constructed in accordance with Section 419, the nonresidential portion is required to be accessible. In a structure where there are four or more live/work units intended to be occupied as a residence, the residential portion of the *live/work unit* shall be a Type B unit or FHA Type C units must be provided in accordance with Section 1107.6.2.1.1.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

1107.6.2.1.1 FHA Type C units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit shall be at least an FHA Type C unit.

Exception: The number of FHA Type C units is permitted to be reduced in accordance with the Fair Housing Act Design Manual—1996 (Updated 1998).

1107.6.2.2 Apartment houses, monasteries and convents. Type A units and Type B units shall be provided in apartment houses, monasteries and convents in accordance with Sections 1107.6.2.2.1 and 1107.6.2.2.2 or FHA Type C units must be provided in accordance with Section 1107.6.2.1.1.

1107.6.2.2.1 Type A units. In Group R-2 occupancies containing more than 20 dwelling units or sleeping units, at least 2 percent but not less than one of the units shall be a Type A unit. All Group R-2 units on a site shall be considered to determine the total number of units and the required number of Type A units. Type A units shall be dispersed among the various classes of units. Bedrooms in monasteries and convents shall be counted as sleeping units for the purpose of determining the number of units. Where the sleeping units are grouped into suites, only one sleeping unit in each suite shall count towards the number of required Type A units.

Exceptions:

- 1. The number of *Type A units* is permitted to be reduced in accordance with Section 1107.7.
- 2. Existing structures on a site shall not contribute to the total number of units on a site.

1107.6.2.2.2 Type B units. Where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7

1107.6.2.3 Group R-2 other than live/work units, apartment houses, monasteries and convents. In Group R-2 occupancies, other than live/work units, apartment houses, monasteries and convents falling within the scope of Sections 1107.6.2.1 and 1107.6.2.2, Accessible units and Type B units shall be provided in accordance with Sections 1107.6.2.3.1 and 1107.6.2.3.2 or FHA Type C units must be provided in accordance with Section 1107.6.2.1.1. Bedrooms within congregate living facilities shall be counted as sleeping units for the purpose of determining the number of units. Where the sleeping units are grouped into suites, only one sleeping unit in each suite shall be permitted to count towards the number of required Accessible units.

1107.6.2.3.1 Accessible units. Accessible dwelling units and sleeping units shall be provided in accordance with Table 1107.6.1.1.

1107.6.2.3.2 Type B units. Where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and every sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.

1107.6.3 Group R-3. In Group R-3 occupancies where there are four or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit or an FHA Type C unit. Bedrooms within congregate living facilities shall be counted as sleeping units for the purpose of determining the number of units.

- 1. The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7.
- 2. The number of FHA Type C units is permitted to be reduced in accordance with the Fair Housing Act Design Manual—1996 (Updated 1998).
- **1107.6.4 Group R-4.** Accessible units and Type B units shall be provided in Group R-4 occupancies in accordance with Sections 1107.6.4.1 and 1107.6.4.2 or FHA Type C units must be provided in accordance with Section 1107.6.2.1.1.
 - 1107.6.4.1 Accessible units. In Group R-4 Condition 1, at least one of the dwelling units or sleeping units shall be an Accessible unit. In Group R-4 Condition 2, at least two of the dwelling units or sleeping units shall be an Accessible unit. Bedrooms in Group R-4 facilities shall be counted as sleeping units for the purpose of determining the number of units.
 - 1107.6.4.2 Type B units. In structures with four or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

Exception: The number of *Type B units* is permitted to be reduced in accordance with Section 1107.7."

- 101. Subsection 1107.7, "General Exceptions," of Section 1107, "Dwelling Units and Sleeping Units," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:
- "1107.7 General exceptions. Where specifically permitted by Section 1107.5 or 1107.6, the required number of *Type A units* and *Type B units* is permitted to be reduced in accordance with Sections 1107.7.1 through 1107.7.5.
 - 1107.7.1 Structures without elevator service. Where no elevator service is provided in a structure, only the *dwelling units* and *sleeping units* that are located on stories indicated in Sections 1107.7.1.1 and 1107.7.1.2 are required to be *Type A units*, [and] *Type B units*, or *FHA Type C units* [respectively]. The number of *Type A units* shall be determined in accordance with Section 1107.6.2.2.1.
 - 1107.7.1.1 One story with Type B or FHA Type C units required. At least one story containing dwelling units or sleeping units intended to be occupied as a residence shall be provided with an accessible entrance from the exterior of the structure and all units intended to be occupied as a residence on that story shall be Type B units or FHA Type C units.

- 1107.7.1.2 Additional stories with Type B units or FHA Type C units. On all other stories that have a building entrance in proximity to arrival points intended to serve units on that story, as indicated in Items 1 and 2, all dwelling units and sleeping units intended to be occupied as a residence served by that entrance on that story shall be Type B units or FHA Type C units.
 - 1. Where the slopes of the undisturbed *site* measured between the planned entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less, and
 - 2. Where the slopes of the planned finished grade measured between the entrance and all vehicular or pedestrian arrival points within 50 feet (15 240 mm) of the planned entrance are 10 percent or less.

Where no such arrival points are within 50 feet (15 240 mm) of the entrance, the closest arrival point shall be used unless that arrival point serves the *story* required by Section 1107.7.1.1.

- 1107.7.2 Multistory units. A multistory dwelling unit or sleeping unit that is not provided with elevator service is not required to be a Type B unit or FHA Type C unit. Where a multistory unit is provided with external elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a Type B unit or an FHA Type C unit and, where provided within the unit, a living area, a kitchen and a toilet facility shall be provided on that floor.
- 1107.7.3 Elevator service to the lowest story with units. Where elevator service in the building provides an accessible route only to the lowest story containing dwelling units or sleeping units intended to be occupied as a residence, only the units on that story that are intended to be occupied as a residence are required to be Type B units or FHA Type C units.
- 1107.7.4 Site impracticality. On a site with multiple non-elevator buildings, the number of units required by Section 1107.7.1 to be Type B units or FHA Type C units is permitted to be reduced to a percentage that is equal to the percentage of the entire site having grades, prior to development, that are less than 10 percent, provided that all of the following conditions are met:
 - 1. Not less than 20 percent of the units required by Section 1107.7.1 on the *site* are *Type B units* or *FHA Type C units*;
 - 2. Units required by Section 1107.7.1, where the slope between the building entrance serving the units on that *story* and a pedestrian or vehicular arrival point is no greater than 8.33 percent, are *Type B units* or *FHA Type C* units;
 - 3. Units required by Section 1107.7.1, where an elevated walkway is planned between a building entrance serving the units on that *story* and a pedestrian or vehicular arrival

- point and the slope between them is 10 percent or less, are *Type B units* or *FHA Type C units*; and
- 4. Units served by an elevator in accordance with Section 1107.7.3 are *Type B units* or *FHA Type C units*.
- 1107.7.5 Design flood elevation. The required number of Type A units, [and] Type B units or FHA Type C units shall not apply to a site where the required elevation of the lowest floor or the lowest horizontal structural building members of nonelevator buildings are at or above the design flood elevation resulting in:
 - 1. A difference in elevation between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm) exceeding 30 inches (762 mm), and
 - 2. A slope exceeding 10 percent between the minimum required floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet (15 240 mm).

Where no such arrival points are within 50 feet (15 240 mm) of the primary entrances, the closest arrival points shall be used.

- 102. Subsection 1109.1, "General," of Section 1109, "Other Features and Facilities," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:
- "1109.1 General. Accessible building features and facilities shall be provided in accordance with Sections 1109.2 through 1109.15.

- 1. Accessible units, Type A units and Type B units shall comply with Chapter 10 of ICC A117.1.
- 2. FHA Type C dwelling units designed and constructed in accordance with the Fair Housing Act Design Manual—1996(Updated 1998) are considered in compliance with these provisions."
- 103. Paragraph 1109.2.1, "Family or Assisted-Use Toilet and Bathing Rooms," of Subsection 1109.2, "Toilet and Bathing Facilities," of Section 1109, "Other Features and

Facilities," of Chapter 11, "Accessibility," of the 2015 International Building Code is amended to read as follows:

"1109.2.1 Family or assisted-use toilet and bathing rooms. In assembly and mercantile occupancies, an accessible family or assisted-use toilet room shall be provided where an aggregate of six or more male or [and] female water closets are provided [is required]. In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the family or assisted-use toilet room requirement. In recreational facilities where separate-sex bathing rooms are provided, an accessible family or assisted-use bathing room shall be provided. Fixtures located within family or assisted-use toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy.

Exception: Where each separate-sex bathing room has only one shower or bathtub fixture, a family or assisted-use bathing room is not required.

- **1109.2.1.1 Standard.** Family or assisted-use toilet and bathing rooms shall comply with Sections 1109.2.1.2 through 1109.2.1.7.
- 1109.2.1.2 Family or assisted-use toilet rooms. Family or assisted-use toilet rooms shall include only one water closet and only one lavatory. A family or assisted-use bathing room in accordance with Section 1109.2.1.3 shall be considered a family or assisted-use toilet room.

Exception: A urinal is permitted to be provided in addition to the water closet in a family or assisteduse toilet room.

- 1109.2.1.3 Family or assisted-use bathing rooms. Family or assisted-use bathing rooms shall include only one shower or bathtub fixture. Family or assisted-use bathing rooms shall also include one water closet and one lavatory. Where storage facilities are provided for separate-sex bathing rooms, *accessible* storage facilities shall be provided for family or assisted-use bathing rooms.
- 1109.2.1.4 Location. Family or assisted-use toilet and bathing rooms shall be located on an accessible route. Family or assisted-use toilet rooms shall be located not more than one story above or below separate-sex toilet rooms. The accessible route from any separate-sex toilet room to a family or assisted-use toilet room shall not exceed 500 feet (152 m).
- 1109.2.1.5 Prohibited location. In passenger transportation facilities and airports, the *accessible route* from separate-sex toilet rooms to a family or assisted-use toilet room shall not pass through security checkpoints.

1109.2.1.6 Clear floor space. Where doors swing into a family or assisted-use toilet or bathing room, a clear floor space not less than 30 inches by 48 inches (762 mm by 1219 mm) shall be provided, within the room, beyond the area of the door swing.

1109.2.1.7 Privacy. Doors to family or assisted-use toilet and bathing rooms shall be securable from within the room."

104. Subsection 1203.1, "General," of Section 1203, "Ventilation," of Chapter 12, "Interior Environment," of the 2015 International Building Code is amended to read as follows:

"1203.1 General. Buildings shall be provided with natural ventilation in accordance with Section 1203.4, or mechanical ventilation in accordance with the <u>Dallas</u> [International] Mechanical Code.

Where the air infiltration rate in a dwelling unit is [less than] 5 air changes or less per hour when tested with a blower door at a pressure 0.2 inch w.c. (50 Pa) in accordance with Section 402.4.1.2 of the <u>Dallas</u> [International] Energy Conservation Code—Residential Provisions, the dwelling unit shall be ventilated by mechanical means in accordance with Section 403 of the <u>Dallas</u> [International] Mechanical Code. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407 of the <u>Dallas</u> [International] Mechanical Code."

105. Paragraph 1210.2.2, "Walls and Partitions," of Subsection 1210.2, "Finish Materials," of Section 1210, "Toilet and Bathroom Requirements," of Chapter 12, "Interior Environment," of the 2015 International Building Code is amended to read as follows:

"1210.2.2 Walls and partitions. Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Exception: This section does not apply to the following buildings and spaces:

- 1. Dwelling units and sleeping units.
- 2. Toilet rooms that are not accessible to the public and that have not more than one water closet <u>provided that walls around urinals comply with the minimum surrounding material specified by Section 419.3 of the Dallas Plumbing Code</u>.

Accessories such as grab bars, towel bars, paper dispensers and soap dishes, provided on or within walls, shall be installed and sealed to protect structural elements from moisture."

- 106. Subsection 1405.5, "Wood Veneers," of Section 1405, "Installation of Wall Coverings," of Chapter 14, "Exterior Walls," of the 2015 International Building Code is amended to read as follows:
- "1405.5 Wood veneers. Wood veneers on exterior walls of buildings of Type I, II, III and IV construction shall be not less than 1 inch (25 mm) nominal thickness, 0.438-inch (11.1 mm) exterior hardboard siding or 0.375-inch (9.5 mm) exterior-type wood structural panels or particleboard and shall conform to the following:
 - 1. The veneer shall not exceed 40 feet (12 190 mm) in height above grade. Where fire-retardant-treated wood is used, the height shall not exceed 60 feet (18 290 mm) in height above grade.
 - 2. The veneer is attached to or furred from a noncombustible backing that is fire-resistance rated as required by other provisions of this code.
 - 3. Where open or spaced wood veneers (without concealed spaces) are used, they shall not project more than 24 inches (610 mm) from the building wall.

See Sections 1406.2.1 and 1406.3 for additional limitations."

- 107. Subparagraph 1406.2.1.1, "Ignition Resistance," of Paragraph 1406.2.1, "Type I, II, III and IV Construction," of Subsection 1406.2, "Combustible Exterior Wall Coverings," of Section 1406, "Combustible Materials on the Exterior Side of Exterior Walls," of Chapter 14, "Exterior Walls," of the 2015 International Building Code is amended to read as follows:
 - "1406.2.1.1 Ignition resistance. Where permitted by Section 1406.2.1, combustible exterior wall coverings shall be tested in accordance with NFPA 268.

- 1. Wood or wood-based products <u>installed at fully sprinklered exterior exitways</u>, exterior *stairs* or exterior *exit* balconies of Group R occupancies.
- 2. Other combustible materials covered with an exterior weather covering, other than vinyl sidings, included in and complying with the thickness requirements of Table 1405.2.

- 3. Aluminum having a minimum thickness of 0.019 inch (0.48 mm).
- 4. Materials of a Class II flame spread classification may be substituted in lieu of testing in accordance with NFPA 268 for exterior wall coverings of wood or wood-based products and of Type V construction in Group R, Division 1, 2 and 4 occupancies. The finish materials must be such that the required flame spread is an inherent characteristic of the material or is permanently achieved by pressure impregnation.
- 1406.2.1.1.1 Fire separation 5 feet or less. Where installed on exterior walls having a fire separation distance of 5 feet (1524 mm) or less, combustible exterior wall coverings shall not exhibit sustained flaming as defined in NFPA 268.
- 1406.2.1.1.2 Fire separation greater than 5 feet. For fire separation distances greater than 5 feet (1524 mm), any exterior wall covering shall be permitted that has been exposed to a reduced level of incident radiant heat flux in accordance with the NFPA 268 test method without exhibiting sustained flaming. The minimum fire separation distance required for the exterior wall covering shall be determined from Table 1406.2.1.1.2 based on the maximum tolerable level of incident radiant heat flux that does not cause sustained flaming of the exterior wall covering."
- 108. Subsection 1406.3, "Balconies and Similar Projections," of Section 1406, "Combustible Materials on the Exterior Side of Exterior Walls," of Chapter 14, "Exterior Walls," of the 2015 International Building Code is amended to read as follows:
- "1406.3 Balconies and similar projections. Balconies and similar projections of combustible construction other than fire-retardant-treated wood shall be fire-resistance rated where required by Table 601 for floor construction or shall be of Type IV construction in accordance with Section 602.4. The aggregate length of the projections shall not exceed 50 percent of the building's perimeter on each floor.

- 1. On buildings of Type I and II construction, three stories or less above *grade plane*, fire-retardant-treated wood shall be permitted for balconies, porches, decks and exterior stairways not used as required exits.
- 2. Untreated wood is permitted for pickets and rails or similar guardrail devices that are limited to 42 inches (1067 mm) in height <u>installed at fully sprinklered exterior exitways</u>, exterior stairs or exterior exit balconies of Group R occupancies.

- 3. Balconies and similar projections on buildings of Type III, IV and V construction shall be permitted to be of Type V construction, and shall not be required to have a *fire-resistance rating* where sprinkler protection is extended to these areas.
- 4. Where sprinkler protection is extended to the balcony areas, the aggregate length of the balcony on each floor shall not be limited."
- 109. Table 1505.1, "Minimum Roof Covering Classification for Types of Construction," of Subsection [BF] 1505.1, "General," of Section 1505, "Fire Classification," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is amended to read as follows:

"TABLE 1505.1^{a[,+b]}
MINIMUM ROOF COVERING CLASSIFICATION FOR TYPES OF CONSTRUCTION

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
В	В	В	C _{P[⊕]}	В	C _{P[⊕]}	В	В	С₽[ө]

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m^2 .

- a. Unless otherwise required in accordance with the *International Wildland-Urban Interface Code* or due to the location of the building within a fire district in accordance with Appendix D.
- b. Nonclassified roof coverings shall be permitted on buildings of [Group R-3 and] Group U occupancies having not more than 200 square feet of projected roof area. When exceeding 200 square feet of projected roof area, buildings of Group U occupancies may use non-rated, non-combustible [where there is a minimum fireseparation distance of 6 feet measured from the leading edge of the] roof coverings.
- [e. Buildings that are not more than two stories above grade plane and having not more than 6,000 square feet of projected roof area and where there is a minimum 10 foot fire separation distance from the leading edge of the roof to a lot line on all sides of the building, except for street fronts or public ways, shall be permitted to have roofs of No. 1 cedar or redwood shakes and No. 1 shingles constructed in accordance with Section 1505.7.]"
- 110. Subsection [BF] 1505.7, "Special Purpose Roofs," of Section 1505, "Fire Classification," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is deleted.
- 111. Paragraph [BG] 1510.2.5, "Type of Construction," of Subsection [BG] 1510.2, "Penthouses," of Section 1510, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is amended to read as follows:
 - "[BG] 1510.2.5 Type of construction. Penthouses shall be constructed with walls, floors and roofs as required for the type of construction of the building on which such penthouses are built. All structures must be designed by an engineer registered in the State of Texas.

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- 1. On buildings of Type I construction, the exterior walls and roofs of penthouses with a *fire separation distance* greater than 5 feet (1524 mm) and less than 20 feet (6096 mm) shall be permitted to have not less than a 1-hour fire-resistance rating. The exterior walls and roofs of penthouses with a fire separation distance of 20 feet (6096 mm) or greater shall not be required to have a fire-resistance rating.
- 2. On buildings of Type I construction two stories or less in height above grade plane or of Type II construction, the exterior walls and roofs of penthouses with a fire separation distance greater than 5 feet (1524 mm) and less than 20 feet (6096 mm) shall be permitted to have not less than a 1-hour fire-resistance rating or a lesser fire-resistance rating as required by Table 602 and be constructed of fire-retardant-treated wood. The exterior walls and roofs of penthouses with a fire separation distance of 20 feet (6096 mm) or greater shall be permitted to be constructed of fire-retardant-treated wood and shall not be required to have a fire-resistance rating. Interior framing and walls shall be permitted to be constructed of fire-retardant-treated wood.
- 3. On buildings of Type III, IV or V construction, the exterior walls of penthouses with a fire separation distance greater than 5 feet (1524 mm) and less than 20 feet (6096 mm) shall be permitted to have not less than a 1-hour fire-resistance rating or a lesser fire-resistance rating as required by Table 602. On buildings of Type III, IV or VA construction, the exterior walls of penthouses with a fire separation distance of 20 feet (6096 mm) or greater shall be permitted to be of Type IV or noncombustible construction or fire-retardant-treated wood and shall not be required to have a fire-resistance rating."
- 112. Subsection [BS] 1510.8, "Other Rooftop Structures," of Section 1510, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is amended by adding a new Paragraph 1510.8.6, "Architectural Appendages," to read as follows:
 - "1510.8.6 Architectural appendages. Architectural appendages used exclusively as decoration or embellishment must comply with Section 1510.2 as penthouses and be of the same type of construction as required for the exterior walls of the building or the roof in which such appendages are located."

- 113. Section 1510, "Rooftop Structures," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is amended by adding a new Subsection 1510.10, "Wood Surfaces," to read as follows:
- "1510.10 Wood surfaces. Where roof assemblies are required to be fire rated, wood surfaces on roof assemblies such as walks, running tracks and other similar surfaces may be installed when constructed of fire-retardant treated wood. Any space between the wood and the roof surface must be filled with inorganic or Class I material or the space must be fire stopped not to exceed 8 feet (2438.4 mm) in any direction. Weep holes of sufficient size to prevent water accumulation on the roof are permitted."
- 114. Subsection 1511.1, "General," of Section 1511, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is amended to read as follows:
- "1511.1 General. Materials and methods of application used for recovering or replacing an existing roof covering shall comply with the requirements of Chapter 15. All individual replacement shingles or shakes shall be in compliance with the rating required by Table 1505.1.

- 1. Roof replacement or roof recover of existing low-slope roof coverings shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section 1507 for roofs that provide positive roof drainage.
- 2. Recovering or replacing an existing roof covering shall not be required to meet the requirement for secondary (emergency overflow) drains or scuppers in Section 1503.4 for roofs that provide for positive roof drainage. For the purposes of this exception, existing secondary drainage or scupper systems required in accordance with this code shall not be removed unless they are replaced by secondary drains or scuppers designed and installed in accordance with Section 1503.4."
- 115. Paragraph 1511.3.1, "Roof Recover," of Subsection 1511.3, "Roof Replacement," of Section 1511, "Reroofing," of Chapter 15, "Roof Assemblies and Rooftop Structures," of the 2015 International Building Code is amended to read as follows:

- "1511.3.1 Roof recover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:
 - 1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
 - 2. Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
 - 3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs when applied in accordance with Section 1511.4.
 - 4. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear off of existing roof coverings.
 - 5. Where the maximum number of roof coverings, including the new roof covering installation, does not exceed two.
 - **1511.3.1.1 Exceptions.** A *roof recover* shall not be permitted where any of the following conditions occur:
 - 1. Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
 - 2. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
 - 3. Where the existing roof has three [two] or more applications of any type of roof covering."
 - 116. Subsection 1612.1, "General," of Section 1612, "Flood Loads," of Chapter 16,

"Structural Design," of the 2015 International Building Code is amended to read as follows:

"1612.1 General. Within *flood hazard areas* as established in Section 1612.3, all new construction of buildings, structures and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads. For buildings that are located in more than one *flood hazard area*, the provisions associated with the most restrictive *flood hazard area* shall apply.

Exception: Buildings and structures constructed and elevated as required by floodplain regulations in Article V of the *Dallas Development Code*."

117. Subsection 1704.2, "Special Inspections and Tests," of Section 1704, "Special Inspections and Tests, Contractor Responsibility and Structural Observation," of Chapter 17, "Special Inspections and Tests," of the 2015 International Building Code is amended to read as follows:

"1704.2 Special inspections and tests. Where application is made to the building official for construction as specified in Section 301 of Chapter 52, "Administrative Provisions for the Construction Codes" of the Dallas City Code [105], the owner or the owner's authorized agent, or the registered design professional in responsible charge, other than the contractor, shall employ one or more approved agencies to provide special inspections and tests during construction on the types of work listed under Section 1705 and identify the approved agencies to the building official. The special inspector shall not be employed by the contractor. These special inspections and tests are in addition to the inspections identified by the building official that are identified in Section 304 of Chapter 52, "Administrative Provisions for the Construction Codes" of the Dallas City Code [110].

- 1. Special inspections and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.
- 2. Unless otherwise required by the *building official*, *special inspections* and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
- 3. Special inspections and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308.
- 4. The contractor is permitted to employ the *approved agencies* where the contractor is also the owner.
- 1704.2.1 Special inspector qualifications. Prior to the start of the construction or upon request, the approved agencies shall provide written documentation to the registered design professional in responsible charge and the building official demonstrating the competence and relevant experience or training of the special inspectors who will perform the special inspections and tests during construction. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of

special inspection or testing activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other sections of this code.

The registered design professional in responsible charge and engineers of record involved in the design of the project are permitted to act as the approved agency and their personnel are permitted to act as special inspectors for the work designed by them, provided they qualify as special inspectors.

1704.2.2 Access for special inspection. The construction or work for which special inspection or testing is required shall remain accessible and exposed for special inspection or testing purposes until completion of the required special inspections or tests.

1704.2.3 Statement of special inspections. The applicant shall submit a statement of special inspections in accordance with Section 301.4.7 of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code [107.1] as a condition for permit issuance. This statement shall be in accordance with Section 1704.3.

Exception: A statement of *special inspections* is not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.7 or the conventional light-frame construction provisions of Section 2308.

1704.2.4 Report requirement. Approved agencies shall keep records of special inspections and tests. The approved agency shall submit reports of special inspections and tests to the building official upon request and to the registered design professional in responsible charge. Individual inspection r[R]eports shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional in responsible charge prior to the completion of that phase of the work. A final report documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of work by the owner or the owner's authorized agent to the building official.

1704.2.5 Special inspection of fabricated items. Where fabrication of structural, load-bearing or lateral load-resisting members or assemblies is being conducted on the premises of a fabricator's shop, special inspections of the fabricated items shall be performed during fabrication.

Exceptions:

1. Special inspections during fabrication are not required where the fabricator maintains approved detailed fabrication and quality control procedures that

provide a basis for control of the workmanship and the fabricator's ability to conform to approved construction documents and this code. Approval shall be based upon review of fabrication and quality control procedures and periodic inspection of fabrication practices by the building official.

2. Special inspections are not required where the fabricator is registered and approved in accordance with Section 1704.2.5.1.

1704.2.5.1 Fabricator approval. Special inspections during fabrications required by Section 1704 are not required where the work is done on the premises of a fabricator registered and approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved agency, or a fabricator that is enrolled in a nationally accepted inspections program. At completion of fabrication, the acceptable or approved fabricator shall submit a certificate of compliance to the owner or the owner's authorized agent or the registered design professional in responsible charge, [for submittal to the building official as specified in Section 1704.5] stating that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the building official upon request."

118. Section 1705, "Required Special Inspections and Tests," of Chapter 17, "Special Inspections and Tests," of the 2015 International Building Code is amended by adding a new Subsection 1705.19, "Special Inspections for Dallas Energy Conservation Code Compliance," to read as follows:

"1705.19 Special inspections for Dallas Energy Conservation Code compliance. Special inspections are required to verify compliance with the Dallas Energy Conservation Code in accordance with Section 1705.19.1 and 1705.19.2.

1705.19.1 Scope of inspection and testing. The scope of the test is as follows:

- 1. Building envelope.
- 2. Building mechanical system including air leakage testing and duct leakage testing, as applicable.
- 3. Service water heating.
- 4. Electric lighting and power system.

- 1705.19.2 Qualifications. Special inspectors for *Dallas Energy Conservation Code* inspections shall have a current International Code Council certification in the relevant energy code inspection specialty as required by the state of Texas."
- 119. Section 1705, "Required Special Inspections and Tests," of Chapter 17, "Special Inspections and Tests," of the 2015 International Building Code is amended by adding a new Subsection 1705.20, "Special Inspections for Dallas Green Code Construction Code Compliance," to read as follows:
- "1705.20 Special inspections for Dallas Green Construction Code compliance. Special inspections are required to verify compliance with the Dallas Green Construction Code in accordance with Sections 1705.20.1 and 1705.20.2.

1705.20.1 Scope of inspection and testing.

- **1705.20.1.1 Single-family or duplex structures.** The scope of work required is stipulated in the *Dallas Green Construction Code*.
- 1705.20.1.2 Commercial structures. The scope of work required is stipulated in the Dallas Green Construction Code.
- 1705.20.2 Qualifications. Special inspectors for *Dallas Green Construction Code* inspections shall be qualified as stipulated by the building official."
- 120. Subsection 2503.1, "Inspection," of Section 2503, "Inspection," of Chapter 25, "Gypsum Board, Gypsum Panel Products and Plaster," of the 2015 International Building Code is amended to read as follows:
- "2503.1 Inspection. Lath, gypsum board and gypsum panel products shall be inspected in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code [Section 110.3.5]."
- 121. Subsection [P] 2901.1, "Scope," of Section 2901, "General," of Chapter 29, "Plumbing Systems," of the 2015 International Building Code is amended to read as follows:
- "[P] 2901.1 Scope. The provisions of this chapter and the <u>Dallas</u> [<u>International</u>] Plumbing Code shall govern the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing equipment and systems. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Plumbing systems and equipment shall be

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constructed, installed and maintained in accordance with the <u>Dallas</u> [International] Plumbing Code. Private sewage disposal systems shall conform to the <u>Dallas Plumbing</u> [International Private Sewage Disposal] Code. The provisions of this chapter are meant to work in coordination with the provisions of Chapter 4 of the <u>Dallas Plumbing Code</u>. Should any conflicts arise between the two chapters, the building official shall determine which provision applies."

- 122. Subsection [P] 2902.1, "Minimum Number of Fixtures," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2015 International Building Code is amended to read as follows:
- "[P] 2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number in accordance with this section and as shown in Table 2902.1 based on the actual use of the building or space. Uses not shown in Table 2902.1 shall be considered individually by the code official. The number of occupants shall be determined by this code.
 - 1. Assembly occupancies: At least one drinking fountain must be provided at each floor level in an approved location.
 - Exception: A drinking fountain need not be provided in a drinking or dining establishment.
 - 2. Groups A, B, F, I, M and S occupancies: Buildings, tenant spaces or portions thereof where persons are employed must be provided with at least one water closet for each sex except as provided in Section 2902.2. Such water closet rooms in connection with food establishments where food is prepared, stored or served must have hand washing facilities therein or adjacent thereto.
 - 3. Group E and R occupancies must be provided with fixtures as shown in Table 2902.1.

It is recommended, but not required, that the minimum number of fixtures provided also comply with the number shown in Table 2902.1. Types of occupancies not shown in Table 2902.1 shall be considered individually by the *building official*. The number of occupants shall be determined by this code. Occupancy classification shall be determined in accordance with Chapter 3.

[P] 2902.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

Exception: The total *occupant load* shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.

2902.1.1.1 Occupant load for minimum plumbing facilities. In determining minimum plumbing facilities, the number of occupants for whom minimum plumbing facilities are provided must be computed in accordance with Section 1004.

Exception: Where state law or city ordinance limits the number of students per classroom, fixtures in primary and secondary schools may be provided on the basis of the maximum number of students allowed.

- [P] 2902.1.2 Family or assisted-use toilet and bath fixtures. Fixtures located within family or assisted-use toilet and bathing rooms required by Section 1109.2.1 are permitted to be included in the number of required fixtures for either the male or female occupants in assembly and mercantile occupancies.
- 2902.1.3 Additional fixtures for food preparation facilities. In addition to the fixtures required in this chapter, all food service facilities must be provided with additional fixtures as required in this section.
 - 2902.1.3.1 Hand washing lavatory. At least one hand washing lavatory must be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.
 - 2902.1.3.2 Service sinks and floor sinks. In new or remodeled food service establishments, at least one service sink or one floor sink must be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste. The location of the service sinks or mop sinks must be approved by the health department."
- 123. Subsection 2902.6 "Small Occupanicies," of Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2015 International Building Code is amended to read as follows:
- "[P] 2902.6 Small occupancies. Drinking fountains shall not be required for an occupant load of 15 or fewer, in mercantile occupancies with an occupant load of 100 or fewer or in business occupancies with an occupant load of 25 or fewer."

- 124. Section 2902, "Minimum Plumbing Facilities," of Chapter 29, "Plumbing Systems," of the 2015 International Building Code is amended by adding a new Subsection 2902.7, "Finish Material," to read as follows:
- "2902.7 Finish material. Finish materials must comply with Section 1210."
- 125. Subsection 3001.2, "Referenced Standards," of Section 3001, "General," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:
- "3001.2 Referenced standards. Except as otherwise provided for in this code, the design, construction, installation, *alteration*, repair and maintenance of elevators and conveying systems and their components shall conform to ASME A17.1/CSA B44, ASME A17.7/CSA B44.7, ASME A90.1, ASME B20.1, ANSI MH29.1, ALI ALCTV and ASCE 24 for construction in flood hazard areas established in Section 1612.3.

Exception: The appendices of ASME A17.1—2013 do not apply. The building owner is responsible for the safe operation and maintenance of each elevator, dumbwaiter, escalator or moving walk installation and shall cause periodic inspections, tests and maintenance to be made of such conveyances."

- 126. Subsection 3001.3, "Accessibility," of Section 3001, "General," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:
- "3001.3 Accessibility. Passenger elevators required to be accessible or to serve as part of an accessible means of egress shall comply with Sections 1009 and 1109.7.

Exception: Passenger elevators regulated under Article 9102, "Architectural Barriers," of *Vernon's Texas Civil Statutes* and the "Texas Accessibility Standards of the Architectural Barriers Act," adopted by the Texas Commission of Licensing and Regulation pursuant to Article 9102 and built in accordance with state certified plans, including any variances granted by the state, will be deemed in compliance with the requirements of this chapter."

127. Section 3002.1, "Hoistway Enclosure Protection," of Section 3002, "Hoistway Enclosures," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:

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"3002.1 Hoistway enclosure protection. Elevator, dumbwaiter and other hoistway enclosures shall be *shaft enclosures* complying with Section 713.

Exceptions:

- 1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
- 2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.
- **3002.1.1 Opening protectives.** Openings in hoistway enclosures shall be protected as required in Chapter 7.

Exception: The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I Emergency Recall Operation.

- **3002.1.2 Hardware.** Hardware on opening protectives shall be of an *approved* type installed as tested, except that *approved* interlocks, mechanical locks and electric contacts, door and gate electric contacts and door-operating mechanisms shall be exempt from the fire test requirements."
- 128. Subsection 3005.4, "Machine Rooms, Control Rooms, Machinery Spaces, and Control Spaces," of Section 3005, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:
- "3005.4 Machine rooms, control rooms, machinery spaces, and control spaces. Elevator machine rooms, control rooms, control spaces and machinery spaces [outside of but attached to a hoistway that have openings into the hoistway] shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. The fire-resistance rating shall be not less than the required rating of the hoistway enclosure served by the machinery. Openings in the fire barriers shall be protected with assemblies having a fire protection rating not less than that required for the hoistway enclosure doors.

Exceptions:

1. For other than fire service access elevators and occupant evacuation elevators, where machine rooms, machinery spaces, control rooms and control spaces do not abut and have no openings to the hoistway enclosure they serve, the *fire barriers* constructed in accordance with Section 707 or *horizontal assemblies* constructed in accordance

- with Section 711, or both, shall be permitted to be reduced to a 1-hour *fire-resistance* rating.
- 2. For other than fire service access elevators and occupant evacuation elevators, in buildings four *stories* or less above *grade plane* where machine room, machinery spaces, control rooms and control spaces do not abut and have no openings to the hoistway enclosure they serve, the machine room, machinery spaces, control rooms and control spaces are not required to be fire-resistance rated <u>although the physical separation must be maintained from the rest of the building</u>.
- 3. Self-contained elevator and control systems as approved by the building official."
- 129. Section 3005, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended by adding a new Subsection 3005.7, "Fire Protection in Machine Rooms, Control Rooms, Machinery Spaces and Control Spaces," to read as follows:
- "3005.7 Fire protection in machine rooms, control rooms, machinery spaces and control spaces.
 - **3005.7.1** Automatic sprinkler system. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.2.1.
 - **3005.7.2.1 Prohibited locations.** Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoistways.

Exception: Sprinklers may be installed at the bottom of the pit as required in ASME A17.1 and installed in accordance with NFPA 13.

- 3005.7.2.2 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.
- **3005.7.3 Water protection.** An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.
- **3005.7.4** Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

- 3005.7.5 Detection. The elevator machine room, machine room, machinery space, control room, control space or hoistway of traction elevators must be protected by smoke detectors or other automatic fire detection installed in accordance with NFPA 72."
- 130. Section 3005, "Machine Rooms," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended by adding a new Subsection 3005.8, "Storage," to read as follows:
- "3005.8 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and/or control spaces and shall provide approved signage at each entry to the above listed locations stating: "No Storage Allowed.""
- 131. Subsection 3006.2, "Hoistway Opening Protection Required," of Section 3006, "Elevator Lobbies and Hoistway Opening Protection," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:
- "3006.2 Hoistway opening protection required. Elevator hoistway door openings shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and any of the following conditions apply:
 - 1. The building is not protected throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.
 - 2. The building contains a Group I-1 Condition 2 occupancy.
 - 3. The building contains a Group I-2 occupancy.
 - 4. The building contains a Group I-3 occupancy.
 - 5. The building is a high rise and the elevator hoistway is more than 75 feet (22 860 mm) in height. The height of the hoistway shall be measured from the lowest floor at or below grade to the highest floor at or above grade of the floors served by the hoistway.

Exceptions:

1. Protection of elevator hoistway door openings is not required where the elevator serves only open parking garages in accordance with Section 406.5.

- 2. Protection of elevator hoistway door openings is not required at the level(s) of exit discharge, provided the level(s) of exit discharge is equipped with an *automatic* sprinkler system in accordance with Section 903.3.1.1.
- 3. Enclosed elevator lobbies and protection of elevator hoistway door openings are not required on levels where the elevator hoistway opens to the exterior."
- 132. Subsection 3007.1, "General," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:
- "3007.1 General. Where required by Section 403.6.1, every floor of the building shall be served by fire service access elevators complying with Sections 3007.1 through 3007.9. Except as modified in this section, fire service access elevators shall be installed in accordance with this chapter and ASME A17.1/CSA B44. A fire service access elevator must be one that is accessible for general public use. This requirement may be satisfied by an elevator for freight, service or passengers which also meets this condition."
- 133. Subsection 3007.6, "Fire Service Access Elevator Lobby," of Section 3007, "Fire Service Access Elevator," of Chapter 30, "Elevators and Conveying Systems," of the 2015 International Building Code is amended to read as follows:
- "3007.6 Fire service access elevator lobby. The fire service access elevator shall open into a fire service access elevator lobby in accordance with Sections 3007.6.1 through 3007.6.5. Egress is permitted through the elevator lobby in accordance with Item 1 of Section 1016.2. A fire service access elevator lobby must be one that is accessible for general public use.

Exception: Where a fire service access elevator has two entrances onto a floor, the second entrance shall be permitted to open into an elevator lobby in accordance with Section 3006.3.

3007.6.1 Access to interior exit stairway or ramp. The fire service access elevator lobby shall have direct access from the enclosed elevator lobby to an enclosure for an *interior exit stairway* or *ramp*.

Exception: Access to an *interior exit stairway* or *ramp* shall be permitted to be through a protected path of travel that has a level of fire protection not less than the elevator lobby enclosure. The protected path shall be separated from the enclosed elevator lobby through an opening protected by a smoke and draft control assembly in accordance Section 716.5.3.

3007.6.2 Lobby enclosure. The fire service access elevator lobby shall be enclosed with a *smoke barrier* having a *fire-resistance rating* of not less than 1 hour, except that lobby doorways shall comply with Section 3007.6.3.

Exception: Enclosed fire service access elevator lobbies are not required at the *levels of exit discharge*.

- **3007.6.3 Lobby doorways.** Other than doors to the hoistway, elevator control room or elevator control space, each doorway to a fire service access elevator lobby shall be provided with a 3/4-hour *fire door assembly* complying with Section 716.5. The *fire door assembly* shall comply with the smoke and draft control door assembly requirements of Section 716.5.3.1 with the UL 1784 test conducted without the artificial bottom seal.
- **3007.6.4** Lobby size. Regardless of the number of fire service access elevators served by the same elevator lobby, the enclosed fire service access elevator lobby shall be not less than 150 square feet (14 m^2) in an area with a dimension of not less than 8 feet (2440 mm).
- 3007.6.5 Fire service access elevator symbol. A pictorial symbol of a standardized design designating which elevators are fire service access elevators shall be installed on each side of the hoistway door frame on the portion of the frame at right angles to the fire service access elevator lobby. The fire service access elevator symbol shall be designed as shown in Figure 3007.6.5 and shall comply with the following:
 - 1. The fire service access elevator symbol shall be not less than 3 inches (76 mm) in height.
 - 2. The helmet shall contrast with the background, with either a light helmet on a dark background or a dark helmet on a light background.
 - 3. The vertical center line of the fire service access elevator symbol shall be centered on the hoistway door frame. Each symbol shall be not less than 78 inches (1981 mm), and not more than 84 inches (2134 mm) above the finished floor at the threshold."
 - 134. Subsection 3102.1, "General," of Section 3102, "Membrane Structures," of

Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:

"3102.1 General. The provisions of Sections 3102.1 through 3102.8 shall apply to air-supported, air-inflated, membrane-covered cable, membrane-covered frame and tensile membrane structures, collectively known as membrane structures, erected for a period of 31 consecutive [180] days or longer. Those erected for a shorter period of time shall comply with the <u>Dallas</u> [International] Fire Code. Membrane structures covering water storage facilities, water clarifiers, water treatment plants, sewage treatment plants, greenhouses and similar facilities not

used for human occupancy are required to meet only the requirements of Sections 3102.3.1 and 3102.7. Membrane structures erected on a building, balcony, deck or other structure for any period of time shall comply with this section. A tent, other fabric, membrane structure or portion of a structure intended to be in place temporarily must comply with the provisions of Chapter 39.

- 3102.1.1 Tensile membrane structures. Tensile membrane structures, including permanent and temporary structures, shall be designed and constructed in accordance with ASCE 55. The provisions in Sections 3102.3 through 3106.2 shall apply.
- 3102.1.2 Other code provisions. Except as specifically required by this section, membrane structures must meet any other applicable provisions of this code.

Exception: Membrane structures need not comply with the provisions of this section where they completely comply with other applicable provisions of this code.

3102.1.3 Permeable covers. For purposes of this chapter, permeable covers are considered floor area.

Exception: Open-grid covers in which the openings are ¼ inch (6.4 mm) or larger in the least dimension and when such openings constitute at least 75 percent of the area of the covering material."

- 135. Subsection 3103.1, "General," of Section 3103, "Temporary Structures," of
- Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:
- "3103.1 General. The provisions of Sections 3103.1 through 3103.4 shall apply to structures erected for a period of less than 31 [180] days. Tents and other membrane structures erected for a period of less than 31 consecutive [180] days shall comply with the <u>Dallas</u> [International] Fire Code and Chapter 39 of this code. Those erected for a longer period of time shall comply with applicable sections of this code.
 - **3103.1.1 Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, *means of egress*, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure public health, safety and general welfare.
 - 3103.1.2 Permit required. Temporary structures that cover an area greater than 120 square feet (11.16 m²), including connecting areas or spaces with a common *means of egress* or entrance that are used or intended to be used for the gathering together of 10 or more persons, shall not be erected, operated or maintained for any purpose without obtaining a *permit* from the *building official*."

- 136. Subsection 3104.1, "General," of Section 3104, "Pedestrian Walkways and Tunnels," of Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:
- "3104.1 General. This section shall apply to connections between buildings such as *pedestrian* walkways or tunnels, located at, above or below grade level, that are used as a means of travel by persons. Except for determination of the building fire area in Section 511.1.2, [The] pedestrian walkways shall not contribute to the building area or the number of stories or height of connected buildings.
 - **3104.1.1 Application.** Pedestrian walkways shall be designed and constructed in accordance with Sections 3104.2 through 3104.9. Tunnels shall be designed and constructed in accordance with Sections 3104.2 and 3104.10."
- 137. Subsection 3109.1, "General," of Section 3109, "Swimming Pool Enclosures and Safety Devices," of Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:
- "3109.1 General. Swimming pools shall comply with the requirements of Sections 3109.2 through 3109.5 and other applicable sections of this code. This section does not preempt state law. Compliance with this section is not a safe harbor for compliance with state law.
 - 3109.1.1 Fence required. Every owner, purchaser under contract, lessee, tenant, licensee or other person in possession of a tract, lot or premises on which a swimming pool is situated shall at all times maintain a fence, wall or barrier that completely surrounds the swimming pool.
 - 3109.1.2 Swimming pool and filling. A swimming pool must be provided with a barrier that must be installed, inspected and approved prior to plastering or filling the swimming pool with water."
- 138. Subsection 3109.2, "Definition," of Section 3109, "Swimming Pool Enclosures and Safety Devices," of Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:
- "3109.2 Definitions. The following terms are [is] defined in Chapter 2:

FRENCH DOORS.

KEYED DEAD BOLT.

KEYLESS DEAD BOLT.

POOL.

POOL OR SPA YARD ENCLOSURE.

POOLS, STATE LAW.

POOL YARD OR SPA YARD.

PREMISES.

PUBLIC POOL OR SPA.

RESIDENTIAL POOL OR SPA.

SPA.

[SWIMMING POOLS.]"

139. Subsection 3109.3, "Public Swimming Pools," of Section 3109, "Swimming Pool Enclosures and Safety Devices," of Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:

"3109.3 Enclosures for p[P]ublic swimming pools and spas. Public swimming pools and spas shall be completely enclosed in accordance with Sections 3109.3.1 through 3109.3.4 [by a fence not less than 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates].

3109.3.1 Enclosures for Class A and B pools and spas. Class A and B pools and spas shall be enclosed by a barrier consisting of the following, or its equivalent: a fence, portion of a building, wall, or other durable enclosure.

- 1. A building that serves as part of the enclosure shall have doors or gates that open into the pool yard only if:
 - 1.1. any doors or gates between the building and the pool yard are for entry into a storage room, restroom, shower room, dressing room, or mechanical room adjacent to the pool;

- 1.2. the room does not have any door or gate openings to the outside of the pool yard enclosure; and
- 1.3. the room does not contain any gas chlorine containers.
- 2. The enclosure, including doors and gates, shall:
 - 2.1. have a minimum effective perpendicular height of at least 6 feet as measured from the ground surface on the outside of the fence;
 - 2.2 have no opening in the enclosure through or under which a 4-inch diameter sphere can pass;
 - <u>2.3</u> <u>be designed and constructed so that it cannot be readily climbed; and</u>
 - 2.4 have all doors, gates, and windows in the enclosure directly and continuously supervised by staff at the pool during hours of operation, or locked to prevent unauthorized entry.

3109.3.2 Enclosures for Class C pools and spas and Class D pools at a Class C facility (such as apartment, property owner associations and similar residential developments). Pool yards and spa yards of apartments, property owner associations and similar residential developments must have an enclosure that meets the following requirements in addition to the requirements of Section 3109.4:

- 1. The height of the *pool yard* enclosure must be at least 48 inches measured from the ground on the side away from the pool.
- 2. Openings under the *pool yard* enclosure may not allow a sphere of 4 inches in diameter to pass under the *pool yard* enclosure.
- 3. If the pool yard enclosure is constructed with horizontal and vertical members and the distance between the tops of the horizontal members is at least 45 inches, the openings may not allow a sphere 4 inches in diameter to pass through the enclosure.
- 4. If the pool yard enclosure is constructed with horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the openings may not allow a sphere 134 inches in diameter to pass through the enclosure.
- 5. The use of chain link fencing materials is prohibited entirely for a new pool yard enclosure that is constructed after January 1, 1994. The use of diagonal fencing members that are lower than 49 inches above the ground is prohibited for a new pool yard enclosure that is constructed after January 1, 1994.

- 6. Decorative designs or cutouts on or in the *pool yard* enclosure may not contain any openings greater than 1³/₄ inches in any direction.
- 7. Indentations or protrusions in a solid *pool yard* enclosure without any openings may not be greater than normal construction tolerances and tooled masonry joints on the side away from the pool.
- 8. Permanent equipment or structures may not be constructed or placed in a manner that makes them readily available for climbing over the *pool yard* enclosure.
- 9. The wall of a building may be part of the *pool yard* enclosure only if the doors and windows of the wall comply with Section 3109.3.2.3 and 3109.3.2.4.
- 3109.3.2.1 Gates for Class C pools and spas and Class D pools at a Class C facility. Gates of the enclosures into *pool yards* and *spa yards* of apartments, property owner associations and similar residential developments must meet the following requirements:
 - 1. Except as provided in Section 3109.3.2.2, a gate in a fence or wall enclosing a *pool* yard as required by Section 3109.3.2 must:
 - 1.1. have a self-closing and self-latching device;
 - 1.2. have hardware enabling it to be locked at the option of whoever controls the gate by a padlock or a built-in lock operated by key, card or combination; and
 - 1.3. open outward away from the *pool yard*.
 - 2. Except as provided in Item 3 and Section 3109.3.2.2, a gate latch must be installed so that it is at least 60 inches above the ground, except that it may be installed lower if:
 - 2.1. the latch is installed on the *pool yard* side of the gate only and is at least 3 inches below the top of the gate; and
 - 2.2. the gate or enclosure has no opening greater than ½ inch in any direction within 18 inches from the latch, including the space between the gate and the gate post to which the gate latches.
 - 3. A gate latch may be located 42 inches or higher above the ground if the gate cannot be opened by key, card or combination on both sides of the gate.
- 3109.3.2.2 Existing pool yard enclosures. Existing enclosures into pool yards and spa yards of apartments, property owner associations and similar residential developments must meet the following requirements:

- 1. If a pool yard enclosure is constructed or modified before January 1, 1994, and no municipal ordinance containing standards for pool yard enclosures were applicable at the time of construction or modification, the enclosure must comply with the requirements of Sections 3109.3.2 and 3109.3.2.1, except that:
 - 1.1. if the enclosure is constructed with chain link metal fencing material, the openings in the enclosure may not allow a sphere 2½ inches in diameter to pass through the enclosure; or
 - 1.2. if the enclosure is constructed with horizontal and vertical members and the distance between the tops of the horizontal members is at least 36 inches, the openings in the enclosure may not allow a sphere 4 inches in diameter to pass through the enclosure.
- 2. If a pool yard enclosure is constructed or modified before January 1, 1994, and if the enclosure is in compliance with applicable municipal ordinances existing on January 1, 1994, and containing standards for pool yard enclosures, Sections 3109.3.2, 3109.3.2.1(1) and 3109.3.2.1(2) do not apply to the enclosure.
- 3109.3.2.3 Doors for Class C pools and spas and Class D pools at a Class C facility. Doors of the enclosure into pool yards and spa yards of apartments, property owner associations and similar residential developments must meet the following requirements:
 - 1. A door, sliding glass door or *French door* may not open directly into a *pool yard* if the date of electrical service for initial construction of the building or pool is on or after January 1, 1994.
 - 2. A door, sliding glass door or *French door* may open directly into a *pool yard* if the date of electrical service for initial construction of the building or pool is before January 1, 1994 and the *pool yard* enclosure complies with Items 3, 4, or 5, as applicable.
 - 3. If a door of a building, other than a sliding glass door or screen door opens into a pool vard, the door must have a:
 - 3.1. latch that automatically engages when the door is closed;
 - 3.2. spring-loaded door-hinge pin, automatic door closer or similar device to cause the door to close automatically; and
 - 3.3. <u>keyless bolting device that is installed not less than 36 inches or more than</u> 48 inches above the interior floor.
 - 4. If French doors of a building open to the pool yard, one of the French doors must comply with Item 3.1 above and the other door must have:

- 4.1. a keyed dead bolt or keyless bolting device capable of insertion into the doorjamb above the door, and a keyless bolting device capable of insertion into the floor or threshold; or
- 4.2. a bolt with at least a ¾-inch throw installed inside the door and operated from the edge of the door that is capable of insertion into the doorjamb above the door and another bolt with at least a ¾-inch throw installed inside the door and operated from the edge of the door that is capable of insertion into the floor or threshold.
- 5. If a sliding glass door of a building opens into the *pool yard*, the sliding glass door must have:
 - 5.1. a sliding door handle latch or sliding door security bar that is installed no more than 48 inches above the interior floor; and
 - 5.2. a sliding door pin lock that is installed not more than 48 inches above the interior floor.
- 6. A door, sliding glass door or *French door* that opens into a *pool yard* from an area of a building that is not used by residents and that has no access to an area outside the *pool yard* is not required to have a lock, latch, dead bolt or keyless bolting device.
- 7. A keyed dead bolt, keyless bolting device, sliding door pin lock or sliding door security bar installed before September 1, 1993 may be installed not more than 54 inches from the floor.
- 8. A keyed dead bolt or keyless dead bolt, as described by Section 3109.2, installed in a dwelling on or after September 1, 1993, must have a bolt with at throw of not less than 1 inch.
- 3109.3.2.4 Windows and window screens for Class C pools and spas and Class D pools at a Class C facility. Windows and window screens into pool yards and spa yards of apartments, property owner associations and similar residential developments must meet the following requirements:
 - 1. A wall of a building constructed before January 1, 1994 may not be used as part of a pool yard enclosure unless each window in the wall has a latch and unless each window screen on a window in the wall is affixed by a window screen latch, screws or similar means. This does not require the installation of window screens.

- 2. A wall of a building constructed on or after January 1, 1994 may not be used as part of a *pool yard* enclosure unless each ground floor window in the wall is permanently closed and unable to be opened.
- 3109.3.2.5 Building located in pool yard for Class C pools and spas and Class D pools at a Class C facility. Each door, sliding glass door, window and window screen of each dwelling unit in a residential building located in the enclosed pool yard must comply with Sections 3109.3.2.3 and 3109.3.2.4.
- 3109.3.3 Enclosures for all other Class C pools and spas and Class D pools at Class C facilities (such as hotels, motels, RV parks, etc.). A Class C pool or spa or a Class D pool at a Class C facility that is not subject to Section 3109.3.2 must have a pool yard or spa yard enclosure in compliance with this section.
 - 1. The *pool yard* or *spa yard* enclosure for a pool or spa subject to this section must consist of one or a combination of a fence, portion of a building, wall or other durable enclosure. The enclosure must comply with the following:
 - 1.1. The enclosure must have a minimum perpendicular height of at least 48 inches as measured from the ground surface on the outside of the fence.
 - 1.2. Openings in or under the enclosure must not allow the passage of a 4-inch diameter sphere.
 - 1.3. Planters or other structures that might allow small children to climb over the enclosure are not permitted within 36 inches, measured horizontally, from the outside of the enclosure.
 - 1.4. Chain link fencing may be used for the enclosure of a pool or spa installed on or before October 1, 1999 if the chain link fencing was installed on or before September 1, 2004. Chain link fencing cannot be used for an enclosure of a pool or spa installed after September 1, 2004.
 - 1.5. Doors, gates or windows that open into a building are allowed as part of the enclosure of a pool or spa installed on or before October 1, 1999. Windows that are capable of being opened are not allowed as part of an enclosure for a pool or spa erected after October 1, 1999. Doors or gates of a building that are capable of being opened are not allowed as part of an enclosure for a pool or spa installed after October 1, 1999 unless:
 - 1.5.1. the doors or gates between the building and the *pool yard* or *spa yard* are for entry into a storage room, restroom, shower room, dressing room or mechanical room adjacent to the pool;

- 1.5.2. the room does not have any door or gate openings to the outside of the pool yard or spa yard enclosure; and
- 1.5.3. the room does not contain any gas chlorine containers.
- 2. Gates and doors for *pool yard* or *spa yard* enclosures for pools and spas subject to this section must:
 - 2.1. be equipped with self-closing and self-latching devices and be latched when the pool or spa is not in use; the self-closing device must be designed to keep the gate or door securely closed and the self-latching device must latch when the gate is allowed to close within its range of operation, which is from its fully open position to 6 inches from the fully closed position;
 - 2.2. open outward away from the pool or spa except for gates constructed before October 1, 1999 in compliance with applicable city ordinances;
 - 2.3. have hand activated door or gate opening hardware located at least 3½ feet above the deck or hallway;
 - 2.4. be capable of being locked;
 - 2.5. be locked if it is for entry into a Class A or B pool or a spa and the pool or spa is not open for use; and
 - 2.6. be locked if it is for entry into a Class C pool or a spa or a Class D pool at a Class C facility and the pool or spa needs to be closed because of repairs, hazards or other conditions.
- 3. Pool yard and spa yard enclosures for pools and spas installed after October 1, 1999 must be constructed so that all persons are required to pass through an enclosure gate or door in order to gain access to the pool or spa. All gates and doors exiting a pool yard or spa yard of a pool installed after October 1, 1999 or a spa must open into a public area or walkway accessible to all users of the pool or spa.
- 3109.3.4 Propping open gates prohibited. The owner of a pool or spa, or the employee or agent of the owner of a pool or spa shall not knowingly allow a gate in a *pool yard* or *spa yard* enclosure to be propped open or remain propped open. A person shall not prop open a gate to a *pool yard* or *spa yard* unless an agent, employee or contractor of the owner is present and doing construction, maintenance or repair work in the *pool yard* or *spa yard* or on its enclosure that reasonably requires the gate to be propped open."

- 140. Subsection 3109.4, "Residential Swimming Pools," of Section 3109, "Swimming Pool Enclosures and Safety Devices," of Chapter 31, "Special Construction," of the 2015 International Building Code is amended to read as follows:
- "3109.4 Additional requirements for Class C pools and spas and Class D pools at a Class C facility [Residential swimming pools]. Class C pools and spas and Class D [Residential swimming] pools shall be completely enclosed by a barrier complying with Sections 3109.4.1 through 3109.4.3.

Exception: A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346 need not comply with this section.

- 3109.4.1 Barrier height and clearances. The [top of the] barrier shall comply with Section 3109.3 [be not less than 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm)].
 - 3109.4.1.1 Openings. Openings in the barrier shall comply with Section 3109.3 [not allow passage of a 4-inch diameter (102 mm) sphere].
 - 3109.4.1.2 Solid barrier surfaces. Solid barriers shall comply with Section 3109.3 [which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints].
 - 3109.4.1.3 Closely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the <u>barrier shall comply with Section 3109.3</u> [horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall be not greater than 13/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 13/4 inches (44 mm) in width].
 - 3109.4.1.4 Widely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, the barrier shall comply with Section 3109.3 [spacing between vertical members shall be not greater than 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1¾ inches (44 mm) in width].

- 3109.4.1.5 Chain link dimensions. Chain link fences shall comply with Section 3109.3. [Mesh size for chain link fences shall be not greater than a 2½ inch square (57 mm square) unless the fence is provided with slats fastened at the top or the bottom that reduce the openings to not more than 1¾ inches (44 mm)].
- 3109.4.1.6 Diagonal members. Diagonal members shall comply with Section 3109.3 [Where the barrier is composed of diagonal members, the opening formed by the diagonal members shall be not greater than 1¾ inches (44 mm)].
- 3109.4.1.7 Gates. Access doors or gates shall comply with the requirements of Section[s] 3109.3 [3109.4.1.1 through 3109.4.1.6 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall open outward away from the pool and shall be self closing and have a self latching device. Doors or gates other than pedestrian access doors or gates shall have a self-latching device. Release mechanisms shall be in accordance with Sections 1010.1.9 and 1109.13. Where the release mechanism of the self latching device is located less than 54 inches (1372 mm) from the bottom of the door or gate, the release mechanism shall be located on the pool side of the door or gate 3 inches (76 mm) or more, below the top of the door or gate, and the door or gate and barrier shall be without openings greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism].
- **3109.4.1.8 Dwelling wall as a barrier.** Where a wall of a *dwelling* serves as part of the barrier, one of the following shall apply:
 - 1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door or its screen, if present, are opened. The alarm shall be *listed* and labeled in accordance with UL 2017. In dwellings not required to be *Accessible units*, *Type A units* or *Type B units*, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwellings required to be *Accessible units*, *Type A units* or *Type B units*, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.
 - 2. The pool shall be equipped with a power safety cover that complies with ASTM F 1346.
 - 3. Other means of protection, such as self-closing doors with self-latching devices, which are *approved*, shall be accepted so long as the degree of protection afforded is not less than the protection afforded by Item 1 or 2 above.
- 3109.4.1.9 Pool structure as barrier. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded

- by a barrier that meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8. Where the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.
- 3109.4.2 Indoor swimming pools. Indoor swimming pools shall comply with Section 3109.3. [Walls surrounding indoor swimming pools shall not be required to comply with Section 3109.4.1.8.]
- 3109.4.3 Prohibited locations. Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers."
- 141. Section 3109, "Swimming Pool Enclosures and Safety Devices," of Chapter 31, "Special Construction," of the 2015 International Building Code is amended by adding a new Subsection 3109.6, "Construction of Swimming Pools," to read as follows:
- "3109.6 Construction of swimming pools. The following standards govern the construction of swimming pools.
 - **3109.6.1 Public pools.** Public pools and spas must be constructed in compliance with Title 25, Part I, Chapter 265, Subchapter L of the *Texas Administrative Code*, as amended.
 - **3109.6.2 Private pools.** A private pool must be constructed in compliance with Appendix Q of the *Dallas One- and Two-Family Dwelling Code*, as amended."
- 142. Chapter 31, "Special Construction," of the 2015 International Building Code is amended by adding a new Section 3112, "Fixed Guideway Transit System Stations," to read as follows:

"SECTION 3112 FIXED GUIDEWAY TRANSIT SYSTEM STATIONS

3112.1 General. Where provided, fixed guideway transit system stations must be installed in accordance with NFPA 130.

Exception: Means of egress from fixed guideway transit system must comply with Chapter 10."

143. Chapter 31, "Special Construction," of the 2015 International Building Code is amended by adding a new Section 3113, "Storage Racks," to read as follows:

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"SECTION 3113 STORAGE RACKS

- **3113.1** Applicability. The provisions of this section apply to all parts of buildings and structures that contain bin box storage or shelf storage rack systems.
- **3113.2 Definitions.** The following words and terms shall, for the purposes of this section and as used elsewhere in this code, have the meanings shown herein.
- **BIN BOX STORAGE.** Storage in five-sided boxes with an open face on each aisle. Boxes are self-supporting or supported by a structure designed so that little or no horizontal or vertical space exists around boxes.
- **RACK SYSTEMS.** Structures designed to store materials and products.
- **SHELF STORAGE.** Storage on structures equal to or less than 30 inches (752 mm) deep with shelves a maximum of 2 feet (610 mm) apart vertically and separated by minimum 30-inch (762 mm) aisles.
- 3113.3 Rack systems. Bin box storage or shelf storage rack systems, including their aisles and stairs, must not contribute to the number of stories as regulated by Section 503 or to the number of mezzanines as regulated by Section 505 where meeting all of the following conditions:
 - 1. The building, including the *rack systems*, is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.
 - 2. The *rack systems*, aisles, and *stairs* are not part of the structural framework of the building.
 - 3. The *rack systems* and *stairs* are of noncombustible materials. The aisles are of expanded metal or metal grid.
 - 4. The structural design of the *rack systems*, aisles, and *stairs*, complies with Chapter 16 and Section 2208.
 - 5. The aisles and stairways are designed to comply with the means of egress provisions of Chapter 10.
- **3113.4 Other requirements.** In addition, rack storage in high-piled combustible storage areas must comply with Chapter 32 of the *Dallas Fire Code*."

- 144. Subsection 3201.4, "Drainage," of Section 3201, "General," of Chapter 32, "Encroachments Into the Public Right-of-Way," of the 2015 International Building Code is amended to read as follows:
- "3201.4 Drainage. Drainage water collected from a roof, awning, canopy or marquee, and condensate from mechanical equipment shall not flow over a public walking surface except as permitted by Section 1101 of the *Dallas Plumbing Code*."
- 145. Section 3303, "Demolition," of Chapter 33, "Safeguards During Construction," of the 2015 International Building Code is deleted and replaced with a new Section 3303, "Demolition," to read as follows:

"SECTION 3303 DEMOLITION

- 3303.1 General. Demolition activities are regulated under Chapter 40 of this code."
- 146. Subsection 3310.1, "Stairways Required," of Section 3310, "Means of Egress," of Chapter 33, "Safeguards During Construction," of the 2015 International Building Code is amended to read as follows:
- "3310.1 Stairways required. Where a building has been constructed to a building height of 35 [50] feet (10 668 [15 240] mm) or four stories, or where an existing building exceeding 35 [50] feet (10 668 [15 240] mm) in building height is altered, no fewer than one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses."
- 147. Subsection [F] 3311.1, "Where Required," of Section 3311, "Standpipes," of Chapter 33, "Safeguards During Construction," of the 2015 International Building Code is amended to read as follows:
- "[F] 3311.1 Where required. In buildings required to have standpipes by Section 905.3.1, no fewer than one standpipe shall be provided for use during construction. Such standpipes shall be installed prior to construction exceeding 35 [40] feet (10 668 [12-192] mm) in height above the lowest level of fire department vehicle access. Such standpipes shall be provided with fire department hose connections at accessible locations adjacent to usable *stairways*. Such

standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring."

148. The introductory paragraph to Chapter 35, "Referenced Standards," of the 2015 International Building Code is amended to read as follows:

"This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 101.4 of Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code [102.4]."

149. The ASME standards of Chapter 35, "Referenced Standards," of the 2015 International Building Code are amended by amending the following standard to read as follows:

150. The NFPA standards of Chapter 35, "Referenced Standards," of the 2015 International Building Code are amended by adding or amending the following standards to read as follows:

"13—13	Installation of Sprinkler Systems
"13D—13	Standard for the Installation of Sprinkler Systems in One- and Two-family Dwellings and Manufactured Homes
"13R—13	Standard for the Installation of Sprinkler Systems in Low Rise Residential Occupancies903.3.1.2, 903.3.1.2.3, 903.3.5.2, 903.4"
"14—13	Standard for the Installation of Standpipe and Hose System
" <u>25—14</u>	Standard for the Inspection, Testing and Maintenance of Water-based Fire Protection Systems 905.11"
"72—13	National Fire Alarm and Signaling Code

901.6, 903.4.1, 904.3.5, 907.2, 907.2.6, 907.2.11,

907.2.13.1.2, 907.2.13.2, 907.3, 907.3.3, 907.3.4, 907.5.2.1.2, 907.5.2.2, 907.5.2.2, 907.5.2.25, 907.6, 907.6.1, 907.6.1.4, 907.6.2, 907.6.6, 907.7, 907.7.1, 907.7.2, 907.2.9.3, 911.1.5, 2702.2.4, 3005.5, 3005.7.5, 3007.7"

151. The 2015 International Building Code is amended by adding a new Chapter 36,

"Signs," to read as follows:

"CHAPTER 36 SIGNS

SECTION 3601 PERMITS

3601.1 General. The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of signs and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code in accordance with Chapter 52, "Administrative Procedures of the Construction Codes," of the Dallas City Code.

SECTION 3602 DEFINITIONS

3602.1 Definitions. For the purposes of this chapter, definitions contained in the *Dallas Development Code* shall be used.

SECTION 3603 ELECTRICAL

- **3603.1 General.** Every sign in which electrical wiring and connections are used shall comply with the requirements of the *Dallas Electrical Code*. In addition, each illuminated sign shall bear the Underwriters Laboratory® label or be built to comply with Underwriters Laboratory® requirements.
- **3603.2** Utility lines. No sign may be erected nearer than 2 feet (609.6 mm) from any telephone cable, electrical street light standard or electrical power distribution line when voltage between conductors is less than 300 volts. If the voltage between conductors is 300 volts or greater, clearance shall be maintained in accordance with the *Dallas Electrical Code*.
- **3603.3 Protection.** Wire glass, safety glass, a locked box of metal or wood, or any other approved method shall protect an electrical device within reach of persons on public property. Amend Chapter 53 (adopt 2015 International Building Code) Page 153

SECTION 3604 DESIGN

- **3604.1 General.** Every sign and its supports shall be designed as specified for a building in this code. All supports shall be designed to transfer lateral forces to the foundations. An attached sign shall be designed to transmit the dead and lateral loads through the structural frame of the building in such a manner as to not overstress any element.
- **3604.2 Wind pressure.** Every sign and its supports shall be designed to withstand a minimum allowable resultant wind pressure of 30 pounds per square foot.
- **3604.3 Dead load resisting moment.** The overturning moment produced from lateral forces may in no case exceed two-thirds of the dead load resisting moment. Uplift shall be adequately resisted by proper anchorage to the ground or to the structural frame of the building. The weight superimposed over footings or supports may be used in determining the dead load resisting moment.
- **3604.4 Allowable stress.** The design of wood, concrete, steel or aluminum members shall conform to the requirements of this code. Loads, both vertical and horizontal, exerted on the soil shall not produce stresses exceeding those specified in this code.

The working stresses of wire rope and its fastening shall not exceed 25 percent of the ultimate strength.

Working stresses for wind loads combined with dead loads may be increased as specified in this code.

SECTION 3605 CONSTRUCTION

- **3605.1** General. Every sign and its supports shall be built, constructed and erected in conformance with the requirements of all applicable laws and ordinances.
- **3605.2 Materials.** Materials of construction for each sign and its supports shall be of the quality, type and grade as specified for a building in this code. In the absence of detailed requirements, material shall conform to the following:
 - 1. Structural steel shall be of such quality as to conform to Chapter 22. Secondary members of a sign in contact with, or directly supporting the display surface may be formed of light gauge steel, provided the members are designed in accordance with the specifications of the design of light gauge steel as specified in Chapter 22 and are galvanized. Secondary members, when formed integrally with the display surface, shall not be less than No. 24 gauge in thickness. When not formed integrally with the display surface, the minimum thickness of hot-rolled steel members furnishing structural support for a sign shall be ½ inch, except that if galvanized, such members shall not be less than

- ¹/₈ inch thick. Steel pipes shall be of such quality as to conform to Chapter 22. Steel members may be connected with a galvanized bolt, provided the connection is adequate to transfer the stresses in the members.
- 2. Anchors and supports, when of wood and embedded in the soil or within 6 inches (152.4 mm) of the soil, shall be of all heartwood of a durable species or shall be pressure treated with an approved preservative. Such members shall be marked or branded by an approved agency.
- 3. Glass thickness and area limitations are as required in Chapter 24.
- 4. Approved plastics may be used as set forth in Chapter 26 for plastic veneer. Location, size and spacing shall be as set forth in Chapter 26 for glazing or veneer.
- 5. Awnings and marquees that also serve as signs shall be constructed of materials as required by Sections 3105 and 3106.
- 6. Attached signs on Type I or Type II buildings, other than those specified in Section 3605.2(5), and detached signs located within 3 feet (914.4 mm) of any Type I or Type II building or within 3 feet (914.4 mm) of any property line, exclusive of a public way, shall be constructed of noncombustible materials.
- **3605.3 Height clearance.** Except for an attached sign which does not project more than 2 inches (50.8 mm) from the building facade, every sign shall have the following minimum clearance from the surface immediately below:
 - 1. Ten feet (3048 mm) when located above a sidewalk.
 - 2. Twelve feet (3657.6 mm) when located above a parking lot, parking space, driveway or head-in parking.
 - 3. Fourteen feet (4267.2 mm) when located above a fire lane.
- **3605.4 Location.** Location of a sign shall be in accordance with the *Dallas Development Code*.
- 3605.5 Clearance from fire escapes, exits or standpipes. No sign or its supports may be erected in a manner that will interfere in any way with the use of any fire escape, exit or standpipe. No sign or its supports may be attached to a standpipe or fire escape.
- **3605.6 Obstruction or openings in buildings.** No sign or its supports may obstruct any required openings to such an extent that light or ventilation is reduced below that required.
- **3605.7 Weatherproofing.** Every sign shall be constructed so as to prevent the accumulation of water.

3605.8 Sign maintenance. The owner of any premises upon which a sign is erected shall maintain the sign and its supports. If any sign becomes dangerous to life, limb or property; or an obstruction to the use of any sidewalk or roadway; or interferes with the operation of the fire department, it is the responsibility of the owner of the premises or the owner's agent to remove or repair the sign."

152. The 2015 International Building Code is amended by adding a new Chapter 37,

"Moving of Structures," to read as follows:

"CHAPTER 37 MOVING OF STRUCTURES

SECTION 3701 GENERAL

3701.1 License required. No person shall own, maintain, conduct, operate or engage in the business of moving structures along, across or over any public street, alley, highway or other public place without holding a valid annual license issued by the *building official* to engage in the building mover's business.

Exceptions: No license is required if a permit exemption applies in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.

SECTION 3702 LICENSE APPLICATION

3702.1 Application requirement. An applicant desiring to engage in the business of moving structures along, across or over a public street in the city shall file with the *building official* a written application on a form provided for that purpose, which shall be signed by the applicant or the applicant's authorized agent.

3702.2 Contents of application. The application shall contain:

- 1. The names, addresses and telephone numbers of the building moving company and all affiliated places of business and storage facilities;
- 2. The number and type of vehicles to be operated in connection with the business;
- 3. The name, address, telephone number and Social Security number of the building moving company; and
- 4. Proof of compliance with the insurance requirements of Section 3704.
- 3702.3 Surety bond. The applicant shall also file with the building official, on a form furnished

by the city, a surety bond by a surety acceptable to the city in the sum of not less than \$5,000. The bond shall protect the city from any costs, damages and suits that may result from the moving of any vehicle, equipment or load in the public right-of-way or from injury to any person or property, whether public or private, that may arise from the use of any street, alley or public place in the moving of any structure. The bond shall provide that 30 days written notice be given to the *building official* in the event of any material change or cancellation of the bond by the surety.

- **3702.4 Indemnification.** An applicant shall execute, and file with the *building official*, a written agreement to indemnify the city and its officers, agents and employees against all claims of injury or damage to persons or property, whether public or private, arising out of the moving of a structure.
- 3702.5 Established place of business. An applicant is required to maintain a regular and established place of business at a location where a building moving company is not prohibited by municipal ordinance and for which every license, tax permit and certificate of occupancy, if required by law, has been issued and is in force.
- 3702.6 Approval or denial of application. When a complete application for a license or a license renewal has been filed with the *building official* in proper form, the *building official* shall, within a period of 30 days after the date of filing, approve or deny the application. If the application is denied, the *building official* shall send to the applicant by certified mail to the designated address shown on the application, return receipt requested, a written statement setting forth the reasons for the denial.
- **3702.7** Additional information. The *building official* may, at any time, require additional information of a licensee or an applicant related to an application.

SECTION 3703 FEE

3703.1 Fee. The annual fee for a building mover's license is \$260 for each moving company. The fee for issuing a duplicate license for one lost, destroyed or mutilated is \$25. Fees are payable to the *building official* upon issuance of a license. No refund of a fee will be made.

SECTION 3704 LICENSE ISSUANCE; EXPIRATION; NON-TRANSFERABILITY

- **3704.1** License qualifications. The *building official* shall issue a license to engage in the business of moving structures to all applicants complying with the provisions of this chapter. No license authorizing the moving of structures on the streets of the city may be issued unless all requirements of this section are met.
 - 3704.1.1 Insurance. The applicant shall procure and keep in full force and effect commercial general liability insurance and comprehensive automobile liability insurance written by an

insurance company approved by the State of Texas and acceptable to the city and issued in the standard form approved by the Texas Department of Insurance. All provisions of the policy shall be acceptable to the city. The insured provisions of the policy shall name the city and its officers and employees as additional insureds. The coverage types and limits set forth in this section shall be maintained at all times during the term of the license.

- **3704.1.1.1** Commercial general liability insurance. The commercial general liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$500,000 for each occurrence, or the equivalent, and include coverage for premises operations, independent contractors, products/completed operations, personal injury, contractual liability and medical payments.
- 3704.1.1.2 Comprehensive automobile liability insurance. The comprehensive automobile liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$500,000 for each occurrence, or the equivalent, for each motor vehicle used by the licensee.
- **3704.1.1.3 Cancellation provisions.** Each insurance policy shall include a cancellation provision in which the insurance company is required to notify the *building official* in writing not fewer than 30 days before canceling, failing to renew or making a material change to the policy.
- **3704.1.2 Indemnification agreement.** The applicant shall execute a written agreement to indemnify the city and its officers and employees against all claims of injury or damage to persons or property arising out of the moving of a structure by the licensee.
- 3704.1.3 Identification of structure, vehicles and equipment. The name of the applicant shall be painted, stenciled or otherwise permanently affixed in clearly legible letters not less than 3 inches (76.2 mm) high on all structures being moved and on all vehicles, trailers, lowboys, beams or other equipment to be used.
- **3704.2 Expiration of license.** A building mover's license expires one year from the date of issuance.
- 3704.3 Nontransferability of license. A building mover's license is not assignable or transferable.

SECTION 3705 LICENSE-DISPLAY, DUPLICATES, RENEWAL AND CHANGES

- **3705.1 License display.** Each license issued pursuant to this chapter shall be posted and kept in a conspicuous place in the building mover's establishment.
- **3705.2** License duplicates. A duplicate license may be issued for one lost, destroyed or mutilated upon application on a form prescribed by the *building official*. Each duplicate license

shall have the word "duplicate" stamped across its face.

3705.3 License renewal. A licensee shall apply for renewal of a building mover's license at least 30 days before expiration of the license.

3705.4 Notification of changes. Every licensee shall, within 10 days after a partial change of control in ownership or management, or a change of address or trade name, notify the *building official* of the changes. If complete ownership of a building moving company is changed, the new owner shall apply for a new building mover's license in accordance with Section 3702.

SECTION 3706 REFUSAL TO ISSUE OR RENEW A LICENSE

3706.1 Refusal to issue or renew license. The *building official* shall refuse to issue or renew a building mover's license for any of the following reasons:

- 1. The making of any false statement as to a material matter in an application for a license or license renewal, or in a hearing concerning the license.
- 2. Conviction of the licensee, applicant or any employee while in the scope of employment with the licensee or applicant for a violation of this chapter.
- 3. Revocation of a license, pursuant to this chapter, of the applicant, or of any proprietor, partner or corporate officer in a building moving company, within one year preceding application unless the one year is specifically waived by the Building Inspection Advisory, Examining and Appeals Board.
- 4. Failure of the licensee to obtain the bond and insurance required by this chapter for a building mover's license.

SECTION 3707 LICENSE REVOCATION

3707.1 Grounds for revocation. The *building official* shall revoke a building mover's license for any one or more of the following reasons:

- 1. The making of any false statement as to a material matter in an application for a license or license renewal, or in a hearing concerning the license.
- 2. Conviction of the licensee, or any employee while in the scope of employment with the licensee, of a violation of Section 3701, 3704, 3710, 3711, 3712, 3713, 3714, 3715 or 3716.
- 3. Failure of the licensee to maintain the bond and insurance required by this chapter for a building mover's license.

3707.2 Notice of revocation. The *building official* shall send written notice of revocation to the licensee by certified mail, return receipt requested, setting forth the reason for, and the effective date of, the revocation.

SECTION 3708 APPEAL

3708.1 Appeal rights and procedures. If the building official refuses to approve the issuance of an original license or the renewal of a license to any applicant, or revokes the license issued to any licensee under this chapter, this action is final subject to the licensee's right, within 10 days after the receipt of written notice of the action, to file with the Building Inspection Advisory, Examining and Appeals board a written appeal. The building official shall cause all documents constituting the records upon which the action was appealed to be forwarded to the board. The hearing before the board shall be public and any interested party may appear in person, by agent or by legal counsel. The board shall, within 30 days after the appeal is filed, hear and consider all the evidence in support of or against the action appealed and render a decision either sustaining or reversing the action. The board shall have authority to sustain, reverse or modify the action appealed. The decision of the board is final as to administrative remedies in the city.

3708.2 Other remedies not affected by appeal. Nothing in this section is deemed to abolish or impair remedies of the city or its officers, agents or employees relative to the removal or demolition of any structure which is deemed to be dangerous, unsafe, unsanitary, unfit for human habitation, constructed or maintained in violation of the *Dallas Development Code*, or so located as to be a hazard to the traveling public or to constitute a public nuisance.

SECTION 3709 POWERS AND DUTIES OF THE BUILDING OFFICIAL

3709.1 General. In addition to the powers and duties elsewhere prescribed in this code, the *building official* is required to:

- 1. Administer and enforce all provisions of this chapter;
- 2. Keep records of all licenses issued or revoked; and
- 3. Adopt such rules and regulations, not inconsistent with this chapter, with respect to the form and content of applications for licenses, the investigation of applicants, and other matters incidental or appropriate to the *building official's* powers and duties that may be necessary for the proper administration and enforcement of this chapter.

SECTION 3710 PERMIT TO MOVE A STRUCTURE

3710.1 Permit required. The licensee shall obtain from the building official a separate permit

for each move of a structure or portion of a structure along, across or over the public way, except that a single permit may be issued to authorize the moving of a structure in more than one piece, if all portions of the structure are moved at the same time. Permits for moving structures along the public ways may only be issued to licensed building movers.

3710.2 Permit application. Application for each permit shall be made on a form provided for that purpose. The moving permit fee required in Section 3716 shall accompany the application and, if applicable, the inspection fee required in Section 3711, and shall contain the following information:

- 1. A description of the structure to be moved.
- 2. The overall height, width and length of the structure.
- 3. The present location of the structure.
- 4. The location to which the structure is to be moved.
- 5. All other information that may be required.

3710.3 Other permits.

3710.3.1 Building permit and site plan. Except when a structure is moved to a location outside the city limits or to an approved temporary storage site, each application for a moving permit shall be accompanied by an application for a building permit, along with a site plan showing the location of the moved structure on the new site, signed by the owner of the site to which the structure is being moved, stating the use to which the structure is to be put, stating that the destination site is properly zoned for the proposed use and describing the work to be done to repair or remodel the structure.

3710.3.2 Requirements of building permit. The building permit shall require the following:

- 1. The structure shall be completely moved to the new site within 30 days after the date the moving permit is issued.
- 2. Work shall be started on the structure within 10 days after the date the structure arrives at the new site.
- 3. The structure shall be placed on an approved permanent foundation within 60 days after the date the moving permit is issued.
- 4. Within 100 days after the date the moving permit is issued, the exterior of the structure shall be made to comply with this code and all other applicable city ordinances and all exterior construction work shall be completed, including, but not

limited to, the completion of all site work, paving, grading and site cleanup and the installation, repair and replacement of all siding, roofing, doors, windows, trim, paint, steps, porches and other work visible from the street or any neighboring property.

5. Completion of interior work on the structure shall proceed in compliance with other provisions of this code and other applicable city ordinances.

3710.3.3 Failure to comply. Failure to comply with the requirements of Section 3710.3.2 may result in the revocation of the building permit and the structure will then become subject to the provisions of Chapter 27, "Minimum Urban Rehabilitation Standards," of the *Dallas City Code*, as amended.

3710.4 Issuance, expiration and renewal.

3710.4.1 Issuance. Upon receipt of an application for a moving permit, the structure to be moved shall be inspected, and if it is found to be in conformity with, or can be made to comply with, the requirements of this code and other applicable ordinances, a moving permit shall be issued upon payment of the fee required by this chapter. A moving permit shall be issued for each move to the destination site. If moving of the structure will violate any provision of this chapter, the *building official* shall not issue the moving permit, and the structure may not be moved.

3710.4.2 Expiration. A moving permit expires two years after the date the permit is issued.

3710.4.3 Renewal. A moving permit may be renewed one time for a period not to exceed 30 additional days if written application by the building mover and payment of a \$100 renewal fee is received by the *building official* prior to the original permit expiration date. A moving permit that has expired may not be renewed except by application for a new permit and payment of all required permit fees.

3710.5 Temporary storage. A person who stores within the city a structure which has been moved from its original construction site to a location, without placing the structure on an approved foundation with anchorage and support, shall provide a solid fence or wall with plant screening surrounding the storage area which complies with provisions of the *Dallas Development Code* relating to storage of structures. This provision does not prohibit the location of new structures on bona fide sales lots displaying examples of workmanship and appearance of structures to be sold and constructed on individual remote sites.

3710.6 Unlawful acts not authorized by permit. The issuance or granting of a permit pursuant to this section does not authorize the violation of any provision of this code or other applicable ordinances. The issuance of a permit does not prevent the *building official* from requiring correction of errors or from preventing moving operations along the public ways which are in violation of this code or any other city ordinance, which violate or disturb the public peace, general welfare or public safety, or which create a nuisance.

3710.7 Removal of obstructions; time and route. Movements authorized by permit shall be made at the time and along the route specified by the *building official*. The granting of the permit does not authorize the cutting or removing of trees or branches or the adjustment of wires, utilities, signs, markers or public facilities. The mover shall give notice in the manner required by Section 3712.2 to the utility companies to remove the meters and public utility facilities prior to moving.

3710.8 Bond required. The owner of the structure to be moved or of the site to which the structure is being moved shall, upon application for a permit to move a structure, file with the building official a cash bond, or a surety bond by a surety acceptable to the city, to cover the city's costs of bringing the site to which a structure has been moved back to its original state should any exterior work on the site or structure not be completed in compliance with the time schedule set forth in Section 3710.3.2. The amount of the bond required is equal to \$1 for each square foot of structure being moved, measured from the structure's exterior, or \$10,000, whichever is greater. Action by the city that is covered by the bond may include, but is not limited to, demolition or removal of the structure. A surety bond shall provide that 30 days' written notice be given to the building official in the event of any material change in or cancellation of the bond by the surety.

Exception: The bond requirements do not apply if a structure is being moved to property owned by the federal or state government or a political subdivision of the state.

SECTION 3711 PREMOVE INSPECTIONS

3711.1 Request for inspection and payment of fees. A person moving a structure to a lot located within the city shall request an inspection from the *building official* and pay all applicable fees required by Section 303 of Chapter 52 of the *Dallas City Code* at least five business days before the move is scheduled.

Exception: Industrialized building or housing units that maintain a current certification as an industrialized structure by the State of Texas shall not be assessed a pre-move inspection fee.

3711.2 Inspection. If the building official determines from inspection that a structure requested to be moved is in compliance with, or can be made to comply with, this code and all other applicable city ordinances and authorizes the structure to be moved into the city, the structure shall be moved within 90 days from the date of inspection or another inspection fee will be required.

3711.3 Moving structures through the city. A structure may be moved through the city from outside the city limits, if the destination site is outside the city, either pursuant to a Texas State Highway Department permit, if the move is over state or federal highways, or otherwise pursuant to the provisions of this chapter.

SECTION 3712 WEIGHT AND SIZE REGULATIONS

- 3712.1 Width. The total width, including eaves, porches or other overhang, of any structure to be moved shall not exceed the width of any street, measured from normal curb alignment to normal curb alignment at any place along the route unless the mover obtains written approval of the building official. The width, length or height permitted to be moved may be reduced by the building official on the basis of traffic volume, geometrics of the route, or length of the move in terms of distance and time. The applicant shall investigate the route and provide for proper clearance along the route.
- 3712.2 Height. The total height of any structure to be moved shall not exceed 17½ feet (5334 mm) in height when loaded unless the mover gives evidence to the *building official* that the utility companies have received written notice of the move of an over height structure at least five business days before the scheduled move of a structure not exceeding 21 feet (6400 mm) in height and at least 15 business days before the scheduled move of a structure exceeding 21 feet (6400 mm) in height.
- **3712.3 Weight.** The total weight of the vehicle and load shall not exceed the maximum weight limits, which are provided in Chapter 28 of the *Dallas City Code*, as amended.
- 3712.4 Moving structures on bridges, underpasses and similar facilities. No person shall operate any vehicle, including its load, over or on any bridge or through any underpass or similar facility unless the height and width of the vehicle and load is less than the vertical and horizontal clearance of the facility.
- 3712.5 Moving operations to comply with state law. Moving operations shall meet all requirements of the *Texas Transportation Code*, as amended, including the display of side or clearance flags and lights when and where required.

SECTION 3713 MOVING A STRUCTURE

- 3713.1 How movement is to be made. The moving of a structure shall be conducted expeditiously and without unnecessary obstruction of the public way. If the vehicle or equipment becomes disabled so that normal operation is impossible or impractical, the person in charge of the moving shall have the vehicle and equipment, with loads, immediately removed to a temporary parking area off the traveled roadway and notify the *building official* of the inability to complete the move and of the temporary storage location of the structure. The vehicle and equipment shall be immediately restored to operating condition, the move rescheduled, and the vehicle and equipment escorted to the destination.
- 3713.2 Parking, standing or storage prohibited. The building official is authorized to remove, or have removed, any vehicle, equipment or load left parked or standing by a mover on any portion of the public right-of-way or other temporary storage place when the mover fails to

remove the encroachment within a reasonable time. All costs incurred will be charged to the mover. No further permits shall be granted to the mover until the encroachments have been removed and the costs have been paid. Failure to pay the costs will result in recovery of the costs from the mover's surety bond filed pursuant to Section 3702.3.

SECTION 3714 ESCORT REQUIRED

- **3714.1 Escort required.** No person shall move any structure for which a permit is required by this chapter along, across or over any public way within the city unless accompanied by an escort who is approved by the *building official* and who has authority to direct traffic and exercise other police powers.
- 3714.2 Distribution or moving permit copies. The building mover shall provide the escort a copy of the moving permit. When the moved structure has been placed at its final location, the building mover shall mark a copy of the moving permit with the date and time the move is completed and shall return the copy to the *building official* within three working days.
- **3714.3 Escort fee.** The escort fee is determined by the mover and the escort and is in addition to the moving permit fee.

SECTION 3715 CLEANUP OF SITE FROM WHICH STRUCTURE IS REMOVED

- 3715.1 Requirements for clearing site. Within 30 days after a structure is removed from a lot or tract of land within the city, the lot or tract of land shall be cleaned by the mover or owner of the lot and left free from any unsafe, hazardous or unsanitary condition. All debris, rubbish and waste material resulting from the moving shall be removed from the site. All portions of the structure, appurtenances and incidental accessory structures remaining after the removal of the structure shall be demolished, after obtaining a demolition permit pursuant to Chapter 40, by the mover or owner of the lot to grade level, including all wood, brick and concrete foundation and concrete elements such as porches, slabs and steps which have portions above the grade. The mover or owner of the lot shall leave the site blade clean and compact, level and smooth all basements, cellars, wells, cisterns, excavations, holes or depressions which extend below the grade of the site and are apparent as a consequence of the moving. The mover or owner of the lot shall plug air and watertight sewer laterals, house lines and any other sewer and plumbing connections.
- 3715.2 Letter of intent to clear site. The mover shall file, with the application for a permit, a letter of intent to clear the lot, signed by the mover and the owner of the lot from which the structure is to be removed. Failure of the mover or owner of the lot to clear the lot as required in Section 3715.1, and in compliance with the submitted letter of intent, is a violation of Section 3715.

SECTION 3716

MOVING PERMIT FEES

- 3716.1 Moving permit fees. In addition to filing an application for a permit to move a structure as provided in this chapter, the applicant shall pay all applicable fees required by Section 303, Chapter 52 of the *Dallas City Code*. A permit and accompanying fee is required for each move and, notwithstanding any other provisions of this code, no organization or agency is exempt from this fee.
- 3716.2 Other fees. Nothing in this section will relieve any person from the payment of any other fee required by other city ordinances or regulations.
- 3716.3 Ad valorem taxes to be paid. A moving permit shall not be issued until the city tax assessor and collector has determined that ad valorem taxes on the property concerned have been paid."
 - 153. The 2015 International Building Code is amended by adding a new Chapter 38,

"Fencing," to read as follows:

"CHAPTER 38 FENCING

SECTION 3801 HEIGHT

3801.1 General. Fences shall not exceed the height provided in the *Dallas Development Code*.

SECTION 3802 STRENGTH

3802.1 General. Fences shall be of sufficient strength to support their own dead load and to resist overturning. Fences over 9 feet (2743.2 mm) in height shall be designed as structures and have plans and specifications prepared by an engineer registered in the State of Texas.

SECTION 3803 VISIBILITY OBSTRUCTION PROHIBITED

3803.1 General. No fence may be erected or maintained in a manner so as to be a visibility obstruction as defined in the *Dallas Development Code*."

154. The 2015 International Building Code is amended by adding a new Chapter 39,

"Tents," to read as follows:

"CHAPTER 39 TENTS

SECTION 3901 SCOPE

3901.1 Scope. This chapter applies only to a tent used for temporary operations. A tent or other fabric or membrane structure or portion of a structure intended to be in place permanently shall comply with the provisions of this code regulating permanent buildings and structures.

SECTION 3902 DEFINITIONS

3902.1 Definitions. The following terms used in this chapter shall have the meanings as defined in Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code:

PREMISES.

TENT.

SECTION 3903 PERMIT REQUIREMENTS FOR TENTS

- **3903.1 Offense.** A person commits an offense if he erects or maintains a *tent* covered by this chapter without having a valid *tent* permit issued by the *building official*.
- **3903.2 Permit required.** A permit is required in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code.
- **3903.3 Application.** An application is required in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code.
- 3903.4 Issuance of permit. The conditions of permit issuance shall be in accordance with Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code.

SECTION 3904 USE CONDITIONS

3904.1 Compliance with other laws. The use and placement of a *tent* and all operations within a *tent* shall comply with all city ordinances and other applicable laws.

- **3904.2 Privilege.** The granting of a *tent* permit is a privilege that may be revoked at any time upon violation of any provision of this chapter.
- **3904.3 Other permits.** Electrical permits, plumbing permits, mechanical permits, food establishment permits, alcoholic beverage licenses and all other permits and licenses required by city ordinance or other law shall be applied for separately in accordance with the applicable ordinance or law.
- **3904.4 Placement.** Every part of a tent, including guy wires, deadmen, stakes and equipment, shall be set back a minimum of 10 feet (3048 mm) from all property lines and adjacent buildings and shall comply with all building lines and minimum yard areas as required by the *Dallas Development Code*.

Exception: Tents complying with the location provisions of Section 3103.8 of the Dallas Fire Code in addition to the requirements of the Dallas Development Code.

- **3904.5 Lot coverage.** No *tent* may be erected to cover more than 75 percent of the *premises* on which it is located.
- **3904.6 Structural requirements.** All supporting members shall be of sufficient size and strength to adequately support the *tent*. The supporting members shall be guyed and braced to withstand a wind pressure of not less than 20 pounds per square foot of the projected area of the *tent*.
- **3904.7 Nuisances.** Loud speakers or amplifiers, when used, shall not be used so as to create a nuisance as described in the city ordinances and other applicable laws.
- **3904.8 Electricity.** All electrical wiring shall comply with the *Dallas Electrical Code*. Each *premises* on which a *tent* is to be erected shall be provided with a separate, individual electrical service from the power source.
- **3904.9 Construction.** Each *tent* shall be constructed of flame-resistive materials as specified in the *Dallas Fire Code*.
- **3904.10 Parking.** The number of parking spaces for a *tent* shall be provided in accordance with the *Dallas Development Code*.

Exception: A *tent* that is on the same lot as and is accessory to a main use need not be provided with additional parking.

SECTION 3905 EXITS

3905.1 General requirements. Arrangement of seats, aisles, passageways and exits shall conform to Chapter 10.

- **3905.2** Additional requirements. Every *tent* shall be provided with exits meeting all of the following additional provisions contained in this section.
 - **3905.2.1 Line of travel.** The line of travel to an exit shall not be greater than 100 feet (30 480 mm).
 - **3905.2.2 Height.** The height of doors, aisles or passageways may be no less than 7 feet (2133.6 mm).
 - 3905.2.3 Obstructions. No stakes, guy wires or guy ropes may obstruct an exit way.
 - **3905.2.4 Exit openings.** Exit openings from any *tent* shall remain open or may be covered by canvas, provided:
 - 1. The coverings are free-sliding on a proper support, and the support shall not be less than 12 inches (304.8 mm) above the top of the opening;
 - 2. The coverings shall be so arranged that, when open, no part of the coverings obstruct the opening; and
 - 3. The coverings shall be of a color or colors that definitely contrast with the color of the *tent*.
 - **3905.2.5 Lighting.** Exits, aisles and passageways leading to exits shall be adequately lighted at all times when the structures are occupied. Artificial light shall be provided whenever natural light is inadequate.
 - 3905.2.6 Exit signs. Signs reading "EXIT" in red letters on a white background or in other approved distinguishable colors shall adequately indicate exit doorways. Sign letters shall be at least 6 inches (152.4 mm) high and not less than ¾ inch (19.05 mm) wide. Exit signs shall be illuminated in *tents* with occupant loads over 100 persons in the manner specified below:
 - 1. Two separate electrical sources are required for occupant loads over 600.
 - 2. Two separate electrical circuits, one of which shall be separate from other circuits, are required for occupant loads of 600 or less.

SECTION 3906 CLEARANCE OF PREMISES

3906.1 General. The operator of *premises* for which a *tent* permit has been issued shall remove all structures, materials and debris within two days after the expiration or revocation of a *tent* permit."

155. The 2015 International Building Code is amended by adding a new Chapter 40,

"Demolition of Structures," to read as follows:

"CHAPTER 40 DEMOLITION OF STRUCTURES

SECTION 4001 SCOPE

4001.1 Scope. All demolition of structures or portions of structures shall be in accordance with this chapter.

SECTION 4002 DEFINITIONS

4002.1 Definitions. The following terms used in this chapter shall have the meanings indicated in this section:

CONTRACTOR. A person, and any employees, engaged in the business of demolition of structures, who have contracted to demolish a particular structure.

DEMOLITION. The destruction of a structure or part of a structure.

INSECTS. Include cockroaches, fleas, ticks and bloodsucking insects that transmit disease to warm-blooded creatures, but excluding subterranean termites.

SECTION 4003 DEMOLITION PERMIT REQUIRED; FEE EXEMPTION

4003.1 Permit required. A person shall not demolish or begin *demolition* of a structure without obtaining a *demolition* permit from the *building official*.

4003.2 Fees. Before being issued a *demolition* permit, the applicant shall pay all applicable fees required by Section 303 of Chapter 52 of the *Dallas City Code*.

SECTION 4004 PERMIT APPLICATION

- **4004.1** General. Application for a *demolition* permit signed and verified by the owner or owner's agent shall be made to the *building official* on a form provided for the purpose and shall include all of the following information:
 - 1. Location of the structure to be demolished.
 - 2. A plan for *demolition* and a schedule of time to complete the *demolition* project.

- 3. Location of the sites to be used for disposal of debris and proposed routes for transport of the debris to the sites.
- 4. Name and address of the owner of the structure and the notarized signature of the owner or the owner's agent authorizing the *contractor* to obtain a permit for *demolition* of the structure.
- 5. Name and address of the *contractor*.
- 6. Documentary evidence from an insurance company authorized to do business in the State of Texas, indicating a willingness to provide liability insurance required by Section 4010.
- 7. A statement that the abatement of asbestos hazards will be accomplished in accordance with guidelines and procedures established by the department of environmental and health services of the city.
- 8. Such additional information as the *building official* considers necessary to promote the implementation or enforcement of this chapter or the protection of the public safety.

SECTION 4005

REVIEW OF PERMIT APPLICATION; RODENT OR INSECT INFESTATION; DEMOLITION REVIEW COMMITTEE; SPECIAL CONDITIONS

- **4005.1 Rodent or insect infestation.** If the *building official* determines that the structure is infested with rodents or *insects*, the *building official* shall require the structure to be treated to eliminate the infestation before issuing a permit.
- **4005.2.** Review of permit application. If the building official determines from the application that, because of the scope of the proposed demolition project, further review is necessary, the building official shall call a meeting of the demolition review committee. The building official shall give the committee members, the owner of the property and the contractor at least three days' written notice of the meeting unless the contractor requests an earlier meeting.
- **4005.3 Demolition review committee.** The *demolition* review committee is composed of the *building official* as chair and the directors or designated representatives from the following city departments:
 - 1. Department of code compliance.
 - 2. Department of sanitation services.
 - 3. Fire department.
 - 4. Mobility and Street Services Department.

- 5. Office of Environmental Quality.
- 6. Police department.
- **4005.4 Hearing.** The *contractor* and the owner, or the owner's representative other than the *contractor*, shall attend the meeting of the *demolition* review committee and explain in detail the methods and procedures to be used in the proposed *demolition* project.
- **4005.5** Special conditions. After reviewing the application and hearing the presentation of the *contractor*, the *demolition* review committee shall determine if, for the protection of the public safety, any special conditions need to be required for the issuance of a permit. At the conclusion of the meeting, the special conditions, if any, shall be listed and recorded so that they may be made a part of the permit.

SECTION 4006 PERMIT ISSUANCE; APPEAL OF DENIAL

- **4006.1** Issuance of permit. The building official shall issue a demolition permit to the applicant, incorporating any special conditions as part of the permit, if the building official determines that:
 - 1. The applicant has complied with the requirements of Sections 4003, 4004 and 4005;
 - 2. The applicant has submitted proof of the insurance coverage required by Section 4010;
 - 3. The methods and procedures to be used by the applicant will comply with the requirements of this chapter and will not present a hazard to the public; and
 - 4. The applicant has agreed to comply with the special conditions, if any, determined to be necessary by the *demolition* review committee.
- **4006.2** Appeal of denial. If the *building official* denies issuance of a permit, the applicant may appeal the action to the Building Inspection Advisory, Examining and Appeals board under procedures established in Chapter 52 of the *Dallas City Code* for appeals to that board.

SECTION 4007 TRANSFERABILITY; COMMENCEMENT OF WORK; CONTINUATION OF WORK; DURATION OF PERMIT; EXTENSION

- **4007.1 Transferability.** A *demolition* permit is not transferable to another.
- **4007.2** Commencement of work. A contractor or owner shall begin demolition work authorized by a permit within 10 working days from the date the permit is issued, otherwise the permit expires and the contractor or owner must apply for a new permit.

Exception: The time limit in the contract applies for a *contractor* who demolishes a structure under contract with the city.

- **4007.3 Continuation of work.** After beginning a *demolition* project, a *contractor* or owner shall work continuously at the normal rate of progress in keeping with good *demolition* practices until the project is completed.
- 4007.4 Expiration of permit to demolish smaller structures. A permit issued for demolition of a structure of less than 500 square feet (46.45 m²) or a single-family or duplex dwelling expires 30 days after the date of issuance if no progress has been made toward completion of the demolition, and demolition work authorized by the permit, including cleanup, shall be completed within the 30 days of the date demolition commences.
- 4007.5 Expiration of permit to demolish larger structures. A permit issued for demolition of a structure other than a structure described in Section 4007.4 expires 60 days after the date of issuance if no progress has been made toward completion of the demolition unless a longer period of time is granted in the permit as a special condition approved by the demolition review committee. Demolition work, including cleanup, authorized by the permit shall be completed within 60 days of the date demolition commences or within the time stated in the special condition.
- **4007.6 Extensions of permit.** The *building official* may grant an extension of a *demolition* permit if the *contractor* or owner shows good cause for not completing the project within the required time.

SECTION 4008 OTHER PERMITS

4008.1 General. Issuance of a *demolition* permit does not authorize an activity which requires another permit, as illustrated by, but not limited to, welding, cutting with a torch, construction of pedestrian protections and hauling of debris. The requirement of other permits may be discussed with the *contractor* at the demolition *review meeting*.

SECTION 4009 COST FOR CHANGES IN PUBLIC PROPERTY; EQUIPMENT OR UTILITIES

4009.1 General. The owner of property to be demolished is responsible for the cost of changes in public property, equipment or utilities, including, but not limited to, damage caused by the *demolition* activity, removal and reinstallation if damage cannot be avoided, and temporary equipment or utilities if determined to be necessary by the *building official* or the *demolition* review committee.

SECTION 4010 INSURANCE: INDEMNIFICATION

4010.1 Insurance required. An applicant for a *demolition* permit shall procure and keep in full force and effect commercial general liability insurance and comprehensive automobile liability insurance written by an insurance company approved by the State of Texas and acceptable to the city and issued in the standard form approved by the Texas Department of Insurance. All provisions of the policy shall be acceptable to the city. The insured provisions of the policy shall name the city and its officers and employees as additional insureds.

Exception: Insurance is not required if the structure to be demolished is less than 500 square feet (46.45 m²) in area, and the *demolition* will not affect public property.

4010.1.1 Coverage requirements. The following coverage types and limits shall be maintained at all times during the term of the *demolition* permit:

- The commercial general liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$1,000,000 for each occurrence, or the equivalent, and include coverage for premises operations, asbestos hazards (if the project involves asbestos), independent contractors, products/completed operations, personal injury, contractual liability and medical payments. This insurance shall also include coverage for underground, explosion and collapse hazards.
- 2. The comprehensive automobile liability insurance shall provide combined single limits of liability for bodily injury and property damage of not less than \$500,000 for each occurrence, or the equivalent, for each motor vehicle used by the permittee.

Exception: If the *building official or* the *demolition* review committee determines that public property will not be affected by the project and the scope of the project is not sufficient to require the insurance limits established in Section 4010.1.1, the *building official* or the *demolition* review committee, on recommendation of the office of risk management, may lower the limits required for a particular permit and include the lower limits as a special condition incorporated into the permit.

4010.1.2 Cancellation provisions. Each insurance policy shall include a cancellation provision in which the insurance company is required to notify the *building official* in writing not fewer than 30 days before canceling, failing to renew or making a material change to the insurance policy.

4010.2 Indemnification required. A permittee shall execute a written agreement to indemnify the city and its officers and employees against all claims of injury or damage to persons or property arising out of *demolition* activities by the permittee that affect public property.

SECTION 4011 DEMOLITION BY CITY

4011.1 Inapplicability of certain requirements. Sections 4007, 4009 and 4010 do not apply to

demolition work conducted by city employees in the course of their city employment.

SECTION 4012 PREPARATION OF THE DEMOLITION SITE

- **4012.1 Site preparation requirements.** A *contractor* shall not begin *demolition* work until all of the following preparations have been made:
 - 1. Relocate gas, water, steam, storm and sanitary sewer lines that will be used during the *demolition* process and construct devices to protect the relocated lines.
 - 2. Shut off and cap accessible gas, water, steam, storm and sanitary sewer lines not required during *demolition* outside the building line and shut off other lines as they become accessible.
 - 3. Reduce electrical service connections to a minimum needed for the *demolition* work and relocate and protect needed lines.
 - 4. Disconnect unneeded electrical service lines outside the property line and conspicuously identify energized circuits.
- **4012.2 Notification to utility agencies.** A *contractor* shall notify the appropriate utility agency before making the preparations required in Section 4012.1 and shall accomplish the disconnections and construction of protective devices in a manner approved by that agency.

SECTION 4013 PROTECTIVE DEVICES

- **4013.1 Protective devices.** A *contractor* shall not begin *demolition* of the exterior walls or roof of a structure until the following protective devices have been constructed when required by the *demolition* review committee:
 - 1. A walkway or pedestrian protection in compliance with Section 3306; and
 - 2. A structure to protect public property and utilities, as illustrated by, but not limited to, fire hydrants, street lights, signal lights and control boxes, parking meters, utility lines and poles, and traffic signs.
- **4013.2 Fencing and security.** If the *demolition* review committee determines it is necessary, a special condition to the permit may require a fence enclosing the *demolition* site and a security guard to be kept on duty 24 hours a day.
- **4013.3** Maintenance and removal of protective devices. A contractor shall maintain the required protective devices so long as a hazard to persons or property exists and shall remove the devices immediately when they are no longer needed for protection.

- **4013.4 Means of egress.** A party wall balcony or horizontal exit shall not be destroyed unless and until a substitute means of egress has been provided and approved.
- **4013.5** Water accumulation. Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.

SECTION 4014 WARNING SIGNS AND BARRICADES

4014.1 General requirements. A contractor, when required by the demolition review committee, shall prominently erect and maintain, while the demolition is in progress, signs and barricades which comply with the city's traffic barricade manual and warn members of the public of the hazards that exist as a result of the demolition work.

SECTION 4015 LIGHTS

- **4015.1 General requirements.** A *contractor* shall provide lights between sunset and sunrise that illuminate hazards near or upon sidewalks or streets, as illustrated by, but not limited to, pits, excavations, fences, barriers, equipment, building material or rubbish.
- 4015.2 Pedestrian passageways. In pedestrian passageways, a contractor shall provide:
 - 1. Amber lights with a capacity of at least 100 watts on the street side of the walkway at both ends and near the center; and
 - 2. Sixty-watt lights spaced every 10 feet (3048 mm) along an open walkway and along the inside and outside of a covered pedestrian way.

SECTION 4016 DUST AND DRAINAGE

- **4016.1 Dust.** In order to control dust in the air, a *contractor shall* do the following:
 - 1. Maintain an adequate water supply on the *demolition* site to properly control dust.
 - 2. Wet down material sufficiently to lay the dust before the material is removed.
 - 3. Remove asbestos in accordance with applicable city, state and federal laws and regulations.
- **4016.2 Drainage.** A *contractor* shall maintain the drainage facilities so that storm water and water used for controlling dust will not cause flooding of streets, sewers or other property.

SECTION 4017 HOURS OF OPERATION

4017.1 Residential areas. A contractor shall conduct demolition activity on a structure in or adjacent to a residential area only during the days and hours specified in Chapter 30, "Noise," of the Dallas City Code.

4017.2 Nonresidential areas. The building official or the demolition review committee shall establish the hours of operation at demolition sites not in or adjacent to a residential area to minimize the effect of noise and the interference with normal movement of pedestrians and vehicular traffic. The established hours of operation will be incorporated as a special condition of the permit.

SECTION 4018 METHODS OF DEMOLITION

4018.1 General method. In conducting *demolition* activities, a *contractor* shall do the following:

- 1. Demolish exterior walls and floor construction beginning at the top of the structure and proceeding downward, except that holes may be cut in floors through which to drop materials if precautions are taken so that dropped materials are contained and dust is controlled.
- 2. Completely demolish each story of exterior wall and floor construction and dispose of all materials and debris by moving to a storage space before beginning removal of walls and floors in the next story below.
- 3. Floor over or enclose with guardrails and toe boards all floor openings and shafts not used for material chutes.
- 4. During the *demolition* of a structure that is originally more than 70 feet (21 336 mm) high and that is in proximity to property lines, provide scatterboards not more than two stories below the story being removed. These scatterboards shall:
 - 4.1. project from the exterior of the structure not less than 6 feet (1828.8 mm);
 - 4.2. be designed for a live load of 100 pounds per square foot (488.24 kg/m²) for a distance of 5 feet (1524 mm) from the wall line;
 - 4.3. be floored with at least 2-inch (50.8 mm) thick plank, laid tight and secured; and
 - 4.4. have solid plank guardrails 3 feet (914.4 mm) in height, rigidly braced and secured on the outer edge and ends.

- 5. Reduce all improvements to their component parts and demolish all improvements to ground level, including, but not limited to, foundations, porches, walks, driveways, slabs and steps which have elements above grade.
- **4018.2** Other methods. If a contractor desires to use a method other than that required in Section 4018.1, as illustrated by, but not limited to, demolition of a structure in sections, use of explosives, or use of "headache balls," the proposed method must be approved by the building official or the demolition review committee to ensure the safety of persons and property, with appropriate special conditions incorporated in the permit.

SECTION 4019 DROPPING OF MATERIAL

4019.1 General requirements. A contractor shall not drop material by gravity to a point outside the exterior walls of a structure unless the material is dropped through an enclosed wooden or metal chute.

Exceptions: This restriction does not apply to the following:

- 1. A single-family dwelling and its accessory structures.
- 2. A structure whose height is less than the distance from the building line to the nearest property line or public sidewalk.

SECTION 4020 FIRE PROTECTION

4020.1 General requirements. For requirements governing fire protection at a *demolition* site, see the *Dallas Fire Code*.

SECTION 4021 REMOVAL OF MATERIAL

4021.1 General requirements. A contractor shall remove all material, rubbish and debris at least once each day from the demolition site in accordance with applicable city, state and federal laws and regulations, and in accordance with the routes, disposal sites and precautions established by the building official or the demolition review committee, taking care to maintain adjacent streets, alleys and public ways clear of loose material.

SECTION 4022 CONDITION OF THE DEMOLITION SITE

4022.1 Site condition upon completion of demolition. Upon completion of a *demolition* project, a *contractor* shall:

- 1. Leave the demolition site blade clean; and
- 2. Fill, level, compact and smooth basements, cellars, wells, cisterns, excavations, holes, voids under public or private sidewalks, or any declivity or depression that extends below the grade of the lot and is an apparent consequence of the *demolition*.

Exception: A contractor is not required to fill, level, compact and smooth the demolition site if a building permit has been issued for new construction on the site, to begin within 60 days of completion of the demolition project.

4022.2 Inert material as fill. Inert material may be used as fill if the top 1 foot (304.8 mm) of fill is clean earth.

4022.3 Shrubbery and trees. Living shrubbery and trees are not required to be removed from the site."

156. The 2015 International Building Code is amended by adding a new Chapter 41,

"Building Security," to read as follows:

"CHAPTER 41 BUILDING SECURITY

SECTION 4100 PURPOSE

4100.1 General. The purpose of this chapter is to establish minimum standards to make dwelling units resistant to unlawful entry.

SECTION 4101 SCOPE

- **4101.1 General.** The provisions of this chapter apply to the following openings:
 - 1. Openings into dwellings within apartment houses of Group R, Division 2 Occupancies.
 - 2. Openings into a dwelling and dwelling units of Group R, Division 3 Occupancies.
 - 3. Openings between attached garages and the dwelling units.
 - 4. Openings into attached garages.

Exceptions:

1. An opening in an exterior wall when all portions of the opening are more than 12 feet

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(3656.6 mm) vertically or 6 feet (1826.8 mm) horizontally from an accessible surface of any adjoining yard, court, passageway, public way, walk, breezeway, patio, planter, porch or similar area.

- 2. All openings in an exterior wall when all portions of the opening are more than 12 feet (3656.6 mm) vertically or 6 feet (1826.8 mm) horizontally from the surface of any adjoining roof, balcony landing, stair tread, platform or similar structure, or when any portion of such surface is more than 12 feet (3656.6 mm) above an accessible surface.
- 3. All openings in a roof when all portions of such roof are more than 12 feet (3656.6 mm) above an accessible surface.
- 4. An opening where the smaller dimension is 6 inches (152.4 mm) or less, provided that the closest edge of the opening is at least 40 inches (1016 mm) from the locking device of a door.
- 5. An opening protected by required fire door assemblies having a fire-endurance rating of not less than 45 minutes.

SECTION 4102 OBSTRUCTING MEANS OF EGRESS

- 4102.1 General. Security methods shall not create a hazard to life by obstructing any means of egress or any opening that is classified as an emergency exiting facility. Security provisions contained in this chapter do not supersede or waive the safety provisions relative to latching or locking devices on means of egress doors or egress windows required by any other provision of this code.
- **4102.2** Emergency escape or rescue windows. Bars, grilles, grates or similar security or secondary locking devices may be installed on emergency escape or rescue windows or doors required by Section 1030 of this code and Section R310 of the *Dallas One- and Two-Family Dwelling Code*, provided the following:
 - 1. Such devices are equipped with approved release mechanisms that are operable from the inside without the use of a key or special knowledge or effort.
 - 2. The building is equipped with smoke detectors installed in accordance with Section 907.2, 1103.7 and 1103.8 of the *Dallas Fire Code* and Section R314 of the *Dallas One-and Two-Family Dwelling Code*.

SECTION 4113 ENTRY VISION

4103.1 Vision required. All main or front entry doors to dwelling units shall be arranged so that

the occupant has a view of the area immediately outside the door without opening the door. Except as provided in Section 716.5.3, the view may be provided by a door viewer having a field of view of not less than 180 degrees or through a window or view port.

4103.2 Glazing separation. Breakable glass should not be installed within 40 inches (1016 mm) of a door-locking device.

Exceptions:

- 1. For required means of egress doors and emergency escape or rescue doors, glazing may be installed within 40 inches (1016 mm) of the locking device if the glass is laminated, patterned, wired, obscured or protected by approved bars, grilles or grates.
- 2. For other doors, glazing may be installed within 40 inches (1016 mm) of a locking device that is key-opened from both the inside and the outside.

SECTION 4104 SWINGING DOORS

4104.1 General. Swinging doors regulated by this chapter shall comply with the following:

- 1. Wood doors shall be solid core and not less than $1^3/8$ -inches (34.92 mm) thick.
- 2. Double doors shall have the inactive leaf secured by header and threshold bolts that penetrate metal strike plates. The bolts shall be flush-mounted in the door edge whenever breakable glass is located within 40 inches (1016 mm) of the bolts.
- 3. Dutch doors shall have concealed flush-bolt locking devices to interlock the upper and lower halves.
- **4104.2** Strike plate installations. In wood-frame construction, any open space between trimmers and wood doorjambs shall be solid-shimmed by a single piece extending not less than 6 inches (152.4 mm) above and below the strike plate.

Strike plates shall be attached to wood with not less than two No. 8 by 2-inch (50.8 mm) screws. Strike plates when attached to metal shall be attached with not less than two No. 8 machine screws.

- 4104.3 Hinges. Hinges that are exposed to the exterior shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.
- **4104.4 Locking hardware.** Single swinging doors and the active leaf of double doors shall be equipped with an approved exterior key-operated dead bolt which shall lock with a minimum bolt throw of 1 inch (25.4 mm) through a metal strike plate. When mounted on an exit door or a

required emergency escape or rescue door, the dead bolt lock shall be operable from the inside without the use of a key or any special knowledge or effort. See Chapter 10 for other exit door requirements.

SECTION 4105 WINDOWS AND SLIDING DOORS

4105.1 General requirements. When regulated by this chapter, openable windows and sliding door assemblies shall be secured by a primary lock or sash operator and by either of the following:

- 1. A secondary locking device consisting of screws, dowels, pinning devices or keyoperated locks designed to prevent opening by lifting or prying.
- 2. Approved bars, grilles or grates.

Jalousie or louvered windows do not comply with this section unless protected with approved bars, grilles or grates. Installation of secondary locking devices or bars, grilles or grates on required emergency escape windows or doors shall comply with Section 1030.4.

SECTION 4106 GARAGE DOORS

4106.1 General requirements. Vehicle access doors in enclosed attached garages shall be equipped with a security device or locking devices.

SECTION 4107 ALTERNATE MATERIALS OR METHODS

4107.1 General. The provisions of this chapter are not intended to prevent the use of any material, device, hardware or method not specifically prescribed in this chapter, when such alternate provides equivalent security and is approved by the *building official*."

157. The 2015 International Building Code is amended by adding a new Chapter 42, "Unity Agreements and the Dissolution of Common Boundary Lines for Building Code Purposes," to read as follows:

"CHAPTER 42 UNITY AGREEMENTS AND THE DISSOLUTION OF COMMON BOUNDARY LINES FOR BUILDING CODE PURPOSES

SECTION 4201 AUTHORIZATION AND REQUIREMENTS FOR UNITY AGREEMENTS

4201.1 Authorization. The *building official* may authorize the dissolution of common boundary lines between two or more lots for purposes of this code if a written agreement is executed in accordance with this section on a form provided by the city.

Exception: The *building official* may authorize the dissolution of common boundary lines for purposes of this code without the execution of a written unity agreement when the city is an owner or lessee of all of the property involved.

4201.1.1 Creation of a building site. The unity agreement may not be used to create a building site nor as a substitute for platting or replatting as required by the *Dallas Development Code*. This agreement shall not be used to allow buildings or portions thereof to encroach across the property line nor into the adjacent lot.

4201.1.2 Newly created building site and existing buildings. Property lines cannot be created unless the structures are compliant or will be made compliant with the requirements of this code following the permit requirements of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*. A property line proposed through an existing building must result in functionally independent structures on each side of the property line. This includes structural load paths as well as all other requirements of this code including exists and restrooms.

4201.2 Requirements. A unity agreement shall meet all of the following requirements:

- 1. Contain legal descriptions of the properties sharing the common boundary lines.
- 2. Set forth adequate consideration between the parties.
- 3. State that all parties agree that the properties sharing the common boundary lines may be collectively treated as one lot for the limited purpose of meeting requirements of this code.
- 4. State that the dissolution of the common boundary lines described in the agreement is only for the limited purpose of meeting requirements of this code, and that actual lines of property ownership are not affected.
- 5. State that the agreement constitutes a covenant running with the land with respect to all properties sharing the common boundary lines. A maximum of two lots may be used per agreement.
- 6. State that all parties agree to defend, indemnify, and hold harmless the city of Dallas from and against all claims or liabilities arising out of or in connection with the agreement.

- 7. State that the agreement will be governed by the laws of the State of Texas.
- 8. State that the agreement may only be amended or terminated in accordance with Section 4202.
- 9. Be approved by the building official and be approved as to form by the city attorney.
- 10. Be signed by all owners of the properties sharing the common boundary lines.
- 11. Be signed by all lienholders, other than taxing entities, that have either an interest in the properties sharing the common boundary lines or an improvement on those properties.
- 12. Be filed and made a part of the deed records of the county or counties in which the properties are located.
- **4201.3 Filing requirements.** A unity agreement is not effective until a true and correct copy of the approved agreement is filed in the deed records in accordance with Section 4201.2(12), a file-marked copy of the agreement(s) for each property sharing the common boundary line is filed with the *building official*, and the fees are paid in accordance with this section.
 - **4201.3.1 Fees.** An application for a unity agreement and the amendment or termination of an existing unity agreement will not be processed until the fee(s) have been paid in accordance with Section 303 of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code*.

SECTION 4202 AMENDMENT OR TERMINATION OF UNITY AGREEMENTS

- **4202.1 Requirements.** A unity agreement may only be amended or terminated by a written instrument that is executed in accordance with this section on a form provided by the city. The instrument shall meet all of the following requirements:
 - 1. Be signed by an owner of property sharing the common boundary lines or by a lienholder, other than a taxing entity, that has either an interest in a property sharing the common boundary lines or an improvement on such a property.
 - 2. Be approved by the *building official*.
 - 3. Be approved as to form by the city attorney.
 - 4. Be filed and made a part of the deed records of the county or counties in which the properties are located.

- **4202.2** Approval by building official. The building official shall approve an instrument amending or terminating an agreement if all properties governed by the agreement fully comply with this code. The amending or terminating instrument is not effective until it is filed in the deed records in accordance with Section 4201.3 and a file-marked copy of the agreement(s) for each of the properties is filed with the building official."
 - 158. The 2015 International Building Code is amended by adding a new Chapter 43,

"Green Building Program," to read as follows:

"CHAPTER 43 GREEN BUILDING PROGRAM

SECTION 4301 PURPOSE

4301.1 Purpose. The purpose of this chapter is to establish green building standards to help reduce the use of natural resources, create a healthier and more sustainable living environment and minimize the negative environmental impacts of development in Dallas and the North Texas region.

SECTION 4302 DEFINITIONS

- **4302.1 Definitions.** The following terms used in this chapter shall have the meanings indicated in this section:
- **GREEN BUILDING.** Structures and their surrounding landscapes designed, constructed and maintained to decrease energy and water usage and costs, to improve the efficiency and longevity of building systems and to decrease the burdens imposed on the environment and public health.
- **GREEN BUILT TEXAS.** An initiative of the Homebuilders Association of Greater Dallas that provides climate-specific guidelines and verification systems for residential and multifamily green buildings.
- **GREEN BUILT TEXAS-CERTIFIABLE.** A proposed project that is not required to be registered with the Home Builders Association of Greater Dallas, but is planned, designed and constructed to meet or exceed a certified rating using the most recent version of the *Green Built Texas* rating system.
- **LEED.** The Leadership in Energy and Environmental Design *green building* rating systems are nationally accepted standards for *green buildings* developed by the *USGBC*.

LEED-CERTIFIABLE. A proposed project that is not required to be registered with the *USGBC*, but is planned, designed and constructed to meet or exceed a certified rating using the most recent version of LEED NC (new construction), LEED CS (core and shell), LEED CI (commercial interiors), LEED for schools, LEED for healthcare, LEED for retail or LEED for homes.

PROPOSED PROJECT. The erection of any new structure for which a person, firm or corporation is required to obtain a building permit.

USGBC. The U.S. Green Building Council, a nonprofit organization comprised of leaders from the building industry formed to encourage sustainability by promoting buildings that are environmentally responsible, profitable and healthy places to live and work.

SECTION 4303 REQUIREMENTS

4303.1 General. This section applies to all *proposed projects*.

4303.2 All new construction. All *proposed projects* must:

- 1. meet the minimum requirements of the Dallas Green Construction Code;
- 2. be LEED-certifiable;
- 3. be Green Built Texas-certifiable; or
- 4. be certifiable under an equivalent green building standard.

4303.2.1 Formal certification not required. Formal certification by the USGBC, Green Built Texas or an equivalent entity is not required.

4303.2.2 LEED projects.

- 1. Each *proposed project* may apply for compliance under any of the following *LEED* rating system products: LEED NC (new construction), LEED for schools, LEED for retail, LEED for healthcare, LEED CS (core and shell) or LEED for homes.
- 2. Proposed projects must achievel point under the water efficiency credit titled "Water Use Reduction (20% Reduction).

4303.2.3 Multifamily developments. Multifamily developments have the option of using LEED NC, LEED for homes, *Green Built Texas, ICC 700* or an equivalent *green building* standard.

4303.3 Water use. *Proposed projects* must reduce water usage by 20 percent. This may be accomplished by:

- 1. using the water efficiency requirements of *Green Built Texas*, LEED NC, LEED CS, LEED CI, LEED for schools, LEED for healthcare or LEED for retail; or
- 2. using 20 percent less water than the water use baseline calculated for the building's total interior water fixture use as required by the *Dallas Plumbing Code*."
- 159. Appendices A, B, C, D, E, F, G, H, I, J, K, L, and M of the 2015 International Building Code are not adopted.
- 160. All chapters of the 2015 International Building Code adopted by this ordinance are subchapters of Chapter 53 of the Dallas City Code, as amended.
- 161. All references in the 2015 International Building Code to the fire code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, fuel gas code, and green construction code refer, respectively, to Chapters 16, 54, 55, 56, 57, 58, 59, 60, and 61 of the Dallas City Code.

SECTION 2. Any errata corrections of the 2015 International Building Code published by the International Code Council are considered as part of this code.

SECTION 3. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 4. That Chapter 53 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 5. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 6. That this ordinance will take effect on [30 days after passage], and it is accordingly so ordained.

APPROVED AS TO FORM:	
LARRY E. CASTO, City Attorney	
ByAssistant City Attorney	_
Passed	

An ordinance amending Chapter 54, "Dallas Plumbing Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of the International Plumbing Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, use, and maintenance of plumbing work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 54, "Dallas Plumbing Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Plumbing Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

- 1. Page xi, "Legislation," is deleted.
- 2. Chapter 1, "Scope and Administration," of the 2015 International Plumbing Code is deleted and replaced with new Chapter 1, "Administration," to read as follows:

"CHAPTER 1 ADMINISTRATION

SECTION 101 GENERAL

101.1 Title. These regulations are known as the *Dallas Plumbing Code*, hereinafter referred to as "this code."

101.2 Scope. The provisions of this code apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code also regulates nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel gas-fired water heaters and water heater venting systems are regulated by the *Dallas Fuel Gas Code*.

Exceptions:

- 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures must comply with the *Dallas One- and Two-Family Dwelling Code*.
- 2. Plumbing systems in existing buildings undergoing repair, alteration, or additions, and change of occupancy may comply with the *Dallas Existing Building Code*.
- 101.3 Administrative procedures. Except as otherwise specified in this code, all provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to this code.
- 101.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the city of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference made to NFPA 70 or the ICC Electrical Code means the Dallas Electrical Code, as adopted. References made to the International Building Code, the International Mechanical Code, the International Plumbing Code, the International Fire Code, the International Energy Conservation Code, the International Existing Building Code, and the International Residential Code, respectively mean the Dallas Building Code, the Dallas Mechanical Code, the Dallas Plumbing Code, the Dallas Fuel Gas Code, the Dallas Fire Code, the Dallas Energy Conservation Code, the Dallas Existing Building Code, and the Dallas One-and Two-Family Dwelling Code, as amended."
- 3. Section 202, "General Definitions," of Chapter 2, "Definitions," of the 2015 International Plumbing Code is amended by amending or adding the following definitions to read as follows:

"GRAY WATER. Waste water that has not come into contact with toilet waste, kitchen sink waste, dishwasher waste or similarly contaminated sources. Gray water includes waste [discharged] from lavatories, bathtubs, showers, clothes washers and laundry sinks [trays].

ON-SITE NONPOTABLE WATER REUSE SYSTEM. A water system for the collection, treatment, storage, distribution and reuse of nonpotable water generated on site, including but not limited to a gray water system. [This definition does not include a rainwater harvest system.]

RAINWATER HARVEST. The rainwater collected from roofs and other on-site above ground catchment systems.

RECLAIMED WATER. Nonpotable water that, as a result of [has been derived from] the treatment of domestic waste water, is suitable for a direct beneficial use or a controlled use when such system has been submitted and approved by the building official prior to installation [by a facility or system licensed or permitted to produce water meeting the jurisdiction's water requirements for its intended uses]. Also known as "recycled water."

STORM WATER. A drainage system that carries a [N]natural precipitation, including snow-melt, rainwater, surface water or similar liquid wastes that has contacted a surface at or below grade."

4. Subsection 301.6, "Prohibited Locations," of Section 301, "General," of Chapter 3,

"General Regulations," of the 2015 International Plumbing Code is amended to read as follows:

"301.6 Prohibited locations. No plumbing system, waste disposal system, gas distribution system, rainwater piping system, irrigation system, medical gas & vacuum system or parts thereof, shall be located on any lot other than a specific lot or building site as defined by Chapter 51A of the Dallas Development Code. Piping, fixtures or equipment shall not be located as to interfere with the normal use thereof or the normal operation and use of any required windows, doors or other facilities. Plumbing systems shall not be located in an elevator shaft or in an elevator equipment room.

Exception: Floor drains, sumps and sump pumps shall be permitted at the base of the shaft, provided that they are indirectly connected to the plumbing system and comply with Section 1003.4."

5. Paragraph 305.4.1, "Sewer Depth," of Subsection 305.4, "Freezing," of Section 305, "Protection of Pipes and Plumbing System Components," of Chapter 3, "General Regulations," of the 2015 International Plumbing Code is amended to read as follows:

"305.4.1 Sewer depth. [Building sewers that connect to private sewage disposal systems shall be installed not less than [NUMBER] inches (mm) below finished grade at the point of septic tank connection.] Building sewers shall be a minimum of 12 [installed not less than [NUMBER]] inches (304 mm) below grade."

- 6. Subsection 305.7, "Protection of Components of Plumbing System," of Section 305, "Protection of Pipes and Plumbing System Components," of Chapter 3, "General Regulations," of the 2015 International Plumbing Code is amended to read as follows:
- "305.7 Protection of components of plumbing system. Components of a plumbing system installed within 3 feet of [along] alleyways, driveways, parking garages or other locations in a manner in which they would be exposed to damage shall be recessed into the wall or otherwise protected in an approved manner."
- 7. Subsection 312.9, "Shower Liner Test," of Section 312, "Test and Inspections," of Chapter 3, "General Regulations," of the 2015 International Plumbing Code is amended to read as follows:
- "312.9 Shower liner test. Where shower floors and receptors are made water tight by the application of materials required by Section 417.5.2, the completed liner installation shall be tested. The pipe from the shower drain shall be plugged water tight for the test. The floor and receptor area shall be filled with potable water to a depth of not less than 3[2] inches (76.2[51] mm) measured from the top of the drain to the top of [at] the threshold. Where a threshold of at least 3[2] inches (76.2[51] mm) high does not exist, a temporary threshold shall be constructed to retain the test water in the lined floor or receptor area to a level not less than 3[2] inches (76.2[51] mm) deep measured at the threshold. The water shall be retained for a test period of not less than 15 minutes, and there shall not be evidence of leakage."
- 8. Paragraph [M] 314.2.1, "Condensate Disposal," of Subsection [M] 314.2, "Evaporators and Cooling Coils," of Section 314, "Condensate Disposal," of Chapter 3, "General Regulations," of the 2015 International Plumbing Code is amended to read as follows:
 - "[M] 314.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan [outlet] to an approved place of disposal. Such piping shall maintain a horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate shall not discharge into a street, alley, sidewalk, rooftop or other areas so as to cause a nuisance."

- 9. Paragraph [M] 314.2.2, "Drain Pipe Materials and Sizes," of Subsection [M] 314.2, "Evaporators and Cooling Coils," of Section 314, "Condensate Disposal," of Chapter 3, "General Regulations," of the 2015 International Plumbing Code is amended to read as follows:
 - "[M] 314.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polyethylene, ABS, CPVC or PVC pipe or tubing. When exposed to ultraviolet light, schedule 80 PVC piping or tubing is required. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 relative to the material type. Condensate waste and drain line size shall be not less than ¾-inch (19.1 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 314.2.2. All horizontal sections of drain piping must be installed in uniform alignment at a uniform slope."
- 10. Chapter 3, "General Regulations," of the 2015 International Plumbing Code is amended by adding a new Section 317, "Irrigation Systems," to read as follows:

"SECTION 317 IRRIGATION SYSTEMS

- 317.1 Irrigation systems. All potable water source irrigation systems must comply with the provisions of Appendix F, "Standards for Designing, Installing and Maintaining Landscape Irrigation Systems," of this code. All nonpotable water source irrigation systems must comply with the provisions of Chapter 13, "Water Reuse," and Appendix F, "Standards for Designing, Installing and Maintaining Landscape Irrigation Systems."
- 11. Subsection 401.1, "Scope," of Section 401, "General," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is amended to read as follows:
- "401.1 Scope. This chapter shall govern the materials, design and installation of plumbing fixtures, faucets and fixture fittings in accordance with the type of occupancy, and shall provide for the minimum number of fixtures for various types of occupancies. The provisions of this chapter are intended to work in coordination with the provisions of the Dallas Building Code. Should any conflicts arise between the two chapters, the building official shall determine which provision applies."

- 12. Subsection 403.1, "Minimum Number of Fixtures," of Section 403, "Minimum Plumbing Facilities," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is amended to read as follows:
- "403.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as follows:
 - 1. Assembly occupancies. At least one drinking fountain must be provided at each floor level in an approved location.
 - Exception: A drinking fountain need not be provided in a drinking or dining establishment.
 - 2. Group A, B, F, H, I, M and S occupancies. Buildings, tenant spaces or portions of buildings where persons are employed must be provided with at least one water closet for each sex as provided for in Section 403.2.
 - 3. Group E and R occupancies. Fixtures must be provided as shown in Table 403.1

It is recommended, but not required, that the minimum number of fixtures provided also comply with the number shown in Table 403.1[, based on the actual use of the building or space]. Uses not shown in Table 403.1 shall be considered individually by the <u>building</u> [code] official. The number of occupants shall be determined by the <u>Dallas</u> [International] Building Code. Occupancy classification shall be determined in accordance with the <u>Dallas Building Code</u>.

403.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 403.1. Fractional numbers resulting from applying the fixture ratios of Table 403.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded to the next whole number.

Exception: The total occupant load shall not be required to be divided in half where approved statistical data indicates a distribution of the sexes of other than 50 percent of each sex.

403.1.2 Family or assisted-use toiled and bath fixtures. Fixtures located within family or assisted-use toilet and bathing rooms required by Section 1109.2.1 of the <u>Dallas</u> [<u>International</u>] <u>Building Code</u> are permitted to be included in the number of required fixtures for either male or female occupants in assembly and mercantile <u>occupancies</u>."

- 13. Subsection 404.2, "Accessible Fixture Requirements," of Section 404, "Accessible Plumbing Facilities," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is amended to read as follows:
- "404.2 Accessible fixture requirements. Accessible plumbing fixtures shall be installed with the clearances, heights, spacings and arrangements in accordance with the <u>Dallas Building Code</u> [ICC A117.1]."
- 14. Subsection 409.2, "Water Connection," of Section 409, "Dishwashing Machines," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is amended to read as follows:
- "409.2 Water connection. The water supply to a <u>commercial</u> dishwashing machine shall be protected against backflow by an *air gap* that is integral with the machine or a backflow preventer shall be installed in accordance with Section 608. *Air gaps* shall comply with ASME A112.1.2 or A112.1.3"
- 15. Subsection 412.4, "Public Laundries and Central Washing Facilities," of Section 412, "Floor and Trench Drains," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is deleted and replaced as follows:
- "412.4 Required location for floor drains. Floor drains shall be required in the following locations:
 - 1. In public coin-operated laundries and in the central washing facilities of multiple-family dwellings, rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76 mm) in diameter.
 - 2. Food establishments as defined by Chapter 17 of the *Dallas City Code*.
 - 3. Public restrooms."

- 16. Subsection 417.5, "Shower Floors or Receptors," of Section 417, "Showers," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is amended to read as follows:
- "417.5 Shower floors or receptors. Floor surfaces shall be constructed of impervious, noncorrosive, nonabsorbent and waterproof materials. Thresholds must be a minimum of 2 inches (51 mm) and a maximum of 9 inches (229 mm), measured from the top of the drain to the top of the threshold or dam. Thresholds must be of sufficient width to accommodate a minimum 22-inch (559 mm) door.

Exception: Showers designed to comply with ICC/ANSI A117.1 or other designs as approved by the building official.

- 417.5.1 Support. Floors or receptors under shower compartments shall be laid on, and supported by, a smooth and structurally sound base.
- 417.5.2 Shower lining. Floors under shower compartments, except where prefabricated receptors have been provided, shall be lined and made water tight utilizing material complying with Sections 417.5.2.1 through 417.5.2.6. Such liners shall turn up on all sides not less than 3 [2] inches (76 [51] mm) above the finished threshold level and shall extend outward and over the threshold and be fastened to the outside of the threshold jamb to the required minimum height of the shower liner. Liners shall be recessed and fastened to an approved backing so as not to occupy the space required for wall covering, and shall not be nailed or perforated at any point less than 1 inch (25 mm) above the finished threshold. Liners shall be pitched one-fourth unit vertical in 12 units horizontal (2-percent slope) and shall be sloped toward the fixture drains and be securely fastened to the waste outlet at the seepage entrance, making a water-tight joint between the liner and the outlet. The completed liner shall be tested in accordance with Section 312.9.

Exceptions:

- 1. Floor surfaces under shower heads provided for rinsing laid directly on the ground are not required to comply with this section.
- 2. Where a sheet-applied, load-bearing, bonded, waterproof membrane is installed as the shower lining, the membrane shall not be required to be recessed.
- **417.5.2.1 PVC sheets.** Plasticized polyvinyl chloride (PVC) sheets shall meet the requirements of ASTM D 4551. Sheets shall be joined by solvent welding in accordance with the manufacturer's installation instructions.
- 417.5.2.2 Chlorinated polyethylene (CPE) sheets. Nonplasticized chlorinated polyethylene sheet shall meet the requirements of ASTM D 4068. The liner shall be jointed in accordance with the manufacturer's installation instructions.

- 417.5.2.3 Sheet lead. Sheet lead shall weigh not less than 4 pounds per square foot (19.5 kg/m²) and shall be coated with an asphalt paint or other *approved* coating. The lead sheet shall be insulated from conducting substances other than the connecting drain by 15-pound (6.80 kg) asphalt felt or an equivalent. Sheet lead shall be joined by burning.
- 417.5.2.4 Sheet copper. Sheet copper shall confirm to ASTM B 152 and shall weigh not less than 12 ounces per square foot (3.7 kg/m²). The copper sheet shall be insulated from conducting substances other than the connecting drain by 15-pound (6.80 kg) asphalt felt or an equivalent. Sheet copper shall be joined by brazing or soldering.
- 417.5.2.5 Sheet-applied, load-bearing, bonded, waterproof membranes. Sheet-applied, load-bearing, bonded, waterproof membranes shall meet requirements of ANSI A118.10 and shall be applied in accordance with the manufacturer's installation instructions.
- 417.5.2.6 Liquid-type, trowel-applied, load-bearing, bonded waterproof materials. Liquid-type, trowel-applied, load-bearing, bonded waterproof materials shall meet the requirements of ANSI A118.10 and shall be applied in accordance with the manufacturer's instructions."
- 17. Subsection [BG] 419.3, "Surrounding Material," of Section 419, "Urinals," of Chapter 4, "Fixtures, Faucets and Fixture Fittings," of the 2015 International Plumbing Code is amended to read as follows:
- "[BG] 419.3 Surrounding material. Wall and floor space to a point 2 feet (610 mm) in front of a urinal lip and 4 feet (1219 mm) above the floor and at least 2 feet (610 mm) to each side of the urinal shall be waterproofed with a smooth, readily cleanable, hard, nonabsorbent material."
- 18. Subsection 502.3, "Water Heaters Installed in Attics," of Section 502, "Installation," of Chapter 5, "Water Heaters," of the 2015 International Plumbing Code is amended to read as follows:
- "502.3 Water heaters installed in attics. Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall be not less than 30 inches (762 mm) in height and 22 inches (559 mm) in width and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) in width. A level service space not less than 30 inches (762 mm) in length, [and] 30 inches (762 mm) in width and 30 inches (762 mm) deep shall be present at the front or service side of the water heater. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large

enough to allow removal of the water heater. A walkway to an appliance must be rated as a floor as approved by the building official. At a minimum, one of the following must be provided for access to the attic space:

- 1. A permanent stair.
- 2. A pull down stair with a minimum 300 lb. (136 kg) capacity.
- 3. An access door from an upper floor level.

Due to structural conditions, an access panel may be used in lieu of Items 1, 2 or 3 with the prior approval of the building official."

- 19. Section 502, "Installation," of Chapter 5, "Water Heaters," of the 2015 International Plumbing Code is amended by adding a new Subsection 502.6, "Water Heaters Above Ground or Floor," to read as follows:
- "502.6 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than 8 feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A water heater may be reached by portable ladder if the water heater has a capacity of no more than 10 gallons (or larger with prior approval), it is capable of being accessed through a lay-in ceiling, and it is installed not more than 10 feet (3048 mm) above the ground or floor level.

- **502.6.1. Illumination and convenience outlet.** Whenever the attic, roof, mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with the *Dallas Electrical Code*."
- 20. Subsection 504.6, "Requirements for Discharge Piping," of Section 504, "Safety Devices," of Chapter 5, "Water Heaters," of the 2015 International Plumbing Code is amended to read as follows:
- "504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:
 - 1. Not be directly connected to the drainage system.
 - 2. Discharge through an air gap [located in the same room as the water heater].

- 3. Be a minimum $\frac{3}{4}$ " (1.9 mm) inside diameter but shall n[N] of the smaller than the diameter of the outlet of the valve served and shall discharge full size to the *air gap*.
- 4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T&P discharge piping system when approved by the building official and permitted by the manufacturer's installation instructions and installed pursuant to those instructions.

- 5. Discharge by indirect means [to the floor, to the pan serving the water heater or storage tank,] to an approved [a] waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- 8. Not be trapped.
- 9. Be installed so as to flow by gravity.
- 10. Not t[T]erminate less [not more] than 6 inches (152 mm) or more than 24 inches (609 mm) above grade. When terminating at an approved waste receptor, the T&P discharge line shall terminate not more [and not less] than 6 inches (152 mm) above or less than two times the discharge pipe diameter above the [floor or] flood level rim of the waste receptor.
- 11. Not have a threaded connection at the end of such piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1."
- 21. Paragraph 504.7.1, "Pan Size and Drain," of Subsection 504.7, "Required Pan," of Section 504, "Safety Devices," of Chapter 5, "Water Heaters," of the 2015 International Plumbing Code is amended to read as follows:
 - "504.7.1 Pan size and drain. The pan shall be not less than 1 ½ inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than ¾ inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4.

Exception: Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the water heater's manufacturer installation instructions and installed according to manufacturer's instructions."

- 22. Subsection 602.3, "Individual Water Supply," of Section 602, "Water Required," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is deleted.
- 23. Subsection 604.4, "Maximum Flow and Water Consumption," of Section 604, "Design of Building Water Distribution System," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended by adding a new Paragraph 604.4.1, "State Maximum Flow Rate," to read as follows:
 - "604.4.1 State maximum flow rate. Where the state-mandated maximum flow rate is more restrictive than those of this section, the state flow rate takes precedence."
- 24. Subsection 605.2, "Lead Content of Water Supply Pipe and Fittings," of Section 605, "Materials, Joints and Connections," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
- "605.2 Lead contents of water supply pipe and fittings. On potable water systems, the maximum allowable lead content in pipes, pipe fittings, plumbing fittings and fixtures shall be not more than a weighted average of 0.25 percent with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures. [Pipe and pipe fittings, including valves and faucets, utilized in the water supply system shall have not more than 8 percent lead content.]

Exceptions:

- 1. Pipes, pipe fittings, plumbing fittings, fixtures or backflow preventers used only for nonpotable services such as manufacturing, industrial processing, irrigation systems as per Appendix F of the *Dallas Plumbing Code* or any other non-potable service.
- 2. Flush valves, fill valves, flushometer valves, tub fillers, shower valves, service saddles or water distribution main gate valves that are 2 inches (50 mm) in diameter or larger.
- [605.2.1 Lead content of drinking water pipe and fittings. Pipe, pipe fittings, joints, valves, faucets and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372 and shall have a weighted average lead content of 0.25 percent or less.]"

- 25. Subsection 606.1, "Location of Full-Open Valves," of Section 606, "Installation of the Building Water Distribution System," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
- "606.1 Location of full-open valves. Full-open valves shall be installed in the following locations:
 - 1. [On the building water service pipe from the public water supply near the curb.
 - 2.] On the water distribution supply pipe at the entrance into the structure.
 - [3. On the discharge side of every water meter.
 - 4. On the base of every water riser pipe in occupancies other than multiple family residential occupancies that are two stories or less in height and in one- and two-family residential occupancies.
 - 5. On the top of every water down-feed pipe in *occupancies* other than one- and two-family residential *occupancies*.]
 - <u>2</u>[6]. On the entrance to every water supply pipe to a dwelling unit, except where supplying a single fixture equipped with individual stops.
 - 3[7]. On the water supply pipe to a gravity or pressurized water tank.
 - 4[8]. On the water supply pipe to every water heater."
- 26. Subsection 606.2, "Location of Shutoff Valves," of Section 606, "Installation of the Building Water Distribution System," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
- "606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:
 - 1. On the fixture supply to each plumbing fixture other than bathtubs and showers, or similar type valves, in one- and two-family residential occupancies, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, boarding houses and similar occupancies.
 - 2. On the water supply pipe to each sillcock.
 - 3.] On the water supply pipe to each appliance or mechanical equipment."

- 27. Subsection 607.2, "Hot or Tempered Water Supply to Fixtures," of Section 607, "Hot Water Supply System," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
- "607.2 Hot or tempered water supply to fixtures. The developed length of hot or tempered water piping, from the source of hot water to the fixtures that require hot or tempered water, shall not exceed 50 feet (15 240 mm). Recirculating system piping and heat-traced piping shall be considered to be sources of hot or tempered water and shall be installed in accordance with the Dallas Energy Conservation Code.
 - [607.2.1 Circulation systems and heat trace systems for maintaining heated water temperature in distribution systems. For Group R2, R3 and R4 occupancies that are three stories or less in height above grade plane, the installation of heated water circulation and temperature maintenance systems shall be in accordance with Section R403.5.1 of the International Energy Conservation Code. For other than Group R2, R3 and R4 occupancies that are three stories or less in height above grade plane, the installation of heated water circulation and heat trace systems shall be in accordance with Section C404.6 of the International Energy Conservation Code.
 - 607.2.1.1 Pump controls for hot water storage systems. The controls on pumps that circulate water between a water heater and a storage tank for heated water shall limit operation of the pump from heating cycle startup to not greater than 5 minutes after the end of the cycle.
 - 607.2.1.2 Demand recirculation controls for distribution systems. A water distribution system having one or more recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe shall be a demand recirculation water system. Pumps shall have controls that comply with both of the following:
 - 1. The control shall start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture, or sensing the flow of hot or tempered water to a fixture fitting or appliance.
 - 2. The control shall limit the temperature of the water entering the cold water piping to 104°F (40°C).
 - 607.2.1[2] Piping for recirculation systems having master thermostatic valves. Where a thermostatic mixing valve is used in a system with a hot water recirculating pump, the hot water or tempered water return line shall be routed to the cold water inlet pipe of the water heater and the cold water inlet pipe or the hot water return connection of the thermostatic mixing valve."

- 28. Subsection 608.1, "General," of Section 608, "Protection of Potable Water Supply," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
- "608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from nonpotable liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to applicable local regulations, Table 608.1, and [except] as specifically stated in Sections 608.2 through 608.16.10, and Chapter 13 of the Dallas Plumbing Code."
- 29. Subsection 608.8, "Identification of Nonportable Water Systems," of Section 608, "Protection of Potable Water Supply," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
- "608.8 Identification of nonpotable water systems. Where nonpotable water systems are installed, the piping conveying the nonpotable water shall be identified either by <u>permanently installed</u> color marking, metal tags or tape in accordance with Sections 608.8.1 through 608.8.2.3.
 - 608.8.1 Signage required. Nonpotable water outlets, such as hose connections, open ended pipes and faucets, shall be identified with <u>permanently posted</u> signage that reads as follows: "Nonpotable water is utilized for [application name]. CAUTION: NONPOTABLE WATER DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inch (12.7 mm) in height and in white letters on a contrasting purple (consistent with Pantone color # 512) background [colors in contrast to the background on which they are applied]. In addition to the required wordage, the pictograph shown in Figure 608.8.1 shall appear on the required signage. The signs must be located in a manner that is visible to all users and approved by the building official. The number of signs installed must also be approved by the building official.



FIGURE 608.8.1 PICTOGRAPH—DO NOT DRINK

608.8.2 Distribution pipe labeling and marking. Nonpotable distribution piping shall be purple in color (consistent with Pantone # 512) and shall be embossed, or integrally stamped or marked, with the words: "CAUTION: NONPOTABLE WATER – DO NOT DRINK" or the piping shall be installed with a purple identification tape or wrap (consistent with Pantone # 512). Pipe identification shall include the contents of the piping system and an arrow indicating the direction of flow. Hazardous piping systems shall also contain information addressing the nature of the hazard. Pipe identification shall be permanently installed and repeated at intervals not exceeding 20 [25] feet (6096 [7620] mm) and at each point where the piping passes through or over a wall, floor or roof. Lettering shall be readily observable within the room or space where the piping is located.

608.8.2.1 Color. The color of the pipe identification shall be discernable and consistent throughout the building. The color purple (consistent with Pantone # 512) shall be used to identify all nonpotable water reuse [reclaimed, rain and gray water] distribution systems.

608.8.2.2 Lettering size. The size of the background color field and lettering shall comply with Table 608.8.2.2.

TABLE 608.8.2.2 SIZE OF PIPE INDENTIFICATION

PIPE DIAMETER (inches)	LENGTH BACKGROUND COLOR FIELD (inches)	SIZE OF LETTERS (inches)
3/4 to 1 1/4	8	0.5
1 ½ to 2	8	0.75
2 ½ to 6	12	1.25
8 to 10	24	2.5
Over 10	32	3.5

For SI 1 inch = 25.4 mm.

608.8.2.3 Identification tape. Where used, identification tape shall be at least 3 inches (76 mm) wide and have white or black lettering on a purple field (consistent with Pantone # 512) stating "CAUTION: NONPOTABLE WATER — DO NOT DRINK." Identification tape shall be readily observable on [installed on top of] nonpotable

- rainwater and all other nonpotable water reuse distribution pipes, permanently fastened at least every 10 feet (3048 mm) to each pipe length and run continuously the entire length of the pipe."
- 30. Paragraph 608.16.5, "Connections to Lawn Irrigations Systems," of Subsection 608.16, "Connections to the Potable Water System," of Section 608, "Protection of Potable Water Supply," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code is amended to read as follows:
 - "608.16.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric vacuum breaker, a pressure vacuum breaker assembly, a double-check assembly or a reduced pressure principle backflow prevention assembly. Valves shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow prevention assembly and all piping installation and identification shall comply with the requirement of Appendix F and Section 608.8 of the Dallas Plumbing Code."
- 31. Subsection 608.17, "Protection of Individual Water Supplies," of Section 608, "Protection of Potable Water Supply," of Chapter 6, "Water Supply and Distribution," of the 2015 International Plumbing Code shall be deleted.
- 32. Subsection 703.6, "Combined Sanitary and Storm Public Sewer," of Section 703, "Building Sewer," of Chapter 7, "Sanitary Drainage," of the 2015 International Plumbing Code is deleted.
- 33. Paragraph 705.11.2, "Solvent Cementing," of Subsection 705.11, "PVC Plastic," of Section 705, "Joints," of Chapter 7, "Sanitary Drainage," of the 2015 International Plumbing Code is amended to read as follows:
 - "705.11.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B 182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be permitted above or below ground.

Exception: A primer is not required where both of the following conditions apply:

- 1. The solvent cement used is third-party certified as conforming to ASTM D 2564.
- 2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in non-pressure applications in sizes up to and including 4 inches (102 mm) in diameter.]"
- 34. Section 712, "Sumps and Ejectors," of Chapter 7, "Sanitary Drainage," of the 2015 International Plumbing Code is amended by adding a new Subsection 712.5, "Dual Pump System," to read as follows:
- "712.5 Dual pump system. All sumps must be automatically discharged and, when in any "public use" occupancy where the sump serves more than 10 fixture units, must be provided with dual sumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113."
- 35. Section 714, "Computerized Drainage Design," of Chapter 7, "Sanitary Drainage," of the 2015 International Plumbing Code is retitled as Section 714, "Engineered Drainage Design."
- 36. Subsection 714.1, "Design of Drainage System," of Section 714, "Engineered Drainage Design," of Chapter 7, "Sanitary Drainage," of the 2015 International Plumbing Code is amended to read as follows:
- "714.1 Design of drainage system. The sizing, design and layout of the drainage system shall be permitted to be designed by a registered engineer using approved [computer] design methods."
- 37. Paragraph 802.1.1, "Food Handling," of Subsection 802.1, "Where Required," of Section 802, "Indirect Wastes," of Chapter 8, "Indirect/Special Waste," of the 2015 International Plumbing Code is amended to read as follows:
 - "802.1.1 Food handling. Equipment and fixtures utilized for the storage, preparation and handling of food shall discharge through an indirect waste pipe by means of an air gap into a floor sink sized in accordance with Section 802.3.1. [Each well of a multiple-compartment sink shall discharge independently to a waste receptor.]"

- 38. Paragraph 802.1.2, "Floor Drains In Food Storage Areas," of Subsection 802.1, "Where Required," of Section 802, "Indirect Wastes," of Chapter 8, "Indirect/Special Waste," of the 2015 International Plumbing Code is amended to read as follows:
 - "802.1.2 Floor drains in food storage areas. Floor drains located within walk-in refrigerators or freezers in food service and food establishments shall be indirectly connected to the sanitary drainage system by means of an air gap into a floor sink sized in accordance with Section 802.3.1. Where a floor drain is located within an area subject to freezing, the waste line serving the floor drain shall not be trapped and shall indirectly discharge by means of an air gap into a floor sink sized in accordance with Section 802.3.1, and [waste receptor] located outside the area subject to freezing.

[Exception: Where protected against backflow by a backwater valve, such floor drains shall be indirectly connected to the sanitary drainage system by means of an air break or an air gap.]"

- 39. Paragraph 802.1.7, "Commercial Dishwashing Machines," of Subsection 802.1, "Where Required," of Section 802, "Indirect Wastes," of Chapter 8, "Indirect/Special Waste," of the 2015 International Plumbing Code is amended to read as follows:
 - "802.1.7 Commercial dishwashing machines. The discharge from a commercial dishwashing machine shall be through an air gap [or air break] into a floor sink sized [waste receptor] in accordance with Sections 802.2."
- 40. Paragraph 802.1.8, "Food Utensils, Dishes, Pots and Pans Sinks," of Subsection 802.1, "Where Required," of Section 802, "Indirect Wastes," of Chapter 8, "Indirect/Special Waste," of the 2015 International Plumbing Code is amended to read as follows:
 - "802.1.8 Food utensils, dishes, pots and pans sinks. Sinks and equipment, in other than dwelling units, used for the washing, rinsing or sanitizing of utensils, dishes, pots, pans or service ware used in the preparation, serving or eating of food shall discharge indirectly through an air gap into a floor sink sized in accordance with Section 802.3.1 [or an air break to the drainage system]."

- 41. Paragraph 802.3.3, "Standpipes," of Subsection 802.3, "Waste Receptors," of Section 802, "Indirect Wastes," of Chapter 8, "Indirect/Special Waste," of the 2015 International Plumbing Code is amended to read as follows:
 - "802.3.3 Standpipes. Standpipes shall be individually trapped. Standpipes shall extend not less than 18 inches (457 mm) but not greater than 42 inches (1066 mm) above the trap weir. Access shall be provided to standpipes and drains for rodding. No trap serving a standpipe may be installed below the floor."
- 42. Subsection 903.1, "Roof Extension," of Section 903, "Vent Terminals," of Chapter 9, "Vents," of the 2015 International Plumbing Code is amended to read as follows:
- "903.1 Roof extension. Open vent pipes shall [that] extend through or above a roof and shall [be] terminate[d] not less than 6 [[NUMBER]] inches (152 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 10 [7] feet (3048 [2134] mm) above the roof.
 - 903.1.1 Vents above grade. Open vent pipes above grade and adjacent to a structure shall meet the requirements of Section 903.5 and terminate not less than 10 feet (3048 mm) above grade. Remote vents must terminate no less than 6 inches (152 mm) above grade."
- 43. Subsection 905.4, "Vertical Rise of Vent," of Section 905, "Vent Connections and Grades," of Chapter 9, "Vents," of the 2015 International Plumbing Code is amended to read as follows:
- "905.4 Vertical rise of vent. Every dry vent shall rise vertically to a point not less than 6 inches (152 mm) above the *flood level rim* of the highest trap or trapped fixture being vented.

Exceptions:

- 1. Vents for interceptors located outdoors.
- 2. Where structural conditions prohibit the vent to rise 6 inches (152 mm), before offsetting horizontally, and whenever multiple vent pipes converge, each such vent shall rise 6 inches (152 mm) in height above the *flood level rim* of the fixture it serves before connecting to any other vent. Vents less than 6 inches (152 mm) above the *flood level rim* of the fixture shall comply with Sections 905.2 and 905.3 and they shall have a full size cleanout installed on the vent stack in an accessible location."

- 44. Subsection 909.1, "Distance of Trap from Vent," of Section 909, "Fixture Vents," of Chapter 9, "Vents," of the 2015 International Plumbing Code is amended to read as follows:
- "909.1 Distance of trap from vent. Each fixture trap shall have a protecting vent located so that the slope and the *developed length* in the *fixture drain* from the trap weir to the vent fitting are within the requirements set forth in Table 909.1.

[Exception: The developed length of the fixture drain from the trap weir to the vent fitting for self-siphoning fixtures, such as water closets, shall not be limited.]"

- 45. Subsection 915.1, "Type of Fixtures," of Section 915, "Combination Waste and Vent System," of Chapter 9, "Vents," of the 2015 International Plumbing Code is amended to read as follows:
- "915.1 Type of fixtures. A combination waste and vent system shall not serve fixtures other than floor drains[, sinks, lavatories] and indirect waste receptors [drinking fountains]. Combination waste and vent systems shall not receive the discharge from a food waste disposer or clinical sink."
- 46. Paragraph 915.2.3, "Connection," of Subsection 915.2, "Installation," of Section 915, "Combination Waste and Vent," of Chapter 9, "Vents," of the 2015 International Plumbing Code is amended to read as follows:
 - "915.2.3 Connection. The vent connection for a combination waste and vent system shall be downstream of the uppermost fixture [provided with a dry vent connected at any point within the system or the system shall connect to a horizontal drain that serves vented fixtures located on the same floor]. Combination waste and vent systems connecting to building drains receiving only the discharge from one or more stacks shall be provided with a dry vent. The vent connection to the combination waste and vent pipe shall extend vertically to a point not less than 6 inches (152 mm) above the flood level rim of the highest fixture being vented before offsetting horizontally."
- 47. Subsection 916.2, "Vent Connection," of Section 916, "Island Fixture Venting," of Chapter 9, "Vents," of the 2015 International Plumbing Code is deleted and replaced with a new Subsection 916.2, "Installation," to read as follows:
- "916.2 Installation. Traps for island sinks and similar equipment must be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drain board height and then returning it downward and connecting it to the horizontal sink drain

immediately downstream from the vertical fixture drain. The return vent must be connected to the horizontal drain through a wye-branch fitting and must, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than 6 inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings must be used on all parts of the vent below the floor level and a minimum slope of ¼ inch per foot (20.9 mm/m) back to the drain must be maintained. The return bend used under the drain board must be a one piece fitting or an assembly of a 45 degree (0.79 radius), a 90 degree (1.6 radius) and a 45 degree (0.79 radius) elbow in the order named. Pipe sizing must be as required elsewhere in this code. The island sink drain, upstream of the return vent, must serve no other fixtures. An accessible cleanout must be installed in the vertical portion of the foot vent."

- 48. Subsection 916.3, "Vent Installation Below the Fixture Flood Level Rim," of Section 916, "Island Fixture Venting," of Chapter 9, "Vents," of the 2015 International Plumbing Code is deleted.
- 49. Section 917, "Single Stack Vent System," of Chapter 9, "Vents," of the 2015 International Plumbing Code is deleted.
- 50. Subsection 1002.3, "Prohibited Traps," of Section 1002, "Trap Requirements," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is amended to read as follows:

"1002.3 Prohibited traps. The following types of traps are prohibited:

- 1. Traps that depend on moving or removable parts to maintain the seal.
- 2. Bell traps.
- 3. Crown-vented traps.
- 4. Traps not integral with a fixture and that depend on interior partitions for the seal, except those traps constructed of an *approved* material that is resistant to corrosion and degradation.
- 5. "S" traps.
- 6. Drum traps.

Exception: Drum traps used as solids interceptors and drum traps serving chemical waste systems shall not be prohibited."

- 51. Subsection 1002.10, "Plumbing in Mental Health Centers," of Section 1002, "Trap Requirements," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is deleted.
- 52. Paragraph 1003.3.1, "Grease Interceptors and Automatic Grease Removal Devices Required," of Subsection 1003.3, "Grease Interceptors," of Section 1003, "Interceptors and Separators," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is amended to read as follows:
 - "1003.3.1 Grease interceptors and automatic grease removal devices required. A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste exposure located in food preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and clubs. Fixtures and equipment capable of generating or receiving grease-laden waste shall include, but not be limited to, pot sinks, prerinse sinks; hand sinks; 3-compartment sinks; mop sinks; soup kettles or similar devices; work stations; floor drains; [ef] floor sinks [into which kettles are drained]; automatic hood wash units and dishwashers [without prerinse sinks]. Grease interceptors and automatic grease removal devices shall receive waste only through indirect means from fixtures and equipment that allow fats, oils or grease to be discharged. [Where lack of space or other constraints prevent] T[t]he installation [ef replacement] of [a] grease interceptors[, one] or automatic [more] grease removal devices must comply with Section 17-5.2(e) of Chapter 17 of the Dallas City Code [interceptors shall be permitted to be installed on or above the floor and upstream of an existing grease interceptor]."
- 53. Subparagraph 1003.4.2.2, "Garages and Service Stations," of Paragraph 1003.4.2, "Oil Separator Design," of Subsection 1003.4, "Oil Separators Required," of Section 1003, "Interceptors and Separators," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is amended to read as follows:
 - "1003.4.2.2 Garages and service stations. Where automobiles are serviced, greased, repaired or washed or where gasoline is dispensed, oil separators shall have a capacity of not less than 6 cubic feet (0.168 m³) for the first 100 square feet (9.3 m²) of area to be drained, plus 1 cubic foot (0.028 m³) for each additional 100 square feet (9.3 m²) of area to be drained into the separator. Parking garages in which servicing, repairing or washing is not conducted, and in which gasoline is not dispensed, shall not require a separator. Areas of commercial garages utilized only for storage of automobiles are not required to be drained through a separator.

Exception: Automobiles or equipment wash bays larger than 60 inches by 120 inches must use a sand interceptor with a minimum capacity of 1000 gallons."

- 54. Subsection 1003.9, "Venting of Interceptors and Separators," of Section 1003, "Interceptors and Separators," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is amended to read as follows:
- "1003.9 Venting of interceptors and separators. Interceptors and separators shall be designed so as not to become air bound. A vent shall be installed on the effluent side of the interceptor or separator. A 2 inch (50.8 mm) relief vent shall be required on the influent line where fixtures are on a floor level more than 4 feet above the top of the interceptor or separator. A vent shall be installed on any interceptor or separator designed and constructed with vent connections. Vent sizing and installation shall comply with Chapter 9 of the code. [Interceptors and separators shall be vented in accordance with one of the methods in Chapter 9.]"
- 55. Section 1003, "Interceptors and Separators," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is amended by adding a new Subsection 1003.11, "Effluent Sampling," to read as follows:
- "1003.11 Effluent sampling. An effluent sampling well shall be installed at or near the outlet of an interceptor or separator."
- 56. Section 1003, "Interceptors and Separators," of Chapter 10, "Traps, Interceptors and Separators," of the 2015 International Plumbing Code is amended by adding a new Subsection 1003.12, "Abandoned Traps, Interceptors or Separators," to read as follows:
- "1003.12 Abandoned traps, interceptors or separators. Abandoned traps, interceptors or separators shall be plugged or capped and shall have the contents pumped and discarded in an approved manner. The top or entire vessel shall be removed and the remaining portion of the tank or excavation shall be immediately filled with approved materials."
- 57. Subsection 1101.8, "Cleanouts Required," of Section 1101, "General," of Chapter 11, "Storm Drainage," of the 2015 International Plumbing Code is amended to read as follows:
- "1101.8 Cleanouts required. Cleanouts shall be installed in the <u>building</u> storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.

[Exception: Subsurface drainage system.]"

- 58. Subsection 1106.1, "General," of Section 1106, "Size of Conductors, Leaders and Storm Drains," of Chapter 11, "Storm Drainage," of the 2015 International Plumbing Code is amended to read as follows:
- "1106.1 General. The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on a 6 inch (152.4 mm) per hour [the 100-year hourly] rainfall rate [indicated in Figure 1106.1 or on other rainfall rates determined from approved local weather data]."
- 59. Figure 1106.1 of Section 1106, "Size of Conductors, Leaders, and Storm Drains," of Chapter 11, "Storm Drainage," of the 2015 International Plumbing Code is deleted.
- 60. Subsection 1108.3, "Sizing of Secondary Drains," of Section 1108, "Secondary (Emergency) Roof Drains," of Chapter 11, "Storm Drainage," of the 2015 International Plumbing Code is amended to read as follows:
- "1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 [based on the rainfall rate for which the primary system is sized]. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall have an opening dimension of not less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system."
- 61. Subsection [F] 1202.1, "Nonflammable Medical Gases," of Section 1202, "Medical Gases," of Chapter 12, "Special Piping and Storage Systems," of the 2015 International Plumbing Code is amended to read as follows:
- "[F] 1202.1 Nonflammable medical gases. Nonflammable medical gas systems, inhalation anesthetic systems and vacuum piping systems shall be designed and installed in accordance with NFPA 99.

Exception[s]:

- [1.] This section shall not apply to portable systems or cylinder storage.
- [2. Vacuum system exhaust terminations shall comply with the *International Mechanical Code*.]"

62. Chapter 13, "Nonpotable Water Recycling Systems," of the 2015 International Plumbing Code is retitled as Chapter 13, "Water Reuse Systems", and replaced with the following.

"CHAPTER 13 WATER REUSE SYSTEMS

SECTION 1301 GENERAL

- 1301.1 Scope. The provisions of Chapter 13 shall govern the materials, design, construction and installation of rainwater, reclaimed, storm and gray water systems for flushing of water closets and urinals and for subsurface landscape irrigation. Reuse of water for any other application must be submitted to the building official for prior approval.
 - 1301.1.1 Permit required. It is unlawful for any person to construct, install or alter any water reuse system without first obtaining a permit to perform such work. No water reuse permit may be issued until a plot plan with appropriate data satisfactory to the building official has been submitted and approved. Plans and specifications must be drawn to scale and must be of sufficient clarity to indicate the location, nature and extent of the work proposed and show that it will conform to the codes and all applicable laws, ordinances, rules and regulations.
- 1301.2 Installation. In addition to the provisions of Section 1301, systems for flushing of water closets and urinals shall comply with Section 1302 and systems for subsurface landscape irrigation shall comply with Chapter 14. Except as provided for in this chapter, all systems shall comply with the provisions of the other chapters and appendices of this code.
- 1301.3 Materials. Above-ground drain, waste and vent piping for gray water systems shall conform to one of the standards listed in Table 702.1. Water reuse, underground building drainage and vent pipe shall conform to one of the standards listed in Table 702.2.
- 1301.4 Tests. Drain, waste and vent piping for gray water systems shall be tested in accordance with this code.
- **1301.5** Inspections. Water reuse systems shall be inspected in accordance with this code.
- 1301.6 Public water connections. Only connections in accordance with Section 1302.3 shall be made between a water reuse system and a potable water system. Where potable water is used for makeup water to a nonpotable system, a reduced pressure backflow assembly shall be installed immediately at the connection to protect the potable water. When the non-potable connection is at the water meter, the reduced pressure backflow assembly shall be installed as close to the water meter as possible.

- 1301.7 Waste water connections. Water reuse systems designed specifically for gray water recycling systems shall receive only the waste discharge of bathtubs, showers, lavatories, clothes washers or laundry trays.
- 1301.8 Collection reservoir. Water for reuse systems shall be collected in a reservoir approved for water reuse and shall be constructed of durable, nonabsorbent and corrosion-resistant materials. The system shall be protected to prevent the entrance of insects and vermin into the storage tanks and piping systems. Screen materials shall be compatible with contacting system components and shall not accelerate the corrosion of system components. Rainwater harvest collection systems and reservoirs shall comply with the *Dallas Green Construction Code*.
- 1301.9 Filtration. Water for reuse entering the reservoir shall pass through an approved filter such as a media, sand or diatomaceous earth filter. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance.
- 1301.10 Overflow. The collection reservoir shall be equipped with an overflow pipe having the same or larger area as the sum of the areas of all tank inlet pipes. The overflow pipe shall be protected from insects or vermin and the discharge from such pipe shall be indirectly connected to the sanitary drainage system by means of an air gap or shall extend in an approved manner consistent with storm water runoff requirements of the jurisdiction. The overflow drain shall not be equipped with a shutoff valve. A backwater valve shall be installed on each overflow pipe in accordance with Section 715. A minimum of one cleanout shall be provided on each overflow pipe in accordance with Section 708 of the Dallas Plumbing Code.
- 1301.11 Drain. A drain shall be located at the lowest point of the collection reservoir and shall meet the requirements of Section 1301.10.
- 1301.12 Vent required. The reservoir shall be provided with a vent sized in accordance with Chapter 9 and based on the diameter of the reservoir influent pipe(s). The pipe shall be screened to prevent the infiltration of mosquitos or other insects. The reservoir vent shall not be connected to other drainage system vent.
- **1301.13 Hose bibbs.** Hose bibbs are not allowed on reclaimed and gray water piping systems. Hose bibbs on rainwater harvesting and storm water outdoor irrigation piping systems must be identified as required by Section 608.8 and shall be installed as required by Section F104.12 of the *Dallas Plumbing Code*.
- 1301.14 Pipes. Water reuse pipes must not be run or laid in the same trench as potable water pipes. A 10-foot (3048 mm) horizontal separation must be maintained between any water reuse pipe and potable water piping. Buried potable water pipes crossing water reuse piping must be laid a minimum of 18 inches (457.2 mm) above the water reuse pipes. All piping shall be protected from freezing as required by Section 305.4.
- 1301.15 Identification. All piping, fittings, valves, reservoirs, appurtenances and devices within a water reuse system must be identified as containing nonpotable water. Piping used for water reuse must be identified as required by Section 608.8.

1301.16 Signage

1301.16.1 Room entrance signs. All installations using water reuse for flushing of water closets or urinals must be identified with permanently posted signs. Each sign must contain the statement "TO CONSERVE WATER, THIS BUILDING USES NONPOTABLE WATER TO FLUSH TOILETS AND URINALS." The words shall be legibly and indelibly printed on a sign constructed of corrosion-resistant waterproof material. The letters shall be not less than 0.5 inch (12.7 mm) white letters on a contrasting purple (consistent with Pantone color # 512) background. In addition to the required wordage, the pictograph shown in Figure 608.8.1 shall appear on the required signage. The signs must be located in a manner that is visible to all users and approved by the building official. The number of signs installed must also be approved by the building official.

1301.16.2 Equipment room signs. Each equipment room containing water reuse equipment must have a sign permanently posted in a visible location that contains the statement "CAUTION: NONPOTABLE WATER, DO NOT DRINK, DO NOT CONNECT TO DRINKING WATER SYSTEM," in 1-inch (25.4 mm) white letters on a contrasting purple (consistent with Pantone # 512) background. In addition to the required wordage, the pictograph shown in Figure 608.8.1 shall appear on the required signage. The signs must be located in a manner that is visible to all users and approved by the building official. The number of signs installed must also be approved by the building official. Nonpotable water outlets such as hose connections, open ended pipes and faucets shall be identified at the point of use for each outlet with signage required in this section.

1301.17 Approved uses of water reuse systems.

1301.17.1 Gray water. Only treated recycled gray water may be utilized for flushing water closets and urinals located in the same building and property as the gray water recycling system. Treated recycled gray water may be utilized for other commercial or industrial uses with prior approval of the building official for the specific use intended. Treated or untreated recycled gray water may be utilized for subsurface irrigation systems.

1301.17.2 Rain water harvesting. The rainwater collected from roofs and other on-site, above ground catchment systems may be used for flushing water closets and urinals located in the same building and property as the rainwater harvesting system. A rainwater harvesting system may be used for landscape irrigation.

1301.17.3 Storm water. All roofs, paved areas, yards, courts and courtyards must drain into a separate storm sewer system, or to an approved place of disposal. Storm water is permitted to discharge onto flat areas, such as streets or lawns provided that the storm water flows away from the building. Storm water may also be collected in an approved storage reservoir to be used for irrigation or water retention systems. Systems must be equipped with an overflow drain and the drain shall be installed as per Section 1301.10. The authority having jurisdiction shall give specific approval for the collection of storm water.

1301.17.4 Reclaimed water. Reclaimed water systems may be utilized for flushing water closets and urinals when approved by the building official. Reclaimed water may be utilized for other commercial or industrial uses with prior approval of the building official.

SECTION 1302 SYSTEMS FOR FLUSHING WATER CLOSETS AND URINALS

- 1302.1 Collection reservoir. The holding capacity of the reservoir shall be a minimum of twice the volume of water required to meet the daily flushing requirements of the fixtures supplied with nonpotable water, but not less than 50 gallons. The reservoir shall be sized to limit the retention time of gray water to a minimum of 72 hours.
- 1302.2 Disinfection. Gray water shall be disinfected and treated by an approved method that employs one or more disinfectants such as chlorine or ozone that are recommended for the use with the pipes, fittings and equipment by the manufacturer of the pipe, fittings and equipment. Gray water shall be disinfected and treated as needed to ensure that the required water quality is delivered at the point of use. Where chlorine is used for disinfection, the nonpotable water shall not contain more than 4 ppm (4mg/L) of chloramines or free chlorine when tested in accordance with ASTM D 1253. Where ozone is used for disinfection, the nonpotable water shall not contain gas bubbles having elevated levels of ozone at the point of use. The water reuse treatment system shall be on-site and shall comply with NSF 350.
 - 1302.2.1 Water quality. All non-potable water systems for each end use application shall meet the minimum water quality requirements established for the intended application by the authority having jurisdiction. Where nonpotable water from different sources is combined in a system, the system shall comply with the most stringent of the water quality requirements for the intended end use. Except where site conditions as specified in ASTM E 2727 affect the rainwater, collected rainwater shall be considered to have the parameters indicated in Table 1302.2.1.

Table 1302.2.1 Rainwater Quality

PARAMETER	VALUE		
pН	6.0-7.0		
BOD	Not greater than 10 mg/L		
NTU	Not greater than 2		
Fecal Coliform	No detectable fecal coli in 100 mL		
Sodium	No detectable sodium in 100 mL		
Chlorine	No detectable chlorine in 100 mL		
Enteroviruses	No detectable enteroviruses in 100 mL		

1302.2.2 Filtration. Nonpotable water utilized for flushing of water closets and urinals shall be filtered by a 100-micron or finer filter.

- 1302.3 Makeup water. Potable water may be supplied as a source of makeup water for a water reuse system. The potable water supply shall terminate at the reservoir by means of an approved air gap in accordance with Section 608 to prevent a backflow condition. There shall be a full-open valve located on the makeup water supply line to the collection reservoir. Make up water connections to a potable water system shall comply with Section 1301.6.
- **1302.4 Coloring.** The gray water shall be dyed blue or green with a food grade vegetable dye before such water is supplied for flushing of water closets and urinals.
- 1302.5 Materials. Distribution piping shall conform to one of the standards listed in Table 605.4.
- 1302.6 Identification. Distribution piping and reservoirs shall be identified as containing nonpotable water. Piping identification shall be in accordance with Section 608.8."
- 63. Subsection 1401.1, "Scope," of Section 1401, "General," of Chapter 14, "Subsurface Landscape Irrigation Systems," of the 2015 International Plumbing Code is amended to read as follows:
- "1401.1 Scope. The provisions of Chapter 14 shall govern the materials, design, construction and installation of subsurface landscape irrigation systems connected to nonpotable water from onsite water reuse systems. Other provisions of this code associated with nonpotable water systems shall also apply."
- 64. Subsection 1401.4, "Inspections," of Section 1401, "General," of Chapter 14, "Subsurface Landscape Irrigation Systems," of the 2015 International Plumbing Code is amended to read as follows:
- "1401.4 Inspections. Subsurface landscape irrigation systems shall be inspected in accordance with Section 304 [107] of Chapter 52, the Administrative Procedures for the Construction Codes of the Dallas City Code."

65. The ANSI standards of Chapter 15, "Referenced Standards," of the 2015 International Plumbing Code are amended to read as follows:

American National Standards Institute

	American National Standards institute		
	25 West 43 rd Street, Fourth Floor		
	New York, NY 10036		
Standard		Referenced	
reference		in code	
number	Title	section number	
A117.1—09	Accessible and Useable Buildings and Facilities	417.5	
A118.10—99	Specifications for Load Bearing, Bonded, Waterproof Membranes for	or Thin Set	
	Ceramic Tile and Dimension Stone Installation	417.5.2.5, 417.5.2.6	
Z4.3—95	Minimum Requirements for Nonsewered Waste-disposal Systems.	311.1	
Z21.2299(R2003)	Relief Valves for Hot Water Supply Systems with Addenda Z21.22	a2000	
` ,	(R2003) and Z21.22b—2001 (R2003)		
CSA B45.5—11/			

66. Appendix E, "Sizing of Water Piping System," of the 2015 International Plumbing Code is adopted.

Plastic Plumbing Fixtures 407.1, 415.1, 416.1, 416.2, 417.1, 418.1, 419.1, 420.1"

67. A new Appendix F, "Standards for Designing, Installing and Maintaining Landscape Irrigation Systems," is adopted as part of the 2015 International Plumbing Code to read as follows:

"APPENDIX F STANDARDS FOR DESIGNING, INSTALLING AND MAINTAINING LANDSCAPE IRRIGATION SYSTEMS

SECTION F101 SCOPE AND PURPOSE

- **F101.1 Scope.** This appendix applies to the installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of *irrigation systems* within the city. This appendix regulates the installation of backflow prevention devices, control valves, automatic irrigation controllers, control wiring and *water conservation* required for the proper design, installation and operation of *irrigation systems*. All *irrigation systems* must comply with the provisions of this appendix and with 30 *Texas Administrative Code* Chapter 344. All irrigation systems supplied by a nonpotable water source shall comply with Chapter 13 and all other sections of this code applicable to nonpotable water uses.
- **F101.2** Purpose. The purpose of this appendix is to require all *irrigation systems* to be designed, installed, maintained, altered, repaired, serviced and operated in a manner that will promote *water conservation*.

"ANSI

IAPMO Z124—11

SECTION F102 DEFINITIONS

F102.1 Definitions. The following words and terms shall have the meanings shown herein:

IRRIGATION SYSTEM. An assembly of component parts that is permanently installed for the controlled distribution and conservation of water to irrigate any type of landscape vegetation in any location, reduce dust or control erosion. This term does not include a system that is used on or by an agricultural operation as defined by Section 251.002 of the *Texas Agriculture Code*.

IRRIGATION TECHNICIAN. A person who works under the supervision of a licensed irrigator to install, maintain, alter, repair, service or supervise installation of an *irrigation system*, including the connection of such system in or to a private or public, raw or potable water supply system or any water supply, and who is required to be licensed under this ordinance or 30 *Texas Administrative Code* Chapter 344.

MAINTENANCE, ALTERATION, REPAIR OR SERVICE. Any activity that involves opening the irrigation main line to the atmosphere at any point prior to the discharge side of any irrigation zone control valve. This includes, but is not limited to, repairing or connecting into a main supply pipe, replacing a zone control valve or repairing a zone control valve in a manner that opens the system to the atmosphere.

TCEQ. Texas Commission on Environmental Quality.

WATER CONSERVATION. The design, installation, service and operation of an *irrigation* system in a manner that prevents the waste of water, promotes the most efficient use of water, and applies the least amount of water that is required to maintain healthy individual plant material or turf, reduce dust and control erosion.

SECTION F103 DESIGN OF THE IRRIGATION PLAN

F103.1 Minimum standards for the design of the irrigation plan.

F103.1.1 Irrigation plan. A licensed irrigator or landscape architect shall prepare an irrigation plan for each site where a new *irrigation system* will be installed. A city approved irrigation plan must be on the job site at all times during the installation of the *irrigation system*. A drawing showing the actual system installation must be provided to the *irrigation system* owner on completion of the installation. During installation, variances from the original plan may be authorized by the licensed irrigator if the variance from the plan does not:

- 1. Diminish the operational integrity of the irrigation system;
- 2. Violate any requirements of this ordinance or 30 Texas Administrative Code Chapter 344; and

- 3. Go unnoted in red on the irrigation plan.
- **F103.1.2** Coverage area. The irrigation plan must include complete coverage of the areas to be irrigated; areas not irrigated must be noted on the irrigation plan.
- **F103.1.3 Plan requirements.** All irrigation plans used for *irrigation system* installation must be drawn to scale. Two sets of irrigation drawings must be submitted, one set to be retained as part of the inspection records, the other set is required for onsite inspection and must be given to the property owner on completion of the *irrigation system*. Submitted irrigation plans must have a minimum font size of 3/32", a maximum drawing sheet size of 36" X 48" and must include the following information:
 - 1. the dated seal and signature of either a licensed irrigator or a landscape architect;

Exceptions:

- 1. Not required for property that is owned and occupied solely as a person's homestead.
- 2. Not required for irrigation plans submitted by a licensed and registered plumbing contractor.
- 2. all major physical features and the boundaries of the area to be watered;
- 3. north arrow;
- 4. a legend;
- 5. the zone flow measurement for each zone;
- 6. location and type of each:
 - 6.1. controller;
 - 6.2. rain and freeze sensors;
 - 6.3. all electrical splices; and
- 7. location, type, and size of each:
 - 7.1. water source, such as, but not limited to a water meter and point(s) of connection:
 - 7.2. backflow prevention device;

- 7.3. water emission device, including, but not limited to, spray heads, rotary sprinkler heads, quick-couplers, bubblers, drip or micro-sprays;
- 7.4. valve, including, but not limited to, zone valves, station solenoid valves, automatic master valves and isolation valves;
- 7.5. pressure regulation components;
- 7.6. main line and lateral piping;
- 7.7. scale used; and
- 7.8. design pressure.

SECTION FI04 DESIGN AND INSTALLATION

F104.1 Minimum design and installation requirements.

F104.1.1 Backflow protection. Any irrigation system connected to a public or private potable water system must be connected through a TCEQ-approved backflow prevention method. The backflow prevention device must be approved by the American Society of Sanitary Engineering or the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California, the Uniform Plumbing Code, the Dallas Plumbing Code or a city-approved laboratory that has equivalent capabilities for both the laboratory and field evaluation of backflow prevention assemblies. Backflow prevention devices must be installed in accordance with the laboratory approval standards, or if the approval does not include specific installation information, the manufacturer's current published recommendations.

F104.1.1.1 Backflow device installation. Connections between the potable water supply and the approved backflow preventer must be of the same type of material and joining method as required by the *Dallas Plumbing Code* and *Dallas One- and Two-Family Dwelling Code*. The backflow device must be installed a maximum of 10 feet from the water meter on the property being served by the *irrigation system*. Backflow devices may not be installed in the parkway (between the sidewalk and the public right-of-way.)

Exceptions:

- 1. Atmospheric vacuum breakers must be installed in an accessible location.
- 2. Backflow devices may be installed in the public right-of-way or at a distance greater than 10 feet from the water meter or potable water supply with prior approval from the building official.

F104.1.1.2 Approved types of backflow devices. The following types of backflow devices are approved:

- l. Air gap.
- 2. Atmospheric vacuum breaker (AVB).
- 3. Pressure vacuum breaker (PVB).
- 4. Double check backflow preventer (DCA).
- 5. Reduced pressure principal backflow preventer (RPZ).
- **F104.1.1.3 Double check backflow assembly (DCA).** A DCA must be installed and made accessible by a minimum jumbo valve box (length 26 inches X 19 inches) or larger.
 - **F104.1.1.3.1** Valve box. A valve box must be installed on compacted soil. Rocks, brick or other types of support may not be used. A valve box cover must be installed flush with finish grade. A minimum 2 inch air gap is required between the bottom of the DCA and 12 inches of washed rock.
- F104.1.1.4 Reduced pressure principal backflow preventer (RPZ). An RPZ must be installed according to the manufacturer's installation requirements for aboveground installation and protected from freezing. Twelve inches of washed rock must be installed under the RPZ.
- **F104.1.2 Isolation valve and y-type strainer.** An isolation valve and y-type strainer must be installed prior to the approved backflow prevention assembly in an approved valve box. The isolation valve and y-type strainer must be installed a maximum of 24 inches from the installation of the approved backflow prevention assembly.
- F104.2 Limitation. No irrigation design or installation may require the use of any component, including the water meter, in a way which exceeds the manufacturer's published performance limitations for the component.

F104.3 Emission devices.

- **F104.3.1 Emission devices.** The maximum spacing between emission devices must not exceed the manufacturer's published radius or spacing of the device(s). The radius or spacing is determined by referring to the manufacturer's published specifications for a specific emission device at a specific operating pressure.
- **F104.3.2** Aboveground spray. New *irrigation systems* may not utilize aboveground spray emission devices in landscaped areas that are less than 60 inches in width or length not including impervious surfaces which contain impervious pedestrian or vehicular traffic surfaces, along two or more perimeters. If pop-up sprays or rotary sprinkler heads are used in

a new *irrigation system*, the sprinkler heads must direct flow away from any adjacent surface and may not be installed closer than four inches from a hardscape, such as, but not limited to, a building foundation, fence, concrete, asphalt, pavers or stones set with mortar.

Exception: Narrow paved walkways, jogging paths, golf cart paths or other small areas located in cemeteries, parks, golf courses or other public areas may be exempted from this requirement if the runoff drains into a landscaped area.

F104.3.3 Water pressure. Emission devices must be installed to operate at the minimum and not above the maximum sprinkler head pressure as published by the manufacturer for the nozzle and head spacing that is used. Methods to achieve the water pressure requirements include, but are not limited to, flow control valves, a pressure regulator or pressure compensating spray heads.

F104.4 Misting. Misting must be kept to a minimum and may not be used as an irrigation method for shrubs and groundcover.

F104.5 Piping.

F104.5.1 Velocity. Piping in *irrigation systems* must be designed and installed so that the flow of water in the pipe will not exceed a velocity of 5 feet per second for polyvinyl chloride (PVC) pipe or exceed the manufacturer's recommendation for other piping materials.

F104.5.2 PVC pipe primer solvent. All new *irrigation systems* installed using PVC pipe and fittings must be primed with a colored primer prior to applying the PVC cement in accordance with the *Dallas Plumbing Code* and the *Dallas One-and Two-Family Dwelling Code*.

F104.5.3 Depth coverage of piping. Piping must be installed to provide a minimum depth coverage of 6 inches of select backfill between the top of the pipe and the natural grade of the topsoil. All portions of the *irrigation system* that fail to meet this standard must be noted on the irrigation plan. If the area being irrigated has rock at a depth of 6 inches or less, select backfill may be mounded over the pipe. Mounding must be noted on the irrigation plan and discussed with the *irrigation system* owner or owner's representative to address any safety issues. All trenches and holes created during installation of an *irrigation system* must be backfilled and compacted to the original grade. Mechanical excavation is not allowed where damage could occur to a tree root system per Section 51A-10.136 of the *Dallas Development Code*.

Exception: If a utility, man-made structure or roots create an unavoidable obstacle which makes the 6 inch depth coverage requirement impractical, the piping must be installed to provide a minimum of 2 inches of select backfill between the top of the pipe and the natural grade of the topsoil.

F104.6 Irrigation zones. *Irrigation systems* must have separate zones based on plant material type, microclimate factors, topographic features, soil conditions and hydrological requirements.

Zones must be designed and installed so that all of the emission devices in that zone irrigate at the same precipitation rate.

F104.7 Spray over impervious surfaces prohibited. *Irrigation systems* must not spray water over surfaces made of concrete, asphalt, brick, wood, stones set with mortar or any other impervious material, such as, but not limited to, walls, fences, sidewalks, streets, etc.

F104.8 Master valve. A master valve must be installed on the discharge side of the backflow prevention device on all new installations in an approved valve box.

F104.9 Rain and freeze shut-off devices. All automatically controlled *irrigation systems* must include sensors or other technology designed to inhibit or interrupt operation of the *irrigation system* during periods of moisture, rainfall or freezing temperatures. Rain or moisture and freeze shut-off technology must be installed according to the manufacturer's published recommendations. All existing automatic *irrigation systems* must include a sensor or other technology designed to inhibit or interrupt operation of the *irrigation system* during periods of moisture, rainfall or temperatures of 37° or below.

F104.10 Valves. All new irrigation systems and major maintenance, alterations, repairs or service, including repair or replacement of the backflow device, must include an isolation valve and y-type strainer between the water meter and the backflow prevention device. A master valve must be installed after the backflow preventer. Zone valve(s), station solenoid valve(s), an automatic master valve and isolation valves must be installed in an approved valve box for accessibility, repair and service.

F104.11 Irrigation system wiring.

F104.11.1 Underground electrical wiring. Underground electrical wiring used to connect an automatic controller to any electrical component of the *irrigation system* must be listed by Underwriters Laboratories as acceptable for direct underground burial.

F104.11.2 Component wiring size. Electrical wiring that connects any *irrigation system* electrical components must be sized according to the manufacturer's recommendation.

F104.11.3 Wire splicing. Electrical wire splices which may be exposed to moisture must be waterproof as certified by the wire splice manufacturer. Electrical splice locations must be noted on the irrigation plan.

F104.11.4 Automatic controller wiring. Underground electrical wiring that connects an automatic controller to any electrical component of the *irrigation system* must be buried with a minimum of 6 inches of select backfill.

F104.11.5 Exposed wiring. All exposed wiring must be protected from physical damage in compliance with the *Dallas Electric Code*.

Exception: Listed cord and plug.

- F104.12 Non-potable water. Water contained within the piping of an *irrigation system* is deemed to be non-potable. No drinking or domestic water usage, such as, but not limited to, filling swimming pools or decorative fountains, may be connected to an *irrigation system*. If a hose bibb (an outdoor water faucet that has hose threads on the spout) is connected to an *irrigation system* for the purpose of providing supplemental water to an area, the hose bibb must be installed using a quick coupler key on a quick coupler installed in a covered purple valve box (consistent with Pantone # 512). The hose bibb and the valve box cover must be labeled "NON-POTABLE WATER DO NOT DRINK" and "AGUA DE RECIPERACION NO BEBER". The lettering shall be white on a purple background (consistent with Pantone # 512). In addition to the required wordage, the pictograph shown in Figure 608.8.1 shall appear on the required signage. An isolation valve must be installed upstream of a quick coupler connecting a hose bibb to an *irrigation system*. The area being watered with a non-potable source shall be identified as per Section F106.1.5.
- **F104.13 Check valves.** Check valves are required where elevation differences may result in low head drainage. Check valves may be located at the sprinkler head(s) or on the lateral lines.
- **F104.14 Direct supervision.** Job site supervision is required by either a licensed irrigator or *irrigation technician* while work is being performed. When a licensed irrigator is not onsite, the licensed irrigator shall be responsible for ensuring that a licensed *irrigation technician* is on-site to supervise the installation of the *irrigation system*.
- F104.15 Programmable irrigation controller. All new irrigation system installations require the installation of a programmable irrigation controller. The programmable irrigation controller must be equipped with an emergency back-up power supply in the event of a primary power failure.
 - **F104.15.1 Manufacturer's instructions.** A programmable irrigation controller must be installed according to the manufacturer's installation instructions.
 - F104.15.2 Maximum height. A programmable irrigation controller may not be mounted more than 60 inches above a level floor surface.
 - F104.15.3 Power surges. The electrical power supplying a programmable irrigation controller must be protected from power surges or utilize a dedicated electrical circuit.
 - **F104.15.4 Minimum installation distance.** A programmable irrigation controller must be installed at least 15 inches from center to any side wall or similar obstruction.

Exception: When the manufacturer's installation instructions require a lesser distance.

SECTION F105 COMPLETION AND MAINTENANCE

F105.1 Completion of irrigation system installation.

F105.1.1 Completion. The licensed irrigator, installer or technician shall complete the following items upon completion of the *irrigation system* installation:

- 1. A final "walk through" with the *irrigation system's* owner or the owner's representative to explain the operation of the system.
- 2. A maintenance checklist with the signature of the *irrigation system's* owner or owner's representative and signed, dated and sealed by the licensed irrigator, installer or technician. If the *irrigation system's* owner or owner's representative is unwilling or unable to sign the maintenance checklist, the irrigator shall note the time and date of the refusal on the *irrigation system's* owner or owner's representative's signature line. The *irrigation system* owner or owner's representative will be given the original maintenance checklist and a duplicate copy of the maintenance checklist shall be maintained by the licensed irrigator. The items on the maintenance checklist must include but are not limited to:
 - 2.1. The manufacturer's manual for the automatic controller.
 - 2.2. A seasonal (spring, summer, fall, winter) watering schedule based on either current/real time evapotranspiration or monthly historical reference evapotranspiration (historical ET) data, monthly effective rainfall estimates, plant landscape coefficient factors and site factors.
 - 2.3. A list of components, such as the nozzle or pump filters, and other such components that require maintenance and the recommended frequency for the service.
- 3. A permanent sticker which contains the licensed irrigator's name, license number, company name, telephone number and the dates of the warranty period affixed to each programmable irrigation controller installed by the licensed irrigator, installer or technician. If the *irrigation system* is manual, the sticker must be affixed to the original maintenance checklist. Programmable irrigation controllers listed and installed for outdoor installation require a water proof permanent sticker. The information contained on the sticker, whether indoor or outdoor, must be printed with waterproof ink.
- 4. Provide the *irrigation system's* owner or owner's representative a copy of the irrigation plan indicating the actual system installation.
- 5. The statement, "This irrigation system has been installed in accordance with all applicable state and local laws, ordinances, rules, regulations or orders. I have tested

- the system and determined that it has been installed according to the irrigation plan and is properly adjusted for the most efficient application of water at this time."
- 6. Provide a certificate of compliance to the building official and the property owner or the property owner's representative stating that the requirements of this section and 30 *Texas Administrative Code* Chapter 344 have been completed.

F105.2 Maintenance, alteration, repair or service of irrigation systems.

- F105.2.1 Irrigator responsibility. The irrigator is responsible for all work that the irrigator performed during the maintenance, alteration, repair or service of an irrigation system during the warranty period. The irrigator or business owner is not responsible for the professional negligence of any other irrigator who subsequently conducts any irrigation service on the same irrigation system.
- F105.2.2 Trenches and holes. All trenches and holes created during the maintenance, alteration, repair or service of an irrigation system must be returned to the original grade with compacted select backfill.
- **F105.2.3 PVC primer.** Colored PVC pipe primer solvent must be used on all pipes and fittings used in the *maintenance*, *alteration*, *repair or service* of an *irrigation system* in accordance with the *Dallas Plumbing Code* or *Dallas One- and Two-Family Dwelling Code*.
- F105.2.4 Maintenance, alteration, repair or service. When maintenance, alteration, repair or service of an irrigation system is required and performed and an isolation valve, y-type strainer, rain and freeze sensors or approved backflow device are not present, the valve(s) and or sensors must be installed, permitted, tested and inspected. Existing approved backflow device(s) must be tested and test report given to the building official.

SECTION F106 RECLAIMED WATER OR WATER WELLS

- **F106.1 Reclaimed water or water wells.** Reclaimed water, storm water, rainwater harvest, gray water or water wells may be utilized in landscape *irrigation systems*.
 - **F106.1.1 Connections.** An *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water must not be directly connected to the potable water supply.

Exception: When potable water is protected by an air gap as defined by and installed in accordance with the *Dallas Plumbing Code* or the *Dallas One- and Two-Family Dwelling Code* and the potable water system shall be protected by means of a reduced pressure backflow preventer immediately at the point of connection.

F106.1.2 Edible crops. Water from an *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water may not make direct contact with edible crops, unless the crop is pasteurized before consumption.

- **F106.1.3 Property lines.** An *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water must not spray water across property lines.
- **F106.1.4 Purple components.** An *irrigation system* utilizing reclaimed water, storm water, rainwater harvest, gray water or well water must be installed using purple components (consistent with Pantone # 512) as detailed in the *Dallas Plumbing Code* per the *Dallas One-and Two-Family Dwelling Code*.
- F106.1.5 Sign. Areas being irrigated utilizing a water reuse system or well shall be properly identified. Signs shall be a minimum 8 inch by 8 inch corrosion-resistant waterproof sign. Signage shall read as follows: "NON-POTABLE WATER DO NOT DRINK" and "AGUA DE RECUPERACION NO BEBER." The words shall be legibly and indelibly printed and shall be not less than 0.5 inch (12.7 mm) in height on a purple background (consistent with Pantone color # 512) with white letters. In addition to the required wordage, the pictograph shown in Figure 608.8.1 shall appear on the required signage. The signs must be located in a manner that is visible to all persons and approved by the building official. The number of signs installed must also be approved by the building official.
 - F106.1.6 Backflow prevention. Backflow prevention on the reclaimed water supply line must be in accordance with the *Dallas Plumbing Code*, *Dallas One- and Two-Family Dwelling Code*, and Dallas Water Utilities rules and regulations."
 - 68. Appendices A, B, C and D of the 2015 International Plumbing Code are not adopted.
- 69. All chapters of the 2015 International Plumbing Code adopted by this ordinance are subchapters of Chapter 54 of the Dallas City Code, as amended.
- 70. All references in the 2015 International Plumbing Code to the fire code, building code, mechanical code, electrical code, residential code, existing building code, energy conservation code, fuel gas code, and green construction code refer, respectively, to Chapters 16, 53, 55, 56, 57, 58, 59, 60, and 61 of the Dallas City Code.
- SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of

this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 54 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 4. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 5.	That this ordinance	will take effect of	on,	2017, and	it is
accordingly so ordaine	ed.				

APPROVED AS TO FORM:	
LARRY E. CASTO, City Attorney	
Ву	
Assistant City Attorney	
Passed	

ORDINANCE NO.

An ordinance amending Chapter 55, "Dallas Mechanical Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of the International Mechanical Code of the International Code Council, Inc.; regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use, and maintenance of mechanical work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 55, "Dallas Mechanical Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Mechanical Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

- 1. Page xi, "Legislation," is deleted.
- 2. Chapter 1, "Administration," of the 2015 International Mechanical Code is deleted and replaced with a new Chapter 1, "Administration," to read as follows:

"CHAPTER 1 ADMINISTRATION

SECTION 101 GENERAL

101.1 Title. These regulations are known as the *Dallas Mechanical Code*, hereinafter referred to as "this code."

101.2 Scope. This code regulates the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings. This code also regulates those mechanical systems, system components, equipment and appliances specifically addressed herein. The installation of fuel gas distribution piping and equipment, fuel gas-fired appliances and fuel gas-fired appliance venting systems are regulated by the *Dallas Fuel Gas Code*.

Exceptions:

- 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures must comply with the *Dallas One- and Two-Family Dwelling Code*.
- 2. Mechanical systems in existing buildings undergoing repair, alterations, or additions, and change of occupancy may comply with the *Dallas Existing Building Code*.

101.3 Administrative procedures. Except as otherwise specified in this code, all provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to this code.

101.4 Referenced codes and standards. The codes and standards referenced in this code are considered part of the requirements of this code to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the city of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards is considered to reference the amendments as well. Any reference made to NFPA 70 or the ICC Electrical Code means the Dallas Electrical Code, as amended. References made to the International Plumbing Code, the International Building Code, the International Fire Code, the International Energy Conservation Code, the International Fuel Gas Code, the International Existing Building Code, and the International Residential Code, respectively mean the Dallas Plumbing Code, the Dallas Building Code, the Dallas Fire Code, the Dallas Energy Conservation Code, the Dallas Fuel Gas Code, the Dallas Existing Building Code, and the Dallas One- and Two-Family Dwelling Code, as amended.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's instructions apply."

3. The definition of "Environmental Air," in Section 202, "General Definitions," of

Chapter 2, "Definitions," of the 2015 International Mechanical Code is amended to read as follows:

"ENVIRONMENTAL AIR. Air that is conveyed to or from occupied areas through ducts which are not part of the heating or air-conditioning system, such as ventilation for human usage,

domestic kitchen range exhaust, bathroom exhaust, domestic clothes dryer exhaust [and parking garage exhaust]."

- 4. Subsection 304.3, "Elevation of Ignition Source," of Section 304, "Installation," of Chapter 3, "General Regulations," of the 2015 International Mechanical Code is amended to read as follows:
- "304.3 Elevation of ignition source. Equipment and appliances having an *ignition source* and located in hazardous locations and public garages, private garages, repair garages, automotive motor fuel-dispensing facilities and parking garages shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor surface on which the *equipment* or appliance rests. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

- 1. Elevation of the ignition source is not required for appliances that are listed as flammable vapor ignition resistant.
- 2. Electric appliances.
- **304.3.1 Parking garages.** Connection of a parking garage with any room in which there is a fuel-fired *appliance* shall be by means of a vestibule providing a two-doorway separation, except that a single door is permitted where the sources of ignition in the *appliance* are elevated in accordance with Section 304.3.

Exception: This section shall not apply to *appliance* installations complying with Section 304.6."

- 5. Subsection 304.7, "Private Garages," of Section 304, "Installation," of Chapter 3, "General Regulations," of the 2015 International Mechanical Code is deleted.
- 6. Subsection 306.3, "Appliances in Attics," of Section 306, "Access and Service Space," of Chapter 3, "General Regulations," of the 2015 International Mechanical Code is amended to read as follows:
- "306.3 Appliances in attics. Attics containing appliances <u>requiring access</u> shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length measured along the centerline of the

passageway from the opening to the *appliance*. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the *appliance*. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm) or larger where such dimensions are not[, and] large enough to allow removal of the largest *appliance*. A walkway to an *appliance* must be rated as a floor as approved by the building official. At a minimum, one of the following must be provided for access to the attic space:

- 1. A permanent stair.
- 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
- 3. An access door from an upper floor level.

Due to structural conditions, an access panel may be used in lieu of items 1, 2 or 3 with the prior approval of the building official.

Exceptions:

- 1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
- 2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.
- 306.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the *appliance* location in accordance with the *Dallas Electric Code*. Low voltage wiring of 50 volts or less must be installed in an approved manner as defined in the *Dallas Electrical Code* in order to prevent physical damage to the wiring [NFPA 70]."
- 7. Subsection 306.5, "Equipment and Appliances on Roofs or Elevated Structures," of Section 306, "Access and Service Space," of Chapter 3, "General Regulations," of the 2015 International Mechanical Code is amended to read as follows:
- "306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access a permanent [such equipment or appliances, an] interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and must extend to the equipment and appliances' level service space. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units

vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- 1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
- 2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall be not greater than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
- 3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
- 4. There shall be not less than 18 inches (457 mm) between rails.
- 5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a 300-pound (136.1 kg) load.
- 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488.2 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
- 7. Climbing clearance. The distance from the centerline on the rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15-inches (381 mm) shall be provided on both sides of the ladder measured from midpoint of and parallel with the rungs except where cages or wells are installed.
- 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder.
- 9. Ladders shall be protected against corrosion by approved means.
- 10. Access to ladders shall be provided at all times.

Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

- **306.5.1 Sloped roofs.** Where appliances, *equipment*, fans or other components that require service are installed on [a] roofs having [a] slopes greater than four [of three] units vertical in 12 units horizontal (33[25]-percent slope) [or greater] and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches (406.4 mm) in width with substantial cleats spaced not more than 16 inches (406.4 mm) apart must be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance or equipment to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the Dallas [International] Building Code. Access shall not require walking on roofs having a slope greater than four units vertical in 12 units horizontal (33-percent slope). Where access involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be provided with ladders installed in accordance with Section 306.5 or stairways installed in accordance with the requirements specified in the Dallas [International] Building Code in the path of travel to and from appliances, fans or equipment requiring service.
- **306.5.2 Electrical requirements.** A receptacle outlet shall be provided at or near the *equipment* location in accordance with the *Dallas Electrical Code* [NFPA 70]."
- 8. Section 306, "Access and Service Space," of Chapter 3, "General Regulations," of the 2015 International Mechanical Code is amended by adding a new Subsection 306.6, "Water Heaters Above Ground or Floor," to read as follows:
- "306.6 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than 8 feet (2438 mm) above the ground or floor level, it must be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A water heater may be reached by portable ladder if the water heater has a capacity of no more than 10 gallons (or larger with prior approval), it is capable of being accessed through a lay-in ceiling, and it is installed not more than 10 feet (3048 mm) above the ground or floor level.

- **306.6.1. Illumination and convenience outlet.** Whenever the attic, roof, mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet must be provided in accordance with Section 306.3.1."
- 9. Subsection 307.2, "Evaporators and Cooling Coils," of Section 307, "Condensate Disposal," of Chapter 3, "General Regulations," of the 2015 International Mechanical Code is amended to read as follows:

"307.2 Evaporators and cooling coils. Condensate drain systems shall be provided for *equipment* and appliances containing evaporators or cooling coils. Condensate drain systems shall be designed, constructed and installed in accordance with Sections 307.2.1 through 307.2.5.

Exception: Evaporators and cooling coils that are designed to operate in sensible cooling only and not support condensation shall not be required to meet the requirements of this section.

- **307.2.1 Condensate disposal.** Condensate from all cooling coils and evaporators shall be conveyed from the drain pan [outlet] to an approved place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate shall not discharge into a street, alley, sidewalk, rooftop or other areas so as to cause a nuisance.
- 307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polyethylene, ABS, CPVC, PVC, or polypropylene pipe or tubing. When exposed to ultra violet light, schedule 80 PVC pipe or tubing is required. Components shall be selected for the pressure, [and] temperature, and exposure rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the Dallas [International] Plumbing Code relative to the material type. Condensate waste and drain line size shall be not less than ¾-inch (19.1 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2.
- **307.2.3** Auxiliary and secondary drain systems. In addition to the requirements of Section 307.2.1, where damage to any building components could occur as a result of overflow from the *equipment* primary condensate removal system, one of the following auxiliary protection methods shall be provided for each cooling coil or fuel-fired *appliance* that produces condensate:
 - 1. An auxiliary drain pan with a separate drain shall be provided under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1 ½ inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit, or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236 inch (0.6010 mm) (No. 24 gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).
 - 2. A separate overflow drain line shall be connected to the drain pan provided with the *equipment*. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.

However, the conspicuous point must not create a hazard such as dripping over a street, alley, sidewalk, rooftop or other areas so as to create a nuisance.

- 3. An auxiliary drain pan without a separate drain line shall be provided under the coils on which condensate will occur. Such pan shall be equipped with a water-level detection device conforming to UL 508 that will shut off the *equipment* served prior to overflow of the pan. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section. A water level detection device may be installed only with prior approval of the building official.
- 4. A water level detection device conforming to UL 508 shall be provided that will shut off the *equipment* served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line, or in the equipment-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

Exception: Fuel-fired appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.

- 307.2.3.1 Water-level monitoring devices. On down-flow units and all other coils that do not have a secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the *equipment* served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted. A water level detection device may be installed only with prior approval of the building official.
- 307.2.3.2 Appliances, equipment and insulation in pans. Where appliances, equipment or insulation are subject to water damage when auxiliary drain pans fill, that portion of the appliance, equipment and insulation shall be installed above the rim of the pan. Supports located inside of the pan to support the appliance or equipment shall be water resistant and approved.
- **307.2.4 Traps.** Condensate drains shall be trapped as required by the *equipment* or *appliance* manufacturer.
 - 307.2.4.1 Ductless mini-split system traps. Ductless mini-split equipment that produces condensate shall be provided with an inline check valve located in the drain line, or a trap.
 - 307.2.5 Drain line maintenance. Condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut.

- 10. Paragraph 403.2.1, "Recirculation of Air," of Subsection 403.2, "Outdoor Air Required," of Section 403, "Mechanical Ventilation," of Chapter 4, "Ventilation," of the 2015 International Mechanical Code is amended to read as follows:
 - "403.2.1 Recirculation of air. The outdoor air required by Section 403.3 shall not be recirculated. Air in excess of that required by Section 403.3 shall not be prohibited from being recirculated as a component of supply air to building spaces, except that:
 - 1. Ventilation air shall not be recirculated from one *dwelling* to another or to dissimilar occupancies.
 - 2. Supply air to a swimming pool and associated deck areas shall not be recirculated unless such air is dehumidified to maintain the relative humidity of the area at 60 percent or less. Air from this area shall not be recirculated to other spaces where more than 10 percent of the resulting supply airstream consists of air recirculated from these spaces.
 - 3. Where mechanical exhaust is required by Note b in Table 403.3.1.1, recirculation of air from such spaces shall be prohibited. Recirculation of air that is contained completely within such spaces shall not be prohibited. Where recirculation of air is prohibited, all air supplied to such spaces shall be exhausted, including any air in excess of that required by Table 403.3.1.1.
 - 4. Where mechanical exhaust is required by Note g in Table 403.3.1.1, mechanical exhaust is required and recirculation from such spaces is prohibited where more than 10 percent of the resulting supply airstream consists of air recirculated from these spaces. Recirculation of air that is contained completely within such spaces shall not be prohibited.
 - 5. Toilet rooms within private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air."
 - 11. Subsection 501.3, "Exhaust Discharge," of Section 501, "General," of Chapter 5,

"Exhaust Systems," of the 2015 International Mechanical Code is amended to read as follows:

"501.3 Exhaust discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic, crawl space, or be directed onto walkways.

Exceptions:

- 1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of *dwelling units* having private attics.
- 2. Commercial cooking recirculating systems.
- 3. Where installed in accordance with the manufacturer's instructions and where mechanical or *natural ventilation* is otherwise provided in accordance with Chapter 4, *listed* and *labeled* domestic ductless range hoods shall not be required to discharge to the outdoors.
- 4. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.
- **501.3.1 Location of exhaust outlets.** The termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:
 - 1. For ducts conveying explosive or flammable vapors, fumes or dusts: 30 feet (9144 mm) from property lines; 10 feet (3048 mm) from operable openings into buildings; 6 feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls and operable openings into buildings which are in the direction of the exhaust discharge; 10 feet (3048 mm) above adjoining grade.
 - 2. For other product-conveying outlets, including but not limited to enclosed parking garage, loading dock, and motor vehicle repair garage exhaust outlets: 10 feet (3048 mm) from the property lines; 3 feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from operable openings into buildings; 10 feet (3048 mm) above adjoining grade.
 - 3. For all *environmental air* exhaust: 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable openings into buildings for all occupancies other than Group U, and 10 feet (3048 mm) from mechanical air intakes. Such exhaust shall not be considered hazardous or noxious.
 - 4. Exhaust outlets serving structures in flood hazard areas shall be installed at or above the elevation required by Section 1612 of the <u>Dallas</u> [International] Building Code for utilities and attendant equipment.
 - 5. For specific systems see the following sections:
 - 5.1. Clothes dryer exhaust, Section 504.4.
 - 5.2. Kitchen hoods and other kitchen exhaust *equipment*, Section 506.3.13, 506.4 and 506.5.
 - 5.3. Dust stock and refuse conveying systems, Section 511.2.

- 5.4. Subslab soil exhaust systems, Section 512.4.
- 5.5. Smoke control systems, Section 513.10.3.
- 5.6. Refrigerant discharge, Section 1105.7.
- 5.7. Machinery room discharge, Section 1105.6.1.
- 501.3.2 Exhaust opening protection. Exhaust openings that terminate outdoors shall be protected with corrosion-resistant screens, louvers or grilles. Openings in screens, louvers and grills shall be sized not less than ¼ inch (6.4 mm) and not larger than ½ inch (12.7 mm). Openings shall be protected against local weather conditions. Louvers that protect exhaust openings in structures located in hurricane-prone regions, as defined in the <u>Dallas</u> [International] Building Code, shall comply with AMCA Standard 550. Outdoor openings located in exterior walls shall meet the provisions for exterior wall opening protectives in accordance with the <u>Dallas</u> [International] Building Code."
- 12. Paragraph 504.8.2, "Duct Installation," of Subsection 504.8, "Domestic Clothes Dryer Ducts," of Section 504, "Clothes Dryer Exhaust," of Chapter 5, "Exhaust Systems," of the 2015 International Mechanical Code is amended to read as follows:
 - "504.8.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners [that protrude more than 1/8 inch (3.2 mm) into the inside of the duct]."
- 13. Subsection 505.1, "Domestic Systems," of Section 505, "Domestic Kitchen Exhaust Equipment," of Chapter 5, "Exhaust Systems," of the 2015 International Mechanical Code is amended to read as follows:
- "505.1 Domestic systems. Where domestic range hoods and domestic appliances equipped with downdraft exhaust are provided within dwelling units, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems.

Exceptions:

1. [In other than Group I-1 and I-2,] W[w]here installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.

- 2. Ducts for domestic kitchen cooking appliances equipped with downdraft exhaust systems shall be permitted to be constructed of Schedule 40 PVC pipe and fittings provided that the installation complies with all of the following:
 - 2.1. The duct shall be installed under a concrete slab poured on grade.
 - 2.2. The underfloor trench in which the duct is installed shall be completely backfilled with sand or gravel.
 - 2.3. The PVC duct shall extend not more than 1 inch (25 mm) above the indoor concrete floor surface.
 - 2.4. The PVC duct shall extend not more than 1 inch (25 mm) above grade outside of the building.
 - 2.5. The PVC ducts shall be solvent cemented."
- 14. Subsection 505.3, "Common Exhaust Systems for Domestic Kitchens Located in Multistory Structures," of Section 505, "Domestic Kitchen Exhaust Equipment," of Chapter 5, "Exhaust Systems," of the 2015 International Mechanical Code is amended to read as follows:
- "505.3 Common exhaust systems for domestic kitchens located in <u>residential</u> multistory structures. Where a common multistory duct system is designed and installed to convey exhaust from multiple domestic kitchen exhaust systems in a <u>residential</u> multistory structure, the construction of the system shall be in accordance with all of the following:
 - 1. The shaft in which the duct is installed shall be constructed and fire-resistance rated as required by the <u>Dallas</u> [International] Building Code.
 - 2. Dampers shall be prohibited in the exhaust duct, except as specified in Section 505.1. Penetrations of the shaft and ductwork shall be protected in accordance with Section 607.5.5, Exception 2.
 - 3. Rigid metal ductwork shall be installed within the shaft to convey the exhaust. The ductwork shall be constructed of sheet steel having a minimum thickness of 0.0187 inch (0.4712 mm)(No. 26 gage) and in accordance with SMACNA *Duct Construction Standards*.
 - 4. The ductwork within the shaft shall be designed and installed without offsets.
 - 5. The exhaust fan motor design shall be in accordance with Section 503.2.
 - 6. The exhaust fan motor shall be located outside of the airstream.

- 7. The exhaust fan shall run continuously, and shall be connected to a standby power source.
- 8. Exhaust fan operation shall be monitored in an approved location and shall initiate an audible or visual signal when the fan is not in operation.
- 9. Where the exhaust rate for an individual kitchen exceeds 400 cfm (0.19 m³/s) makeup air shall be provided in accordance with Section 505.2.
- 10. A cleanout opening shall be located at the base of the shaft to provide access to the duct to allow for cleanout and inspection. The finished openings shall be not less than 12 inches by 12 inches (305 mm by 305 mm).
- 11. Screens shall not be installed at the termination.
- 12. The common <u>residential</u> multistory duct system shall serve only kitchen exhaust and shall be independent of other exhaust systems."
- 15. Subsection 505.4, "Other Than Group R," of Section 505, "Domestic Kitchen Exhaust Equipment," of Chapter 5, "Exhaust Systems," of the 2015 International Mechanical Code is deleted.
- 16. Paragraph [BF] 607.5.1, "Fire Walls," of Subsection [BF] 607.5, "Where Required," of Section 607, "Duct and Transfer Openings," of Chapter 6, "Duct Systems," of the 2015 International Mechanical Code is amended to read as follows:
 - "[BF] 607.5.1 Fire walls. Ducts and air transfer openings permitted in fire walls in accordance with Section 706.11 of the <u>Dallas</u> [International] Building Code shall be protected with listed fire dampers installed in accordance with their listing. For hazardous exhaust systems see Section 510.
 - [BF] 607.5.1.1 Horizontal exits. A listed smoke damper designed to resist the passage of smoke shall be provided at each point that a duct or air transfer opening penetrates a fire wall that serves as a horizontal exit."
- 17. The ASHRAE standards of Chapter 15, "Referenced Standards," of the 2015

 International Mechanical Code are amended to read as follows:

"ASHRAE ASHRAE

1791 Tullie Circle, NE Atlanta, GA 30329

Standard reference number	Title	Referenced in code section number
ASHRAE—2013	ASHRAE Fundamentals Handbook	603.2
15-2013	Safety Standard for Refrigeration Systems	1101.6, 1105.8, 1108.1
342013	Designation and Safety Classification of Refrigerants	202, 1102.2.1, 1103.1
62.1—2013	Ventilation for Acceptable Indoor Air Quality	
170-2008	Ventilation of Health Care Facilities	407
[180 2012	Standard Practice for Inspection and Maintenance of Commercial	
•	Building HVAC Systems	

18. The NFPA standards of Chapter 15, "Referenced Standards," of the 2015

International Mechanical Code are amended to read as follows:

"NFPA

National Fire Protection Associtaion

1 Batterymarch Park Quincy, MA 02269-9101

Standard	Referenced
reference	in code
number	Title section number
30A—15	Code for Motor Fuel-dispensing Facilities and Repair Garages
31—11	Standard for the Installation of Oil-burning Equipment 701.1, 801.2.1, 801.18.1,
	801.18.2, 920.2, 922.1, 1308.1
37—14	Standard for the Installation and Use of Stationary Combustion
	Engines and Gas Turbines
5814	Liquefied Petroleum Gas Code
69—14	Standard on Explosion Prevention Systems
70—14	National Electrical Code
	513.11, 513.12.2, 602.2.1.1, 927.2, 1104.2.2, 1106.3, 1106.4
72—13	National Fire Alarm Signaling Code
82—14	Standard on Incinerators and Waste and Linen Handling Systems and Equipment 601.1
85—15	Boiler and Combustion Systems Hazards Code
91—15	Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists and
	Noncombustible Particulate Solids
9215	Standard for Smoke Control Systems
96—14	Standard for Ventilation Control and Fire Protection of
	Commercial Cooking Operations
211—13	Standard for Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances
262—15	Standard Method of Test for Flame Travel and Smoke of Wires and
	Cables for Use in Air-handling Spaces
286—15	Standard Methods of Fire Tests for Evaluating Contribution of Wall and
	Ceiling Interior Finish to Room Fire Growth
704—12	Standard System for Identification of the Hazards of Materials for
	Emergency Response
853—15	Standard on Installation of Stationary Fuel Power Plants
	•

19. Appendix A of the 2015 International Mechanical Code is adopted.

- 20. Appendix B of the 2015 International Mechanical Code is not adopted.
- 21. All chapters of the 2015 International Mechanical Code adopted by this ordinance are subchapters of Chapter 55 of the Dallas City Code, as amended.
- 22. All references in the 2015 International Mechanical Code to the fire code, building code, plumbing code, electrical code, residential code, existing building code, energy conservation code, fuel gas code, and green construction code refer, respectively to Chapters 16, 53, 54, 56, 57, 58, 59, 60, and 61 of the Dallas City Code.

SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 55 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 4. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 5. That this ordinance will take effect on, 2017, and it is
ccordingly so ordained.
APPROVED AS TO FORM:
ARRY E. CASTO, City Attorney
By
Assistant City Attorney
Annual I

ORDINANCE N	VO .
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An ordinance amending Chapter 57, "Dallas One-and Two-Family Dwelling Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of the International Residential Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, demolition, use, and maintenance of construction, plumbing, mechanical, and electrical work in the city on one- and two-family dwellings; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 57, "Dallas One- and Two-Family Dwelling Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Residential Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

- 1. Page xvii, "Legislation," is deleted.
- 2. Chapter 1, "Scope and Administration," of the 2015 International Residential Code is deleted and replaced with a new Chapter 1, "Scope and Administration," to read as follows:

"CHAPTER 1

SCOPE AND ADMINISTRATION

SECTION R101 GENERAL

- **R101.1 Title.** These regulations shall be known as the *Dallas One- and Two-Family Dwelling Code*, hereinafter referred to as "this code."
- **101.2** Administrative procedures. All provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to this code."
- 3. Section R202, "Definitions," of Chapter 2, "Definitions," of the 2015 International Residential Code is amended by alphabetically adding, deleting, or amending the following definitions to read as follows:
- "COMMERCIAL DWELLING SITE. Three or more dwelling units on a lot."
- "ENERGY SYSTEMS LABORATORY. An agency established by the Texas Legislature to assist communities in evaluating code amendments to the energy provisions of the *International Residential Code* and the *International Energy Conservation Code* which now define the minimum energy efficiency standards for the State of Texas."
- "FIRE WALL. A fire-resistance-rated wall having protected openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall. Fire walls required by this code shall comply with the provisions of Section 706 of the Dallas Building Code."
- "FLOOR AREA. The area included within the surrounding exterior walls of a building or portion thereof, exclusive of vent shafts and courts. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above."
- "[[RB] GLAZING AREA. The interior surface area of all glazed fenestration, including the area of sash, curbing or other framing elements, that enclose conditioned space. Includes the area of glazed fenestration assemblies in walls bounding conditioned basements.]"
- "GRAY WATER. Waste water that has not come into contact with toilet waste, kitchen sink waste, dishwasher waste or similarly contaminated sources. Gray water includes waste [discharged] from lavatories, bathtubs, showers, clothes washers and laundry sinks [trays]."
- "GREEN BUILDING. Structures and their surrounding landscapes designed, constructed and maintained to decrease energy and water usage and costs, to improve the efficiency and longevity of building systems and to decrease the burdens imposed on the environment and public health."
- "GREEN BUILT TEXAS. An initiative of the Homebuilders Association of Greater Dallas that provides climate-specific guidelines and verification systems for residential and multifamily green buildings."

- "GREEN BUILT TEXAS-CERTIFIABLE. A proposed project that is not required to be registered with the Home Builders Association of Greater Dallas, but is planned, designed and constructed to meet or exceed a certified rating using version 2.0 of the Green Built Texas rating system."
- "[RB] HISTORIC BUILDING. A building that is designated as historic as defined in the Dallas Existing Building Code. [Buildings that are listed in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.]"
- "LEED. The Leadership in Energy and Environmental Design green building rating systems are nationally accepted standards for green buildings developed by the USGBC."
- "LEED-CERTIFIABLE. A proposed project that is not required to be registered with the USGBC, but is planned, designed and constructed to meet or exceed a certified rating using LEED NC (new construction) version 2.2 to present, LEED CS (core and shell) version 2.0 to present, LEED CI (commercial interiors) version 2.0 to present, LEED for schools version 2007, LEED for healthcare, LEED for retail version 2 or LEED for homes."

"MULTIPLE BUILDING TOWNHOUSE. See TOWNHOUSE."

- "[RB] OCCUPIED SPACE. The total area of all buildings or structures on any *lot* or parcel of ground projected on a horizontal plane, excluding permitted projections as allowed by this code. Any space that could be assumed to be occupiable shall not be exempt from the requirements of this code by designing the space without means of egress, light, or ventilation."
- "ON-SITE NONPOTABLE WATER REUSE SYSTEMS. Water systems for the collection, treatment, storage, distribution, and reuse of nonpotable water generated on site, including but not limited to graywater systems. [This definition does not include rainwater harvest systems.]"
- "PROPOSED PROJECT. For purposes of the *green building* program, the erection of any new structure for which a person, firm or corporation is required to obtain a building permit."
- "RECLAIMED WATER. Nonpotable water that, as a result of [has been derived from] the treatment of domestic waste water, is suitable for a direct beneficial use or a controlled use when such system has been submitted and approved by the building official prior to installation. [by a facility or system licensed or permitted to produce water meeting the jurisdiction's water requirements for its intended uses.] Also known as "Recycled Water"."
- "SINGLE BUILDING TOWNHOUSE. A multiple dwelling unit located on a commercial dwelling site with more than two units between exterior wall or fire walls complying with Section 706 of the *Dallas Building Code* in which each unit extends from foundation to roof and with a yard or public way on not less than two sides."
- "STORM [SEWER,] DRAIN. A <u>drainage system that carries a natural precipitation, including snow-melt,</u> [pipe used for conveying] rainwater, surface water [subsurface water and] or similar liquid waste that has contacted a surface at or below grade."

- "TOWNHOME. A dwelling located on a single-family or duplex dwelling site and constructed in a group of abutting structures separated by property lines with each dwelling extending from its foundation to its roof and with a yard or public way on at least two sides."
- "[{RB}] TOWNHOUSE. A <u>multiple</u> [single family] dwelling unit <u>located on a commercial dwelling site</u> and constructed with a maximum [in a group] of two [three or more attached] units <u>located</u> between exterior walls or fire walls complying with Section 706 of the <u>Dallas Building Code</u> in which each unit extends from foundation to roof and with a <u>yard</u> or public way on not less than two sides."
- "USGBC. The U.S. Green Building Council, a nonprofit organization comprised of leaders from the building industry formed to encourage sustainability by promoting buildings that are environmentally responsible, profitable and healthy places to live and work."
 - 4. Subsection R301.1, "Application," of Section R301, "Design Criteria," of Chapter
- 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R301.1 Application. Buildings and structures, and parts thereof, shall be constructed to safely support all loads, including dead loads, live loads, roof loads, flood loads, snow loads, wind loads and seismic loads as prescribed by this code. The construction of buildings and structures in accordance with the provisions of this code shall result in a system that provides a complete load path that meets the requirements for the transfer of loads from their point of origin through the load-resisting elements to the foundation. Buildings and structures constructed as prescribed by this code are deemed to comply with the requirements of this section.
 - **R301.1.1** Alternative provisions. As an alternative to the requirements in Section R301.1, the following standards are permitted subject to the limitations of this code and the limitations therein. Where engineered design is used in conjunction with these standards, the design shall comply with the <u>Dallas</u> [International] Building Code.
 - 1. AF&PA Wood Frame Construction Manual (WFCM).
 - 2. AISI Standard for Cold-Formed Steel Framing—Prescriptive Method for One- and Two-Family Dwellings (AISI S230).
 - 3. ICC Standard on the Design and Construction of Log Structures (ICC 400).
 - **R301.1.2 Construction systems.** The requirements of this code are based on platform and balloon-frame construction for light-frame buildings. The requirements for concrete and masonry buildings are based on a balloon framing system. Other framing systems must have equivalent detailing to ensure force transfer, continuity and compatible deformations.

- R301.1.3 Engineered design. Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the <u>Dallas [International]</u> Building Code is permitted for buildings and structures, and parts thereof, included in the scope of this code.
- R301.1.4 Elevators. The provisions of Section R321 shall apply to the design, construction, installation, operation, alteration and repair of elevators, dumbwaiters, escalators and moving walks and their hoistways.
- R301.1.5 Fire protection provisions. In addition to the requirements of Section R313, an automatic sprinkler system must be installed when required by the *Dallas Fire Code*.
- **R301.1.6 Draftstop requirements.** Draftstopping must be installed in accordance with Section 302.12.
- R301.1.7 Security. Openings into dwellings must comply with Chapter 45 of this code.
- R301.1.8 Unity agreements. The dissolution of common boundary lines for purposes of this code may be executed in accordance with Chapter 42 of the Dallas Building Code.
- R301.1.9 Special inspections. The provisions of Chapter 17 of the Dallas Building Code apply to dwellings governed by this code.
- R301.1.10 Sound transmission ratings. The sound transmission ratings of the wall assemblies between each dwelling unit of a two-family dwelling, a townhome or townhouse must comply with Appendix K."
- 5. Table R301.2(1), "Climatic and Geographic Design Criteria," of Subsection R301.2, "Climatic and Geographic Design Criteria," of Section R301, "Design Criteria," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:

"TABLE R301.2(1)

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND	WIND DESIGN		SEISMIC	SUBJECT TO DAMAGE FROM			WINTER	ICE BARRIER	FLOOD	AIR	MEAN		
SNOW	Speed ⁴	Topographic	Special wind	Wind-borne debris zone	DESIGN	Weathering®	Frost line	Termite*	DESIGN	UNDERLAYMENT	HAZARDS ^a	PREEZING	ANNUAL
LOAD	(mph)	effects ^k	region		CATEGORY'		depth*		TEMP*	REQUIRED*		INDEX ⁴	TEMP
5 lb/ft²	115 (Y ult	No	No	No	Δ	moderate	6"	very heavy	22° F	No	local codes	150	64.9° F

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column [shall-be filled in with the weathering index, "negligible," "moderate" or "severe"] for concrete as determined from Figure R301.2(3). The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The [jurisdiction shall fill in the frost line depth column with the] minimum depth of footing below finish grade.
- c. The [jurisdiction-shall-fill in this part of the table to indicate the] need for protection [depending on whether there has been a history of local] from subterranean termite damage.
- d. The [jurisdiction shall fill in this part of the table with the] wind speed from the basic wind speed map [Figure R301.2(4)A]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.
- e. The outdoor design dry-bulb temperature shall be selected from the columns of 971/2-percent values for winter from Appendix D of the International Plumbing Code.

 Deviations from the Appendix D temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.
- f. The [jurisdiction shall fill in this part of the table with the] seismic design category determined from Section R301.2.2.1.
- g. Refer to Chapter 51A of the Dallas City Code. [The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of the currently effective FIRMs and FBFMs or other flood hazard man adopted by the authority having jurisdiction, as amended.
- dates of the currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.]

 h. In accordance with Sections R905.1.2, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1.[, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "YES."
- ice damming, the juriediction shall fill in this part of the table with "YES." Otherwise, the juriediction shall fill in this part of the table with "NO."]

 i. The [juriediction shall fill in this part of the table with the] 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99 percent) value on the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- j. The [jurisdiction shall fill in this part of the table with the] mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)."
- k. In accordance with Section R301.2.1.5[, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the invited interest of the table in this part of the table with "VES." Otherwise the invited interest "NO" in this part of the table.
- jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table].

 1. In accordance with Figure R301.2(4)A[, where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table].
- m. In accordance with Section R301.2.1.2.1[, the jurisdiction shall indicate the wind borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table].

Amend Chapter 57 (adopt 2015 International Residential Code) - Page 6

- 6. Subsection R302.1, "Exterior Walls," of Section R302, "Fire-Resistant Construction," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1); or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

Exceptions:

- 1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.
- 2. Walls of dwellings and accessory structures located on the same lot.
- 3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the *lot*. Projections beyond the *exterior wall* shall not extend over the *lot line* unless allowed under the *Dallas Development Code*.
- 4. Detached garages accessory to a *dwelling* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).
- 5. Foundation vents installed in compliance with this code are permitted.
- 6. Carports open on all sides and constructed entirely of noncombustible materials may be constructed within 0 feet of the property line without fire-resistive construction or opening protection when the location of such is approved as required by other city ordinances. Projections beyond the exterior wall may not extend over the *lot line* unless allowed as determined by the *Dallas Development Code*."
- 7. Subsection R302.2, "Townhouses," of Section R302, "Fire-Resistant Construction," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R302.2 Townhouses and townhomes. Common walls not associated with a property line and separating townhouses or townhomes shall be assigned a fire-resistance rating in accordance with Section R302.2, Item 1 or 2. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in

accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.

- 1. Where a fire sprinkler system in accordance with Section P2904 is provided, the common wall shall be not less than a 1-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263.
- 2. Where a fire sprinkler system in accordance with Section P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263.

Each townhome must provide at the property line its own fire-resistance-rated wall assembly meeting the requirements of Section R302.1 for exterior walls.

Exception: When approved by the *Dallas Development Code*, townhomes may provide at the property line a common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall must be rated for fire exposure from both sides and must extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations, if allowed by the *Dallas Development Code*, must be installed in accordance with the *Dallas Electrical Code*. Penetrations of electrical outlet boxes must be in accordance with Section R302.4. Use of this common wall provision may require the foundation on either side of the property line to be removable along with an associated deed restriction when required by the *Dallas Development Code*.

R302.2.1 Continuity. The fire-resistance-rated wall or assembly separating *townhouses* shall be continuous from the foundation to the underside of the roof sheathing, deck or slab. The fire-resistance rating shall extend the full length of the wall or assembly, including wall extensions through and separating attached enclosed *accessory structures*.

R302.2.2 Parapets for townhouses. Parapets constructed in accordance with Section R302.2.3 shall be constructed for townhouses as an extension of exterior walls or common walls in accordance with the following:

- 1. Where roof surfaces adjacent to the wall or walls are at the same elevation, the parapet shall extend not less than 30 inches (762 mm) above the roof surfaces.
- 2. Where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is not more than 30 inches (762 mm) above the lower roof, the parapet shall extend not less than 30 inches (762 mm) above the lower roof surface.

Exception: A parapet is not required in the preceding two cases where the roof covering complies with a minimum Class C rating as tested in accordance with ASTM E 108 or UL 790 and the roof decking or sheathing is of noncombustible materials or *approved* fire-retardant-treated wood for a distance of 4 feet (1219)

mm) on each side of the wall or walls, or one layer of 5/8-inch (15.9 mm) Type X gypsum board is installed directly beneath the roof decking or sheathing, supported by not less than nominal 2-inch (51 mm) ledgers attached to the sides of the roof framing members, for a distance of not less than 4 feet (1219 mm) on each side of the wall or walls and any openings or penetrations in the roof are not within 4 feet (1219 mm) of the common walls.

3. A parapet is not required where roof surfaces adjacent to the wall or walls are at different elevations and the higher roof is more than 30 inches (762 mm) above the lower roof. The common wall construction from the lower roof to the underside of the higher roof deck shall have not less than a 1-hour fire-resistance rating. The wall shall be rated for exposure from both sides.

R302.2.3 Parapet construction. Parapets shall have the same fire-resistance rating as that required for the supporting wall or walls. On any side adjacent to a roof surface, the parapet shall have noncombustible faces for the uppermost 18 inches (457 mm), to include counterflashing and coping materials. Where the roof slopes toward a parapet at slopes greater than 2 units vertical in 12 units horizontal (16.7-percent slope), the parapet shall extend to the same height as any portion of the roof within a distance of 3 feet (914 mm), and the height shall be not less than 30 inches (762 mm).

R302.2.4 Structural independence. Each individual townhouse and townhome shall be structurally independent.

Exceptions:

- 1. Foundations supporting *exterior walls* or common walls.
- 2. Structural roof and wall sheathing from each unit fastened to the common wall framing.
- 3. Nonstructural wall and roof coverings.
- 4. Flashing at termination of roof covering over common wall.
- 5. Townhouses separated by a common wall as provided in Section R302.2, Item 1 or 2.
- 6. Foundations of townhomes may be continuous across property lines when allowed by the *Dallas Development Code*."
- 8. Paragraph R302.5.1, "Opening Protection," of Subsection R302.5, "Dwelling-Garage Opening and Penetration Protection," of Section R302, "Fire-Resistant Construction," of

Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:

- "R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors[, equipped with a self-closing device]."
- 9. Subsection R302.12, "Draftstopping," of Section R302, "Fire-Resistant Construction," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R302.12 Draftstopping. In combustible construction where there is usable space both above and below the concealed space of a floor-ceiling assembly, draftstops shall be installed so that the area of the concealed space does not exceed 1,000 square feet (92.9 m²). Draftstopping shall divide the concealed space into approximately equal areas. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below, draftstopping shall be provided in floor-ceiling assemblies under the following circumstances:
 - 1. Ceiling is suspended under the floor framing.
 - 2. Floor framing is constructed of truss-type open-web or perforated members.

Exception: When the entire building, including within the floor-ceiling assembly, is protected by an approved automatic sprinkler system, the floor-ceiling assembly is not required to be subdivided.

R302.12.1 Materials. Draftstopping materials shall be not less than 1/2-inch (12.7 mm) gypsum board, 3/8-inch (9.5 mm) wood structural panels or other approved materials adequately supported. Draftstopping shall be installed parallel to the floor framing members unless otherwise approved by the building official. The integrity of the draftstops shall be maintained.

R302.12.2 Draftstopping attics. Draftstopping shall be installed in attics and concealed roof spaces, such that any horizontal area does not exceed 9,000 square feet (836.13 m²).

Exception: When the entire building, including the attic spaces, is protected by an approved automatic sprinkler system, the attic is not required to be subdivided."

- 10. Subsection R303.3, "Bathrooms," of Section R303, "Light, Ventilation and Heating," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.3 m²), one-half of which must be openable.

Exception: The glazed areas shall not be required where artificial light and a local exhaust system are provided. The minimum local exhaust rates shall be determined in accordance with Section M1507. Exhaust air from the space shall be exhausted directly to the outdoors unless the space contains only a water closet, a lavatory or a combination thereof which may be ventilated with an *approved* mechanical recirculating fan or similar device designed to remove odors from the air."

- 11. Subsection R311.2, "Egress Door," of Section R311, "Means of Egress," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended by adding a new Paragraph R311.2.1, "Bars, Grilles, Covers and Screens at Egress Door," to read as follows:
 - "R311.2.1 Bars, grilles, covers and screens at egress door. Bars, grilles, covers, screens or similar devices are permitted to be placed at the egress door provided that the bars, grilles, covers, screens or similar devices shall be releasable from the inside without the use of a key, tool, special knowledge or force greater than that required for the normal operation of passage hardware."
- 12. Subparagraph R311.7.5.1, "Risers," of Paragraph R311.7.5, "Stair Treads and Risers," of Subsection R311.7, "Stairways," of Section R311, "Means of Egress," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
 - "R311.7.5.1 Risers. The riser height shall be not more than 7 3/4 inches (196 mm). The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the openings located more than 30 inches (762 mm), as measured vertically, to the floor or grade below do not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exceptions:

- 1. The opening between adjacent treads is not limited on spiral stairways.
- 2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.
- 3. Private steps and stairways serving an occupant load of less than 10 and stairways to unoccupied roofs may be constructed with an 8-inch maximum riser height."
- 13. Subparagraph R311.7.5.2, "Treads," of Paragraph R311.7.5, "Stair Treads and Risers," of Subsection R311.7, "Stairways," of Section R311, "Means of Egress," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
 - "R311.7.5.2 Treads. The tread depth shall be not less than 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

Exception: Private steps and stairways serving an occupant load of less than 10 and stairways to unoccupied roofs may be constructed with a 9-inch minimum tread depth.

R311.7.5.2.1 Winder treads. Winder treads shall have a tread depth of not less than 10 inches (254 mm) measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. Winder treads shall have a tread depth of not less than 6 inches (152 mm) at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than 3/8 inch (9.5 mm). Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within 3/8 inch (9.5 mm) of the rectangular tread depth.

Exception: The tread depth at spiral stairways shall be in accordance with Section R311.7.10.1."

14. Section R313, "Automatic Fire Sprinkler Systems," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:

"SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exceptions:

- 1. An automatic residential fire sprinkler system shall not be required where [additions of alterations are made to existing townhouses or townhomes that do not have an automatic residential fire sprinkler system installed.
- 2. The floor area of an existing unsprinklered townhouse or townhome greater than 7,500 square feet (696.77 m²) and not housing a Group H occupancy may be increased by not more than 25 percent of the existing floor area (92.90 m²). Only one increase in floor area is permitted under this exception.
- 3. New townhouses or townhomes that are separated into fire areas no greater than 7,500 square feet (696.77 m²) by the use of 2-hour-rated fire walls. Horizontal assemblies may not be used to satisfy this requirement.
- R313.1.1 Design and installation. Automatic residential fire sprinkler systems for multiple building townhouses shall be designed and installed in accordance with Section P2904 or NFPA 13D. Automatic residential fire sprinkler systems for single building townhouses shall be designed and installed in accordance with NFPA 13R.

R313.2 One- and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings.

Exceptions:

- 1. An automatic residential fire sprinkler system shall not be required for [additions or] alterations to existing buildings that are not already provided with an automatic residential sprinkler system.
- 2. The floor area of an existing unsprinklered dwelling greater than 7,500 square feet (696.77 m²) and not housing a Group H occupancy may be increased by not more than 25 percent of the existing floor area (92.90 m²). Only one increase in the floor area is permitted under this exception.
- 3. New dwellings that are separated into fire areas no greater than 7,500 square feet (696.77 m²) by the use of 2-hour rated fire walls. Horizontal assemblies may not be used to satisfy this requirement.
- R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D."

- 15. Paragraph R314.2.2, "Alterations, Repairs, and Additions," of Subsection R314.2, "Where Required," of Section R314, "Smoke Alarms," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
 - "R314.2.2 Alterations, repairs and additions. Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

Exceptions:

- 1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, the *addition* or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
- 2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.
- 3. Hard wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure."
- 16. Paragraph R315.2.2, "Alterations, Repairs, and Additions," of Subsection R315.2, "Where Required," of Section R315, "Carbon Monoxide Alarms," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
 - "R315.2.2 Alterations, repairs and additions. Where alterations, repairs or additions requiring a permit occur, or where one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with carbon monoxide alarms located as required for new dwellings.

Exceptions:

- 1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, is exempt from the requirements of this section.
- 2. Installation, alteration or repairs of <u>electrical powered</u> plumbing or mechanical systems are exempt from the requirements of this section."

- 17. Subsection R317.1, "Location Required," of Section R317, "Protection of Wood and Wood-Based Products Against Decay," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R317.1 Location required. Protection of wood and wood- based products from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative-treated in accordance with AWPA U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.
 - 1. Wood joists or the bottom of a wood structural floor when closer than 18 inches (457 mm) or wood girders when closer than 12 inches (305 mm) to the exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
 - 2. Wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches (203 mm) from the exposed ground.
 - 3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier.
 - 4. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 1/2 inch (12.7 mm) on tops, sides and ends.
 - 5. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches (152 mm) from the ground or less than 2 inches (51 mm) measured vertically from concrete steps, porch slabs, patio slabs and similar horizontal surfaces exposed to the weather.
 - 6. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.
 - 7. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below *grade* except where an *approved* vapor retarder is applied between the wall and the furring strips or framing members.
 - 8. When the bottoms of wood structural floor elements, including joists, girders and subfloor, are less than 8 inches (203 mm) above the horizontal projection of the outside ground level and extend toward the outside ground beyond the plane represented by the interior face of the foundation wall studs, such elements shall be approved naturally durable or preservative-treated wood.
 - **R317.1.1 Field treatment.** Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated in the field in accordance with AWPA M4.

R317.1.2 Ground contact. All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather that supports permanent structures intended for human occupancy shall be *approved* pressure-preservative-treated wood suitable for ground contact use, except that untreated wood used entirely below groundwater level or continuously submerged in fresh water shall not be required to be pressure-preservative treated.

R317.1.3 Geographical areas. In geographical areas where experience has demonstrated a specific need, *approved* naturally durable or pressure-preservative-treated wood shall be used for those portions of wood members that form the structural supports of buildings, balconies, porches or similar permanent building appurtenances when those members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering that would prevent moisture or water accumulation on the surface or at joints between members. Depending on local experience, such members may include:

- 1. Horizontal members such as girders, joists and decking.
- 2. Vertical members such as posts, poles and columns.
- 3. Both horizontal and vertical members.

R317.1.4 Wood columns. Wood columns shall be *approved* wood of natural decay resistance or *approved* pressure-preservative-treated wood.

Exceptions:

- 1. Columns exposed to the weather or in *basements* where supported by concrete piers or metal pedestals projecting 1 inch (25 mm) above a concrete floor or 6 inches (152 mm) above exposed earth and the earth is covered by an *approved* impervious moisture barrier.
- 2. Columns in enclosed crawl spaces or unexcavated areas located within the periphery of the building when supported by a concrete pier or metal pedestal at a height more than 8 inches (203 mm) from exposed earth and the earth is covered by an impervious moisture barrier.
- 3. Deck posts supported by concrete piers or metal pedestals projecting not less than 1 inch (25 mm) above a concrete floor or 6 inches (152 mm) above exposed earth.

R317.1.5 Exposed glued-laminated timbers. The portions of glued-laminated timbers that form the structural supports of a building or other structure and are exposed to weather and not properly protected by a roof, eave or similar covering shall be pressure treated with preservative, or be manufactured from naturally durable or preservative-treated wood."

- 18. Subsection R321.1, "Elevators," of Section R321, "Elevators and Platform Lifts," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R321.1 Elevators. Where provided, passenger elevators, limited-use and limited-application elevators or private residence elevators shall comply with ASME A17.1/CSA B44.

Exception: The appendices of ASME A17.1—2013 do not apply. The building owner shall be responsible for the safe operation and maintenance of each elevator, dumbwaiter, escalator or moving walk installation and shall cause periodic inspections, test and maintenance to be made on such conveyance."

- 19. Subsection R322.1, "General," of Section R322, "Flood-Resistant Construction," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R322.1 General. Buildings and structures constructed in whole or in part in flood hazard areas, including A or V Zones and Coastal A Zones, as established in Table R301.2(1), and substantial improvement and restoration of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with the provisions contained in this section. Buildings and structures that are located in more than one flood hazard area shall comply with the provisions associated with the most restrictive flood hazard area. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.

Exception: Buildings and structures permitted to be located, designed and constructed in the flood plain areas in accordance with the regulations of the *Dallas Development Code*.

- **R322.1.1** Alternative provisions. As an alternative to the requirements in Section R322, ASCE 24 is permitted subject to the limitations of this code and the limitations therein.
- **R322.1.2 Structural systems.** Structural systems of buildings and structures shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the design flood elevation.
- **R322.1.3 Flood-resistant construction.** Buildings and structures erected in areas prone to flooding shall be constructed by methods and practices that minimize flood damage.
- R322.1.4 Establishing the design flood elevation. The design flood elevation shall be used to define flood hazard areas. At a minimum, the design flood elevation shall be the higher of the following:

- 1. The base flood elevation at the depth of peak elevation of flooding, including wave height, that has a 1 percent (100-year flood) or greater chance of being equaled or exceeded in any given year; or
- 2. The elevation of the design flood associated with the area designated on a flood hazard map adopted by the community, or otherwise legally designated.
- **R322.1.4.1 Determination of design flood elevations.** If design flood elevations are not specified, the *building official* is authorized to require the applicant to comply with either of the following:
 - 1. Obtain and reasonably use data available from a federal, state or other source; or
 - 2. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic engineering practices used to define special flood hazard areas. Determinations shall be undertaken by a registered design professional who shall document that the technical methods used reflect currently accepted engineering practice. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval.
- R322.1.4.2 Determination of impacts. In riverine flood hazard areas where design flood elevations are specified but floodways have not been designated, the applicant shall demonstrate that the effect of the proposed buildings and structures on design flood elevations, including fill, when combined with other existing and anticipated flood hazard area encroachments, will not increase the design flood elevation more than 1 foot (305 mm) at any point within the *jurisdiction*.
- R322.1.5 Lowest floor. The lowest floor shall be the lowest floor of the lowest enclosed area, including *basement*, and excluding any unfinished flood-resistant enclosure that is useable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the building or structure in violation of this section.
- R322.1.6 Protection of mechanical, plumbing and electrical systems. Electrical systems, equipment and components; heating, ventilating, air conditioning; plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall be located at or above the elevation required in Section R322.2 or R322.3. If replaced as part of a substantial improvement, electrical systems, equipment and components; heating, ventilating, air conditioning and plumbing appliances and plumbing fixtures; duct systems; and other service equipment shall meet the requirements of this section. Systems, fixtures, and equipment and components shall not be mounted on or penetrate through walls intended to break away under flood loads.

Exception: Locating electrical systems, *equipment* and components; heating, ventilating, air conditioning; plumbing *appliances* and plumbing fixtures; *duct systems*; and other service *equipment* is permitted below the elevation required in Section R322.2 or R322.3 provided that they are designed and installed to prevent water from entering or

- accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in accordance with ASCE 24. Electrical wiring systems are permitted to be located below the required elevation provided that they conform to the provisions of the electrical part of this code for wet locations.
- R322.1.7 Protection of water supply and sanitary sewage systems. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems in accordance with the plumbing provisions of this code. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into systems and discharges from systems into floodwaters in accordance with the plumbing provisions of this code [and Chapter 3 of the International Private Sewage Disposal Code].
- R322.1.8 Flood-resistant materials. Building materials and installation methods used for flooring and interior and exterior walls and wall coverings below the elevation required in Section R322.2 or R322.3 shall be flood damage-resistant materials that conform to the provisions of FEMA TB-2.
- R322.1.9 Industrialized housing [Manufactured homes]. The bottom of the frame of new and replacement industrialized homes [manufactured homes] on foundations that conform to the requirements of Section R322.2 or R322.3, as applicable, shall be elevated to or above the elevations specified in Section R322.2 (flood hazard areas including A Zones) or R322.3 in coastal high-hazard areas (V Zones and Coastal A Zones). The foundation [anchor and tiedown] requirements of this code [the applicable state or federal requirements] shall apply. The foundation and anchorage of industrialized [manufactured] homes to be located in identified floodways shall be designed and constructed in accordance with ASCE 24.
- R322.1.10 As-built elevation documentation. A registered design professional shall prepare and seal documentation of the elevations specified in Section R322.2 or R322.3."
- 20. Subsection R326.1, "General," of Section R326, "Swimming Pools, Spas and Hot Tubs," of Chapter 3, "Building Planning," of the 2015 International Residential Code is amended to read as follows:
- "R326.1 General. The design and construction of pools and spas shall comply with Appendix Q. Swimming Pools, Spas and Hot Tubs [the International Swimming Pool and Spa Code]."
- 21. Chapter 3, "Building Planning," of the 2015 International Residential Code is amended by adding a new Section R327, "Aircraft Noise Attenuation Requirements," to read as follows:

"SECTION R327 AIRCRAFT NOISE ATTENUATION REQUIREMENTS

R327.1 Definitions. The following words and terms shall, for the purposes of this chapter, and as used elsewhere in this code, have the meanings shown herein.

A-WEIGHTED SOUND LEVEL. An A-weighted sound level is a sound level occurring in the 1,000 to 6,000 Hz frequency range that is increased by 10 dB if the noise event occurs between 10:00 p.m. and 7:00 a.m. The A-weighted sound level reflects the greater intrusiveness of sounds that the ear perceives as louder compared to other frequencies. "dBA" or "dB(A)" indicate a sound level measurement has been A-weighted.

DAY-NIGHT AVERAGE SOUND LEVEL. The day-night average sound level is the noise exposure in areas around airports (abbreviated as "DNL" in text and "L_{dn}" in equations). DNL is a measure of the average A-weighted sound level of all aircraft flights occurring in a 24-hour period.

R327.2 Aircraft noise zone. All land within a DNL noise contour of 65 dBA or greater, as shown on the aircraft noise maps available for review at the division of building inspection is subject to these regulations. A building that is only partly located within an aircraft noise zone is also subject to these regulations.

R327.3 Noise insulation.

R327.3.1 Certification of plans prior to issuance of building permit. A registered Texas engineer who has demonstrable knowledge of acoustical engineering shall certify that the plans and specifications comply with the noise insulation standards of Section 327.3.2. The building official shall not issue a building permit for any building within an aircraft noise zone unless the plans and specifications for the building meet the noise insulation standards of Section 327.3.2.

Exception: The plans and specifications may be prepared and certified by a member of the National Council of Acoustical Consultants or another organization approved by the *building official*.

- R327.3.2 Noise insulation standards. New buildings must be constructed with sound insulation or other means to achieve a DNL of 45 dBA or less inside the building. If the cost of modifications to an existing building is 75 percent or more of the total assessed improvement value of the site, the building must also meet this standard. Garages and similar accessory buildings that do not include living space are exempt from this requirement."
- 22. Chapter 3, "Building Planning," of the 2015 International Residential Code is amended by adding a new Section R328, "Green Building Program," to read as follows:

"SECTION R328 GREEN BUILDING PROGRAM

R328.1 Purpose. The purpose of this section is to establish *green building* standards to help reduce the use of natural resources, create a healthier and more sustainable living environment and minimize the negative environmental impacts of development in Dallas and the North Texas region.

R328.2 All new construction. All *proposed projects* must satisfy the minimum requirements of Chapter 11 of this code and:

- 1. meet the minimum requirements of ICC 700;
- 2. meet the prescriptive requirements of Section 328.5;
- 3. be *LEED-certifiable* under the LEED for homes standard;
- 4. be Green Built Texas-certifiable; or
- 5. meet an equivalent minimum *green building* standard certification level as determined by the *building official*.

Formal certification by the USGBC, Green Built Texas or an equivalent entity is not required.

Exceptions:

- 1. Additions to existing one- and two-family dwellings that are 200 square feet or less in floor area and contain no bathroom or restroom plumbing fixtures (water closets, lavatories, tubs, showers).
- 2. Carports, garages, storage buildings, agricultural barns, stables and similar structures that are accessory to one- and two-family dwellings 400 square feet or less in floor area.

R328.3 LEED. For *proposed projects* utilizing LEED for homes, the point total must include 1 point under the water efficiency credit titled "Indoor Water Use."

R328.4 Green Built Texas. For proposed projects utilizing the Green Built Texas standards, energy use requirements must be met by complying with the minimum requirements of Chapter 11 of this code.

R328.5 Prescriptive requirements.

R328.5.1 Storm water. For all *proposed projects*, lots must be designed so that at least 70 percent of the built environment, not including any area under a roof, is permeable or

designed to capture water runoff for infiltration onsite. The following areas may be counted toward the 70 percent requirement:

- 1. Vegetative landscape such as grass, trees and shrubs.
- 2. Permeable paving, installed by an experienced professional. Permeable paving must include porous above-ground materials, such as open pavers and engineered products, and a 6-inch porous sub-base. The base layer must be designed to ensure proper drainage from the home.
- 3. Impermeable surfaces that are designed to direct all runoff toward an appropriate permanent infiltration feature such as a vegetated swale, onsite rain garden or rainwater cistern.

R328.5.2 Water efficiency.

R328.5.2.1 New construction. Proposed projects must:

- 1. Utilize drip irrigation emitters for all bedding areas of an approved landscape plan, and
- 2. Meet water reduction strategies that include installing high-efficiency (low-flow) fixtures or fittings which meet at least three of the following requirements:
 - 2.1. The average flow rate for all lavatory faucets must be less than or equal to 2.0 gallons per minute.
 - 2.2. The average flow rate for all shower heads must be less than or equal to 2.0 gallons per minute.
 - 2.3. The average flow rate for all toilets must be:
 - 2.3.1. Less than or equal to 1.3 gallons per flush;
 - 2.3.2. Be dual flush and meet the requirements of ASME A 112.19.14; or
 - 2.3.3. Meet the U.S. Environmental Protection Agency Water Sense specification and be certified and labeled correctly.
 - 2.4. Utilize ENERGY STAR labeled dishwashers that use 6.0 gallons or less per cycle.
 - 2.5.Utilize ENERGY STAR labeled clothes washers with a modified energy factor (MEF) greater than or equal to 2.0 and a water factor (WF) of less than 5.

R328.5.2.2 Additions to existing one- and two-family dwellings. Additions to existing one- and two-family dwellings must meet at least two of the following water reduction strategies:

- 1. The average flow rate for all lavatory faucets must be less than or equal to 2.0 gallons per minute.
- 2. The average flow rate for all shower heads must be less than or equal to 2.0 gallons per minute.
- 3. The average flow rate for all toilets must be:
 - 3.1.Less than or equal to 1.3 gallons per flush;
 - 3.2.Be dual flush and meet the requirements of ASME A 112.19.14; or
 - 3.3.Meet the U.S. Environmental Protection Agency Water Sense specification and be certified and labeled correctly.

R328.5.3 Energy efficiency. All *proposed projects* must meet the minimum requirements of Chapter 11 of this code.

R328.5.4 Heat island mitigation. Proposed projects shall install an ENERGY STAR qualified roof on all roofs with a slope of 2:12 or greater.

Exceptions:

- 1. A vegetated roof may be installed subject to approval by the building official.
- 2. Installation of a radiant barrier that is manufactured as an integral part of roof decking or roof sheathing materials may be installed in lieu of an ENERGY STAR qualified roof.
- 3. Attic encapsulated with foam insulation at a minimum of R-22 may be installed in lieu of an ENERGY STAR qualified roof.

R328.5.5 Indoor air quality.

R328.5.5.1 HVAC. For *proposed projects*, all air-handling equipment and ductwork must be outside the fire-rated envelope of the garage.

R328.5.5.2 Minimize pollutants from the garage. For *proposed projects*, surfaces between conditioned space and an attached garage must be tightly sealed.

R328.5.5.2.1 Conditioned spaces above a garage.

- 1. All penetrations must be sealed.
- 2. All floor and ceiling joist bays must be sealed.
- 3. The walls and ceilings of conditioned spaces above a garage must be painted.

R328.5.5.2.2 Conditioned spaces next to a garage.

- 1. All penetrations must be sealed.
- 2. All doors must be weather stripped.
- 3. All cracks at the base of the wall must be sealed.

R328.5.5.2.3 Air filters.

- 1. For proposed projects, air filters must be installed with a minimum reporting value (MERV) equal to or greater than 8.
- 2. For *proposed projects*, air handlers must be able to maintain adequate air pressure and air flow.
- 3. For *proposed projects*, air filter housings must be airtight to prevent bypass or leakage."
- 23. Subsection R401.2, "Requirements," of Section R401, "General," of Chapter 4, "Foundations," of the 2015 International Residential Code is amended to read as follows:
- "R401.2 Requirements. Foundation construction shall be capable of accommodating all loads in accordance with Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Gravel fill used as footings for wood and precast concrete foundations shall comply with Section R403. Every foundation or footing, or any addition of any size to an existing post-tension foundation, regulated by this code must be designed and sealed by an engineer registered in the State of Texas."
- 24. Paragraph R403.1.4, "Minimum Depth," of Subsection R403.1, "General," of Section R403, "Footings," of Chapter 4, "Foundations," of the 2015 International Residential Code is amended to read as follows:
 - "R403.1.4 Minimum depth. Exterior footings shall be placed not less than 12 inches (305 mm) below the undisturbed ground surface. Where applicable, the depth of footings shall also conform to Sections R403.1.4.1 through R403.1.4.2.

Exception: A one-story wood or metal-frame building not used for human occupancy with an area of 400 square feet (37.2 m²) or less, with an eave height of 10 feet (3048 mm) or less may be constructed with walls supported on a wood foundation plate when approved by the building official.

R403.1.4.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

- 1. Extended below the frost line specified in Table R301.2.(1).
- 2. Constructed in accordance with Section R403.3.
- 3. Constructed in accordance with ASCE 32.
- 4. Erected on solid rock.

Exceptions:

- 1. Protection of freestanding accessory structures with an area of 600 square feet (56 m²) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
- 2. Protection of freestanding accessory structures with an area of 400 square feet (37 m²) or less, of other than light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
- 3. Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

Footings shall not bear on frozen soil unless the frozen condition is permanent."

25. Subsection R408.7, "Flood Resistance," of Section R408, "Under-Floor Space," of Chapter 4, "Foundations," of the 2015 International Residential Code is amended to read as follows:

"R408.7 Flood resistance. For buildings located in flood hazard areas as established in Table R301.2(1):

1. Walls enclosing the under-floor space shall be provided with flood openings in accordance with Section R322.2.2.

Exception: Walls that meet the requirements of the floodplain regulations of the *Dallas Development Code*.

2. The finished ground level of the under-floor space shall be equal to or higher than the outside finished ground level on at least one side.

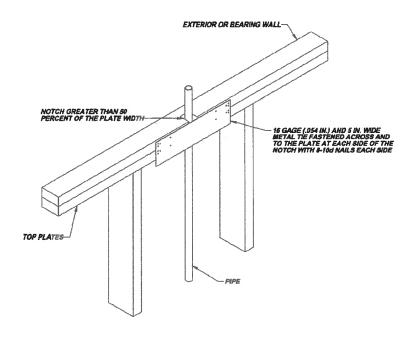
Exceptions:

- 1. Under-floor spaces that meet the requirements of FEMA/FIA TB 11-1.
- 2. <u>Under-floor spaces that meet the requirements of the floodplain regulations of the Dallas Development Code.</u>"
- 26. Paragraph R602.6.1, "Drilling and Notching of Top Plate," of Subsection R602.6, "Drilling and Notching of Studs," of Section R602, "Wood Wall Framing," of Chapter 6, "Wall Construction," of the 2015 International Residential Code is amended to read as follows:
 - "R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 ga) and 5 [11/2] inches (127 [38] mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) nails having a minimum length of 11/2 inches (38 mm) at each side or equivalent. Fasteners will be offset to prevent splitting of the top plate material. The metal tie must extend a minimum of 6 inches past the opening. See Figure R602.6.1.

Exception: When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing."

27. Figure R602.6.1, "Top Plate Framing to Accommodate Piping," of Subsection R602.6, "Drilling and Notching of Studs," of Section R602, "Wood Wall Framing," of Chapter 6, "Wall Construction," of the 2015 International Residential Code is deleted and replaced with a new Figure R602.6.1, "Top Plate Framing to Accommodate Piping," to read as follows:

"FIGURE R602.6.1 TOP PLATE FRAMING TO ACCOMMODATE PIPING



28. Subparagraph R703.8.4.1, "Size and Spacing," of Paragraph R703.8.4, "Anchorage," of Subsection R703.8, "Anchored Stone and Masonry Veneer, General," of Section R703, "Exterior Covering," of Chapter 7, "Wall Covering," of the 2015 International Residential Code is amended to read as follows:

"R703.8.4.1 Size and spacing. Veneer ties, if strand wire, shall be not less in thickness than No. 9 U.S. gage [(0.148 inch) (4 mm)] wire and shall have a hook embedded in the mortar joint, or if sheet metal, shall be not less than No. 22 U.S. gage by [(0.0299 inch) (0.76 mm)] 7/8 inch (22 mm) corrugated. Each tie shall support not more than 2.67 square feet (0.25 m²) of wall area and shall be spaced not more than 32 inches (813 mm) on center horizontally and 24 inches (635 mm) on center vertically. In stud framed exterior walls, all ties must be anchored to studs as follows:

- 1. When studs are 16 inches (407 mm) on center, stud ties must be spaced no further apart than 24 inches (737 mm) vertically starting approximately 12 inches (381 mm) from the foundation; or
- 2. When studs are 24 inches (610 mm) on center, stud ties must be spaced no further apart than 16 inches (483 mm) vertically starting approximately 8 inches (254 mm) from the foundation.

Exception: In Seismic Design Category D_0 , D_1 or D_2 or townhouses in Seismic Design Category C or in wind areas of more than 30 pounds per square foot pressure (1.44 kPa), each tie shall support not more than 2 square feet (0.2 m²) of wall area.

- R703.8.4.1.1 Veneer ties around wall openings. Additional metal ties shall be provided around wall openings greater than 16 inches (406 mm) in either dimension. Metal ties around the perimeter of openings shall be spaced not more than 3 feet (9144 mm) on center and placed within 12 inches (305 mm) of the wall opening."
- 29. Subsection R902.1, "Roofing Covering Materials," of Section R902, "Fire Classification," of Chapter 9, "Roof Assemblies," of the 2015 International Residential Code is amended to read as follows:
- "R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B or C roofing shall be installed [in jurisdictions designated by law as requiring their use or where the edge of the roof is less than 3 feet (914 mm) from a lot line]. Class A, B and C roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

Exceptions:

- 1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
- 2. Class A roof assemblies include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.
- 3. Class A roof assemblies include minimum 16 ounces per square foot copper sheets installed over combustible decks.
- 4. Class A roof assemblies include slate installed over underlayment over combustible decks.
- 5. Non-classified roof coverings are permitted on one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 200 square feet (18.58 m²)."
- 30. Subsection R908.1, "General," of Section R908, "Reroofing," of Chapter 9, "Roof Assemblies," of the 2015 International Residential Code is amended to read as follows:

"R908.1 General. Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of Chapter 9. All individual replacement shingles or shakes must comply with Section R902.1.

Exceptions:

- 1. Reroofing shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide positive roof drainage.
- 2. For roofs that provide positive drainage, re-covering or replacing an existing roof covering shall not require the secondary (emergency overflow) drains or scuppers of Section R903.4.1 to be added to an existing roof."
- 31. Paragraph R908.3.1, "Roof Re-Cover," of Subsection R908.3, "Roof Replacement," of Section R908, "Reroofing," of Chapter 9, "Roof Assemblies," of the 2015 International Residential Code is amended to read as follows:
 - "R908.3.1 Roof re-cover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:
 - 1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions
 - 2. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
 - 3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs where applied in accordance with Section R908.4.
 - 4. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.
 - 5. Where the application of a new roof covering results in not more than a total of two roof coverings and complies with all other provisions of this section.
 - **R908.3.1.1** A *roof re-cover* shall not be permitted where any of the following conditions occur:
 - 1. Where the existing roof or roof covering is water soaked or has deteriorated to the

- point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
- 3. Where the existing roof has three [two] or more applications of any type of roof covering."
- 32. Subsection N1101.4 (R102.1.1), "Above Code Programs," of Section N1101, "General," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is amended by adding new Paragraph N1101.4.1 (R102.1.2), "Alternative Compliance," to read as follows:
 - "N1101.4.1 (R102.1.2) Alternative compliance. A building certified by a national, state or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance."
- 33. Subsection N1101.6 (R202), "Defined Terms," of Section N1101, "General," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is amended by adding in alphabetical order new defined terms to read as follows:
- "DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including U-factor, solar heat gain coefficient (SHGC) or visible transmittance (VT)."
- "PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device."
- 34. Subsection N1102.2 (R402.2), "Specific Insulation Requirements (Prescriptive)," of Section N1102 (R402), "Building Thermal Envelope," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is amended by adding a new Paragraph N1102.2.14 (R402.2.14), "Insulation Installed in Walls," to read as follows:

"N1102.2.14 (R402.2.14) Insulation installed in walls. To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official."

35. Paragraph N1102.3.2 (R402.3.2). "Glazed Fenestration SHGC," of Subsection N1102.3 (R402.3), "Fenestration (Prescriptive)," of Section N1102 (R402), "Building Thermal Envelope," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is amended to read as follows:

"N1102.3.2 (R402.3.2) Glazed fenestration SHGC. An area-weighted average of fenestration products more that 50-percent glazed shall be permitted to satisfy the SHGC requirements.

Dynamic glazing shall be permitted to satisfy the SHGC requirements of Table N1102.1.2 (Table R402.1.2) provided the ratio of the higher to lower labeled SHGC is greater than or equal to 2.4, and the dynamic glazing is automatically controlled to modulate the amount of solar gain into the space in multiple steps. Dynamic glazing shall be considered separately from other fenestration, and area-weighted averaging with other fenestration that is not dynamic glazing shall not be permitted.

Exception: Dynamic glazing is not required to comply with this section when both the lower and higher labeled SHGC already comply with the requirements of Table N1102.1.2 (Table R402.1.2).

Where vertical fenestration is shaded by an overhang, eave, or permanently attached shading device, the SHGC required in Table N1102.1.2 (R402.1.2) shall be reduced by using the multipliers in Table N1102.3.2 (R402.3.2) SHGC Multipliers for Permanent Projections.

Table N1102.3.2 (R402.3.2) SHGC Multipliers for Permanent Projections ^a

Projection	SHGC Multiplier	SHGC Multiplier
<u>Factor</u>	(all Other Orientation)	(North Oriented)
0 - 0.10	1.00	1.00
<u>>0.10 − 0.20</u>	0.91	0.95
<u>>0.20 − 0.30</u>	0.82	0.91
<u>>0.30 − 0.40</u>	0.74	0.87

>0.40 - 0.50	0.67	0.84
≥0.50 – 0.6 <u>0</u>	<u>0.61</u>	0.81
<u>>0.60 − 0.70</u>	<u>0.56</u>	0.78
<u>>0.70 − 0.80</u>	<u>0.51</u>	0.76
<u>>0.80 − 0.90</u>	0.47	0.75
≥0.90 – 1.00	0.44	0.73

^a North oriented means within 45 degrees of true north."

36. Subparagraph N1102.4.1.2 (R402.4.1.2), "Testing," of Paragraph N1102.4.1 (R402.4.1), "Building Thermal Envelop," of Subsection N1102.4 (R402.4), "Air Leakage (Mandatory)," of Section N1102 (R402) "Building Thermal Envelope," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code amended to read as follows:

"N1102.4.1.2 (R402.4.1.2) Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

During testing:

- 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
- 2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
- 3. Interior doors, if installed at the time of the test, shall be open.
- 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.

- 5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
- 6. Supply and return registers, if installed at the time of the test, shall be fully open.

Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed or have any financial interest in the company that constructs the structure."

37. Paragraph N1103.3.3 (R403.3.3), "Duct Testing (Mandatory)," of Subsection N1103.3 (R403.3), "Ducts," of Section N1103 (R403), "Systems," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is amended to read as follows:

"N1103.3.3 (R403.3.3) Duct Testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:

- 1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.
- 2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exception: A <u>total</u> [duct air] leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed or have any financial interest in the company that constructs the structure. A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*."

- 38. Paragraph N1105.6.2 (R405.6.2) "Specific Approval," of Subsection N1105.6 (R405.6), "Calculation Software Tools," of Section N1105 (R405) "Simulated Performance Alternative (Performance)," of Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is amended to read as follows;
 - "N1105.6.2 (R405.6.2) Specific approval. Performance analysis tools meeting the applicable provisions of Section N1105 shall be permitted to be approved. Tools are permitted to be approved based on meeting a specified threshold for a jurisdiction. The <u>code</u> [building] official shall be permitted to approve tools for a specified application or limited scope.

Acceptable performance software simulation tools may include, but are not limited to, REM RateTM, Energy Gauge and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as outlined in N1105.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official."

39. Table N1106.4 (R406.4) "Maximum Energy Rating Index," of Subsection N1106.4 (406.4), "ERI-Based Compliance," of Section N1106 (R406) "Energy Rating Index Compliance Alternative," Chapter 11 [RE], "Energy Efficiency," of the 2015 International Residential Code is deleted and replaced with the following tables:

"TABLE N1106.4 (R406.4)¹
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	65

¹ This table is effective until August 31, 2019.

TABLE N1106.4 (R406.4)² MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	63

² This table is effective from September 1, 2019 through August 31, 2022.

TABLE N1106.4 (R406.4)³ MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
3	59

³ This table is effective on and after September 1, 2022."

40. Paragraph M1305.1.3, "Appliances in Attics," of Subsection M1305.1, "Appliance Access for Inspection Service, Repair and Replacement," of Section M1305, "Appliance Access," of Chapter 13, "General Mechanical System Requirements," of the 2015 International Residential Code is amended to read as follows:

"M1305.1.3 Appliances in attics. Attics containing appliances requiring access shall be provided with an opening and a clear and unobstructed passageway large enough to allow removal of the largest appliance, but not less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) long measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous solid flooring in accordance with Chapter 5 not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present along all sides of the appliance where access is required. The clear access opening dimensions shall not be less than 20 inches by 30 inches (508 mm by 762 mm) or larger where such dimensions are not[, and] large enough to allow removal of the largest appliance. A walkway to an appliance must be rated as a floor as approved by the building official. As a minimum, provide one of the following for access to the attic space:

- 1. A permanent stair.
- 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
- 3. An access door from an upper floor.

An access panel may be used in lieu of Items 1, 2 or 3 due to structural conditions with prior approval of the building official.

Exceptions:

1. The passageway and level service space are not required where the *appliance* can be serviced and removed through the required opening.

- 2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not more than 50 feet (15,250 mm) long.
- M1305.1.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the appliance location in accordance with the <u>Dallas Electrical Code</u> [Chapter 39]. Exposed lamps shall be protected from damage by location or lamp guards."
- 41. Subparagraph M1305.1.4.3, "Electrical Requirements," of Paragraph M1305.1.4, "Appliances Under Floors," of Subsection M1305.1, "Appliance Access for Inspection Service, Repair and Replacement," of Section M1305, "Appliance Access," of Chapter 13, "General Mechanical System Requirements," of the 2015 International Residential Code is amended to read as follows:
 - "M1305.1.4.3 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the appliance location in accordance with the Dallas Electrical Code. Low voltage wiring of 50 volts or less must be installed in a manner to prevent physical damage [Chapter 39]. Exposed lamps shall be protected from damage by location or lamp guards."
- 42. Subsection M1307.3, "Elevation of Ignition Source," of Section M1307, "Appliance Installation," of Chapter 13, "General Mechanical System Requirements," of the 2015 International Residential Code is amended to read as follows:
- "M1307.3 Elevation of ignition source. Equipment and a[A]ppliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the garage.

Exceptions:

- 1. Elevation of the ignition source is not required for appliances that are listed as flammable-vapor-ignition resistant.
- 2. Electric appliance or electric water heaters.

M1307.3.1 Protection from impact. Appliances shall not be installed in a location subject to vehicle damage except where protected by approved barriers."

43. Section M1307, "Appliance Installation," of Chapter 13, "General Mechanical System Requirements," of the 2015 International Residential Code is amended by adding a new Subsection M1307.7, "Prohibited Locations," to read as follows:

"M1307.7 Prohibited locations. Fuel-fired appliances must not be located in, or obtain combustion air from, any of the following rooms or spaces:

- 1. Sleeping rooms.
- 2. Bathrooms.
- 3. Toilet rooms.
- 4. Storage closets.

Exception: This section does not apply to the following applications:

- 1. Direct-vent appliances that obtain all combustion air directly from outdoors.
- 2. Solid fuel-fired appliances, provided that the room is not a confined space and the building is not of unusually tight construction.
- 3. Appliances installed in a dedicated enclosure in which all combustion air is taken directly from the outdoors, in accordance with Chapter 7. Access to such enclosure must be through a solid door, weather-stripped in accordance with the exterior door leakage requirements of the *Dallas Energy Conservation Code* and equipped with an approved self-closing device."
- 44. Subsection M1401.4, "Exterior Installations," of Section M1401, "General," of Chapter 14, "Heating and Cooling Equipment and Appliances," of the 2015 International Residential Code is amended to read as follows:
- "M1401.4 Exterior installations. Equipment and appliances installed outdoors shall be listed and labeled for outdoor installation. Supports and foundations shall prevent excessive vibration, settlement or movement of the equipment. Supports and foundations shall be in accordance with Section M1305.1.4.1.

M1401.4.1 Side yard clearances. A unitary air conditioning unit installed in a required side yard must comply with the requirements of Section 51A-4.402(a)(4) of the Dallas Development Code.

M1401.4.2 Low voltage wiring. Low voltage wiring of 50 volts or less must be installed in an approved manner as defined in the *Dallas Electrical Code* in order to prevent physical damage to the wiring."

45. Subsection M1411.3, "Condensate Disposal," of Section M1411, "Heating and Cooling Equipment," of Chapter 14, "Heating and Cooling Equipment and Appliances," of the 2015 International Residential Code is amended to read as follows:

"M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to an *approved* place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope.) Condensate shall not discharge into a street, alley, sidewalk, rooftop or other areas so as to [where it would] cause a nuisance.

M1411.3.1 Auxiliary and secondary drain systems. In addition to the requirements of Section M1411.3, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components <u>could</u> [will] occur as a result of overflow from the *equipment* drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope). Drain piping shall be not less than 3/4-inch (19 mm) nominal pipe size. One of the following methods shall be used:

- 1. An auxiliary drain pan with a separate drain shall be installed under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1.5 inches (38 mm), shall not be less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236-inch (0.6010 mm) (No. 24 Gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).
- 2. A separate overflow drain line shall be connected to the drain pan installed with the *equipment*. This overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point must not create a nuisance.
- 3. An auxiliary drain pan without a separate drain line shall be installed under the coils on which condensation will occur. This pan shall be equipped with a water level

detection device conforming to UL 508 that will shut off the *equipment* served prior to overflow of the pan. The pan shall be equipped with a fitting to allow for drainage. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section. A water level detection device may be installed only with prior approval of the *building official*.

4. A water level detection device conforming to UL 508 shall be installed that will shut off the *equipment* served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the *equipment*-supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan. A water level detection device may be installed only with prior approval of the *building official*.

M1411.3.1.1 Water-level monitoring devices. On down-flow units and all other coils that have no secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices shall not be installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

Exception: Fuel-fired appliances that automatically shut down operation in the event of a stoppage in the condensate drainage system.

M1411.3.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be ABS, cast iron, copper, cross-linked polyethylene, CPVC, galvanized steel, [PE-RT,] polyethylene, polypropylene or PVC pipe or tubing. When exposed to ultra violet light, schedule 80 PVC pipe or tubing is required. Components shall be selected for the pressure, [and] temperature and exposure rating of the installation. Joints and connections shall be made in accordance with [the applicable provisions of] Chapter 30. Condensate waste and drain line size shall be not less than 3/4-inch (19 mm) internal [nominal] diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2, "Condensate Drain Sizing," of the Dallas Mechanical Code [an approved method].

M1411.3.3 Drain line maintenance. Condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut.

M1411.3.4 Appliances, equipment and insulation in pans. Where appliances, equipment or insulation are subject to water damage when auxiliary drain pans fill, those portions of the appliances, equipment and insulation shall be installed above the flood level rim of the pan. Supports located inside of the pan to support the appliance or equipment shall be water resistant and approved."

- 46. Paragraph M1502.4.2, "Duct Installation," of Subsection M1502.4, "Dryer Exhaust Ducts," of Section M1502, "Clothes Dryer Exhaust," of Chapter 15, "Exhaust Systems," of the 2015 International Residential Code is amended to read as follows:
 - "M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 [and shall be mechanically fastened]. Ducts shall not be joined with screws or similar fasteners [that protrude more than 1/8 inch (3.2 mm) into the inside of the duct]."
- 47. Subsection M1503.4, "Makeup Air Required," of Section M1503, "Range Hoods," of Chapter 15, "Exhaust Systems," of the 2015 International Residential Code is amended to read as follows:
- "M1503.4 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be mechanically or naturally provided with makeup air at a rate approximately equal to the <u>difference between the</u> exhaust air rate <u>and 400 cubic feet per minute (0.19 m³/s)</u>. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system [not less than one damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be accessible for inspection, service, repair and replacement without removing permanent construction or any other duets not connected to the damper being inspected, serviced, repaired or replaced].

Exception: Where all appliances in the house are of sealed combustion, power-vent, unvented or electric, the exhaust hood system is permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) must be provided with a makeup air rate approximately equal to the difference between the exhausted air rate and 600 cubic feet per minute (0.28 m³/s).

M1503.4.1 Location. Kitchen exhaust makeup air shall be discharged into the same room in which the exhaust system is located or into rooms or duct systems that communicate through one or more permanent openings with the room in which such exhaust system is located. Such permanent openings shall have a net cross-sectional area not less than the required area of the makeup air supply openings."

- 48. Subsection M1507.2, "Recirculation of Air," of Section M1507, "Mechanical Ventilation," of Chapter 15, "Exhaust Systems," of the 2015 International Residential Code is amended to read as follows:
- "M1507.2 Recirculation of air. Exhaust air from bathrooms and toilet rooms shall not be recirculated within a residence or to another *dwelling unit* and shall be exhausted directly to the outdoors. Exhaust air from bathrooms and toilet rooms shall not discharge into an *attic*, crawl space or other areas inside the building.

Exception: Toilet rooms within private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air."

- 49. Chapter 20, "Boilers and Water Heaters," of the 2015 International Residential Code is retitled as Chapter 20, "Boilers."
- 50. Subsection M2005.1, "General," of Section M2005, "Water Heaters," of Chapter 20, "Boilers," of 2015 International Residential Code is deleted and replaced with a new Subsection 2005.1, "General," to read as follows:
- "M2005.1 General. Water heaters shall be installed in accordance with Chapter 28 and the manufacturer's instructions. Gas-fired water heaters shall comply with the requirements of Chapter 24 and electric water heaters shall comply with the *Dallas Electrical Code*."
- 51. Paragraph G2407.6.2 (304.6.2), "One-Permanent-Opening Method," of Subsection G2407.6 (304.6), "Outdoor Combustion Air," of Section G2407 (304), "Combustion, Ventilation and Dilution Air," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is deleted.
- 52. Subsection G2407.10 (304.10), "Louvers and Grilles," of Section G2407 (304), "Combustion, Ventilation and Dilution Air," of Chapter 24, "Fuel Gas," of the 2015.

 International Residential Code is amended to read as follows:
- "G2407.10 (304.10) Louvers and grilles. The required size of openings for *combustion*, ventilation and *dilution air* shall be based on the net free area of each opening. Where the free area through a design of louver, grille or screen is known, it shall be used in calculating the size

opening required to provide the free area specified. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have 50 [75]-percent free area. Screens shall have a mesh size not smaller than ¼ inch (6.4 mm). Nonmotorized louvers and grilles shall be fixed in the open position. Motorized louvers shall be interlocked with the appliance so that they are proven to be in the full open position prior to main burner ignition and during main burner operation. Means shall be provided to prevent the main burner from igniting if the louvers fail to open during burner start-up and to shut down the main burner if the louvers close during operation."

53. Subsection G2408.2 (305.3), "Elevation of Ignition Source," of Section G2408 (305), "Installation," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

"G2408.2 (305.3) Elevation of ignition source. Equipment and appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in [hazardous locations and public garages,] private garages, motor fuel dispensing facilities and parking garages]. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exceptions:

- 1. Elevation of the *ignition source* is not required for *appliances* that are listed as flammable-vapor-ignition resistant.
- 2. Electric appliances or electric water heaters.
- **G2408.2.1** (305.3.1) Installation in residential garages. In residential garages where appliances are installed in a separate, enclosed space having access only from outside of the garage, such appliances shall be permitted to be installed at floor level, provided that the required combustion air is taken from the exterior of the garage."
- 54. Subsection G2408.3 (305.5), "Private Garages," of Section G2408 (305), "Installation," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is deleted.
- 55. Subsection G2411.1 (310.1), "Pipe and Tubing Other Than CSST," of Section G2411 (310), "Electrical Bonding," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is deleted and replaced with a new Subsection G2411.1 (310.1), "Pipe and Tubing," to read as follows:

"G2411.1 (310.1) Pipe and tubing. Metal piping systems that are likely to become energized shall be bonded by a qualified contractor and in accordance with the requirements of the *Dallas Electrical Code*."

56. Subsection G2412.5 (401.5), "Identification," of Section G2412 (401), "General," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

"G2412.5 (401.5) Identification. For other than <u>black</u> steel *pipe*, exposed *piping* shall be identified by a <u>permanently attached</u> yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on *pipe* located in the same room as the <u>equipment</u> [appliance] served. <u>Both ends of each section of medium pressure shall identify its operating gas pressure with an approved permanently attached tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:</u>

WARNING
½ to 5 psi gas pressure
Do Not Remove."

57. Subsection G2413.3 (402.3), "Sizing," of Section G2413 (402), "Pipe Sizing," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

"G2413.3 (402.3) Sizing. Gas piping shall be sized in accordance with one of the following:

- 1. Pipe sizing tables or sizing equations in accordance with Section G2413.4.
- 2. The sizing tables included in a *listed piping* system's manufacturer's installation instructions.
- 3. Other *approved* engineering methods.

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of ½ inch (18 EDH)."

58. Subsection G2415.12 (404.12), "Minimum Burial Depth," of Section G2415 (404), "Piping System Installation," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

- "G2415.12 (404.12) Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 18 [12] inches (458 [305] mm), measured from top of pipe to existing [below] grade[, except as provided for in Section G2415.12.1.
 - G2415.12.1 (404.12.1) Individual outside appliances. Individual lines to outside lights, grills or other appliances shall be installed not less than 8 inches (203 mm) below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.]"
- 59. Subsection G2417.1 (406.1), "General," of Section G2417 (406), "Inspection, Testing and Purging," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:
- "G2417.1 (406.1) General. Prior to acceptance and initial operation, all *piping* installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections G2417.1.1 through G2417.7.3 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the *building official* when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.
 - **G2417.1.1 (406.1.1) Inspections.** Inspection shall consist of visual examination, during or after manufacture, fabrication, assembly or *pressure tests*.
 - G2417.1.2 (406.1.2) Repairs and additions. In the event repairs or additions are made after the *pressure test*, the affected *piping* shall be tested.
 - With prior approval of the building official, m[M]inor repairs and additions are not required to be *pressure tested* provided that the work is inspected and connections are tested with a noncorrosive leak-detecting fluid or other *approved* leak-detecting methods.
 - **G2417.1.3 (406.1.3)** New branches. Where new branches are installed to new *appliances*, only the newly installed branches shall be required to be *pressure tested*. Connections between the new *piping* and the existing *piping* shall be tested with a noncorrosive leak-detecting fluid or other *approved* leak-detecting methods.
 - **G2417.1.4 (406.1.4) Section testing.** A piping system shall be permitted to be tested as a complete unit or in sections. Under no circumstances shall a valve in a line be used as a bulkhead between gas in one section of the piping system and test medium in an adjacent section, except where a double block and bleed valve system is installed. A valve shall not be subjected to the test pressure unless it can be determined that the valve, including the valve closing mechanism, is designed to safely withstand the test pressure.

G2417.1.5 (406.1.5) Regulators and valve assemblies. Regulator and valve assemblies fabricated independently of the *piping system* in which they are to be installed shall be permitted to be tested with inert gas or air at the time of fabrication.

G2417.1.6 (406.1.6) Pipe clearing. Prior to testing, the interior of the pipe shall be cleared of all foreign material."

60. Subsection G2417.4 (406.4), "Test Pressure Measurement," of Section G2417 (406), "Inspection, Testing and Purging," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

"G2417.4 (406.4) Test pressure measurement. Test pressure shall be measured with [a manometer or with] a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. [Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.]

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be not less than [1½ times the proposed maximum working pressure, but not less than] 3 psig (20 kPa gauge). For tests requiring a pressure of 3 psig, diaphragm gauges must utilize a dial with a minimum diameter of 3½ inches, a set hand, 1/10 pound increments and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges must utilize a dial with a minimum diameter of 3½ inches, a set hand, a minimum of 2/10 pound increments and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure must not be less than 10 pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure must be not less than one and one-half times the proposed maximum working pressure. [, irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.]

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing.

G2417.4.2 (406.4.2) Test duration. The test duration shall be held for a length of time satisfactory to the building official, but in no case for [not] less than 15 [10] minutes. For welded piping, and for piping carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa), the test duration must be held for a length of time satisfactory to the building official, but in no case for less than 30 minutes."

- 61. Subsection G2420.1 (409.1), "General," of Section G2420 (409), "Shutoff Valves," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended by adding a new Paragraph G2420.1.4, "Valves in CSST Installations," to read as follows:
 - "G2420.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems must be supported with an approved termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration, but in no case greater than 12 inches from the center of the valve. Supports must be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings and valves between anchors. All valves and supports must be designed and installed so they will not be disengaged by movement of the supporting piping."
- 62. Paragraph G2420.5.1 (409.5.1), "Located Within Same Room," of Subsection G2420.5 (409.5), "Appliance Shutoff Valve," of Section G2420 (409), "Shutoff Valves," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:
 - "G2420.5.1 (409.5.1) Located within same room. The shutoff valve shall be located in the same room as the appliance. The shutoff valve shall be within 6 feet (1829 mm) of the appliance, and shall be installed upstream of the union, connector or quick disconnect device it serves. Such shutoff valves shall be provided with access. Appliance shutoff valves located in the firebox of a fireplace shall be installed in accordance with the appliance manufacturer's instructions. A secondary valve shall be installed within 3 feet (914 mm) of the firebox if appliance shutoff is in the firebox."
- 63. Subsection G2421.1 (410.1), "Pressure Regulators," of Section G2421 (410), "Flow Controls," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:
- "G2421.1 (410.1) Pressure regulators. A line pressure regulator shall be installed where the appliance is designed to operate at a lower pressure than the supply pressure. Line gas pressure regulators shall be listed as complying with ANSI Z21.80. Access shall be provided to pressure regulators. Pressure regulators shall be protected from physical damage. Regulators installed on the exterior of the building shall be approved for outdoor installation. Access to regulators must comply with the requirements for access to appliances as specified in Section M1305.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening."

64. Subparagraph G2422.1.2.3 (411.1.3.3), "Prohibited Locations and Penetrations," of Paragraph G2422.1.2 (411.1.3), "Connector Installation," of Subsection G2422.1 (411.1), "Connecting Appliances," of Section G2422 (411), "Appliance Connections," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

"G2422.1.2.3 (411.1.3.3) Prohibited locations and penetrations. Connectors shall not be concealed within, or extended through, walls, floors, partitions, ceilings or appliance housings.

Exception[s]:

- [1. Connectors constructed of materials allowed for *piping systems* in accordance with Section G2414 shall be permitted to pass through walls, floors, partitions and ceilings where installed in accordance with Section G2420.5.2 or G2420.5.3
- 2.] Rigid <u>black</u> steel pipe connectors shall be permitted to extend through openings in *appliance* housings.
- [3. Fireplace inserts that are factory equipped with grommets, sleeves or other means of protection in accordance with the listing of the appliance.
- 4. Semirigid *tubing* and listed connectors shall be permitted to extend through an opening in an *appliance* housing, cabinet or casing where the tubing or connector is protected against damage.]"
- 65. Paragraph G2439.7.2 (614.8.2), "Duct Installation," of Subsection G2439.7 (614.8), "Domestic Clothes Dryer Exhaust Ducts," of Section G2439 (614), "Clothes Dryer Exhaust," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:

"G2439.7.2 (614.8.2) Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners [that protrude more than 1/8 inch (3.2 mm) into the inside of the duct]."

- 66. Subsection G2445.2 (621.2), "Prohibited Use," of Section G2445 (621), "Unvented Room Heaters," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:
- "G2445.2 (621.2) Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the building official unless an unsafe condition is determined to exist as described in Section 203 of Chapter 52 of the Dallas City Code, "Administrative Procedures for the Construction Codes."

- 67. Paragraph G2448.1.1 (624.1.1), "Installation Requirements," of Subsection G2448.1 (624.1), "General," of Section G2448 (624), "Water Heaters," of Chapter 24, "Fuel Gas," of the 2015 International Residential Code is amended to read as follows:
 - "G2448.1.1 (624.1.1) Installation requirements. The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with Chapter 28 and all other provisions of this code."
- 68. Paragraph P2603.5.1, "Sewer Depth," of Subsection P2603.5, "Freezing," of Section P2603, "Structural and Piping Protection," of Chapter 26, "General Plumbing Requirements," of the 2015 International Residential Code is amended to read as follows:
 - "P2603.5.1 Sewer depth. [Building sewers that connect to private sewage disposal systems shall be a not less than [NUMBER] inches (mm) below finished grade at the point of septic tank connection.] Building sewers shall be not less than 12 [[NUMBER]] inches (304 mm) below grade."
- 69. Chapter 26, "General Plumbing Requirements," of the 2015 International Residential Code is amended by adding a new Section P2610, "Irrigation Systems," to read as follows:

"SECTION P2610 IRRIGATION SYSTEMS

- **P2610.1 Irrigation systems.** All potable water source irrigation systems must comply with the provisions of Appendix J, "Standards for Designing, Installing and Maintaining Landscape Irrigation Systems," of the *Dallas Plumbing Code*. All nonpotable water source irrigation systems must comply with the provisions of Chapter 13, "Water Reuse," and Appendix J, "Standards for Designing, Installing and Maintaining Landscape Irrigation Systems."
- 70. Chapter 26, "General Plumbing Requirements," of the 2015 International Residential Code is amended by adding a new Section P2611, "Water Reuse Systems," to read as follows:

"SECTION P2611 WATER REUSE SYSTEMS

- **P2611.1 Water reuse systems.** All water reuse systems must comply with the provisions of Chapter 13, "Water Reuse Systems," of the *Dallas Plumbing Code*."
- 71. Subsection P2709.1, "Construction," of Section P2709, "Shower Receptors," of Chapter 27, "Plumbing Fixtures," of the 2015 International Residential Code is amended to read as follows:
- "P2709.1 Construction. Where a shower receptor has a finished curb threshold, it shall be not less than 1 inch (25 mm) below the sides and back of the receptor. The curb shall be not less than 2 inches (51 mm) and not more than 9 inches (229 mm) deep when measured from the top of the curb to the top of the drain. The finished floor shall slope uniformly toward the drain not less than ¼ unit vertical in 12 units horizontal (2-percent slope) nor more than ½ unit vertical per 12 units horizontal (4-percent slope) and floor drains shall be flanged to provide a water-tight joint in the floor. Thresholds must be of sufficient width to accommodate a minimum 22-inch (559 mm) door.

Exception: Showers designed to comply with ICC/ANSI A117.1 or other designs as approved by the building official."

- 72. Subsection P2718.1, "Waste Connection," of Section P2718, "Clothes Washing Machine," of Chapter 27, "Plumbing Fixtures," of the 2015 International Residential Code is amended to read as follows:
- "P2718.1 Waste connection. The discharge from a clothes washing machine shall be through an air break into a standpipe. Standpipes must be individually trapped. Standpipes must extend not less than 18 inches (457 mm) but not greater than 42 inches (1066 mm) above the trap weir.

Access must be provided to all standpipes and drains for rodding. A trap serving a standpipe cannot be installed below the floor."

- 73. Subsection P2801.3, "Installation," of Section P2801, "General," of Chapter 28,
- "Water Heaters," of the 2015 International Residential Code is amended to read as follows:
- "P2801.3 Installation. Water heaters shall be installed in accordance with the manufacturer's instructions, this chapter and Chapter[s 20 and] 24."
 - 74. Subsection P2801.4 "Location," of Section P2801, "General," of Chapter 28,
- "Water Heaters," of the 2015 International Residential Code is amended to read as follows:
- "P2801.4 Location. Water heaters and storage tanks shall be installed in accordance with their listing and this chapter. Water heaters [Section M1305] and shall be located and connected to provide access for observation, maintenance, servicing, [and] replacement and inspection without removing permanent construction, other appliances or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. A level working space not less than 30 inches deep and 30 inches wide (762 mm by 762 mm) shall be provided in front of the control side to service an appliance.
 - P2801.4.1 Water heaters in attics. Attics containing water heaters requiring access shall be provided with an opening and a clear and unobstructed passageway large enough to allow removal of the water heater, but not less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) long measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring in accordance with Chapter 5 not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present along all sides of the water heater where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm) or larger where such dimensions are not and large enough to allow removal of the water heater. A walkway to the water heater must be rated as a floor as approved by the building official. As a minimum, provide one of the following for access to the attic space:
 - 1. A permanent stair.
 - 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
 - 3. An access door from an upper floor.

An access panel may be used in lieu of Items 1, 2 or 3 due to structural conditions with prior approval of the building official.

Exceptions:

- 1. The passageway and level service space are not required where the water heater can be serviced and removed through the required opening.
- 2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not more than 50 feet (15 250 mm) long.
- P2801.4.1.1 [M1305.1.3.1] Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the water heater location in accordance with the Dallas Electrical Code.
- P2801.4.2 [M1305.1.2] Water heaters in rooms. Water heaters installed in a compartment, alcove, basement or similar space shall be accessed by an opening or door and an unobstructed passageway measuring not less than 24 inches (610 mm) wide and large enough to allow removal of the water heater in the space, provided there is a level service space of not less than 30 inches (762 mm) deep and the height of the appliance, but not less than 30 inches (762 mm), at the front or service side of the appliance with the door open."
- 75. Subsection P2801.5, "Prohibited Locations," of Section P2801, "General," of Chapter 28, "Water Heaters," of the 2015 International Residential Code is amended to read as follows:
- "P2801.5 Prohibited locations. Fuel fired water heaters shall not be located in rooms used for sleeping purposes, bathrooms, toilet rooms or storage closets, or in a space that opens into such rooms or spaces, except where the installation complies with one of the following:
 - 1. The water heater is a listed direct-vent appliance installed in accordance with the conditions of the listing and the manufacturer's instructions.
 - 2. The water heater is installed in a room or space that opens into a room used for sleeping purposes, bathroom, toilet room or storage closet, and such room or space is used for no other purpose and is provided with a solid weather-stripped air tight door equipped with an approved self-closing device. All combustion air shall be taken directly from the outdoors in accordance with Section G2407.6. [Waters heaters shall be located in accordance with Chapter 20.]"
- 78. Paragraph P2801.6.1, "Pan Size and Drain," of Subsection P2801.6, "Required Pan," of Section P2801, "General," of Chapter 28, "Water Heaters," of the 2015 International Residential Code is amended to read as follows:

"P2801.6.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) deep and shall be of sufficient size and shape to receive dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe of not less than 3/4 inch (19 mm) diameter. Piping for safety pan drains shall be of those materials indicated in Table P2905.5. Where a pan drain was not previously installed, a pan drain shall not be required for a replacement water heater installation.

Exception: Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the water heater's manufacturer installation instructions and installed according to manufacturer's instructions."

79. Subsection P2801.7, "Water Heaters Installed in Garages," of Section P2801, "General," of Chapter 28, "Water Heaters," of the 2015 International Residential Code is amended to read as follows:

"P2801.7 Water heaters installed in garages. Water heaters having an *ignition source* shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor.

Exception: Elevation of the *ignition source* is not required for <u>water heaters</u> [appliances] that meet one of the following conditions:

- 1. [are I]Listed as flammable vapor ignition resistant.
- 2. Electric water heaters."
- 80. Section P2801, "General," of Chapter 28, "Water Heaters," of the 2015 International Residential Code is amended by adding new Subsections P2801.9 through P2801.19 to read as follows:
- "P2801.9 Protection from vehicle impact damage. Water heaters shall not be installed in a location subject to vehicle impact damage except where protected by an approved means.
- **P2801.10 Outdoor locations.** Water heaters installed in outdoor locations shall be either listed for outdoor installation or provided with protection from outdoor environmental factors that influences the operability, durability and safety of the water heater.
- **P2801.11 Water heater valves.** A readily accessible full-open valve shall be installed in the cold-water supply line to each water heater at or near the water heater.

P2801.12 Combustion, ventilation and dilution air. Air for combustion, ventilation and dilution of flue gases for water heaters installed in structures shall comply section G2407 (304).

P2801.13 Vents. Vents for fuel gas water heaters shall be installed in accordance with Chapter 24 of this code.

P2801.14 Pressure regulators. Pressure regulators shall be installed in accordance with Section G2421 (410) of this code.

P2801.15 Shutoff valves. Each fuel gas water heater shall be provided with shut off valves in accordance with Section G2420 (409) of this code.

P2801.16 Appliance connectors. Fuel gas water heaters shall be connected to the gas system in accordance with Section G2422 (411) of this code.

P2801.17 Drips and sloped piping. Where wet gas exists, drips and sloped piping shall be installed in accordance with Section G2419 (408) of this code.

P2801.18 (G2410.2) Electrical connections. Electrical connections between water heaters and the building wiring, including grounding of the appliance, shall conform to the *Dallas Electrical Code*.

P2801.18.1 (G2410.1) Pipe and tubing. Metal piping systems that are likely to become energized shall be bonded by a qualified contractor and in accordance with the requirements of the *Dallas Electrical Code*.

P2801.19 Thermal expansion control. When required, thermal expansion control shall be installed in accordance with Section P2903.4 of this code."

81. Paragraph P2804.6.1, "Requirements for Discharge Pipe," of Subsection P2804.6, "Installation of Relief Valves," of Section P2804, "Relief Valves," of Chapter 28, "Water Heaters," of the 2015 International Residential Code is amended to read as follows:

"P2804.6.1 Requirements for discharge pipe. The discharge piping serving a pressure-relief valve, temperature-relief valve or combination valve shall:

- 1. Not be directly connected to the drainage system.
- 2. Discharge through an air gap [located in the same room as the water heater].
- 3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.

4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T&P discharge piping system when first approved by the building official and permitted by the manufacturer's installation instructions and installed pursuant to those instructions.

- 5. Discharge by indirect means [to the floor, to the pan serving the water heater or storage tank,] to an approved waste receptor or to the outdoors.
- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 7. Discharge to a termination point that is readily observable by the building occupants.
- 8. Not be trapped.
- 9. Be installed to flow by gravity.
- 10. Terminate not <u>less</u> [more] than 6 inches (152 mm) or more [and not less] than 24 inches (609 mm) [two times the discharge pipe diameter] above grade nor more than 6 inches (152 mm) above the [floor or] waste receptor flood level rim.
- 11. Not have a threaded connection at the end of the piping.
- 12. Not have valves or tee fittings.
- 13. Be constructed of those materials included in Section P2906.5 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.
- 14. Be one nominal size larger than the size of the relief-valve outlet, where the relief-valve discharge piping is constructed of PEX or PE-RT tubing. The outlet end of such tubing shall be fastened in place."
- 82. Section P2901, "General," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is deleted and replaced with a new Section P2901, "General," to read as follows:

"SECTION P2901 GENERAL

- **P2901.1 Potable water required.** Only potable water shall be supplied to plumbing fixtures that provide water for drinking, bathing or culinary purposes. Unless otherwise provided in this code, potable water shall be supplied to all plumbing fixtures.
- **P2901.2** Nonpotable water use. Where nonpotable water systems are installed, the nonpotable water system shall be supplied to only water closets, urinals or lawn irrigation systems. Nonpotable water systems shall be installed in accordance with Section 2910 of this code and all applicable sections of the *Dallas Plumbing Code*.

Exception: The requirements of this section and the *Dallas Plumbing Code* shall not be construed to require signage for water closets and urinals.

- **P2901.2.1** (608.8) Identification of nonpotable water systems. Where nonpotable water systems are installed, all identification requirements for the piping conveying the nonpotable water shall be in accordance with Section 608.8 of the *Dallas Plumbing Code*."
- 83. Paragraph P2902.5.3, "Lawn Irrigation Systems," of Subsection P2902.5, "Protection of Potable Water Connections," of Section P2902, "Protection of Potable Water Supply," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is amended to read as follows:
 - "P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric vacuum breaker, a pressure vacuum breaker assembly, a double-check assembly or a reduced pressure principle backflow prevention assembly. Valves shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow prevention assembly."
- 84. Subsection P2903.2, "Maximum Flow and Water Consumption," of Section P2903, "Water Supply System," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is amended to read as follows:
- "P2903.2 Maximum flow and water consumption. Where the state-mandated maximum flow rate is more restrictive than those of this section, the state flow rate prevails. [The maximum water consumption flow rates and quantities for plumbing fixtures and fixture fittings shall be in accordance with Table P2903.2.]"

- 85. Paragraph P2903.9.1, "Service Valve," of Subsection P2903.9, "Valves," of Section P2903, "Water Supply System," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is amended to read as follows:
 - "P2903.9.1 Service valve. Each dwelling unit shall be provided with an accessible main shutoff valve near the entrance of the water service. The valve shall be of a full-open type having nominal restriction to flow[, with provision for drainage such as a bleed orifice or installation of a separate drain valve. Additionally, the water service shall be valved at the eurb or lot line in accordance with local requirements]."
- 86. Section P2904, "Dwelling Unit Fire Sprinkler Systems," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is deleted and replaced with a new Section P2904, "Dwelling Unit Fire Sprinkler Systems," to read as follows:

"SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS

- **P2904.1 General.** The design and installation of multipurpose residential fire sprinkler systems must be in accordance with the most current edition of NFPA 13D."
- 87. Subsection P2906.2, "Lead Content," of Section P2906, "Materials, Joints and Connections," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is amended to read as follows:
- "P2906.2 Lead contents of water supply pipe and fittings. On potable water systems, the maximum allowable lead content in pipes, pipe fittings, plumbing fittings and fixtures shall be not more than a weighted average of 0.25 percent with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings and fixtures. [The lead content in pipe and fittings used in the water supply system shall be not greater than 8 percent.]

Exceptions:

- 1. Pipes, pipe fittings, plumbing fittings, fixtures or backflow preventers used only for nonpotable services such as manufacturing, industrial processing, irrigation systems as per Appendix F of the *Dallas Plumbing Code* or any other non-potable service.
- 2. Flush valves, fill valves, flushometer valves, tub fillers, shower valves, service saddles or water distribution main gate valves that are 2 inches (50 mm) in diameter or larger.

- [P2906.2.1 Lead content of drinking water pipe and fittings. Pipe, pipe fittings, joints, valves, faucets and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372 and shall have a weighted average lead content of 0.25 percent lead or less.]"
- 88. Section P2910, "Nonpotable Water Systems," of Chapter 29, "Water Supply and Distribution," of the 2015 International Residential Code is deleted and replaced with a new Section P2910, "Nonpotable Water Systems," to read as follows:

"SECTION 2910 NONPOTABLE WATER SYSTEMS

- **P2910.1 General.** The provisions of Chapter 13 of the *Dallas Plumbing Code* shall govern the materials, design, construction and installation for nonpotable water piping systems used only for flushing of water closets or urinals. The use and application of nonpotable water shall comply with Chapter 13 of the *Dallas Plumbing Code*. Landscape irrigation systems supplied by a nonpotable water source shall comply."
- 89. Paragraph P3003.9.2, "Solvent Cementing," of Subsection P3003.9, "PVC Plastic," of Section P3003, "Joints and Connections," of Chapter 30, "Sanitary Drainage," of the 2015 International Residential Code is amended to read as follows:
 - "P3003.9.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3 or CSA B181.2 shall be applied to all joint surfaces. The joint shall be made while the cement is wet, and shall be in accordance with ASTM D 2855. Solvent-cement joints shall be installed above or below ground.

Exception: A primer shall not be required where all of the following conditions apply:

- 1. The solvent cement used is third party certified as conforming to ASTM D 2564.
- 2. The solvent cement is used only for joining PVC drain, waste and vent pipe and fittings in non-pressure applications in sizes up to and including 4 inches (102 mm) in diameter.]"
- 90. Section P3009, "Subsurface Landscape Irrigation Systems," of Chapter 30, "Sanitary Drainage," of the 2015 International Residential Code is deleted and replace with a new Section P3009, "Subsurface Landscape Irrigation Systems," to read as follows.

"SECTION 3009 SUBSURFACE LANDSCAPE IRRIGATION SYSTEMS

- **P3009.1 General.** The provisions of Appendix F and Chapter 13 of the *Dallas Plumbing Code* shall govern the materials, design, construction and installation for subsurface landscape irrigation systems."
- 91. Subsection P3105.1, "Distance of Trap from Vent," of Section P3105, "Fixture Vents," of Chapter 31, "Vents," of the 2015 International Residential Code is amended to read as follows:
- "P3105.1 Discharge of trap from vent. Each fixture trap shall have a protecting vent located so that the slope and the *developed length* in the *fixture drain* from the trap weir to the vent fitting are within the requirements set forth in Table P3105.1.

[Exception: The developed length of the fixture drain from the trap weir to the vent fitting for self-siphoning fixtures, such as water closets, shall not be limited.]"

- 92. Section P3111, "Combination Waste and Vent System," of Chapter 31, "Vents," of the 2015 International Residential Code is deleted.
- 93. Subsection P3112.2, "Vent Connection," of Section P3112, "Island Fixture Venting," of Chapter 31, "Vents," of the 2015 International Residential Code is deleted and replaced with a new Subsection P3112.2, "Installation," to read as follows:
- "P3112.2 Installation. Traps for island sinks and similar equipment must be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drain board height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent must be connected to the horizontal drain through a wye-branch fitting and must, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than 6 inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings must be used on all parts of the vent below the floor level and minimum slope of ¼ inch per foot (20.9 mm/m) back to the drain must be maintained. The return bend used under the drain board must be a one piece fitting or an assembly of a 45 degree (0.79 radius), a 90 degree (1.6 radius) and a 45 degree (0.79 radius) elbow in the order named. Pipe sizing must be as elsewhere required in this code. The island sink drain, upstream of the return vent, must serve no other fixtures. An accessible cleanout must be installed in the vertical portion of the foot vent."

94. Subsection P3201.5, "Prohibited Trap Designs," of Section P3201, "Fixture Traps," of Chapter 32, "Traps," of the 2015 International Residential Code is amended to read as follows:

"P3201.5 Prohibited trap designs. The following types of traps are prohibited:

- 1. Bell traps.
- 2. [Separate fixture t]Traps not integral with a fixture and that depend on interior partitions for the seal, except those [lavatory] traps constructed of an approved material that is resistant to corrosion and degradation [made of plastic, stainless steel or other corrosion-resistant material].
- 3. "S" traps.
- 4. Drum traps.
- 5. Traps designed with moving or removable parts to maintain the seal."
- 95. Chapter 34, "General Requirements," of the 2015 International Residential Code is deleted and replaced with a new Chapter 34, "General Requirements," to read as follows:

"CHAPTER 34 GENERAL REQUIREMENTS

SECTION E3401 GENERAL

E3401.1 Applicability. The provisions of the *Dallas Electrical Code* establish the general scope of the electrical system and equipment requirements of this code."

96. Chapter 35, "Electrical Definitions"; Chapter 36, "Services"; Chapter 37, "Branch Circuit and Feeder Requirements"; Chapter 38, "Wiring Methods"; Chapter 39, "Power and Lighting Distribution"; Chapter 40, "Devices and Luminaires"; Chapter 41, "Appliance Installation"; Chapter 42, "Swimming Pools"; and Chapter 43, "Class 2 Remote-Control, Signaling and Power-Limited Circuits," of the 2015 International Residential Code are deleted.

- 98. The ASTM standards of Chapter 44, "Referenced Standards," of the 2015 International Residential Code are amended by amending the following standard to read as follows:
- "E 119—2012a Test Methods for Fire Tests of Building Construction and Materials Table R302.1(1), Table R302.1(2), R302.2, [R302.2.2,] R302.3, R302.4.1, R302.11.1"
- 99. The ICC standards of Chapter 44, "Referenced Standards," of the 2015 International Residential Code are amended by adding or amending the following standards to read as follows:
- 100. The NFPA standards of Chapter 44, "Referenced Standards," of the 2015 International Residential Code are amended by amending the following standards to read as follows:
- 101. The NSF standards of Chapter 44, "Referenced Standards," of the 2015 International Residential Code are amended by deleting the following standard as follows:

102. The UL standards of Chapter 44, "Referenced Standards," of the 2015 International Residential Code are amended by amending or deleting the following standards to read as follows:

"[174 04	Household Electric Storage Tank Water Heaters—with revisions through September 2012
"[732 2010	Oil Fired Storage Tank Water Heaters with revisions through April 2010M2005.1]"
"2523—09	Standard for Solid Fuel-fired Hydronic Heating Appliances, Water Heaters and Boilers—with revisions through February 2013[M2005.1,] M2001.1.1"

103. The 2015 International Residential Code is amended by adding a new Chapter 45, "Building Security," to read as follows:

"CHAPTER 45 BUILDING SECURITY

SECTION S4510 PURPOSE

S4510.1 General. The purpose of this chapter is to establish minimum standards to make dwelling units resistant to unlawful entry.

SECTION S4511 SCOPE

S4511.1 General. The provisions of this chapter apply to the following openings:

- 1. Openings into dwellings of townhouses and townhomes.
- 2. Openings into dwelling units.
- 3. Openings between attached garages and the dwelling units.
- 4. Openings into attached garages.

Exceptions:

1. An opening in an exterior wall when all portions of the opening are more than 12 feet (3656.6 mm) vertically or 6 feet (1826.8 mm) horizontally from an accessible surface of any adjoining yard, court, passageway, public way, walk, breezeway, patio, planter, porch or similar area.

- 2. All openings in an exterior wall when all portions of the opening are more than 12 feet (3656.6 mm) vertically or 6 feet (1826.8 mm) horizontally from the surface of any adjoining roof, balcony landing, stair tread, platform or similar structure, or when any portion of such surface is more than 12 feet (3656.6 mm) above an accessible surface.
- 3. All openings in a roof when all portions of such roof are more than 12 feet (3656.6 mm) above an accessible surface.
- 4. An opening where the smaller dimension is 6 inches (152.4 mm) or less, provided that the closest edge of the opening is at least 40 inches (1016 mm) from the locking device of a door.
- 5. An opening protected by required fire door assemblies having a fire-endurance rating of not less than 45 minutes.

SECTION S4512 OBSTRUCTING MEANS OF EGRESS

- **S4512.1 General.** Security methods shall not create a hazard to life by obstructing any means of egress or any opening that is classified as an emergency exiting facility. Security provisions contained in this chapter do not supersede or waive the safety provisions relative to latching or locking devices on means of egress doors or egress windows required by any other provision of this code.
- **S4512.2 Emergency escape or rescue windows.** Bars, grilles, grates or similar security or secondary locking devices may be installed on emergency escape or rescue windows or doors required by Section R310 of this code, provided the following:
 - 1. Such devices are equipped with approved release mechanisms that are operable from the inside without the use of a key or special knowledge or effort.
 - 2. The building is equipped with smoke alarms installed in accordance with the *Dallas Fire Code* and Section R314 of this code.

SECTION S4513 ENTRY VISION

- **S4513.1 Vision required.** All main or front entry doors to dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. The view may be provided by a door viewer having a field of view of not less than 180 degrees or through a window or view port.
- **S4513.2 Glazing separation.** Breakable glass should not be installed within 40 inches (1016 mm) of a door-locking device.

Exceptions:

- 1. For required means of egress doors and emergency escape or rescue doors, glazing may be installed within 40 inches (1016 mm) of the locking device if the glass is laminated, patterned, wired, obscured or protected by approved bars, grilles or grates.
- 2. For other doors, glazing may be installed within 40 inches (1016 mm) of a locking device that is key-opened from both the inside and the outside.

SECTION S4514 SWINGING DOORS

S4514.1 General. Swinging doors regulated by this chapter shall comply with the following:

- 1. Wood doors shall be solid core and not less than $1^3/8$ -inches (34.92 mm) thick.
- 2. Double doors shall have the inactive leaf secured by header and threshold bolts that penetrate metal strike plates. The bolts shall be flush-mounted in the door edge whenever breakable glass is located within 40 inches (1016 mm) of the bolts.
- 3. Dutch doors shall have concealed flush-bolt locking devices to interlock the upper and lower halves.

S4514.2 Strike plate installations. In wood-frame construction, any open space between trimmers and wood doorjambs shall be solid-shimmed by a single piece extending not less than 6 inches (152.4 mm) above and below the strike plate.

Strike plates shall be attached to wood with not less than two No. 8 by 2-inch (50.8 mm) screws. Strike plates when attached to metal shall be attached with not less than two No. 8 machine screws.

S4514.3 Hinges. Hinges that are exposed to the exterior shall be equipped with nonremovable hinge pins or a mechanical interlock to preclude removal of the door from the exterior by removing the hinge pins.

S4514.4 Locking hardware. Single swinging doors and the active leaf of double doors shall be equipped with an approved exterior key-operated dead bolt which shall lock with a minimum bolt throw of 1 inch (25.4 mm) through a metal strike plate. When mounted on an exit door or a required emergency escape or rescue door, the dead bolt lock shall be operable from the inside without the use of a key or any special knowledge or effort. See Chapter 10 for other exit door requirements.

SECTION S4515 WINDOWS AND SLIDING DOORS

S4515.1 General requirements. When regulated by this chapter, openable windows and sliding door assemblies shall be secured by a primary lock or sash operator and by either of the following:

- 1. A secondary locking device consisting of screws, dowels, pinning devices or keyoperated locks designed to prevent opening by lifting or prying.
- 2. Approved bars, grilles or grates.

Jalousie or louvered windows do not comply with this section unless protected with approved bars, grilles or grates. Installation of secondary locking devices or bars, grilles or grates on required emergency escape windows or doors shall comply with Section 1003.

SECTION S4516 GARAGE DOORS

S4516.1 General requirements. Vehicle access doors in enclosed attached garages shall be equipped with a security device or locking devices.

SECTION S4517 ALTERNATE MATERIALS OR METHODS

- **S4517.1 General.** The provisions of this chapter are not intended to prevent the use of any material, device, hardware or method not specifically prescribed in this chapter, when such alternate provides equivalent security and is approved by the *building official*."
- 102. Appendix E, "Manufactured Housing Used as Dwellings," of the 2015 International Residential Code is adopted with the following amendments:
- A. Appendix E, "Manufacture Housing Used as Dwellings," is retitled to read as follows:

"APPENDIX E PREFABRICATED [MANUFACTURED] HOUSING USED AS DWELLINGS

[(The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.)]"

B. Section AE101, "Scope," is amended to read as follows:

"SECTION AE101 SCOPE

AE101.1 <u>Industrialized housing</u>. All <u>industrialized housing</u> is subject to the <u>Texas Industrialized Housing and Building Act</u>, <u>Texas Civil Statutes</u>, <u>Article 5221f-1 and Texas Civil Statutes</u>, <u>Article 1900</u>.

AE101.2 Manufactured housing. All manufactured housing is subject to the Texas Manufactured Housing Standards Act, Texas Revised Civil Statutes, Article 5221f.

<u>AE101.3 Prefabricated housing [General]</u>. These provisions shall be applicable only to a <u>prefabricated [manufactured]</u> home used as a single <u>or two-family dwelling unit [installed on privately owned (nonrental) lots]</u> and shall apply to the following:

- 1. Construction, *alteration* and repair of any foundation system that is necessary to provide for the installation of an industrialized housing [a manufactured home] unit.
- 2. Construction, installation, addition, alteration, repair or maintenance of the building service equipment that is necessary for connecting prefabricated [manufactured] homes to water, fuel, or power supplies and sewage systems.
- 3. [Alterations, a] Additions [or repairs to] existing prefabricated [manufactured] homes. The construction, alteration, moving, demolition, repair and use of accessory buildings and structures, and their building service equipment, shall comply with the requirements of the codes adopted by this jurisdiction.

These provisions shall not be applicable to the design and construction of *manufactured homes* and shall not be deemed to authorize either modifications or *additions* to *manufactured homes* where otherwise prohibited.

Exception: In addition to these provisions, new and replacement <u>prefabricated</u> [manufactured] homes to be located in flood hazard areas as established in Table R301.2(1) of the <u>Dallas One- and Two-Family Dwelling</u> [International Residential] Code shall meet the applicable requirements of Section R322 of the <u>Dallas One- and Two-Family Dwelling</u> [International Residential] Code or the floodplain regulations of the Dallas Development Code.

AE101.4 State mandatory codes.

AE101.4.1 Electrical code. In addition to complying with Subsection AE 101.4.2, industrialized housing and buildings must be constructed to meet or exceed the requirements and standards of the *National Electrical Code*, published by the National Fire Protection Association, as that code existed on January 1, 1985.

AE101.4.2 Other codes. Industrialized housing and buildings erected or installed in a municipality must be constructed to meet or exceed the requirements and standards of the *Uniform Building Code*, *Uniform Plumbing Code*, and *Uniform Mechanical Code*, published by the International Conference of Building Officials, as those codes existed on January 1, 1985.

AE101.5 Building code amendment. If a code described by AE101.4 is amended by the council after January 1, 1985, the requirements and standards of the amended code shall be used in place of the January 1, 1985 editions.

- AE101.6 Local code amendment. The building official may not require or enforce, as a prerequisite for granting or approving a building or construction permit or certificate of occupancy, an amendment to a code described by Section AE101.4.
- AE101.7 Effect of mandatory building code amendment. Industrialized housing that bears an approved decal or insignia indicating that the building complies with the mandatory building codes and that has not been modified or altered is considered to be in compliance with a new mandatory building code adopted by the council or an amendment to a code approved by the council under Section AE101.5 or AE101.6.
- AE101.8 Alterations, additions or repairs to existing industrialized homes. Alterations, additions or repairs to existing industrialized homes shall comply with the Dallas One- and Two-Family Dwelling Code and Section 103.1 of Chapter 52 of the Dallas City Code.
- AE101.9 Relocated industrialized housing. Relocated industrialized housing is treated as moved buildings in accordance with Section 309 of the Dallas Existing Building Code."
- C. Section AE102, "Application to Existing Manufactured Homes and Building Service Equipment," is deleted.
- D. Subsection AE201.1, "General," of Section AE201, "Definitions," is amended to read as follows:
- **AE201.1 General.** For the purpose of these provisions, certain abbreviations, terms, phrases, words and their derivatives shall be construed as defined or specified herein.
- ACCESSORY BUILDING. Any building or structure or portion thereto, located on the same property as a <u>prefabricated</u> [manufactured] home, which does not qualify as a <u>prefabricated</u> [manufactured] home as defined herein.
- ALTERATION. Any construction, other than ordinary repairs of the house or building, to an existing industrialized house or building after affixing of the decal by the manufacturer. Industrialized housing or buildings that have not been maintained are considered altered.
- ALTERATION DECAL. The approved form of certification issued by the department to an industrialized builder to be permanently affixed to a module indicating that alterations to the industrialized building module have been constructed to meet or exceed the state model code requirements.
- **BUILDING SERVICE EQUIPMENT.** Refers to the plumbing, mechanical and electrical *equipment*, including piping, wiring, fixtures and other accessories which provide sanitation, lighting, heating, ventilation, cooling, fire protection and facilities essential for the habitable

occupancy of a <u>prefabricated</u> [manufactured] home or accessory building or structure for its designated use and occupancy.

BUILDING SYSTEM. The design or method of assembly of *modules* or *modular components* represented in the plans, specifications and other documentation which may include structural, electrical, mechanical, plumbing, fire protection and other systems affecting health and safety.

COMMISSION means the Texas Commission of Licensing and Regulation.

COMPONENT. A sub-assembly, subsystem or combination of elements for use as a part of a building system or part of a modular component that is not structurally independent, but may be part of structural, plumbing, mechanical, electrical, fire protection or other systems affecting life safety.

COUNCIL means the Texas Industrialized Building Code Council.

DECAL. The approved form of certification issued by the department to the *manufacturer* to be permanently affixed to the *module* indicating that it has been constructed to meet or exceed the code requirements and in compliance with these sections.

DEPARTMENT. The Texas Department of Licensing and Regulation.

DESIGN PACKAGE. The aggregate of all plans, designs, specifications and documentation required by these sections to be submitted to the *design review agency*, or required by the *design review agency* for compliance review, including the compliance control manual and the *on-site construction* documentation. Unique or site specific foundation drawings and special *on-site construction* details prepared for specific projects are not a part of the design package except as approved by the Texas Industrialized Housing and Building Act.

DESIGN REVIEW AGENCY. An approved organization, private or public, determined by the *Texas Industrialized Building Code Council* to be qualified by reason of facilities, personnel, experience and demonstrated reliability to review designs, plans, specifications and building systems documentation, and to certify compliance to these sections evidenced by affixing the *Texas Industrialized Building Code Council's* stamp.

EXECUTIVE DIRECTOR. Executive director of the *department*.

INDUSTRIALIZED BUILDER. A person who is engaged in the assembly, connection and on-site construction and erection of modules or modular components at the building site or who is engaged in the purchase of industrialized housing or buildings or of modules or modular components from a manufacturer for sale or lease to the public; a subcontractor of an industrialized builder is not a builder for purposes of these sections.

INDUSTRIALIZED HOUSING is a residential structure that is:

1. designed for the occupancy of one or more families;

- 2. constructed in one or more modules or constructed using one or more modular components built at a location other than the permanent site; and
- 3. designed to be used as a permanent residential structure when the module or the modular component is transported to the permanent site and erected or installed on a permanent foundation system.

<u>Industrialized housing includes the structure's plumbing, heating, air conditioning, and electrical systems.</u> <u>Industrialized housing does not include:</u>

- 1. a residential structure that exceeds four stories or 60 feet in height;
- 2. housing constructed of a sectional or panelized system that does not use a modular component; or
- 3. a ready-built home constructed in a manner in which the entire living area is contained in a single unit or section at a temporary location for the purpose of selling and moving the home to another location.

INSIGNIA. The approved form of certification issued by the department to the *manufacturer* to be permanently affixed to the *modular component* indicating that it has been constructed to meet or exceed the code requirements and in compliance with the sections in this chapter.

MANUFACTURED HOME. A structure transportable in one or more sections which, in the traveling mode, is 8 body feet (2438 body mm) or more in width or 40 body feet (12 192 body mm) or more in length or, when erected on site, is 320 or more square feet (30 m²), and which is built on a permanent chassis and designed to be used as a *dwelling* with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein; except that such term shall include any structure which meets all the requirements of this paragraph, except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the Secretary of the U.S. Department of Housing and Urban Development (HUD) and complies with the standards established under this title.

For mobile homes built prior to June 15, 1976, a *label* certifying compliance with the *Standard for Mobile Homes*, NFPA 501, ANSI 119.1, in effect at the time of manufacture, is required. For the purpose of these provisions, a mobile home shall be considered a *manufactured home*.

MANUFACTURED HOME INSTALLATION. Construction which is required for the installation of a manufactured home, including the construction of the foundation system, required structural connections thereto and the installation of on-site water, gas, electrical and sewer systems and connections thereto which are necessary for the normal operation of the manufactured home.

MANUFACTURED HOME STANDARDS. The Manufactured Home Construction and Safety Standards as promulgated by the <u>U.S. Department of Housing and Urban Development (HUD)</u> or the Texas Department of Housing and Community Affairs.

MANUFACTURER. A person who constructs or assembles modules or modular components at a manufacturing facility which are offered for sale or lease, sold or leased, or otherwise used.

MANUFACTURING FACILITY. The place other than the building site, at which machinery, equipment and other capital goods are assembled and operated for the purpose of making, fabricating, constructing, forming or assembly of industrialized housing, buildings, modules or modular components.

MOBILE HOME. A factory-assembled structure or structures equipped with the necessary service connections and made to be readily movable as a unit or units on its (their) own running gear and designed to be used as a dwelling unit(s) without a permanent foundation.

MODULAR COMPONENT. A structural portion of any dwelling that is constructed at a location other than the homesite in such a manner that its construction cannot be adequately inspected for code compliance at a homesite without damage or without removal of a part thereof and reconstruction.

MODULE. A three dimensional section of *industrialized housing*, designed and approved to be transported as a single section independent of other sections, to a site for *on-site construction* with or without other modules *or modular components*.

ON-SITE CONSTRUCTION. Preparation of the site, foundation construction, assembly and connection of the modules or modular components, affixing the structure to the permanent foundation, connecting the structures together, completing all site-related construction in accordance with designs, plans, specifications and on-site construction documentation.

PERMANENT FOUNDATION SYSTEM. A foundation system for industrialized housing designed to meet the applicable requirements of the Dallas Building Code or the Dallas One-and Two-Family Dwelling Code.

PREFABRICATED HOUSING. Includes both industrialized housing and manufactured homes.

[PRIVATELY OWNED (NONRENTAL) LOT. A parcel of real estate outside of a manufactured home rental community (park) where the land and the manufactured home to be installed thereon are held in common ownership.]

STATE MANDATORY CODES means the State adopted codes listed in Sections AE101.4, AE101.5 and the Administrative Rules of the Texas Department of Licensing and Regulation, 16 Texas Administrative Code, Chapter 70.

STRUCTURE. An industrialized house which results from the complete assemblage of the modules, modular components or components designed to be used together to form a completed unit.

TEXAS INDUSTRIALIZED BUILDING CODE COUNCIL. The state-appointed council having as its mission the assurance that the designs, plans and specifications of *industrialized housing* and buildings meet the mandatory state codes."

E. Section AE301, "Permits," is deleted and replaced with a new Section AE301, "Permits," to read as follows:

"SECTION AE301 PERMITS

AE301.1 Permit requirements. This section is governed by Chapter 52 of the *Dallas City Code*."

F Section AE302, "Application for Permit," is deleted and replaced with a new Section AE302, "Application for Permit," to read as follows:

"SECTION AE302 APPLICATION FOR PERMIT

AE302.1 Permit application requirements and procedures. This section is governed by Chapter 52 of the *Dallas City Code*."

G. Section AE303, "Permits Issuance," is deleted and replaced with a new Section AE303, "Permits Issuance," to read as follows:

"SECTION AE303 PERMITS ISSUANCE

AE303.1 Issuance, expiration, suspension, revocation and validity of permits. Except as otherwise provided in Section AE303.2, this section is governed by Chapter 52 of the *Dallas City Code*.

AE303.2 Other requirements and procedures for permit issuance.

AE303.2.1 Disputes over whether a design package and/or unique on-site documentation meets state code requirements. Questions concerning the code compliance of an approved design package must be raised prior to the issuance of a building permit. The building official shall forward in writing to the executive director any instances where it is found that the approved design package does not meet the mandatory building codes adopted

in this chapter. The documentation must specify the code sections and the reasons why the design package fails to meet the mandatory building codes.

- **AE303.2.1.1 In compliance.** If the approved *design package* is found to be in compliance, the *executive director* shall notify all concerned parties and the *building official* shall issue a building permit.
- AE303.2.1.2 Not in compliance. If the approved design package is not in compliance, the executive director shall notify all concerned parties and the industrialized builder or manufacturer shall bring the building into compliance with the mandatory building codes.
- **AE303.2.1.3 Disagreements.** If the building official, industrialized builder, or manufacturer disagrees with the executive director, an appeal may be made to the Texas Industrialized Building Code Council for a determination of whether the design package complies with the mandatory building codes. The decision of the council is binding on all parties.
- AE303.2.2 Dispute over whether on-site construction complies with approved design package and/or unique on-site construction documentation. If a dispute or difference of opinion arises between the *industrialized builder* and the *building official* as to whether the on-site construction meets or exceeds the approved design package or unique on-site construction documentation, the dispute or difference of opinion must be resolved by the commissioner. If the commissioner is unable to resolve the dispute, then he will forward it to the Texas Industrialized Building Code Council for resolution.
- **AE303.2.3** Correction of deviations. If an inspector finds a *structure*, or any part thereof, at the building site to be in violation of the approved *design package* and/or the unique onsite plans and specifications, the inspector shall immediately post a deviation notice and notify the *industrialized builder*. The *industrialized builder* is responsible for assuring that all deviations are corrected and inspected prior to occupation of the building.
- **AE303.2.4 Unique on-site details.** If the typical foundation drawing in the *on-site* construction documentation is not suitable for a specific site, or if the structure is only partially constructed of modular components, or if the industrialized builder will add unique on-site details, a registered Texas professional engineer (or architect for one and two-family dwellings or buildings having one story and total floor area or 5,000 square feet or less) shall design and stamp the unique foundation drawings or on-site details. Review by a design review agency is not needed or required."
 - H. Section AE304, "Fees," is deleted and replaced with a new Section AE304,

"Fees," to read as follows:

"SECTION AE304 FEES AE304.1 Permit fees. This section is governed by Chapter 52 of the Dallas City Code."

I. Section AE305, "Inspections," is deleted and replaced with a new Section

AE305, "Inspections," to read as follows:

"SECTION AE305 INSPECTIONS

- **AE305.1 General.** Except as otherwise provided in this section, inspections are governed by Chapter 52 of the *Dallas City Code*.
- **AE305.2 Inspection procedures.** The council issues instructions establishing procedures for inspecting the construction and installation of industrialized housing and buildings to ensure compliance with approved designs, plans, and specifications.
- **AE305.3 Department inspections.** To ensure compliance with the mandatory building codes or approved designs, plans, and specifications, the department inspects the construction of industrialized housing and buildings. The executive director may designate approved third-party inspectors to perform the inspections subject to the rules of the commission.
- **AE305.4 On-site inspections.** The building official must inspect all construction involving industrialized housing to be located in the municipality to ensure compliance with designs, plans, and specifications, including inspection of:
 - 1. the construction of the foundation system; and
 - 2. the erection and installation of the modules or modular components on the foundation.
- **AE305.5 Rules providing for decals or insignia.** The commission by rule provides for the placement of decals or insignia on each transportable modular section or modular component to indicate compliance with the mandatory building codes.
- **AE305.6 Reservation of building official authority.** Authority is specifically and entirely reserved to the building official, including, as applicable:
 - 1. land use and zoning requirements;
 - 2. building setback requirements;
 - 3. side and rear yard requirements;
 - 4. site planning and development and property line requirements;
 - 5. subdivision control; and

6. landscape architectural requirements.

AE305.7 Local regulation of industrialized housing.

AE305.7.1 General. The building official must:

- 1. require and review, for compliance with mandatory building codes, a complete set of designs, plans, and specifications bearing the council's stamp of approval for each installation of industrialized housing in the municipality;
- 2. require that all applicable local permits and licenses be obtained before construction begins on a building site;
- 3. require, in accordance with commission rules, that all modules or modular components bear an approved decal or insignia indicating inspection by the department; and
- 4. establish procedures for the inspection of:
 - 4.1. the erection and installation of industrialized housing to be located in the municipality, to ensure compliance with mandatory building codes and commission rules; and
 - 4.2. all foundation and other on-site construction, to ensure compliance with approved designs, plans, and specifications.

AE305.7.2 Other approvals. Procedures described by Subsection AE305.7.1(4) may require:

- 1. before occupancy, a final inspection or test in accordance with mandatory building codes; and
- 2. correction of any deficiency identified by the test or discovered in the final inspection."
- J. Subsection AE306.1, "General," of Section AE306, "Special Inspections," is

amended to read as follows:

"AE306.1 General. In addition to the inspections required by Section AE305, the *building official* may require the owner to employ a special inspector during construction of specific types of work as described in this code. Special inspections, when required, shall be governed by Chapter 17 of the *Dallas Building Code*."

- K. Subsection AE307.1, "General," of Section AE307, "Utility Service," is amended to read as follows:
- "AE307.1 General. Utility service shall not be provided to any building service equipment which is regulated by these provisions or other applicable codes, and for which a <u>prefabricated</u> [manufactured] home installation permit is required by these provisions, until approved by the building official."
- L. Subsection AE401.1, "Manufactured Homes," of Section AE401, "Occupancy Classification," is amended to read as follows:
- "AE401.1 <u>Industrial</u> [<u>Manufactured</u>] homes. An industrial [<u>manufactured</u>] home shall be limited in use to a single <u>dwelling unit</u> or its components for living, sleeping, eating, cooking, sanitation and accessory use.

Exception: Industrialized homes converted and in compliance with Chapters 51, 51A, and 53, as well as other applicable ordinances of the Dallas City Code."

- M. Subsection AE402.1, "General," of Section AE402, "Location on Property," is amended to read as follows:
- "AE402.1 General. <u>Prefabricated</u> [<u>Manufactured</u>] homes and accessory buildings shall be located on the property in accordance with applicable codes and ordinances of this jurisdiction."
 - N. Section AE501, "Design," is amended to read as follows:

"SECTION AE501 DESIGN

AE501.1 General. An industrial [manufactured] home shall be installed on a foundation system which is designed and constructed to sustain within the stress limitations specified in this code and all loads specified in this code. <u>Industrialized housing may not be installed on a temporary foundation system.</u>

[Exception: When specifically authorized by the building official, foundation and anchorage systems which are constructed in accordance with the methods specified in Section AE600 of these provisions, or in the HUD, Permanent Foundations for Manufactured Housing, 1984 Edition, Draft, shall be deemed to meet the requirements of this appendix.]

AE501.2 Manufacturer's installation instructions. The installation instructions as provided by the manufacturer of the <u>industrialized</u> [manufactured] home shall be used to determine permissible points of support for vertical loads and points of attachment for anchorage systems used to resist horizontal and uplift forces.

AE501.3 Rationality. Any system or method of construction to be used shall submit to a rational analysis in accordance with well-established principles of mechanics."

O. Section AE502, "Foundation Systems," is amended to read as follows:

"SECTION AE502 FOUNDATION SYSTEMS

AE502.1 General. Foundation systems designed and constructed in accordance with this section shall [may] be considered a permanent installation.

AE502.2 Soil classification. The classification of the soil at each <u>industrial</u> [manufactured] home site shall be determined when required by the building official. The building official may require that the determination be made by an engineer or architect licensed by the state to conduct soil investigations.

The classification shall be based on observation and any necessary tests of the materials disclosed by borings or excavations made in appropriate locations. Additional studies may be necessary to evaluate soil strength, the effect of moisture variation on soil-bearing capacity, compressibility and expansiveness.

When required by the *building official*, the soil classification design-bearing capacity and lateral pressure shall be shown on the plans.

AE502.3 Footings and foundations. Footings and foundations, unless otherwise specifically provided, shall be constructed of materials specified by this code for the intended use and in all cases shall extend below the frost line. Footings of concrete and masonry shall be of solid material. Foundations supporting untreated wood shall extend at least 8 inches (203 mm) above the adjacent finish *grade*. Footings shall have a minimum depth below finished *grade* of 12 inches (305 mm) unless a greater depth is recommended by a foundation investigation.

Piers and bearing walls shall be supported on masonry or concrete foundations or piles, or other *approved* foundation systems which shall be of sufficient capacity to support all loads.

AE502.4 Foundation design. A licensed professional engineer (or architect for one and two family dwellings or buildings having one story and total floor area of 5,000 square feet or less) shall design and seal the foundation systems for each industrialized house or building. Review by a design review agency is not needed or required. The foundation system design must be reviewed for compliance with the mandatory building code. Foundation system designs shall comply with the mandatory building code and shall contain complete details for the construction and attachment of the house or building on the foundation, including, but not limited to the following:

1. address or area for which the foundation is suitable;

- 2. minimum load specifications, including wind loads, seismic design loads, soil bearing capacity, and if the foundation is designed for expansive soils;
- 3. site preparation details;
- 4. material specifications;
- 5. requirements for corrosion resistance, protection against decay, and termite resistance;
- 6. size, configuration and depth below grade of all footings, piers and slabs including, but not limited to, details of concrete reinforcement, spacing of footings and piers, capping of piers, and mortar or concrete fill requirements for piers;
- 7. fastening requirements, including, but not limited to, size, spacing and corrosion resistance;
- 8. requirements for surface drainage; and
- 9. details for enclosure of the crawl space, including details for ventilation and access.

[When a design is provided, the foundation system shall be designed in accordance with the applicable structural provisions of this code and shall be designed to minimize differential settlement. Where a design is not provided, the minimum foundation requirements shall be as set forth in this code.]

AE502.5 Drainage. <u>Drainage p[P]</u>rovisions shall be <u>in accordance with Chapter 4 of this code</u> [made for the control and drainage of surface water away from the *manufactured home*].

AE502.6 Under-floor clearances—ventilation and access. A minimum clearance of 12 inches (305 mm) shall be maintained beneath the lowest member of the floor support framing system. Clearances from the bottom of wood floor joists or perimeter joists shall be as specified in this code.

Under-floor spaces shall be ventilated with openings as specified in this code. If combustion air for one or more heat-producing *appliance* is taken from within the under-floor spaces, ventilation shall be adequate for proper *appliance* operation.

Under-floor access openings shall be provided. Such openings shall be not less than 18 inches (457 mm) in any dimension and not less than 3 square feet (0.279 m²) in area, and shall be located so that any water supply and sewer drain connections located under the <u>industrialized</u> [manufactured] home are accessible."

P. Subsection AE503.2, "Retaining Walls," of Section AE503, "Skirting and

Perimeter Enclosures," is amended to read as follows:

- "AE503.2 Retaining walls. Where retaining walls are used as a permanent perimeter enclosure, they shall resist the lateral displacements of soil or other materials and shall conform to this code as specified for foundation walls. Retaining walls and foundation walls shall be constructed of approved [treated wood, concrete, masonry or other approved] materials or combination of materials as for foundations as specified in this code. Siding materials shall extend below the top of the exterior of the retaining or foundation wall, or the joint between the siding and enclosure wall shall be flashed in accordance with this code."
- Q. Subsection AE504.1, "General," of Section AE504, "Structural Additions," is amended to read as follows:
- **AE504.1 General.** Accessory buildings shall not be structurally supported by or attached to a <u>prefabricated</u> [manufactured] home unless engineering calculations are submitted to substantiate any proposed structural connection.

Exception: The building official may approve an alternate method of compliance or waive the submission of engineering calculations if it is found that the nature of the work applied for is such that engineering calculations are not necessary to show conformance to these provisions."

- R. Subsection AE505.1, "General," of Section AE505, "Building Service Equipment," is amended to read as follows:
- "AE505.1 General. The installation, alteration, repair, replacement, addition to or maintenance of the building service equipment within the industrialized [manufactured] home shall conform to regulations set forth in this code [the Manufactured Home Standards]. Such work which is located outside prefabricated [the manufactured] home shall comply with this code and other [the] applicable city ordinances [codes adopted by this jurisdiction]."
- S. Subsection AE507.1, "General," of Section AE507, "Occupancy, Fire Safety and Energy Conservation Standards," is amended to read as follows:
- "AE507.1 General. Alterations made to an industrialized [manufactured] home subsequent to its initial installation shall conform to the occupancy, fire safety and energy conservation requirements set forth in this code [the Manufactured Home Standards]."
- T. Sections AE600, "Special Requirements for Alternate Foundation Systems"; AE601, "Footings and Foundations"; AE602, "Pier Construction"; AE603, "Height of Piers"; AE604, "Anchorage Installations"; AE605, "Ties, Materials and Installation"; and AE606, "Referenced Standards"; of the 2015 International Residential Code are deleted.

- 104. Appendix H, "Patio Covers," of the 2015 International Residential Code is adopted.
- 105. Appendix I, "Private Sewage Disposal," of the 2015 International Residential Code is adopted with the following amendment:
- A. Subsection AI101.1, "Scope," of Section AI101, "General," is amended to read as follows:
- "AI101.1 Scope. Private sewage disposal systems shall conform to the <u>Dallas Plumbing</u> [International Private Sewage Disposal Code."
- 106. Appendix J, "Existing Buildings and Structures," of the 2015 International Residential Code is adopted with the following amendments:
- A. Subsection AJ102.5, "Flood Hazard Areas," of Section AJ102, "Compliance," is amended to read as follows:
- "AJ102.5 Flood hazard areas. Work performed in existing buildings located in a flood hazard area as established by Table R301.2(1) shall be subject to the provisions of Section 51A-5.104 of the *Dallas Development Code* [R105.3.1.1]."
- B. Subsection AJ102.7, "Other Alternatives," of Section AJ102, "Compliance," is deleted.
- C. Subsection AJ103.1, "General," of Section AJ103, "Preliminary Meeting," is amended to read as follows:
- "AJ103.1 General. If a building *permit* is required at the request of the prospective *permit* applicant, the *building official* or his or her designee shall meet with the prospective applicant to discuss plans for any proposed work under these provisions prior to the application for the *permit*. The purpose of this preliminary meeting is for the *building official* to gain an understanding of the prospective applicant's intentions for the proposed work, and to determine, together with the prospective applicant, the specific applicability of these provisions.

Exception: The building official may substitute a project information sheet indicating the categories of proposed work in lieu of a meeting."

D. Subsection AJ201.1, "General," of Section AJ201, "Definitions," is amended to read as follows:

"AJ201.1 General. For the purposes of this appendix, the terms used are defined as follows:

ALTERATION. The <u>rearrangement or reconfiguration</u> of any space <u>by the construction of walls or partitions or by a change in ceiling height</u>; the <u>addition</u> or elimination of any door or window; the [reconfiguration or] extension <u>or arrangement</u> of any system; [or] the installation of any additional <u>equipment or fixtures and any work which reduces the loadbearing capacity of, or which imposes additional loads on, a primary structural component.</u>

CATEGORIES OF WORK. The nature and extent of construction work undertaken in an existing building. The categories of work covered in this appendix, listed in increasing order of stringency of requirements, are repair, renovation, *alteration* and reconstruction.

DANGEROUS. Where the stresses in any member; the condition of the building, or any of its components or elements or attachments; or other condition that results in an overload exceeding 150 percent of the stress allowed for the member or material in this code.

EQUIPMENT OR FIXTURE. Any plumbing, heating, electrical, ventilating, air-conditioning, refrigerating and fire protection *equipment*; and elevators, dumb waiters, boilers, pressure vessels, and other mechanical facilities or installations that are related to building services.

LOAD-BEARING ELEMENT. Any column, girder, beam, joist, truss, rafter, wall, floor or roof sheathing that supports any vertical load in addition to its own weight, or any lateral load.

MATERIALS AND METHODS REQUIREMENTS. Those requirements in this code that specify material standards; details of installation and connection; joints; penetrations; and continuity of any element, component or system in the building. The required quantity, fire resistance, flame spread, acoustic or thermal performance, or other performance attribute is specifically excluded from materials and methods requirements.

RECONSTRUCTION. The reconfiguration of a space that affects an exit, a renovation or *alteration* when the work area is not permitted to be occupied because existing means-of-egress and fire protection systems, or their equivalent, are not in place or continuously maintained; or there are extensive *alterations* as defined in Section AJ501.3. Reconstruction does not include projects comprised only of floor finish replacement, painting or wallpapering, or the replacement of *equipment* or furnishings. Asbestos hazard abatement and lead hazard abatement projects shall not be classified as reconstruction solely because occupancy of the work area is not permitted.

REHABILITATION. Any repair, renovation, *alteration* or reconstruction work undertaken in an existing building.

RENOVATION. The removal [change, strengthening or addition of load bearing elements;] and [/or the refinishing,] replacement, [bracing, strengthening, upgrading or extensive repair of existing materials, elements, components, equipment] or covering of existing interior or exterior trim, finish, doors, windows, or other materials with new materials that serve the same purpose and do not change the configuration of space [fixtures]. Renovation shall include the replacement of equipment or fixtures, the change, strengthening, bracing, or addition of load bearing elements, or extensive replacement of existing materials [does not involve reconfiguration of spaces. Interior and exterior painting are not considered refinishing for purposes of this definition, and are not renovation].

REPAIR. The patching, restoration or minor replacement of materials, elements, components, equipment or fixtures for the purposes of maintaining those materials, elements, components, equipment or fixtures in good or sound condition.

WORK. That scope of activities affected by any repair, renovation, alteration or reconstruction work and indicted as such in the permit.

WORK AREA. That portion of a building affected by any renovation, alteration or reconstruction work as initially intended by the owner and indicated as such in the permit. Work area excludes other portions of the building where incidental work entailed by the intended work must be performed, and portions of the building where work not initially intended by the owner is specifically required by these provisions for a renovation, alteration or reconstruction."

E. Subsection AJ301.3, "Electrical," of Section AJ301, "Repairs," is amended to

"AJ301.3 Electrical. [Repair or replacement of e] Existing electrical wiring and equipment undergoing repair [with like material] shall be permitted to be repaired or replaced in accordance with the Dallas Electrical Code.

Exceptions:

read as follows:

- 1. Replacement of electrical receptacles shall comply with the requirements of Chapters 34 through 43.
- 2. Plug fuses of the Edison-base type shall be used for replacements only where there is not evidence of overfusing or tampering in accordance with the applicable requirements of Chapters 34 through 43.
- 3. For replacement of nongrounding-type receptacles with grounding type recepticles and for branch circuits that do not have an *equipment* grounding conductor in the branch circuitry, the grounding conductor in the branch circuitry, the grounding conductor of a grounding type receptacle outlet shall be permitted to be grounded to any accessible point on the grounding electrode system, or to any accessible point on

the grounding electrode conductor, as allowed and described in Chapters 34 through 43.]"

F. Subsection AJ501.5, "Electrical Equipment and Wiring," of Section AJ501,

"Alterations," is amended to read as follows:

"AJ501.5 Electrical equipment and wiring.

AJ501.5.1 Materials and methods. All n[N]ewly installed electrical equipment and wiring relating to work done in any work area shall comply with the materials and methods requirements of Chapter[s] 34 [through 43].

Exception: Electrical *equipment* and wiring in newly installed partitions and ceilings shall comply with all the applicable requirements of Chapter[s] 34 [through 43].

AJ501.5.2 Electrical service. Service to the *dwelling unit* shall be not less than 100 ampere, three-wire capacity and service *equipment* shall be dead front having no live parts exposed that could allow accidental contact. [Type "S" fuses shall be installed when fused *equipment* is used.]

Exception. Existing service of 60 ampere, three-wire capacity, and feeders of 30 ampere or larger two- or three-wire capacity shall be accepted if adequate for the electrical load being served.

- AJ501.5.3 Additional electrical requirements. When the work area includes any of the following areas within a *dwelling unit*, the requirements of Sections AJ501.5.3.1 through AJ501.5.3.5 shall apply.
 - AJ501.5.3.1 Enclosed areas. Enclosed areas other than closets, kitchens, basements, garages, hallways, laundry areas and bathrooms shall have not less than two duplex receptacle outlets, or one duplex receptacle outlet and one ceiling- or wall-type lighting outlet.
 - AJ501.5.3.2 Kitchen and laundry areas. Kitchen areas shall have not less than two duplex receptacle outlets. Laundry areas shall have not less than one duplex receptacle outlet located near the laundry *equipment* and installed on an independent circuit.
 - AJ501.5.3.3 Ground-fault circuit-interruption. Ground-fault circuit-interruption shall be provided on newly installed receptacle outlets if required by Chapter[s] 34 [through 43].
 - **AJ501.5.3.4 Lighting outlets.** Not less than one lighting outlet shall be provided in every bathroom, hallway, stairway, attached garage and detached garage with electric power to illuminate outdoor entrances and exits, and in utility rooms and *basements* where these spaces are used for storage or contain *equipment* requiring service.

- AJ501.5.3.5 Clearance. Clearance for electrical service *equipment* shall be provided in accordance with Chapter[s] 34 [through 43]."
- 107. Appendix K, "Sound Transmission," of the 2015 International Residential Code is adopted.
- 108. Appendix O, "Automatic Vehicular Gates," of the 2015 International Residential Code is adopted.
 - 109. Appendix Q of the 2015 International Residential Code is adopted and amended to read as follows:

"APPENDIX Q SWIMMING POOLS, SPAS AND HOT TUBS [RESERVED]

SECTION AQ 101 GENERAL

- AQ101.1 General. The provisions of this appendix and the provisions of Chapter 43A, "Swimming Pools," of the Dallas City Code shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling. To the extent of any conflict between Chapter 57, "Dallas One- And Two-Family Dwelling Code," of the Dallas City Code, hereafter referred to as "this code"; and other city ordinances, this code shall prevail.
 - AQ101.1.1 Location of pool adjacent to structural footings. The provisions of Section R403.1.7 shall control the location of pools adjacent to building and other structural footings.
- AQ 101.2 Pools in flood hazard areas. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section AV101.2.1 or AV101.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

AQ 101.2.1 Pools located in designated floodways. Where pools are located in designated floodways, documentation shall be submitted to the *building official* which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the *jurisdiction*.

Exception: Projects complying with Section 51A-5.104 of the *Dallas Development Code* are deemed compliant with this section.

AQ101.2.2 Pools located where floodways have not been designated. Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

Exception: Projects complying with Section 51A-5.104 of the *Dallas Development Code* are deemed compliant with this section.

SECTION AQ102 DEFINITIONS

AQ102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2 and Chapter 52, "Administrative Procedures for the Construction Codes," of the Dallas City Code.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool."

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above-ground, and onground swimming pools, hot tubs, and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AQ103 SWIMMING POOLS

- AQ103.1 In-ground pools. In-ground pools shall be designed and constructed in compliance with ANSI/NSPI-5.
- AQ103.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in compliance with ANSI/NSPI-4.
- AQ103.3 Pools in flood hazard areas. In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

SECTION AQ104 SPAS AND HOT TUBS

- AQ104.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-3.
- AQ104.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-6.

SECTION AQ105 BARRIER REQUIREMENTS

- AQ105.1 Application. The provisions of this appendix shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.
 - AQ105.1.1 All other pool yard enclosures. Swimming pools existing before June 1, 1988, may continue to be enclosed by fences, walls or barriers not less than 3 feet (1066.8 mm) in height, provided the fence, wall or barrier is kept in repair and otherwise maintained in compliance with all other provisions of this code.
 - AQ105.1.2 Additional provisions. All gates and doors into swimming pool enclosures that lawfully existed before June 1, 1988 must fully comply with the self-closing and self-latching provisions of this section.
- AQ105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa, shall be surrounded by a barrier which shall comply with the following:
 - 1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool

- structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
- 2. Openings in the barrier shall not allow the passage of a 4-inch-diameter (102 mm) sphere.
- 3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions, except for normal construction tolerances and tooled masonry joints.
- 4. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 3/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 3/4 inches (44 mm) in width.
- 5. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 3/4 inches (44 mm) in width.
- 6. Maximum mesh size for chain link fences shall be a 2 1/4-inch (57 mm) square, unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1 3/4 inches (44 mm).
- 7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1 3/4 inches (44 mm).
- 8. Access gates shall comply with the requirements of Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool, and shall be self-closing and have a self-latching device. Gates, other than pedestrian access gates, shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
 - 8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate; and
 - 8.2. The gate and barrier shall have no opening larger than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
- 9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:

- 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346;
- 9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or
- 9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described herein.
- 10. Where an above-ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps:
 - 10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
 - 10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.
- AQ105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Item 9 of Section AQ105.2.
- AQ105.4 Prohibited locations. Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.
- AQ105.5 Barrier exceptions. Spas or hot tubs with a safety cover which comply with ASTM F 1346 shall be exempt from the provisions of this appendix.

SECTION AQ106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AQ106.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

SECTION AQ107 ABBREVIATIONS

AQ107.1 General.

ANSI—American National Standards Institute 11 West 42nd Street

New York, NY 10036

APSP—Association of Pool and Spa Professionals

NSPI-National Spa and Pool Institute

2111 Eisenhower Avenue

Alexandria, VA 22314

ASCE—American Society of Civil Engineers

1801 Alexander Bell Drive

Reston, VA 98411-0700

ASTM—ASTM International

100 Barr Harbor Drive

West Conshohocken, PA 19428

UL-Underwriters Laboratories, Inc.

333 Pfingsten Road

Northbrook, IL 60062-2096

SECTION AQ108 REFERENCED STANDARDS

AQ108.1 General.

ANSI/NSP

ANSI/NSPI-3—99	Standard for Permanently Installed Residential Spas	AQ104.1
ANSI/NSPI-4—99	Standard for Above-ground/On-ground Residential Swimming Pools	AQ103.2
ANSI/NSPI-5—03	Standard for Residential In-ground Swimming Pools	AQ103.1
ANSI/NSPI-6—99	Standard for Residential Portable Spas	AQ104.2
ANSI/APSP	-	

Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, ANSI/APSP-7---06

ASCE

ASCE/SEI-24-05

ASTM

ASTM F 1346—91 (2003) Performance Specification for Safety Covers and Labeling Requirements for All

<u>UL</u>

Standard for General-Purpose Signaling Devices and Systems-with revisions UL 2017-2000

- 110. Appendices A, B, C, D, F, G, L, M, N, P, R, S, T, and U of the 2015 International Residential Code are not adopted.
- 111. All chapters of the 2015 International Residential Code adopted by this ordinance are subchapters of Chapter 57 of the Dallas City Code, as amended.
- 112. Any errata corrections published by the International Code Council for the 2015 International Residential Code, as they are discovered, are considered as part of this code.
- 113. All references in the 2015 International Residential Code to the fire code, building code, plumbing code, mechanical code, electrical code, existing building code, energy conservation code, fuel gas code, and green construction code refer, respectively, to Chapters 16, 53, 54, 55, 56, 58, 59, 60, and 61 of the Dallas City Code.

SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 57 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law

will continue in effect for this purpose.					
SECTION 4. That the terms and provi	SECTION 4. That the terms and provisions of this ordinance are severable and are				
governed by Section 1-4 of Chapter 1 of the Dalla	ıs City Code, a	as amended.			
SECTION 5. That this ordinance will t	ake effect on		, 2017, and	it is	
accordingly so ordained.					
APPROVED AS TO FORM:					
LARRY E. CASTO, City Attorney					
ByAssistant City Attorney					
Passed					

last applicable to the structure, system, development project, or registration, and all former laws

ORDINANCE NO.	
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An ordinance amending Chapter 59, "Dallas Energy Conservation Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of International Energy Conservation Code of the International Code Council, Inc.; providing standards and requirements for the design and construction of energy-efficient buildings and spaces within the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 59, "Dallas Energy Conservation Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Energy Conservation Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

- 1. Page xi, "Legislation," is deleted.
- 2. Subsection C101.1, "Title," of Section C101, "Scope and General Requirements," of Part 1, "Scope and Application," of Chapter 1 [CE], "Scope and Administration," of the Commercial Provisions of the 2015 International Energy Conservation Code is amended to read as follows:
- "C101.1 Title. This code shall be known as the <u>Dallas</u> [International] Energy Conservation Code [of [NAME OF JURISDICTION]], and shall be cited as such. It is referred to herein as 'this code.'

- C101.1.1 Additional administrative provisions. Except as otherwise specified in this chapter, all provisions of Chapter 52, 'Administrative Procedures for the Construction Codes of the City of Dallas' apply to this code."
- 3. Subsection C102.1, "General," of Section C102, "Alternate Materials- Method of Construction, Design or Insulating Systems," of Part 1, "Scope and Application," of Chapter 1 [CE], "Scope and Administration," of the Commercial Provisions of the 2015 International Energy Conservation Code is amended by adding a new Paragraph C102.1.2, "Alternative Compliance," to read as follows:
 - "C102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance."
- 4. Section C109, "Board of Appeals," of Part 2, "Administration and Enforcement," of Chapter 1 [CE], "Scope and Administration," of the Commercial Provisions of the 2015 International Energy Conservation Code is deleted.
- 5. Section C202, "General Definitions," of Chapter 2 [CE], "Definitions," of the Commercial Provisions of the 2015 International Energy Conservation Code is amended by adding in alphabetical order a new defined term, "Projection Factor," to read as follows:
- "PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device."
- 6. Subsection C402.2, "Specific Building Thermal Envelope Insulation Requirements (Prescriptive)," of Section C402, "Building Envelope Requirements," of Chapter 4 [CE], "Commercial Energy Efficiency," of the Commercial Provisions of the 2015 International

Energy Conservation Code is amended by adding a new paragraph C402.2.7 "Insulation Installed in Walls," to read as follows:

- "C402.2.7 Insulation installed in walls. To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official."
- 7. Subsection R101.1, "Title," of Section R101, "Scope and General Requirements," of Part 1, "Scope and Application," of Chapter 1 [RE], "Scope and Administration," of the Residential Provisions of the 2015 International Energy Conservation Code is amended to read as follows:
- "R101.1 Title. This code shall be known as the <u>Dallas</u> [International] Energy Conservation Code [[of [NAME OF JURISDICTION]], and shall be cited as such. It is referred to herein as 'this code.'
 - R101.1.1 Additional administrative provisions. Except as otherwise specified in this chapter, all provisions of Chapter 52, 'Administrative Procedures for the Construction Codes of the City of Dallas' apply to this code."
- 8. Subsection R102.1, "General," of Section R102, "Alternate Materials, Design and Methods of Construction and Equipment," of Part 1, "Scope and Application," of Chapter 1 [RE], "Scope and Administration," of the Residential Provisions of the 2015 International Energy Conservation Code is amended by adding new Paragraph R102.1.2, "Alternative Compliance," to read as follows:
 - "R102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance."

- 9. Section R109, "Board of Appeals," of Part 2, "Administration and Enforcement," of Chapter 1 [RE], "Scope and Administration," of the Residential Provisions of the 2015 International Energy Conservation Code is deleted.
- 10. Section R202, "General Definitions," of Chapter 2 [RE], "Definitions," of the Residential Provisions of the 2015 International Energy Conservation Code is amended by adding in alphabetical order new defined terms, "Dynamic Glazing," and "Projection Factor," to read as follows:

"DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including *U*-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device."

- 11. Subsection R402.2, "Specific Insulation Requirements (Prescriptive)," of Section R402, "Building Thermal Envelope," of Chapter 4 [RE], "Residential Energy Efficiency," of the Residential Provisions of the 2015 International Energy Conservation Code is amended by adding Paragraph R402.2.14 "Insulation Installed in Walls," to read as follows:
 - "R402.2.14 Insulation installed in walls. To insure that insulation remains in place, insulation installed in walls shall be totally enclosed on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official."
- 12. Paragraph R402.3.2, "Glazed Fenestration SHGC," of Subsection R402.3, "Fenestration (Prescriptive)," of Section R402, "Building Thermal Envelope," of the Chapter 4 [RE], "Residential Energy Efficiency," of the Residential Provisions of the 2015 International Energy Conservation Code is amended to read as follows:
 - "R402.3.2 Glazed fenestration SHGC. An area-weighted average of fenestration products more that 50-percent glazed shall be permitted to satisfy the SHGC requirements.

Dynamic glazing shall be permitted to satisfy the SHGC requirements of Table R402.1.2 provided the ratio of the higher to lower labeled SHGC is greater than or equal to 2.4, and the dynamic glazing is automatically controlled to modulate the amount of solar gain into the space in multiple steps. Dynamic glazing shall be considered separately from other fenestration, and area-weighted averaging with other fenestration that is not dynamic glazing shall not be permitted.

Exception: Dynamic glazing is not required to comply with this section when both the lower and higher labeled SHGC already comply with the requirements of Table R402.1.2.

Where vertical fenestration is shaded by an overhang, eave or permanently attached shading device, the SHGC required in Table R402.1.2 shall be reduced by using the multipliers in Table R402.3.2 SHGC Multipliers for Permanent Projections.

Table R402.3.2 SHGC Multipliers for Permanent Projections ^a

Projection	SHGC Multiplier	SHGC Multiplier
<u>Factor</u>	(all Other Orientation)	(North Oriented)
<u>0 - 0.10</u>	<u>1.00</u>	<u>1.00</u>
≥0.10 – 0.20	<u>0.91</u>	<u>0.95</u>
≥0.20 − 0.3 <u>0</u>	0.82	<u>0.91</u>
≥0.30 – 0.40	0.74	0.87
≥0.40 – 0.50	<u>0.67</u>	<u>0.84</u>
≥0.50 – 0.60	<u>0.61</u>	<u>0.81</u>
≥0.60 – 0.70	<u>0.56</u>	<u>0.78</u>
>0.70 - 0.80	<u>0.51</u>	<u>0.76</u>
≥0.80 – 0.9 <u>0</u>	0.47	0.75
>0.90 – 1.00	0.44	0.73

^a North oriented means within 45 degrees of true north."

13. Subparagraph R402.4.1.2, "Testing," of Paragraph R402.4.1, "Building Thermal Envelope," of Subsection R402.4, "Air Leakage (Mandatory)," of Section R402, "Building Thermal Envelope," of Chapter 4 [RE], "Residential Energy Efficiency," of the Residential Provisions of the 2015 International Energy Conservation Code is amended to read as follows:

"R402.4.1.2 Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the *code official*, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party

conducting the test and provided to the *code official*. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*.

During testing:

- 1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weatherstripping or other infiltration control measures.
- 2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
- 3. Interior doors, if installed at the time of the test, shall be open.
- 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
- 5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
- 6. Supply and return registers, if installed at the time of the test, shall be fully open.

Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed by, or have any financial interest in the company that constructs the structure."

- 14. Paragraph R403.3.3 "Duct Testing (Mandatory)," of Subsection R403.3, "Ducts," of Section R403, "Systems," of Chapter 4 [RE], "Residential Energy Efficiency," of the Residential Provisions of the 2015 International Energy Conservation Code is amended to read as follows:
 - "R403.3.3 Duct testing (Mandatory). Ducts shall be pressure tested to determine air leakage by one of the following methods:
 - 1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. All registers shall be taped or otherwise sealed during the test.
 - 2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exception: A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

A written report of the results of the test shall be signed by the party conducting the test and provided to the *code official*.

Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed by, or have any financial interest in the company that constructs the structure."

15. Paragraph R405.6.2 "Specific Approval," of Subsection R405.6, "Calculation Software Tools," of Section R405, "Simulated Performance Alternative (Performance)," of Chapter 4 [RE], "Residential Energy Efficiency," of the Residential Provisions of the 2015 International Energy Conservation Code is amended to read as follows;

"R405.6.2 Specific approval. Performance analysis tools meeting the applicable provisions of Section R405 shall be permitted to be *approved*. Tools are permitted to be *approved* based on meeting a specified threshold for a jurisdiction. The *code official* shall be permitted to approve tools for a specified application or limited scope.

Acceptable performance software simulation tools may include, but are not limited to, REM RateTM, Energy Gauge and IC3. Other performance software programs accredited by RESNET BESTEST and having the ability to provide a report as outlined in R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official."

16. Table R406.4 "Maximum Energy Rating Index," of Section R406, "Energy Rating Index Compliance Alternative," of Chapter 4 [RE], "Residential Energy Efficiency," of the Residential Provisions of the 2015 International Energy Conservation Code is deleted and replaced with the following:

"TABLE R406.41 MAXIMUM ENERGY RATING INDEX

MARKING IN ENGLISHED IN THE STATE OF THE STA		
CLIMATE ZONE	ENERGY RATING INDEX	
3	65	

This table is effective until August 31, 2019.

TABLE R406.4² MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX	
3	63	

² The table is effective from September 1, 2019 to August 31, 2022.

TABLE R406.43 MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX	
3	59	

³ This table is effective on or after September 1, 2022."

- 17. All chapters of the 2015 International Energy Conservation Code adopted by this ordinance are subchapters of Chapter 59 of the Dallas City Code, as amended.
- 18. All references in the 2015 International Energy Conservation Code to the fire code, building code, plumbing code, mechanical code, electrical code, residential code, existing building code, fuel gas code, and green construction code refer, respectively, to Chapters 16, 53, 54, 55, 56, 57, 58, 60, and 61 of the Dallas City Code.

SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 59 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. If any provision contained in Chapters 16, 52, 53, 54, 55, 56, 57, 58, 60, or 61 relating to energy conservation work in the city is in conflict with any provision of Chapter 59, as adopted by this ordinance, the provisions of Chapter 59 will prevail, except that any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 4. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 5. That this ordinance will take effect on _______, 2017, and it is accordingly so ordained.

APPROVED AS TO FORM:

LARRY E. CASTO, City Attorney

By

Assistant City Attorney

Passed_

ORDINANCE NO.	
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An ordinance amending Chapter 60, "Dallas Fuel Gas Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of International Fuel Gas Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, use, and maintenance of fuel gas work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 60, "Dallas Fuel Gas Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Fuel Gas Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

- 1. Page ix, "Legislation," is deleted.
- 2. Chapter 1, "Scope and Administration," of the 2015 International Fuel Gas Code is deleted and replaced with a new Chapter 1, "Administration," to read as follows:

"CHAPTER 1 ADMINISTRATION

SECTION 101 GENERAL

- **101.1 Title.** These regulations are known as the *Dallas Fuel Gas Code*, hereinafter referred to as "this code."
- 101.2 Scope. This code applies to the installation of fuel-gas *piping* systems, fuel gas appliances, gaseous hydrogen systems and related accessories.

- 101.2.1 Piping systems. These regulations cover *piping* systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.6. Coverage must extend from the *point of delivery* to the outlet of the *appliance* shutoff valves. *Piping* system requirements must include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.
- **101.2.2 Gas appliances.** Requirements for gas appliances and related accessories must include installation, combustion and ventilation air, and venting and connections to *piping* systems.

101.2.3 Exclusions. This code does not apply to the following:

- 1. Portable LP-gas appliances and *equipment* of all types that is not connected to a fixed fuel *piping* system.
- 2. Installation of farm appliances and *equipment* such as brooders, dehydrators, dryers and irrigation *equipment*.
- 3. Raw material (feedstock) applications except for *piping* to special atmosphere generators.
- 4. Oxygen-fuel gas cutting and welding systems.
- 5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
- 6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.
- 7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by, or used in, chemical reactions.
- 8. LP-gas installations at utility gas plants.
- 9. Liquefied natural gas (LNG) installations.
- 10. Fuel gas *piping* in power and atomic energy plants.
- 11. Proprietary items of *equipment*, apparatus or instruments such as gas-generating sets, compressors and calorimeters.
- 12. LP-gas equipment for vaporization, gas mixing and gas manufacturing.

- 13. Temporary LP-gas *piping* for buildings under construction or renovation that is not to become part of the permanent *piping* system.
- 14. Installation of LP-gas systems for railroad switch heating.
- 15. Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on vehicles.
- 16. Except as provided in Section 401.1.1, gas *piping*, meters, gas pressure regulators and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.
- 17. Building design and construction, except as specified herein.
- 18. *Piping* systems for mixtures of gas and air within the flammable range with an operating pressure greater than 10 psig (69 kPa gauge).
- 19. Portable fuel cell appliances that are neither connected to a fixed *piping* system nor interconnected to a power grid.
- 101.2.4 Other fuels. The requirements for the design, installation, maintenance, *alteration* and inspection of mechanical systems operating with fuels other than fuel gas shall be regulated by the *Dallas Mechanical Code*.
- 101.3 Administrative procedures. Except as otherwise specified in this code, all provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to this code.
- 101.4 Referenced codes and standards. The codes and standards referenced in this code are considered part of the requirements of this code to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the city of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards is considered to reference the amendments as well. Any reference made to NFPA 70 or the ICC Electrical Code means the Dallas Electrical Code, as amended. References made to the International Mechanical Code, the International Plumbing Code, the International Fire Code, the International Energy Conservation Code, the International Building Code, the International Existing Building Code and the International Residential Code respectively mean the Dallas Mechanical Code, the Dallas Plumbing Code, the Dallas Fire Code, the Dallas Energy Conservation Code, the Dallas Building Code, the Dallas Existing Building Code and the Dallas One- and Two-Family Dwelling Code, as amended. Where differences occur between provisions of this code and the referenced codes and standards, the provisions of this code apply.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instructions apply.

- 101.5 Unsafe installations. An installation that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared an unsafe installation. Use of an installation regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or abandonment is hereby declared to be a public nuisance and must be abated by repair, rehabilitation, demolition or removal."
- 3. Paragraph 304.6.2, "One-Permanent-Opening Method," of Subsection 304.6, "Outdoor Combustion Air," of Section 304 (IFGS), "Combustion, Ventilation and Dilution Air," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is deleted.
- 4. Subsection 304.10, "Louvers and Grilles," of Section 304 (IFGS), "Combustion, Ventilation and Dilution Air," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "304.10 Louvers and grilles. The required size of openings for combustion, ventilation and dilution air shall be based on the net free area of each opening. Where the free area through a design of louver, grille or screen is known, it shall be used in calculating the size opening required to provide the free area specified. Where the design and free area of louvers and grilles are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have 50 [75]-percent free area. Screens shall have a mesh size not smaller than $\frac{1}{4}$ inch (6.4 mm). Nonmotorized louvers and grilles shall be fixed in the open position. Motorized louvers shall be interlocked with the appliance so that they are proven to be in the full open position prior to main burner ignition and during main burner operation. Means shall be provided to prevent the main burner from igniting if the louvers fail to open during burner startup and to shut down the main burner if the louvers close during operation."
- 5. Subsection 305.3, "Elevation of Ignition Source," of Section 305 (IFGC), "Installation," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "305.3 Elevation of ignition source. Equipment and appliances having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the floor in hazardous locations and public garages, private garages, repair garages, motor fuel-dispensing facilities and parking garages. For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

Exception: Elevation of the *ignition source* is not required for appliances <u>or water heaters</u> that are *listed* as flammable vapor ignition resistant.

305.3.1 (IFGS) Installation in residential garages. In residential garages where appliances are installed in a separate, enclosed space having *access* only from outside of the garage, such appliances shall be permitted to be installed at floor level, provided that the required *combustion air* is taken from the exterior of the garage.

305.3.2 Parking garages. Connection of a parking garage with any room in which there is a fuel-fired *appliance* shall be by means of a vestibule providing a two-doorway separation, except that a single door is permitted where the sources of ignition in the *appliance* are elevated in accordance with Section 305.3.

Exception: This section shall not apply to *appliance* installations complying with Section 305.4."

- 6. Subsection 305.5, "Private Garages," of Section 305 (IFGC), "Installation," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is deleted.
- 7. Subsection [M] 306.3, "Appliances in Attics," of Section 306 (IFGC), "Access and Service Space," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is amended to read as follows:

"[M] 306.3 Appliances in attics. Attics containing appliances requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not [and] large enough to allow removal of the largest appliance. A walkway to an appliance must be rated as a floor as approved by the building official. Access to the attic space must be provided by at least one of the following:

- 1. A permanent stair.
- 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
- 3. An access door from an upper floor level.

Due to structural conditions, an access panel may be used in lieu of Items 1, 2, and 3 with prior approval of the building official.

Exceptions:

- 1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
- 2. Where the passageway is not less than 6 feet (1829 mm) high for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.
- [M] 306.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the appliance location in accordance with the <u>Dallas Electrical Code</u> [NFPA 70]."
- 8. Subsection [M] 306.5, "Equipment and Appliances on Roofs or Elevated Structures," of Section 306 (IFGC), "Access and Service Space," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is amended to read as follows:

"[M] 306.5 Equipment and appliances on roofs or elevated structures. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, a permanent [such equipment or appliances, an] interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and must extend to the equipment and appliance's level service space. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- 1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
- 2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall be a maximum of 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
- 3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
- 4. There shall be not less than 18 inches (457 mm) between rails.

- 5. Rungs shall have a diameter not less than 0.75-inch (19 mm) and be capable of withstanding a 300-pound (136.1 kg) load.
- 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488.2 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.
- 7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs, except where cages or wells are installed.
- 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches by 30 inches (762 mm by 762 mm) centered in front of the ladder.
- 9. Ladders shall be protected against corrosion by approved means.
- 10. Access to ladders shall be provided at all times.

Catwalks installed to provide the required *access* shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

[M] 306.5.1 Sloped roofs. Where appliances, equipment, fans or other components that require service are installed on [a] roofs having [a] slopes greater than 4 [of 3] units vertical in 12 units horizontal (33[25]-percent slope) [or greater] and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart must be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance or equipment to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the Dallas [International] Building Code. Access shall not require walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Where access involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be provided with ladders installed in accordance with Section 306.5 or stairways installed in accordance with the requirements specified in the Dallas [International] Building Code in the path of travel to and from appliances, fans or equipment requiring service.

- [M] 306.5.2 Electrical requirements. A receptacle outlet shall be provided at or near the <u>equipment or appliance</u> location in accordance with <u>the Dallas Electrical Code</u> [NFPA 70]."
- 9. Section 306 (IFGC), "Access and Service Space," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is amended by adding a new Subsection 306.7, "Water Heaters Above Ground or Floor," to read as follows:
- "306.7 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than 8 feet (2438 mm) above the ground or floor level, it must be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A water heater may be reached by portable ladder if the water heater has a capacity of no more than 10 gallons (or larger with prior approval), it is capable of being accessed through a lay-in ceiling, and it is installed not more than 10 feet (3048 mm) above the ground or floor level.

- **306.7.1 Illumination and convenience outlet.** Whenever the attic, roof, mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet must be provided in accordance with Section 306.3.1."
- 10. Subsection 310.1, "Pipe and Tubing Other Than CSST," of Section 310 (IFGS), "Electrical Bonding," of Chapter 3, "General Regulations," of the 2015 International Fuel Gas Code is deleted and replaced with a new Subsection 310.1, "Pipe and Tubing," to read as follows:
- "310.1 Pipe and tubing. Metal piping system(s) that are likely to become energized shall be bonded by a qualified contractor and in accordance with the requirements of the *Dallas Electrical Code*."
- 11. Subsection 401.5, "Identification," of Section 401 (IFGC), "General," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "401.5 Identification. For other than <u>black</u> steel pipe, exposed *piping* shall be identified by a yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the *appliance* served.

Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) must identify its operating gas pressure with an approved permanently attached tag. The tags must be composed of aluminum or stainless steel and the following wording must be stamped into the tag:

"WARNING
½ TO 5 psi gas pressure
Do Not Remove.""

12. Subsection 402.3, "Sizing," of Section 402 (IFGS), "Pipe Sizing," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:

"402.3 Sizing. Gas piping shall be sized in accordance with one of the following:

- 1. Pipe sizing tables or sizing equations in accordance with Section 402.4.
- 2. The sizing tables included in a *listed piping* system's manufacturer's installation instructions.
- 3. Other *approved* engineering methods.

Exception: Corrugated stainless steel tubing (CSST) must be a minimum of ½ inch (18 EHD)."

- 13. Subsection 404.12, "Minimum Burial Depth," of Section 404 (IFGC), "Piping System Installation," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "404.12 Minimum burial depth. Underground *piping* systems shall be installed a minimum depth of 18 [12] inches (458 [305] mm), measured from the top of the pipe to the existing [below] grade[, except as provided for in Section 404.12.1].
 - [404.12.1 Individual outside appliances. Individual lines to outside lights, grills or other appliances shall be installed not less than 8 inches (203 mm) below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.]"

- 14. Subsection 406.1, "General," of Section 406 (IFGS), "Inspection, Testing and Purging," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "406.1 General. Prior to acceptance and initial operation, all *piping* installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed by Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of the code. The permit holder shall give reasonable advance notice to the building official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspection and test must be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.
 - **406.1.1 Inspections.** Inspection shall consist of visual examination during or after manufacture, fabrication, assembly or pressure tests.
 - **406.1.2 Repairs and additions.** In the event repairs or additions are made after the pressure test, the affected *piping* shall be tested.

With prior approval of the building official, m[M]inor repairs and additions are not required to be pressure tested provided that the work is inspected and connections are tested with a noncorrosive leak-detecting fluid or other approved leak-detecting methods.

- **406.1.3** New branches. Where new branches are installed to new *appliances*, only the newly installed branches shall be required to be pressure tested. Connections between the new *piping* and the existing *piping* shall be tested with a noncorrosive leak-detecting fluid or other *approved* leak-detecting methods.
- **406.1.4 Section testing.** A *piping* system shall be permitted to be tested as a complete unit or in sections. Under no circumstances shall a valve in a line be used as a bulkhead between gas in one section of the *piping* system and test medium in an adjacent section, except where a double block and bleed valve systems is installed. A valve shall not be subjected to the test pressure unless it can be determined that the valve, including the valve-closing mechanism, is designed to safely withstand the test pressure.
- **406.1.5** Regulators and valve assemblies. Regulator and valve assemblies fabricated independently of the *piping* system in which they are to be installed shall be permitted to be tested with inert gas or air at the time of fabrication.
- **406.1.6 Pipe clearing.** Prior to testing, the interior of the pipe shall be cleared of all foreign material."

- 15. Subsection 406.4, "Test Pressure Measurement," of Section 406 (IFGS), "Inspection, Testing and Purging," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "406.4 Test pressure measurement. Test pressure shall be measured with a [manometer or with a] pressure-measuring device designed and calibrated to read, record or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. [Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.]
 - 406.4.1 Test pressure. The test pressure to be used shall be not less than [1 ½ times the proposed maximum working pressure, but not less than] 3 psig (20 kPa gauge). For tests requiring a pressure of 3 psig, diaphragm gauges must utilize a dial with a minimum diameter of 3 ½ inches, a set hand, 1/10 pound increments and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges must utilize a dial with a minimum diameter of 3 ½ inches, a set hand, a minimum of 2/10 pound increments and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure must not be less than 10 pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure must be not less than one and one-half times the proposed maximum working pressure.

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing. [, irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.]

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the building official, but in no case for less than 15 minutes. For welded piping, and for piping carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa), the test duration must be held for a length of time satisfactory to the building official, but in no case for less than 30 minutes. [not less than ½ hour for each 500 cubic feet (14 m³) of pipe volume or fraction thereof. When testing a system having a volume less than 10 cubic feet (0.28 m³) or a system in a single family dwelling, the test duration shall be not less than 10 minutes. The duration of the test shall not be required to exceed 24 hours.]"

- 16. Subsection 409.1, "General," of Section 409 (IFGC), "Shutoff Valves," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended by adding a new Paragraph 409.1.4, "Valves in CSST Installations," to read as follows:
 - "409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems must be supported with an *approved* termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12 inches from the center of the valve. Supports must be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports must be designed and installed so they will not be disengaged by movement of the supporting piping."
- 17. Paragraph 409.5.1, "Located Within Same Room," of Subsection 409.5, "Appliance Shutoff Valve," of Section 409 (IFGC), "Shutoff Valves," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
 - "409.5.1 Located within same room. The shutoff valve shall be located in the same room as the appliance. The shutoff valve shall be within 6 feet (1829 mm) of the appliance, and shall be installed upstream of the union, connector or quick disconnect device it serves. Such shutoff valves shall be provided with access. Appliance shut-off valves located in the firebox of a fireplace shall be installed in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox."
- 18. Subsection 410.1, "Pressure Regulators," of Section 410 (IFGC), "Flow Controls," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
- "410.1 Pressure regulators. A line pressure regulator shall be installed where the *appliance* is designed to operate at a lower pressure than the supply pressure. Line gas pressure regulators shall be *listed* as complying with ANSI Z21.80. *Access* shall be provided to pressure regulators. Pressure regulators shall be protected from physical damage. Regulators installed on the exterior of the building shall be *approved* for outdoor installation. *Access* to regulators must comply with the requirements for *access* to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening."

- 19. Subparagraph 411.1.3.3, "Prohibited Locations and Penetrations," of Paragraph 411.1.3, "Connector Installation," of Subsection 411.1, "Connecting Appliances," of Section 411 (IFGC), "Appliance and Manufactured Home Connections," of Chapter 4, "Gas Piping Installations," of the 2015 International Fuel Gas Code is amended to read as follows:
 - "411.1.3.3 Prohibited locations and penetrations. Connectors shall not be concealed within, or extended through, walls, floors, partitions, ceilings or appliance housings.

Exception[s]:

- [1. Connectors constructed of materials allowed for piping systems in accordance with Section 403 shall be permitted to pass through walls, floors, partitions and ceilings where installed in accordance with Section 409.5.2 or 409.5.3.
- 2.] Rigid <u>black</u> steel pipe connectors shall be permitted to extend through openings in *appliance* housings.
- [3. Fireplace inserts that are factory equipped with grommets, sleeves or other means of protection in accordance with the listing of the appliance.
- 4. Semirigid tubing and *listed* connectors shall be permitted to extend through an opening in an *appliance* housing, cabinet or casing where the tubing or connector is protected against damage.]"
- 20. Paragraph [M] 614.8.2, "Duct Installation," of Subsection [M] 614.8, "Domestic Clothes Dryer Exhaust Ducts," of Section 614 (IFGC), "Clothes Dryer Exhaust," of Chapter 6, "Specific Appliances," of the 2015 International Fuel Gas Code is amended to read as follows:
 - "[M] 614.8.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners [that protrude more than 1/8 inch (3.2 mm) into the inside of the duct]."
- 21. Subsection 621.2, "Prohibited Use," of Section 621 (IFGC), "Unvented Room Heaters," of Chapter 6, "Specific Appliances," of the 2015 International Fuel Gas Code is amended to read as follows:
- "621.2 Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the building official, unless an unsafe condition is determined to exist as described in Section 101.5."

22. The NFPA standards of Chapter 8, "Referenced Standards," of the 2015 International Fuel Gas Code are amended to read as follows:

"NFPA

National Fire Protection Associtaion

1 Batterymarch Park Quincy, MA 02269-9101

Standard	Referenced
reference	in code
number	Title section number
30A—15	Code for Motor Fuel Dispensing Facilities and Repair Garages
3714	Standard for the Installation and Use of Stationary
	Combustion Engines and Gas Turbines
5113	Design and Installation of Oxygen-Fuel Gas Systems for
	Welding, Cutting and Allied Processes
58—14	Liquefied Petroleum Gas Code
70—14	National Electrical Code
	309.2, [310.1.1.2,] 413.9.2.4, 703.6
8214	Incinerators, Waste and Linen Handling Systems and Equipment 503.2.5, T503.4, 607.1
85—15	Boiler and Combustion Systems Hazards Code
88A—15	Parking Structures
211—13	Standard for the Chimneys, Fireplaces, Vents and Solid Fuel-burning Appliances 503.5.2,
	503.5.3, 503.5.6.1, 503.5.6.3
409—11	Standard for the Aircraft Hangars
85315	Installation of Stationary Fuel Cell Power Systems

- 23. None of the appendices of the 2015 International Fuel Gas Code are adopted.
- 24. All chapters of the 2015 International Fuel Gas Code adopted by this ordinance are subchapters of Chapter 60 of the Dallas City Code, as amended.
- 25. All references in the 2015 International Fuel Gas Code to the fire code, building code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, and green construction code refer, respectively, to Chapters 16, 53, 54, 55, 56, 57, 58, 59, and 61 of the Dallas City Code.

SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or

forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 60 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. If any provision contained in Chapters 16, 52, 53, 54, 55, 56, 57, 58, 59, or 61 relating to fuel gas work in the city is in conflict with any provision of Chapter 60, as adopted by this ordinance, the provisions of Chapter 60 will prevail, except that any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 4. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 5. That this ordinance will take effect on	, 2017, and it is
accordingly so ordained.	
APPROVED AS TO FORM:	
LARRY E. CASTO, City Attorney	
By Assistant City Attorney	
Passed	

ORDINANCE NO	Э.

An ordinance amending Chapter 61, "Dallas Green Construction Code," of the Dallas City Code, as amended; adopting with certain changes the 2015 Edition of the International Green Construction Code of the International Code Council, Inc.; regulating the design, construction, quality of materials, erection, installation, alteration, repair, location, relocation, replacement, addition to, use, and maintenance of construction work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 61, "Dallas Green Construction Code," of the Dallas City Code, as amended, is amended by adopting the 2015 Edition of the International Green Construction Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

1. Page xv, "Legislation," is deleted.

2. Chapter 1, "Scope and Administration," of the 2015 International Green Construction Code is deleted and replaced by a new Chapter 1, "Scope and Administration," to read as follows:

"CHAPTER 1 SCOPE AND ADMINISTRATION

SECTION 101 GENERAL

- 101.1 Title. These regulations shall be known as the Dallas Green Construction Code hereinafter referred to as "this code."
- 101.2 General. This code is an overlay document to be used in conjunction with the other codes and standards adopted by the jurisdiction. This code is not intended to be used as a standalone construction regulation document and permits are not to be issued under this code. This code is not intended to abridge or supersede safety, health or environmental requirements of other applicable codes or ordinances.
- 101.3 Scope. The provisions of this code shall apply to the design, construction, addition and building site of every new building or new structure or any new appurtenances connected or attached to such buildings or structures and to the site on which the building is located. Occupancy classifications shall be determined in accordance with the *Dallas Building Code*.

Exceptions:

- 1. The code shall not apply to items 1.1, 1.2 and 1.3 except where the jurisdiction adopts the jurisdictional requirements of Section 302.1, Item 1, for residential buildings.
 - 1.1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located.
 - 1.2. Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located.
 - 1.3. Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located.
- 2. The code shall not apply to equipment or systems that are used primarily for industrial or manufacturing purposes.

- 3. The code shall not apply to temporary structures *approved* under Section 3103 of the *Dallas Building Code*.
- 4. Where ASHRAE 189.1 is selected in accordance with Section 301.1.1, ASHRAE 189.1 shall not apply to buildings identified in Exceptions 1 through 3.
- 5. This code shall not apply to additions that are less than 400 square feet in floor area and contain no plumbing fixtures.
- 6. This code shall not apply to structures that are designed, built and inspected in accordance with the Texas Industrialized Building Act.
- 7. This code shall not apply to an addition of a mezzanine in an existing building.

101.3.1 Residential construction. The following may be deemed-to-comply with this code:

- 1. Group R-2 and R-4 residential buildings five stories or more in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located that comply with ICC 700, with the minimum energy efficiency category requirements of the *Dallas Energy Conservation Code*.
- 2. Group R-2 and R-4 portions of mixed use buildings that comply with ICC 700, with the minimum energy efficiency category requirements of the *Dallas Energy Conservation Code*. The remainder of the building and the site upon which the building is located shall comply with the provisions of this code.
- 101.4 Appendices. Provisions in the appendices shall not apply unless specifically adopted.
- 101.5 Intent. This code is intended to safeguard the environment, public health, safety and general welfare through the establishment of requirements to reduce the negative impacts and increase the positive impacts of the built environment on the natural environment and building occupants. This code is not intended to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.
- 101.6 Administrative procedures. Except as otherwise specified in this chapter, all provisions of Chapter 52, "Administrative Procedures for the Construction Codes," of the *Dallas City Code* apply to this code.
- 101.7 Referenced codes and standards. The codes and standards referenced in this code are considered part of the requirements of this code to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the City of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards is considered to reference the amendments as well. Any reference made to NFPA 70 or the ICC Electrical Code means the Dallas Electrical Code, as amended. References made to the International Building Code, International Mechanical Code, the International Plumbing Code, the International Fire Code, the International Energy

Conservation Code, the International Fuel Gas Code, the International Existing Building Code, and the International Residential Code, respectively mean the Dallas Building Code, the Dallas Mechanical Code, the Dallas Plumbing Code, the Dallas Fire Code, the Dallas Energy Conservation Code, the Dallas Fuel Gas Code, the Dallas Existing Building Code, and the Dallas One- and Two-Family Dwelling Code, as amended. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code apply."

- 3. Paragraph 301.1.1, "Application," of Subsection 301.1, "Scope," of Section 301, "General," of Chapter 3, "Jurisdictional Requirements," of the 2015 International Green Construction Code is amended to read as follows:
 - "301.1.1 Application. The requirements contained in this code are applicable to <u>new</u> buildings, or <u>new</u> portions of buildings, and <u>first time tenant finish outs</u>. As indicated in Section 101.3, these buildings <u>may</u> [shall] meet either the requirements of ASHRAE 189.1 or the requirements contained in this code."
- 4. Section 302, "Jurisdictional Requirements," of Chapter 3, "Jurisdictional Requirements," of the 2015 International Green Construction Code is amended to read as follows:

"SECTION 302 JURISDICTIONAL REQUIREMENTS

- **302.1 Requirements determined by the jurisdiction.** The jurisdiction shall indicate the following information in Table 302.1 for inclusion in its code adopting ordinance:
 - 1. The jurisdiction shall indicate whether requirements for residential buildings, as indicated in Exception 1 to Section 101.3, are applicable by selecting "Yes" or "No" in Table 302.1. Where "Yes" is selected, the provisions of ICC 700 may [shall] apply and the remainder of this code shall not apply.
 - 2. [Where the jurisdiction requires enhanced energy performance for buildings designed on a performance basis, the jurisdiction shall indicate a zEPI of 46 or less in Table 302.1 for each occupancy required to have enhanced energy performance.
 - 3.] Where "Yes" or "No" boxes are provided, the jurisdiction shall check the box to indicate "Yes" where that section is to be enforced as a mandatory requirement in the jurisdiction, or "No" where that section is not to be enforced as a mandatory requirement in the jurisdiction.

[302.1.1 zEPI of 46 or less. Where a zEPI of 46 or less is indicated by the jurisdiction in Table 302.1, buildings shall comply on a performance basis in accordance with Section 601.3.1.

Exception: Buildings less than 25,000 square feet (2323 m²) in total building floor area pursuing compliance on a prescriptive basis shall be deemed to have a zEPI of 51 and shall not be required to comply with the zEPI of Jurisdictional Choice indicated by the jurisdiction in Table 302.1.]"

5. Table 302.1, "Requirements Determined by the Jurisdiction," of Chapter 3, "Jurisdictional Requirements," of the 2015 International Green Construction Code is amended to read as follows:

"TABLE 302.1 REQUIREMENTS DETERMINED BY THE JURISDICTION

Section Section Title or Description Jurisdictional			ctional
and Directives		Requirements	
CHAPTER 1. SCOPE			
101.3 Exception 1.1	Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located, may [shall] comply with ICC 700.	<u>⊠</u> Yes	□No
101.3 Exception 1.2	Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located, may [shall] comply with ICC 700.	∑Yes	□No
101.3 Exception 1.3	Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located, may [shall] comply with ICC 700.	⊠Yes	□No
	PTER 4. SITE DEVELOPMENT AND LAN	ID USE	
[402.2.1	Flood hazard area preservation, general	□Yes	□No
402.2.2	Flood hazard area preservation, specific	□Yes	□No
402.3	Surface water protection	□Yes	□No
402.5	Conservation area	□Yes	□No
402.6	Agricultural land	□Yes	□Ne]
402.7	Greenfield sites	∑Yes	□No

[407.4.1	High-occupancy vehicle parking	□Yes	□Ne	
<u>-</u>				
407.4.2	Low emission, hybrid and electric vehicle	∃Yes	⊟Ne]	
	parking			
409.1	Light pollution control	<u>⊠</u> Yes	□No	
CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY				
503.1	Minimum percentage of waste material	⊠50%		
	diverted from landfills	□65%		
		□75%		
СНАТ	PTER 6. ENERGY CONSERVATION, EFF	1		
AND CO20 EMISSION REDUCTION				
302.1, 302.1.1, 602.1 ZEPI of Jurisdictional Choice The				
302.1, 302.1.1, 002.1	jurisdiction shall indicate a zEPI of 46 or	Occupancy		
	1 **	Occupancy:		
	less in each occupancy for which it intends	zEPI:		
(0.4.1	to require enhanced energy performance.			
604.1	Automated demand response infrastructure	□Yes	□Ne	
CHAPTER 7. WATER RESOURCE CONSERVATION, QUALITY AND EFFICIENCY				
702.6	Municipal or reclaimed water	□Yes	□Ne]	
CHAPTER 8. INDOOR ENVIRONMENTAL QUALITY AND COMFORT				
804.2	Post-Construction Pre-Occupancy Baseline	⊠Yes	□No	
	IAQ Testing			
[807.1	Sound transmission and sound levels	□Yes	□Ne	
_	· <u></u>			
CHAPTER 10. EXISTING BUILDINGS				
1007.2	Evaluation and certification of existing	□Yes	□Ne	
	buildings and building sites			
1007.3	Post certificate of occupancy annual net	⊟Yes	□Nel"	
	energy use, energy demand, and CO2e			
	emissions reporting			
·			L	

- 6. Subsection 401.2, "Predesign Site Inventory and Assessment," of Section 401, "General," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code is deleted.
- 7. Subsection 402.1, "Protection by Area," of Section 402, "Preservation of Natural Resources," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code is amended to read as follows:
- "402.1 Protection by area. Where [flood hazard areas, surface water bodies or wetlands, conservation areas, parklands, agricultural lands or] greenfields are located on, or adjacent to, a lot, the development of the lot as a building site shall comply with the provisions of Section[s 402.2 through] 402.7."

- 8. Subsection 402.2, "Flood Hazard Areas," Subsection 402.3, "Surface Water Protection," Subsection 402.4, "Wetland Protection," Subsection 402.5, "Conservation Area," and Subsection 402.6, "Agricultural Land," of Section 402, "Preservation of Natural Resources," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code are deleted.
- 9. Subsection 402.7, "Greenfield Sites," of Section 402, "Preservation of Natural Resources," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code is amended to read as follows:

"402.7 Greenfield sites. Where this section is indicated to be applicable in Table 302.1, site disturbance or development shall not be permitted on *greenfield* sites <u>specifically identified by</u> and pursuant to the authority having jurisdiction.

Exception: The development of new buildings and associated site improvements shall be permitted on *greenfield* sites where the jurisdiction determines that adequate infrastructure exists, or will be provided, and where the sites comply with not less than one of the following:

- 1. The greenfield site is located within ¼ mile (0.4 km) of developed residential land and with an average density of not less than 8 dwelling units per acre (19.8 dwelling units per hectare).
- 2. The greenfield site is located within a ¼ mile (0.4 km) distance, measured over roads or designated walking surfaces, of not less than 5 diverse uses and within ½ mile (0.8 km) walking distance of not less than 7 diverse uses. The diverse uses shall include not less than one use from each of the following categories of diverse uses: retail, service, or community facility.
- 3. The *greenfield* site has access to transit service. The building on the building site shall be located in compliance with one of the following:
 - 3.1. Within ¼ mile (0.4 km) distance, measured over designated walking surfaces, of existing or planned bus or streetcar stops.
 - 3.2. Within ½ mile (0.8 km) distance, measured over designed walking surfaces, of existing or planned rapid transit stops, light or heavy passenger rail stations, ferry terminals, or tram terminals.

- 4. The greenfield site is located adjacent to areas of existing development that have connectivity of not less than 90 intersections per square mile (35 intersections per square kilometer). Not less than 25 percent of the perimeter of the building site shall adjoin, or be directly across a street, public bikeway or pedestrian pathway from the qualifying area of existing development.
 - 4.1. Intersections included for determination of connectivity shall include the following:
 - 4.1.1. Intersections of public streets with other public streets;
 - 4.1.2. Intersections of public streets with bikeways and pedestrian pathways that are not part of a public street for motor vehicles; and
 - 4.1.3. Intersections of bikeways and pedestrian pathways that are not part of a public street for motor vehicles with other bikeways and pedestrian pathways that are not part of a public street for motor vehicles.
 - 4.2. The following areas need not be included in the determination of connectivity:
 - 4.2.1. Water bodies, including, but not limited to lakes and wetlands.
 - 4.2.2. Parks larger than ½ acre (2023 m²), designated conservation areas and areas preserved from development by the jurisdiction or by the state or federal government.
 - 4.2.3. Large facilities including, but not limited to airports, railroad yards, college and university campuses.

[402.7.1 Site disturbance limits on greenfield sites. For greenfield sites that are permitted to be developed, site disturbances shall be limited to the following areas:

- 1. Within 40 feet (18 288 mm) of the perimeter of the building;
- 2. Within 15 feet (4572 mm) of proposed surface walkways, roads, paved areas and utilities;
- 3. Within 25 feet (7620 mm) of constructed areas with permeable surfaces that require additional staging areas to limit compaction in the constructed areas.]"

- 10. Section 403, "Stormwater Management," Section 404, "Landscape Irrigation and Outdoor Fountains," and Section 405, "Management of Vegetation, Soils and Erosion Control," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code are deleted.
- 11. Subsection 406.1, "Building Site Waste Management Plan," of Section 406, "Building Site Waste Management," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code is amended to read as follows:
- "406.1 Building site waste management plan. A building site waste management plan shall be developed and implemented to divert not less than 50 [75] percent of the land-clearing debris and excavated soils from disposal. Land-clearing debris includes rock, trees, stumps and associated vegetation. The plan shall include provisions that address all of the following:
 - 1. Materials to be diverted from disposal by efficient usage, recycling or reuse on the building site shall be specified.
 - 2. Diverted materials shall not be sent to [sites that are agricultural land, flood hazard areas or] greenfield sites where development is prohibited by Section 402.1 except where approved by the code official.
 - 3. The effective destruction and disposal of *invasive plant species*.
 - 4. Where contaminated soils are removed, the methods of removal and location where the soils are to be treated and disposed.
 - 5. The amount of materials to be diverted shall be specified and shall be calculated by weight or volume, but not both.
 - 6. Where the site is located in a federal or state designated quarantine zone for invasive insect species, building site vegetation management shall comply with the quarantine rules.
 - 7. Receipts or other documentation related to diversion shall be maintained through the course of construction. When requested by the *code official*, evidence of diversion shall be provided."

- 12. Subsection 407.2, "Changing and Shower Facilities," Subsection 407.3, "Bicycle Parking and Storage," and Subsection 407.4, "Preferred Vehicle Parking," of Section 407, "Transportation Impact," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code are deleted.
- 13. Section 409, "Site Lighting," of Chapter 4, "Site Development and Land Use," of the 2015 International Green Construction Code is deleted and replaced with a new Section 409, "Site Lighting," to read as follows:

"SECTION 409 SITE LIGHTING

409.1 Outdoor lighting restriction.

- **409.1.1 Area of use.** For the lighting of predominately horizontal surfaces such as roadways, areas of vehicular and pedestrian passage, merchandising and storage areas, automotive fuel dispensing facilities, automotive sales areas, loading docks, cul-de-sacs, active and passive recreational areas, building entrances, sidewalks, paths, site entrances and parking areas, light fixtures shall be aimed straight down and shall be full cutoff or fully shielded, unless the aggregate wattage per fixture does not exceed the output of a standard non-directional 60 watt incandescent lamp, i.e., 900 lumens, in which case non-cutoff fixtures are permitted.
- **409.1.2** Maximum lamp wattage and required luminaire or lamp shielding. All lighting installations shall be designed and installed to be fully shielded (full cutoff). Maximum lamp wattage for commercial lighting is 250 watts. Maximum lamp wattage for residential lighting is 100 watts for incandescent bulbs, and 32 watts for compact fluorescent bulbs.

Exceptions:

- 1. Luminaries for safety or security reasons.
- 2. Lighting in swimming pools and other water features governed by the *Dallas Electrical Code*.
- 3. Exit signs and other illumination required by the codes.
- 4. Lighting for stairs and ramps, as required by the codes.
- 5. Signs that are regulated by Article VII of the *Dallas Development Code*, however, all signs are recommended to be fully shielded.

- 6. Holiday and temporary lighting as governed by the Dallas Electrical Code.
- 7. Athletic field lighting if steps have been taken to minimize glare and light trespass.
- 8. Low voltage landscape lighting, but such lighting should be shielded to eliminate glare and light trespass."
- 14. Subsection 503.1, "Construction Material and Waste Management Plan," of Section 503, "Construction Waste Management," of Chapter 5, "Material Resource Conservation and Efficiency," of the 2015 International Green Construction Code is amended by adding exceptions to read as follows:

"Exceptions:

- 1. For projects that generate not more than 2.5 pounds per square foot of affected project area, not less than 25% of nonhazardous construction waste shall be diverted from disposal.
- 2. For projects that generate not more than 1.5 pounds per square foot and the affected project area is 2,500 square feet or less, nonhazardous construction waste diversion is not required."
- 15. Subsection 505.2, "Material Selection," of Section 505, "Material Selection," of Chapter 5, "Material Resource Conservation and Efficiency," of the 2015 International Green Construction Code is amended to read as follows:
- "505.2 Materials selection. Not less than 45 [55] percent of the total building materials used in the project, based on mass, volume or cost, shall comply with Section 505.2.1, 505.2.2, 505.2.3, 505.2.4 or 505.2.5. Where a material complies with more than one section, the material value shall be multiplied by the number of sections that it complies with. The value of total building material mass, volume or cost shall remain constant regardless of whether materials are tabulated in more than one section.
 - **505.2.1** Used materials and components. Used materials and components shall comply with the provisions for such materials in accordance with the applicable code referenced in Section 101.7 [102.4] and the applicable requirements of this code.
 - **505.2.2 Recycled content building materials.** Recycled content building materials shall comply with one of the following:

- 1. Contain not less than 25 percent combined post-consumer and preconsumer recovered material, and shall comply with Section 505.2.3.
- 2. Contain not less than 50 percent combined post-consumer and preconsumer recovered material.

505.2.3 Recyclable building materials and building components. Recyclable building materials and building components shall comply with one of the following:

- 1. Building materials or components that can be recycled into the same material or another material with a minimum recovery rate of not less than 30 percent through recycling and reprocessing or reuse; or
- 2. Building materials shall be recyclable through an established closed loop manufacturer's take-back program.

505.2.4 Bio-based materials. Bio-based materials shall be those materials that comply with one or more of the following:

- 1. The bio-based content is not less than 75 percent as determined by testing in accordance with ASTM D6866.
- 2. Wood and wood products used to comply with this section, other than salvaged or reused wood products, shall be labeled in accordance with the SFI Standard, FSC STD-40-004 V2-1 EN, PEFC Council Technical Document or equivalent fiber procurement system. As an alternative to an on-product label, a Certificate of Compliance indicating compliance with the fiber procurement system shall be permitted. Manufacturer's fiber procurement systems may [shall] be audited by an accredited third-party.
- 3. The requirements of USDA 7CFR Part 2902.

505.2.5 Indigenous materials. Indigenous materials or components shall be composed of resources that are recovered, harvested, extracted and manufactured within a 500 mile (800 km) radius of the building site. Where only a portion of a material or product is recovered, harvested, extracted or manufactured within 500 miles (800 km), only that portion shall be included. Where resources are transported by water or rail, the distance to the building site shall be determined by multiplying the distance that the resources are transported by water or rail by 0.25, and adding that number to the distance transported by means other than water or rail."

16. Chapter 6, "Energy Conservation, Efficiency and CO₂e Emission Reduction," of the 2015 International Green Construction Code is deleted and is replaced to read as follows:

"CHAPTER 6 ENERGY EFFICIENCY

SECTION 601 GENERAL

- **601.1 Scope.** This chapter governs the design and construction of buildings for energy efficiency.
- **601.2** Criteria. Buildings shall be designed and constructed in accordance with the energy provisions of the *Dallas Energy Code*."
- 17. Subsection 701.2, "Water Usage Metering Required," of Section 701 "General," of Chapter 7 "Water Resource Conservation, Quality and Efficiency," of the 2015 International Green Construction Code is amended to read as follows:
- "701.2 Water usage metering required. Water consumed from any source associated with the building or building site may [shall] be metered. Each potable and reclaimed source of water, and each onsite nonpotable water source, shall be metered separately. Meters shall be installed in accordance with the requirements of the <u>Dallas</u> [International] Plumbing Code. For the purposes of Section 701.2.1, each meter identified in Table 701.2.1 shall be capable of communicating water consumption data remotely and at a minimum, be capable of providing daily data with electronic data storage and reporting capability that can produce reports that show daily, monthly, and annual water consumption.

Exception: Fire sprinkler systems installed in accordance with Section 903.3 of the <u>Dallas</u> [International] Fire Code shall not be required to be metered.

701.2.1 Individual metering required. All potable and nonpotable water supplied to the applications listed in Table 701.2.1 <u>may</u> [shall] be individually metered in accordance with the requirements indicated in Table 701.2.1. Similar appliances and equipment shall be permitted to be grouped and supplied from piping connected to a single meter.

Exception: In Group I-2 occupancies and ambulatory care facilities, water used for patient treatment or to support patient care shall not be required to be individually metered."

- 18. Subsection 702.2, "Combination Tub and Shower Valves," Subsection 702.3, "Food Establishment Prerinse Spray Valves," Subsection 702.4, "Drinking Fountain Controls," Subsection 702.5, "Appliances," Subsection 702.6, "Municipal Reclaimed Water," Subsection 702.8, "Trap Priming Water," Subsection 702.9, "Water-Powered Pumps," Subsection 702.10, "Food Service Handwashing Faucets," Subsection 702.11, "Dipper Wells," Subsection 702.12, "Automated Vehicle Wash Facilities," Subsection 702.13, "Self-Service Vehicle Wash Facilities," Subsection 702.14, "Vehicle Washing Facilities," Subsection 702.15, "Food Waste Disposers," Subsection 702.16, "Combination Ovens," Subsection 702.17, "Autoclaves and Sterilizers," Subsection 702.18, "Liquid Ring Vacuum Pumps," and Subsection 702.19, "Film Processors," of Section 702, "Fixtures, Fittings, Equipment and Appliances," of Chapter 7, "Water Resource Conservation, Quality and Efficiency," of the 2015 International Green Construction Code are deleted.
- 19. Subsection 703.4, "Condensate Drainage Recovery," of Section 703, "HVAC Systems and Equipment," of Chapter 7, "Water Resource Conservation, Quality and Efficiency," of the 2015 International Green Construction Code is amended to read as follows:
- "703.4 Condensate drainage recovery. Condensate shall be collected and reused onsite when the following reuse [for] applications occur: [such as, but not limited to] water features, fountains, gray water collection systems, [and] rainwater collection systems, irrigation and cooling tower makeup. When storage of condensate occurs longer than 48 hours, the collection system shall have microbiological treatment control. Condensate shall be collected and reused onsite. Where onsite applications for condensate reuse are not available and the community sanitary sewer authority provides return credit for sanitary sewage or recycles sewage into a nonpotable water supply, condensate shall be discharged to the sanitary sewer system except where prohibited by the authority having jurisdiction.

Exception: When cooling system is less than 60,000 Btu/h."

- 20. Paragraph 703.7.3, "Controllers and Alarms," of Subsection 703.7, "Cooling Towers, Evaporative Condensers and Fluid Coolers," of Section 703, "HVAC Systems and Equipment," of Chapter 7, "Water Resource Conservation, Quality and Efficiency," of the 2015 International Green Construction Code is amended to read as follows:
 - "703.7.3 Controllers and alarms. Cooling towers, evaporative condensers, and fluid coolers shall be equipped with conductivity controllers and <u>have high water level sensors in their respective basins that will indicate an overfill or near overflow condition. These sensors shall have an alarm that shall have a minimum sound pressure level rating of 85 dB measured at a distance of 10 feet (3048 mm) [overflow alarms]."</u>
- 21. Paragraph 703.7.6, "Discharge," of Subsection 703.7, "Cooling Towers, Evaporative Condensers and Fluid Coolers," of Section 703, "HVAC Systems and Equipment," of Chapter 7, "Water Resource Conservation, Quality and Efficiency," of the 2015 International Green Construction Code is deleted.
- 22. Subsection 703.8, "Wet-Hood Exhaust Scrubber Systems," of Section 703, "HVAC Systems and Equipment," of Chapter 7, "Water Resource Conservation, Quality and Efficiency," of the 2015 International Green Construction Code is deleted.
- 23. Subsection 801.2, "Indoor Air Quality Management Plan Required," of Section 801, "General," of Chapter 8, "Indoor Environmental Quality and Comfort," of the 2015 International Green Construction Code is amended to read as follows:
- "801.2 Indoor air quality management plan required. An indoor air quality management plan shall be developed and submitted in the template provided by the building official. Such plan shall address the methods and procedures to be used during design and construction to obtain compliance with Sections 802 through 805."

- 24. Subsection 803.4, "Filters," of Section 803, "HVAC Systems," of Chapter 8, "Indoor Environmental Quality and Comfort," of the 2015 International Green Construction Code is amended by adding an exception to read as follows:
 - "Exception: Filters for air conditioning systems that serve occupied spaces in multi-family residential units or light commercial spaces shall be rated at MERV 6 for systems rated at 30,000 Btu/h or less and MERV 8 for systems rated over 30,000 Btu/h, but no greater than 60,000 Btu/h."
- 25. Subsection 804.2, "Post-Construction, Pre-Occupancy Baseline IAQ Testing," of Section 804, "Specific Indoor Air Quality and Pollutant Control Measures," of Chapter 8, "Indoor Environmental Quality and Comfort," of the 2015 International Green Construction Code is amended to read as follows:
- "804.2 Post-construction, pre-occupancy baseline IAQ testing. Where this section is indicated to be applicable in Table 302.1, and after all interior finishes are installed, the building shall be tested for indoor air quality and the testing results shall indicate that the levels of VOCs do not exceed a total amount of 500 micrograms per cubic meter [meet the levels detailed in Table 804.2] using testing protocols in accordance with ASTM D5197, ASTM D5466, ASTM D6196, ASTM D 6345, and ISO 7708. Test samples shall be taken in not less than one location in each 25,000 square feet (1860 m²) of floor area or in each contiguous floor area.

Exceptions:

- 1. Group F, H, I-2, S and U occupancies shall not be required to comply with this section.
- 2. A building shall not be required to be tested where a similarly designed and constructed building as determined by the *code official*, for the same owner or tenant, has been tested for indoor air quality and the testing results indicate that the level of VOCs did not exceed 500 micrograms per cubic meter [meet the levels detailed in Table 804.2].
- 3. Where the building indoor environment does not meet the concentration of 500 micrograms per cubic meter [limits in Table 804.2] and the tenant does not address the air quality issue by mitigation and retesting, the building shall be flushed out by supplying continuous ventilation with all air-handling units at their maximum outdoor air rate for at least 14 days while maintaining an internal temperature of at least 60°F (15.6°C), and relative humidity not higher than 60 percent. Occupancy shall be permitted to start 7 days after start of the flush out, provided that the flush out continues for the full 14 days."

26. Table 804.2, "Maximum Concentration of Air Pollutants," of Section 804, "Specific Indoor Air Quality and Pollutant Control Measures," of Chapter 8, "Indoor Environmental Quality and Comfort," of the 2015 International Green Construction Code is deleted.

27. Section 807, "Acoustics," and Section 808, "Daylighting," of Chapter 8, "Indoor Environmental Quality and Comfort," of the 2015 International Green Construction Code are deleted.

28. Chapter 9, "Commissioning, Inspections, Operation and Maintenance," Chapter 10, "Existing Buildings," and Chapter 11, "Existing Building Site Development," of the 2015 International Green Construction Code are deleted.

29. The AMCA, ASABE, NFPA, SMACNA, TCIA, and TMS standards in Chapter 12, "Referenced Standards," of the 2015 International Green Construction Code are deleted.

30. The ASME standard in Chapter 12, "Referenced Standards," of the 2015 International Green Construction Code is amended to read as follows:

"ASME

American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990

Standard		Referenced
reference		in code
number	Title	section number
A 112.18.12012/	44 45 4 44 45 45 45 45 45 45 45 45 45 45	
CSA B125.1—2012	Plumbing Supply Fittings	Table 702.1[, 702.2]"

31. The ASHRAE standards in Chapter 12, "Referenced Standards," of the 2015 International Green Construction Code are amended to read as follows:

"ASHRAE ASHRAE

1791 Tullie Circle Atlanta, GA 30329-2305

Standard reference number	Referenced in cod Title section number
52.2-2012	Method of Testing General Ventilation Air-Cleaning Devices for
	Removal Efficiency by Particle Size
55-2010	Thermal Environmental Conditions on Human Occupancy [606.5.1,] 803.2
[72 05	Method of Testing Commercial Refrigerators and Freezers
90.1 2013	Energy Standard for Buildings Except Low-rise Residential Buildings 602.2, 602.2.1.1
189.1—2014	Standard for the Design of High-performance Green Buildings,
	Except Low-rise Residential Buildings

32. The ASTM standards in Chapter 12, "Referenced Standards," of the 2015 International Green Construction Code are amended to read as follows:

"ASTM

ASTM International 100 Barr Harbor

West Conshohocken, PA 19428-2959

Standard	Referenced
reference	in code
number	Title section number
C 1371—04a (2010)E1	Standard Test Method for Determination of Emittance of Materials Near Room
G 1 - 10 00	Temperature Using Portable Emissometers
C 1549—09	Standard Test Method for Determination of Solar Reflectance Near Ambient
G1701/G170134 00	Temperature Using a Solar Reflectometer
C1701/C1701M—09	Standard Test Method for Infiltration Rate of In-Place Pervious Concrete 408.2.4
C1781/C1781M—13	Standard Test Method for Infiltration rate of In-Place Pervious Unit
FD-00-1	Paving Systems
[D2974—13	Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and
	other Organic Soils
D3385 09	Standard Test Method for Infiltration Rate of Soils in Field Using
	Double-Ring Infiltrometer
D3960—05	Standard Practice of Determining Volatile Organic Compound (VOC)
	Content of Paints & Related Coatings
D5055—13	Standard Specification for Establishing and Monitoring Structural Capacities
	of Prefabricated Wood I-Joists
[D5093 2 (2008)	Standard Test Method for Field Measurement of Infiltration Rate Using
	Double-Ring Infiltrometer With Sealed Inner Ring
D5197—09E1	Test Method for Determination of Formaldehyde and Other Carbonyl
	Compounds in Air (Active Sampler Methodology)
D545613	Standard Specification for Evaluation of Structural Composite Lumber Products 202
D5466—01 (2007)	Test Method for Determination of Volatile Organic Chemicals in
	Atmospheres (Canister Sampling Methodology)804.2

D6007—02 (2008)	Standard Test Method for Determining Formaldehyde Concentrations in Air
D6196—03 (2009)	from Wood Products Using a Small-Scale Chamber
D6345—10	Analysis Procedures for Volatile Organic Compounds in Air
D6866—12	Volatile Organic Compounds in Air
D7612—10	and Gaseous Samples Using Radiocarbon Analysis
[E90 09	their Fiber Sources
E336 2010	Loss of Building Partitions and Elements. 807.2
E330 - 2010	Standard Test Method for Measurement of Airborne Sound Attenuation Between
E412 10	Rooms in Buildings
E413 10	Classification for Rating Sound Insulation 807.2
E492 09	Standard Test Method for Laboratory Measurement of Impact Sound Transmission
	Through Floor Ceiling Assemblies Using the Tapping Machine 807.4]
E779—10	Standard Test Method for Determining Air Leakage Rate by
	Fan Pressurization
E1333—10	Standard Test Method for Determining Formaldehyde Concentration in Air and
	Emission Rates from Wood Products Using a Large Chamber
E1509—12	Standard Specification for Room Heaters, Pellet Fuel-Burning Type 804.1.3
E1918—06	Standard Test Method for Measuring Solar Reflectance of Horizontal and
	Low-Sloped Surfaces in the Field
E1980—11	Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces
E 2399—11	Standard Test Method for Maximum Media Density for Dead Load
	Analysis of Vegetative (Green) Roof Systems
E 2635—08	Standard Practice for Water Conservation in Buildings Through In-Situ Water Reclamation
E2921—13	Standard Practice for Minimum Criteria for Comparing Whole Building Life
	Cycle Assessments for Use with Building Codes and Rating Systems
[F1275 03 (2008)	Standard Test Method for Performance of Griddles
F1361 07	Standard Test Method for Performance of Open Deep Fat Fryers
F1496 13	Standard Test Method for Performance of Convection Ovens
F1484 12	Standard Test Methods for Performance of Steam Cookers
F1605 95 (2007)	Standard Test Method for Performance of Double-Sided Griddles Table 609.2.3
F1639 05	Standard Test Method for Performance of Combination Ovens
F1696 07	Standard Test Method for Energy Performance of Single Rack, Door Type
11000 0,	Commercial Dishwashing Machines
F1920 11	Standard Test Method for Performance of Rack Conveyor, Commercial
11520 11	Dishwashing Machines
F2140 11	Standard Test Method for Performance of Hot Food Holding Cabinets Table 609.2.3
F2144 09	Standard Test Method for Performance of Large Open Vat FryersTable 609.2.3
F2861 10	Standard Test Method for Enhanced Performance of Combination Oven in
12001 10	
	Various Modes

33. The ISO standards in Chapter 12, "Referenced Standards," of the 2015 International Green Construction Code are amended to read as follows:

"ISO

International Organization for Standardization ISO Central Secretariat

Chemin de Blandonnet 8 CP 401

1214 Vernier, Geneva, Switzerland

Standard		Referenced
reference		in code
number	Title	section number
7708—1995	Air quality - Particle Size Fraction Definitions for Health-related Sa	mpling 804.2
[13256-1 2011	Water-to-Air and Brine-to-Air Heat Pumps Testing and Rating	. •
	Performance	Table 606.2.2.1
13256 2 2011	Water to Water and Brine to Water Heat Pumps Testing and Rating	eg
	Performance	
14025—2006	Environmental Labels and Declarations—Type III Environmental De	
	Principles and Procedures	505.4.1
ISO/IEC 17025—2005	General Requirements for the Competence of Testing and Calibration	n
2004—11	Laboratories	
		806.4, 806.5, 806.6
219302007	Sustainability in Building Construction—Environmental	, ,
	Declaration of Building Products	505.4.1"

34. The NSF standards in Chapter 12, "Referenced Standards," of the 2015 International Green Construction Code are amended to read as follows:

"NSF

NSF International 780 Dixboro Road Ann Arbor, MI 48105

Standard	Referenced
reference	in code
number	Title section number
NSF/ANSI 3 10	Commercial Warehousing Equipment
NSF/ANSI 44—12	Residential Cation Exchange Water
NSF/ANSI 58—12	Reverse Osmosis Drinking Water Treatment Systems
NSF/ANSI 140—13	Sustainability Assessment for Carpet505.4.2
NSF/ANSI 332—12	Sustainability Assessment for Resilient Floor Covering
NSF/ANSI 33611	Sustainability Assessment for Commercial Furnishings Fabric 505.4.2
NSF/ANSI 342—12	Sustainability Assessment for Wall Coverings
NSF/ANSI 347—12	Sustainability Assessment for Single-Ply Roofing Membranes505.4.2
NSF 350—11	Onsite Residential and Commercial Water Reuse Treatment Systems

35. Appendices A and B of the 2015 International Green Construction Code are not adopted.

- 36. All chapters of the 2015 International Green Construction Code adopted by this ordinance are subchapters of Chapter 61 of the Dallas City Code, as amended.
- 37. All references in the 2015 International Green Code to the fire code, building code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, and fuel gas code refer, respectively to Chapters 16, 53, 54, 55, 56, 57, 58, 59, and 60 of the Dallas City Code.

SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 61 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. Any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 4. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 5. That this ordinance will take effect on	, 2017, and it is
accordingly so ordained.	
APPROVED AS TO FORM:	
LARRY E. CASTO, City Attorney	
By Assistant City Attorney	
Passed	

KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): Outside City Limits

DEPARTMENT: Sustainable Development and Construction

Water Utilities

CMO: Mark McDaniel, 670-3256

MAPSCO: N/A

SUBJECT

Authorize the second step of acquisition for condemnation by eminent domain to acquire a tract of land containing approximately 432,376 square feet located in Kaufman County for the Lake Tawakoni 144-inch Pipeline Project, from Morris Dale Martin - Not to exceed \$55,000 (\$51,615, plus closing costs and title expenses not to exceed \$3,385) - Financing: Water Utilities Capital Improvement Funds

BACKGROUND

This item authorizes the second step of acquisition for condemnation by eminent domain to acquire a tract of land containing approximately 432,376 square feet located in Kaufman County from Morris Dale Martin, the property owner. An offer was presented to the property owner on November 13, 2015 reflecting the appraised value of \$51,615 and the City's offer was declined. Negotiations between the City and the property owner have been ongoing through October 2016 and no amicable agreement has been reached.

The first resolution approved on September 28, 2016, by Resolution No. 16-1585, authorized the purchase in the amount of \$51,615. This property will be used for the construction of a 144-inch raw water transmission line for the Lake Tawakoni Pipeline Project. This acquisition will be part of the right-of-way required to construct approximately 32 miles of pipeline from Lake Tawakoni to the Interim Balancing Reservoir located in Terrell, TX and then to the Eastside Water Treatment plant located in Sunnyvale, TX. The new raw water pipeline will augment the existing 72-inch and 84-inch pipelines. The construction of this pipeline will give Dallas Water Utilities the ability to utilize the full capacity of both the Lake Tawakoni and the Lake Fork raw water supply to meet the current city needs and future water demands.

No relocation benefits are associated with this acquisition.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Authorized acquisition on September 28, 2016, by Resolution No. 16-1585.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

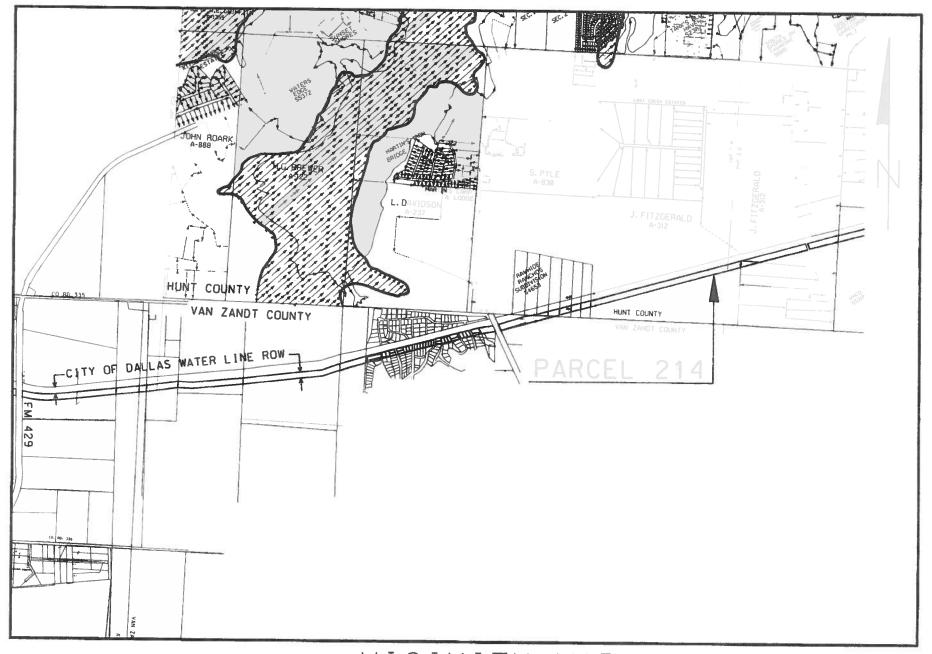
Water Utilities Capital Improvement Funds - \$55,000 (\$51,615, plus closing costs and title expenses not to exceed \$3,385)

OWNER

Morris Dale Martin

MAP

Attached



VICINITY MAP APPROXIMATE SCALE 1"= 2000'



KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 14

DEPARTMENT: Sustainable Development and Construction

CMO: Mark McDaniel, 670-3256

MAPSCO: 35T

SUBJECT

An ordinance abandoning a portion of Newton Court to Park Cities Presbyterian Church, the abutting owner, containing approximately 19,805 square feet of land, located near the intersection of Oak Lawn Avenue and Newton Court and authorizing the quitclaim - Revenue: \$1,163,582, plus the \$20 ordinance publication fee

BACKGROUND

This item is on the addendum because additional review time was required. This item authorizes the abandonment of a portion of Newton Court to Park Cities Presbyterian Church, the abutting owner. The area will be included with the property of the abutting owners for the expansion of church facilities. The abandonment fee is based on an independent appraisal.

Notices were sent to 26 property owners located within 300 feet of the proposed abandonment area. There were no responses received in opposition to this request.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

The Economic Development Committee will be briefed by memo on this item.

FISCAL INFORMATION

Revenue: \$1,163,582, plus the \$20 ordinance publication fee

OWNER

Park Cities Presbyterian Church

Jeff Barber, Executive Director



MAP

Attached



ORDINANCE	NO.	

An ordinance providing for the abandonment of a portion of Newton Court located adjacent to City Blocks 2064 and 3/2064 in the City of Dallas and County of Dallas, Texas; providing for the quitclaim thereof to Park Cities Presbyterian Church; providing for the terms and conditions of the abandonment and quitclaim made herein; providing for barricading; providing for the indemnification of the City of Dallas against damages arising out of the abandonment herein; providing for the consideration to be paid to the City of Dallas; providing for the payment of the publication fee; and providing an effective date for this ordinance.

0000000

WHEREAS, the City Council of the City of Dallas, acting pursuant to law and upon the request and petition of Park Cities Presbyterian Church, a Texas non-profit corporation, hereinafter referred to as GRANTEE, deems it advisable to abandon and quitclaim the hereinafter described tract of land to GRANTEE, and is of the opinion that, subject to the terms and conditions herein provided, said portion of Newton Court is not needed for public use, and same should be abandoned and quitclaimed to GRANTEE, as hereinafter stated; and

WHEREAS, the City Council of the City of Dallas is of the opinion that the best interest and welfare of the public will be served by abandoning and quitclaiming the same to GRANTEE for the consideration and subject to the terms and conditions hereinafter more fully set forth; Now, Therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That the tract of land described in Exhibit A, which is attached hereto and made a part hereof for all purposes, be and the same is abandoned, vacated and closed insofar as the right, title and interest of the public are concerned; subject, however, to the conditions hereinafter more fully set out.



SECTION 2. That for and in monetary consideration of the sum of ONE MILLION ONE HUNDRED SIXTY-THREE THOUSAND FIVE-HUNDRED EIGHTY-TWO AND NO/100 DOLLARS (\$1,163,582.00) paid by GRANTEE, and the further consideration described in Sections 8, 9, 10 and 11, the City of Dallas does by these presents FOREVER QUITCLAIM unto the said GRANTEE, subject to the conditions, reservations, and exceptions hereinafter made and with the restrictions and upon the covenants below stated, all of its right, title and interest in and to the certain tract of land hereinabove described in Exhibit A. TO HAVE AND TO HOLD all of such right, title and interest in and to the property and premises, subject aforesaid, together with all and singular the rights, privileges, hereditaments and appurtenances thereto in any manner belonging unto the said GRANTEE forever.

SECTION 3. That upon payment of the monetary consideration set forth in Section 2, **GRANTEE** accepts the terms, provisions, and conditions of this ordinance.

SECTION 4. That the Chief Financial Officer is authorized to deposit the sum paid by **GRANTEE** pursuant to Section 2 above in the General Fund 0001, Department DEV, Balance Sheet 0519 and Department of Sustainable Development and Construction - Real Estate Division shall be reimbursed for the cost of obtaining the legal description, appraisal and other administrative costs incurred. The reimbursement proceeds shall be deposited in General Fund 0001, Department DEV, Unit 1183, Object 5011 and any remaining proceeds shall be transferred to the General Capital Reserve Fund 0625, Department BMS, Unit 8888, Revenue Source 8416.

SECTION 5. That the abandonment and quitclaim provided for herein are made subject to all present zoning and deed restrictions, if the latter exist, and are subject to all existing easement rights of others, if any, whether apparent or non-apparent, aerial, surface, underground or otherwise, and are further subject to the conditions contained in Exhibit B, which is attached hereto and made a part hereof for all purposes.

SECTION 6. That the terms and conditions contained in this ordinance shall be binding upon **GRANTEE**, its successors and assigns.



SECTION 7. That the abandonment and quitclaim provided for herein shall extend only to the public right, title, easement and interest, and shall be construed to extend only to that interest the Governing Body of the City of Dallas may legally and lawfully abandon and vacate.

SECTION 8. That as a condition of this abandonment and as a part of the consideration for the quitclaim to GRANTEE herein, GRANTEE, its successors and assigns, agree to indemnify, defend, release and hold harmless the City of Dallas as to any and all claims for damages, fines, penalties, costs or expenses to persons or property that may arise out of, or be occasioned by or from: (i) the use and occupancy of the area described in Exhibit A by **GRANTEE**, its successors and assigns; (ii) the presence, generation. spillage, discharge, release, treatment or disposition of any Hazardous Substance on or affecting the area set out in Exhibit A; (iii) all corrective actions concerning any discovered Hazardous Substances on or affecting the area described in Exhibit A, which GRANTEE, its successors and assigns, agree to undertake and complete in accordance with applicable federal, state and local laws and regulations; and (iv) the abandonment, closing, vacation and quitclaim by the City of Dallas of the area set out in Exhibit A. GRANTEE, its successors and assigns, hereby agree to defend any and all suits, claims, or causes of action brought against the City of Dallas on account of same, and discharge any judgment or judgments that may be rendered against the City of Dallas in connection therewith. For purposes hereof, "Hazardous Substance" means the following: (a) any "hazardous substances" under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601 et seq., as amended; (b) any "hazardous substance" under the Texas Hazardous Substances Spill Prevention and Control Act, TEX. WATER CODE, Section 26.261 et seq., as amended; (c) petroleum or petroleum-based products (or any derivative or hazardous constituents thereof or additives thereto), including without limitation, fuel and lubricating oils; (d) any "hazardous chemicals" or "toxic chemicals" under the Occupational Safety and Health Act, 29 U.S.C. Section 651 et seq., as amended; (e) any "hazardous waste" under the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., as amended; and (f) any "chemical substance" under the Toxic Substance Control Act, 15 U.S.C. Section 2601 et seq., as amended. References to particular acts or codifications in this definition



include all past and future amendments thereto, as well as applicable rules and regulations as now or hereafter promulgated thereunder.

SECTION 9. That as a condition of this abandonment and as a part of the consideration for the quitclaim made herein, **GRANTEE** shall:

- a) acknowledge Atmos Energy has active facilities within the right-of-way of Newton Court and **GRANTEE** shall be responsible for cost to relocate/abandon Atmos Energy Corporation facilities if conflicts exist, otherwise Exhibit B will apply.
- b) acknowledge Oncor overhead facilities shall remain in place within Newton Court.

SECTION 10. That as a condition of this abandonment and as a part of the consideration for the quitclaim made herein, **GRANTEE** shall file a final replat of the adjoining properties prior to the issuance of any building permits affecting the tract of land abandoned and quitclaimed herein. This final replat shall be recorded by **GRANTEE** in the official real property records of the county in which the abandoned area is located after its approval by the City Plan Commission of the City of Dallas.

SECTION 11. That as a condition of this abandonment and as a part of the consideration for the quitclaim made herein, **GRANTEE** shall, immediately upon the passage of this ordinance, close, barricade and/or place signs in the area described in Exhibit A in accordance with detailed plans approved by the Director of Department of Sustainable Development and Construction. **GRANTEE's** responsibility for keeping the area described in Exhibit A closed, barricaded and/or the signs in place shall continue until the street improvements and intersection returns are removed by **GRANTEE**, its successors and assigns, to the satisfaction of the Director of Department of Sustainable Development and Construction.

SECTION 12. That the City Secretary is hereby authorized and directed to certify a copy of this ordinance for recordation in the official real property records of the county in which the abandonment area is located, which certified copy shall be delivered to the Director of Department of Sustainable Development and Construction, or designee.



Upon receipt of the monetary consideration set forth in Section 2, plus the fee for the publishing of this ordinance, which **GRANTEE** shall likewise pay, the Director of Department of Sustainable Development and Construction, or designee: (i) shall deliver to **GRANTEE** a certified copy of this ordinance, and (ii) is authorized to and shall prepare and deliver a **QUITCLAIM DEED** with regard to the area abandoned herein, to **GRANTEE** hereunder, same to be executed by the City Manager on behalf of the City of Dallas, attested by the City Secretary and approved as to form by the City Attorney. The Director of Department of Sustainable Development and Construction, or designee, shall be the sole source for receiving certified copies of this ordinance for one year after its passage.

SECTION 13. That this ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so ordained.

APPROVED AS TO FORM: LARRY E. CASTO City Attorney

DAVID COSSUM

Director of Department of Sustainable

Development and Construction

BY	BY
Assistant City Attorney	Assistant Director
Passed	·

KEY FOCUS AREA:

Public Safety

AGENDA DATE:

January 25, 2017

COUNCIL DISTRICT(S):

2

DEPARTMENT:

Equipment & Building Services

Aviation

CMO:

Jill A. Jordan, P.E., 670-5299 Mark McDaniel, 670-3256

MAPSCO:

33H; 34E; 34F

SUBJECT

Authorize a professional services contract with Alliance Geotechnical Group to perform Material Testing on four construction projects in the Airside Capital Improvement Program at Dallas Love Field - Not to exceed \$534,194 - Financing: Aviation Capital Construction Funds

BACKGROUND

The Dallas Love Field Airside Capital Improvement Program was developed based on the results of the Love Field Pavement Evaluation Study performed in 2015. A five year plan that is reviewed, refined and submitted for approval to the Federal Aviation Administration annually, the projects within the program are executed such that design is performed the first year and construction in the second year for budgetary efficiencies.

The construction contracts for the Taxiway Echo Intersection Rehabilitation, Taxiway Bravo Rehabilitation, Runway 18-36 Conversion, and the Runway Incursion Mitigation projects have been awarded. Material testing is now required as a quality control measure to ensure compliance with the project specifications. It is anticipated that this material testing contract will be supplemented in the future as the remaining construction projects are authorized for the program over the next five years.

ESTIMATED SCHEDULE OF PROJECT

Begin Construction
Complete Construction

January 2017 December 2022

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

CONSTRUCTION

Taxiway Echo and Taxiway Bravo Projects

The Transportation & Trinity River Project Committee was briefed by memorandum regarding the construction contract with Munilla Construction Management, LLC for the Taxiway Echo (Runway 18-36) Intersection Rehabilitation Project on September 26, 2016.

The Transportation & Trinity River Project Committee was briefed by memorandum regarding the construction contract with Munilla Construction Management, LLC for the Taxiway Bravo Rehabilitation Project on September 26, 2016.

Authorized a construction contract Munilla Construction Management, LLC, for construction of the Taxiway Echo (Runway 18-36) Intersection Rehabilitation Project at Dallas Love Field on September 28, 2016, by Resolution No. 16-1579.

Authorized a construction contract Munilla Construction Management, LLC, for construction of the Taxiway Bravo Rehabilitation Project at Dallas Love Field on September 28, 2016, by Resolution No. 16-1580.

Runway 18-36 Conversion and Runway Incursion Mitigation Projects

The Transportation & Trinity River Project Committee was scheduled to be briefed by memorandum regarding the construction contract with EAS Contracting, L.P., for the Runway 18-36 Conversion Project at Dallas Love Field on October 10, 2016; meeting cancelled.

The Transportation & Trinity River Project Committee was scheduled to be briefed by memorandum regarding the construction contract with EAS Contracting, L.P., for the Runway Incursion Mitigation Project at Dallas Love Field on October 10, 2016; meeting cancelled.

Authorized a construction contract with EAS Contracting, L.P., to provide construction services required for the physical improvements necessary for the Runway 18-36 Conversion Project at Dallas Love Field on October 11, 2016 by Resolution No. 16-1649.

Authorized a construction contract with EAS Contracting, L.P., to provide construction services required for the physical improvements necessary for the Runway Incursion Mitigation Project at Dallas Love Field October 11, 2016 by Resolution No. 16-1650.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS) (Continued)

CONSTRUCTION ADMINISTRATION / CONSTRUCTION MANAGEMENT

Taxiway Echo and Taxiway Bravo Projects

The Transportation & Trinity River Project Committee was briefed by memorandum regarding Supplemental Agreement No. 3 to the professional services contract with Garver, LLC on September 26, 2016.

Authorized Supplemental Agreement No. 3 for the professional services contract with Garver, LLC to provide full time on-site construction administration and management services for the Airfield Pavement Repairs Project at Dallas Love Field on September 28, 2016, by Resolution No. 16-1581.

Runway 18-36 Conversion and Runway Incursion Mitigation Projects

The Transportation & Trinity River Project Committee was scheduled to be briefed by memorandum regarding Supplemental Agreement No. 3 to the professional services contract with HNTB Corporation on October 10, 2016; meeting cancelled.

Authorized Supplemental Agreement No. 3 to the professional services contract with HNTB Corporation to provide full time on-site construction administration and management services for the Runway 18-36 Conversion Project and the Runway Incursion Mitigation (RIM) Project at Dallas Love Field on October 11, 2016, by Resolution No. 16-1651.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Aviation Capital Construction Funds - \$534,194.00

Taxiway Echo (Runway 18-36) Intersection Rehabilitation Project		
Design	\$471,330.00	
Construction	\$3,167,483.29	
Construction Management	\$561,820.00	
Materials Testing (this action)	\$103,783.00	
Project Total	\$ 4 304 416 29	

Taxiway Bravo Rehabilitation Project

Design	\$852,560.00
Construction	\$11,463,204.40
Construction Management	\$1,207,520.00
Materials Testing (this action)	\$285,724.00
Project Total	\$ 13,809,008.40

FISCAL INFORMATION (Continued)

Runway 18-36 Conversion Project

Evaluation / Study	\$236,929.00
Design	\$525,492.00
Construction	\$5,769,596.00
Construction Management	\$794,248.00
Materials Testing (this action)	\$131,412.00
Project Total	\$ 7,457,677.00

Runway Incursion Mitigation Project

Design	\$287,434.00
Construction	\$2,545,798.00
Construction Management	\$397,747.00
Materials Testing (this action)	\$13,275.00
Project Total	\$ 3,244,254.00

M/WBE INFORMATION

See attached.

ETHNIC COMPOSITION

Alliance Geotechnical Group

Hispanic Female	3	Hispanic Male	22
African-American Female	0	African-American Male	21
Other Female	0	Other Male	8
White Female	10	White Male	56

PROPOSAL INFORMATION

The Request for Qualifications for engineering services for the Airfield Materials / System Testing and Inspection Services At Dallas Love Field (CIZ1615) was advertised in July 2016. Seven firms submitted Statements of Qualifications on July 29, 2016. The selection committee shortlisted the four highest ranked firms and interviews were held on October 17, 2016. The proposers were ranked as follows:

	<u>k</u>
*Alliance Geotechnical Group, Inc. 1 Professional Services Industries, Inc. 2 Amec Foster Wheeler Environmental & Infrastructure, Inc. 3 STL Engineer. 4	

^{*}Denotes successful proposer.

PROPOSAL INFORMATION (Continued)

The proposals were evaluated according to the criteria published in the Request for Qualifications and the Request for Proposals. These criteria, with respective weights, were as follows:

Criteria 1 - Qualifications to undertake this project	25 points
Criteria 2 - Key Personnel	30 points
Criteria 3 - Understanding and Approach	15 points
Criteria 4 - Schedules and Budgets	15 points
Criteria 5 - Past performance and history	15 points
complying with DBE goals	•

OWNER(S)

Alliance Geotechnical Group

Robert Nance, P.E., President/Owner

KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: January 25, 2017

COUNCIL DISTRICT(S): 2

DEPARTMENT: Equipment & Building Services

Convention and Event Services

CMO: Jill A. Jordan, P.E., 670-5299

Mark McDaniel, 670-3256

MAPSCO: 45P

SUBJECT

Authorize an increase to the construction services contract with DENCO CS Corporation, Inc., for additional work required to complete the East Kitchen Improvement Project at the Kay Bailey Hutchison Convention Center Dallas, located at 650 South Griffin Street - Not to exceed \$138,238, from \$1,876,422 to \$2,014,659 - Financing: Convention and Event Services Capital Construction Funds

BACKGROUND

This action will authorize Change Order No. 2 to increase the construction contract with DENCO CS Corporation, Inc. for additional work necessary to complete improvements to the East Kitchen at the Kay Bailey Hutchison Convention Center Dallas, located at 650 South Griffin Street, in an amount not to exceed \$138,237.07, from \$1,876,421.53 to \$2,014,658.60.

During construction unanticipated conditions were uncovered that required changes to the construction scope. The size and location of existing structural members located above the kitchen ceiling resulted in the re-design and relocation of ductwork, the kitchen vent hoods, and the existing sprinkler main. Additionally, the structural engineer requested that an embedded concrete column in the block wall be repaired. Changes to the existing member required re-routing of plumbing lines and penetrations for drains.

As construction continued, unexpected repairs to the boiler servicing the kitchen required the design and installation of a hot water heating solution. Removal of the lower level conference room ceiling also revealed hidden damage that required replacement of the existing light fixtures. Additional requirements by building inspection resulted in the installation of water flow and tamper modules, doorway thresholds outside the project area, and modifications to drain hubs.

ESTIMATED SCHEDULE OF PROJECT

Began Construction
Complete Construction

June 2016 February 2017

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On October 14, 2015, Resolution No. 15-879 authorized an engineering services contract with Campos Engineering, Inc.

On May 25, 2016, Resolution No. 16-0809 authorized a construction services contract with DENCO CS Corporation, Inc.

On September 28, 2016, Resolution No. 16-1622 authorized Change Order No. 1 to the construction contract with DENCO CS Corporation, Inc.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Convention and Event Services Capital Construction Funds - \$138,237.07

Construction Contract	\$1,673,292.00
Change Order No. 1	\$ 203,129.53
Change Order No. 2 (this action)	\$ 138,237.07
Total	\$2,014,658.60

M/WBE INFORMATION

See attached.

ETHNIC COMPOSITION

DENCO CS Corporation, Inc.

Hispanic Female	1	Hispanic Male	25
African-American Female	0	African-American Male	2
Other Female	0	Other Male	0
White Female	1	White Male	19

OWNER

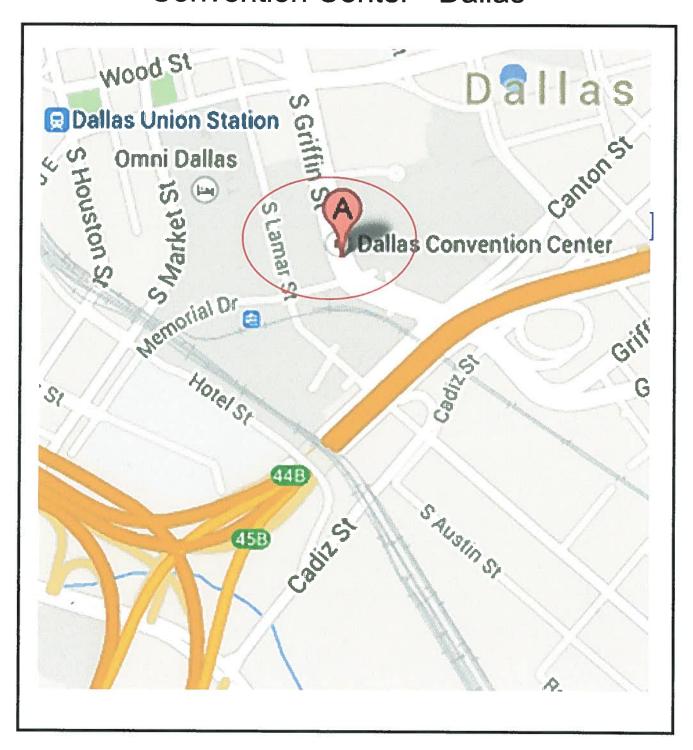
DENCO CS Corporation, Inc.

Steve Smith, Director of Construction

MAP

Attached

Kay Bailey Hutchison Convention Center - Dallas



KEY FOCUS AREA:

Economic Vibrancy

AGENDA DATE:

January 25, 2017

COUNCIL DISTRICT(S):

2

DEPARTMENT:

Equipment & Building Services

Aviation

CMO:

Jill A. Jordan, P.E., 670-5299

Mark McDaniel, 670-3256

MAPSCO:

33D; 33H; 34A; 34E; 34F; 34J; 34K

SUBJECT

Authorize an increase in the construction contract with EAS Contracting L.P. for the final change order, reconciling deletions and additions of work on the Hold Sign Relocation Project at Dallas Love Field for a net deductive increase to the contract, increasing the contract - Not to exceed \$11,740, from \$1,306,252 to \$1,317,992 - Financing: Aviation Capital Construction Funds

BACKGROUND

This project consists of relocating existing runway holding position signs on Runway 13L/31R and Runway 13R/31L to meet current Federal Aviation Administration Standards. This change order includes additions and deductions to the contract. The additions to the contract amount to \$168,320.47 and the deductions total \$156,710.10, for a net increase to the contract of \$11,740.37.

The additional work, amounting to \$168,320.47, includes LED light fixtures, trenching, cables, conduit, pavement markings, and sign panels. The deleted work, totaling \$156,710.10, includes reduction of thermoplastic quantities, airfield 3-module sign, centerline fixtures, paint removal, job site equipment, labor, and FAA conduit.

ESTIMATED SCHEDULE OF PROJECT

Began Design
Completed Design
Begin Construction
Complete Construction

September 2014 March 2015 November 2015 February 2017

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Authorized a professional services contract with Atkins North America, Inc. on September 24, 2014, for the design and preparation of construction documents for the Runway Signage and Marking Holding Position Relocation at Dallas Love Field, by Resolution No. 14-1604.

Authorized a contract with EAS Contracting L.P. on October 28, 2015, to provide construction services for the Love Field Hold Sign Relocation Project at Dallas Love Field, by Resolution No. 15-1968.

Authorized Supplemental Agreement No. 1 to the professional services contract with Atkins North America, Inc. on October 28, 2015, to provide construction administration and construction management services for the Love Field Hold Sign Project at Dallas Love Field, by Resolution No. 15-1969.

Information about this item will be provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

Aviation Capital Construction Funds - \$2,026,904.37

Design	\$ 274,722.00
Construction Administration Supplemental Agreement No. 1	\$ 415,700.00
Construction Administration Supplemental Agreement No. 2	\$ 18,490.00
Construction	\$1,306,252.00
Change Order No. 1 (this action)	\$ 11,740.37
Total	\$2,026,904.37

DBE INFORMATION

The original schedule of contract items and quantities included an anticipated \$366,545.00 in scheduled DBE sub-contracted scope of work. The scheduled items not required to be performed to complete the project were deleted and totaled \$156,710.10, of which DBE \$40,627.56 was intended for subcontracting. The added items required to be performed to complete the project construction did not include any sub-contracting opportunities, and the resultant net change order shows a negative participation amount and percentage. The DBE participation goal for this project is 20.75%. The actual total DBE participation for the project is 24.73%.

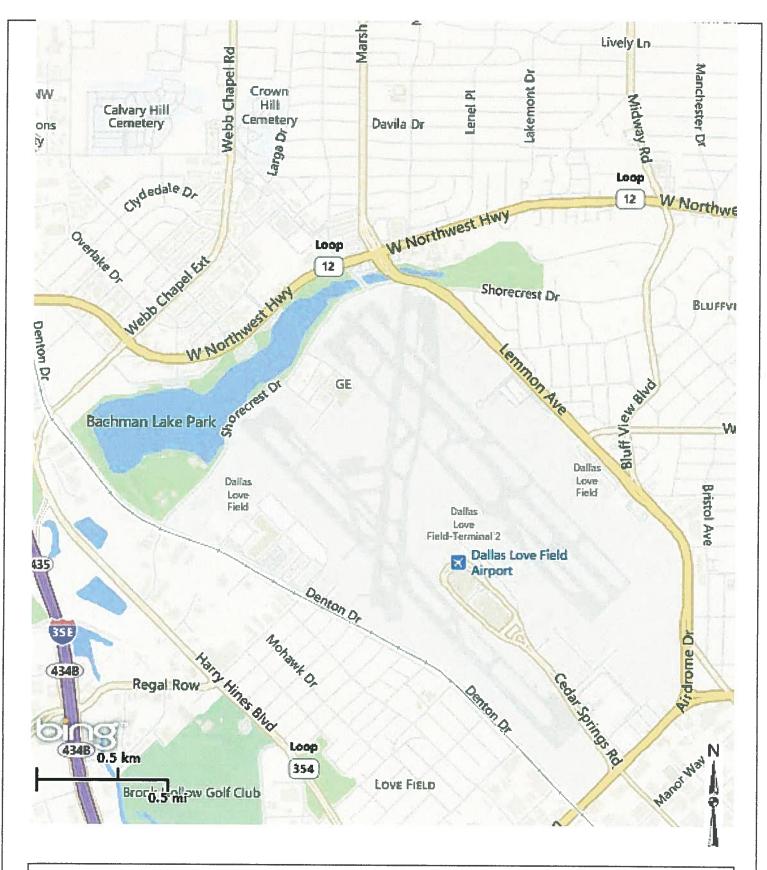
ETHNIC COMPOSITION

Hispanic Female	116	Hispanic Male	201
African-American Female	67	African-American Male	74
Other Female	74	Other Male	124
White Female	648	White Male	1,300

OWNER(S)

EAS Contracting, L.P.

Carroll Edwards, President Jerry Mills, Partner Ray Naizer, Partner



Dallas Love Field Mapsco 33D; 33H; 34A;34E 34F; 34J; 34K

Upcoming Agenda Items February 8, 2017



KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: February 8, 2017

COUNCIL DISTRICT(S): 3, 14

DEPARTMENT: Office of Economic Development

CMO: Mark McDaniel, 670-3256

MAPSCO: 42 Z, 45 K, 45 L, 45 L Q

SUBJECT

Authorize a public hearing to be held on February 22, 2017, to receive comments concerning the City of Dallas' participation in the Texas Enterprise Zone Program pursuant to the Texas Enterprise Zone Act, Chapter 2303 Texas Government Code as revised in order to allow the nomination of The Neiman Marcus Group LLC, 4121 Pinnacle Point Drive, 1700 Pacific Avenue, 1201 Elm Street and 1618 Main Street as an Enterprise Zone Project - Financing: No cost consideration to the City

BACKGROUND

The City Council is asked to authorize a public hearing to take place on February 22, 2017 for the purpose of receiving citizen comments on the City's participation in the Texas Enterprise Zone Program as required by the Texas Enterprise Zone Act, Chapter 2303 Texas Government Code. Upon completing the public hearing, Council will then be asked to approve an ordinance to ordain the City of Dallas participation in the Texas Enterprise Zone Program. The recent adoption of new guidelines and criteria for the Public/Private Partnership Program necessitates the new ordinance and public hearing.

The City of Dallas has been approached by The Neiman Marcus Group LLC (Neiman Marcus) to nominate by ordinance its application for an Enterprise Project designation to the Governor's Office of Economic Development and Tourism. The designation will allow for a rebate of state sales and use tax refunds on qualified expenditures of up to \$2,500 per job created or retained.

Four Neiman Marcus locations will be pertinent to the application. Neiman Marcus' Pinnacle Park facility, located at 4121 Pinnacle Point Drive, Dallas, Texas, is within an Enterprise Zone and serves chiefly as a fulfillment and consolidation center. The facility houses "ship alone" products for Neiman Marcus' direct and Horchow divisions.



The Pinnacle Park facility also consolidates all shipments for Neiman Marcus business units that are shipped from vendors located within the state of Texas and has expanded its operations to include fulfillment and distribution services for the Last Call division and Neiman Marcus' new business offering branded, "off-price" merchandise. Neiman Marcus Downtown Headquarters (1618 Main Street), Renaissance Tower (1201 Elm Street) and the 1700 Pacific Avenue offices in downtown Dallas are not located within an Enterprise Zone. These three locations house the executives and buyers who manage the Last Call division, as well as other administrative personnel who provide the support functions for the Pinnacle Park facility.

Between October 2016 and December 2021, Neiman Marcus anticipates spending over \$5 million in capital investments to renovate and update its Pinnacle Park, Downtown Headquarters, Renaissance Tower, and Pacific Avenue locations. These planned investments include, but may not be limited to, the following: upgraded elevator shuttles and conveying equipment for added comfort and employee mobility, HVAC System and its controls, sewer lines and related necessary plumbing renovations, and an emergency generator improving employee and facility safety. In addition, the offices of the Downtown Headquarters location, along with Pinnacle Park, will also receive substantial renovations.

Neiman Marcus currently employs over 1,100 full time jobs at the four Dallas facilities noted and plans to apply for the retention designation of the Enterprise Zone program, identifying 500 jobs to be retained for this State of Texas benefit.

This project has no cost consideration to the City of Dallas. The four Neiman Marcus locations are in non-target areas; however the proposal does conform with the Public Private Program Guidelines and Criteria in that it involves an investment of over \$5 million and more than 100 jobs.

The Texas Enterprise Zone Program is an economic development tool for local communities to partner with the State of Texas to promote job creation and significant private investment that will assist economically distressed areas of the state. Approved projects are eligible to apply for state sales and use tax refunds on qualified expenditures. The level and amount of refund is related to the capital investment and jobs created at the qualified business site. The Enterprise Zone Program is administered through the Office of the Governor, Economic Development Bank.

The program allows for a 90-day period prior to the application being submitted, and a five-year window of benefit for a project. The 90-day window for this project started October 18, 2016 and the end of the project designation will end March 1, 2022. This project involves 500 jobs allocated to the program and a maximum refund of \$2,500 per job. The company anticipates receiving a maximum potential refund of \$1,250,000 should it receive a designation.



Projects may be physically located in or outside of an Enterprise Zone to qualify for the program. If located within an Enterprise Zone, the company must commit that at least 25 percent of their retained employees will meet economically disadvantaged or enterprise zone residency requirements. If located outside of a zone, the company must commit that at least 35 percent of their new employees will meet economically disadvantaged or enterprise zone residency requirements.

ESTIMATED SCHEDULE OF THE DESIGNATION

Begin window for benefit October 2016
Benefit window ends March 2022

PRIOR ACTION / REVIEW (COUNCIL, BOARDS, COMMISSIONS)

A briefing memo was presented to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

No cost consideration to the City

OWNER

The Neiman Marcus Group LLC

Dani Rizal Manager, Sales/Use Tax and Property Tax

<u>MAP</u>

Attached.



WHEREAS, the City Council of the City of Dallas, Texas recognizes the importance of its role in local economic development; and

WHEREAS, the City Council adopted its Public/Private Partnership Guidelines and criteria on December 14, 2016 by Resolution No. 16-1984, wherein the City elected to continue its participation in tax abatements and other incentive programs including programs for loans and grants for economic development and established Guidelines and Criteria for the Public Private Partnership Program governing those economic development programs and incentive agreements to be entered into by the City as required by the Property Redevelopment and Tax Abatement Act, as amended, V.T.C.A. Tax Code, Chapter 312 ("Act"); and

WHEREAS, the City wishes to continue its participation in the Texas Enterprise Zone Program pursuant to the Texas Enterprise Zone Act, Chapter 2303, Texas Government Code (Act) as revised; and

WHEREAS, the City has determined that The Neiman Marcus Group LLC, 4121 Pinnacle Point Drive, 1700 Pacific Avenue, 1201 Elm Street and 1618 Main Street in Dallas sites as described by the map attached as "Exhibit A" meets the criteria for designation as a Texas Enterprise Zone project; and

WHEREAS, the Act further requires that prior to the adoption of the ordinance providing for the participation in the Texas Enterprise Zone Program as authorized by the Act, the city must hold a public hearing on the participation in the program and find that participation in the program is feasible and practical and would be of benefit to the community and providing interested persons the opportunity to speak and present evidence for or against the designation; and

WHEREAS, the City desires by the calling and holding of such public hearing to provide a reasonable opportunity for any owner of property located within the city, any other taxing districts, and any other interested persons to speak for or against the participation in the Texas Enterprise Zone Program.

NOW THEREFORE, BE IT RESOLVED

BY THE CITY COUNCIL OF THE CITY OF DALLAS, TEXAS:



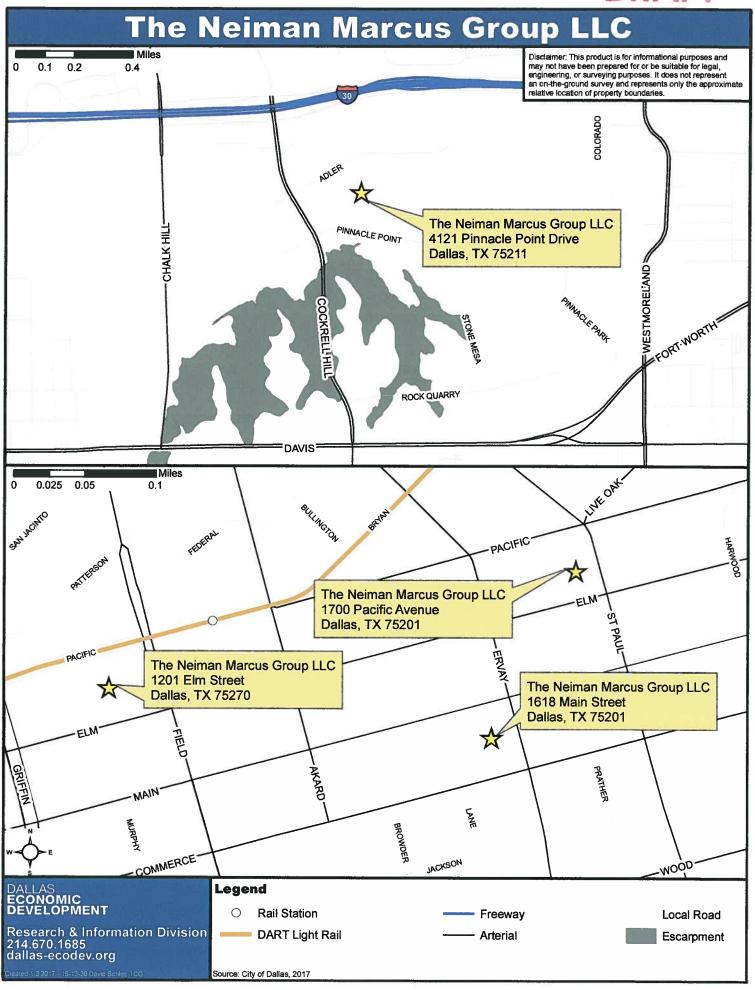
Section 1. That a public hearing shall be held at 1:00 P.M. on February 22, 2017, in the City Council Chambers, Dallas City Hall, 6th floor, 1500 Marilla Street, Dallas, Texas, at which time any interested person may appear and speak for or against the city's participation in the Texas Enterprise Zone Program; and at the close of the public hearing the City Council shall consider:

- (1) An ordinance ordaining The Neiman Marcus Group LLC the city's participation in the Texas Enterprise Zone Program.
- (2) The nomination of The Neiman Marcus Group LLC for enterprise project status.

Section 2. That notice of such public hearing shall be published in the official newspaper of the City of Dallas not later than seven (7) days prior to the date of such hearing, and that written notice of such hearing along with a copy of this resolution shall be delivered in writing to the Economic Development Bank.

Section 3. That this resolution shall take effect immediately from and after its passage in accordance with the Charter of the City of Dallas, and it is accordingly so resolved.







KEY FOCUS AREA:

Economic Vibrancy

AGENDA DATE:

February 8, 2017

COUNCIL DISTRICT(S):

3

DEPARTMENT:

Office of Economic Development

CMO:

Mark McDaniel, 670-3256

MAPSCO:

61A M

SUBJECT

Authorize (1) rescinding Resolution No. 15-0291, previously approved on February 11, 2015, which authorized a 75 percent real property tax abatement for 8 years with PIHV Mountain Creek, LLC; and (2) a 75 percent business personal property tax abatement agreement for 8 years with PIHV Mountain Creek, LLC and/or CarbonLITE Recycling, LLC on new business personal property to be located at 4685 Mountain Creek Parkway within Mountain Creek NEZ No. 1 in Dallas - Revenue: First year revenue estimated at \$83,688; eight-year revenue estimated at \$546,224 (Estimated revenue foregone for eight-year business personal property tax abatement estimated at \$1,638,672)

BACKGROUND

For the past year, city staff has been in discussions with CarbonLITE about the development of a new recycling operation within the City of Dallas. In the fall of 2016, the company chose a newly constructed 225,000 s.f. facility located at 4685 Mountain Creek Parkway which was developed by the Pauls Corporation and owned by PIHV Mountain Creek, LLC. On February 11, 2015, pursuant to Resolution No. 15-0291, the City Council authorized a 75 percent real property tax abatement for 8 years with PIHV Mountain Creek, LLC associated with the development of the facility.

Due to the substantial investment associated with its new manufacturing equipment, CarbonLITE requests the City Council rescind the previously approved real property tax abatement in favor of authorizing a comparable 75 percent business personal property tax abatement for 8 years. CarbonLITE anticipates an investment of \$5 million in tenant improvements at the property as well as approximately \$46 million for new manufacturing equipment and production systems. Additionally, the company anticipates creating up to 110 new jobs at the facility and has agreed to maintain at least 100 jobs at the facility.



CarbonLITE is one of the largest producers of food-grade Post-consumer Recycled PET in the world. The company specializes in processing used plastic bottles into bottle-grade PET resin flakes and pellets that can then be used to manufacture new plastic beverage bottles and other products. CarbonLITE's 220,000 s.f. Riverside, CA manufacturing/recycling facility process more than two billion plastic bottles annually.

Net fiscal impact from the project after incentives is estimated at \$323,942 over 10 years \$1,749,941 over 20 years. This proposed project conforms to minimum eligibility criteria for the City's Public/Private Partnership Program Guidelines and Criteria as it has a private investment exceeding \$5 million and creates more than 100 jobs. Staff recommends the proposed incentives be approved.

ESTIMATED SCHEDULE OF THE PROJECT

Begin Construction

January 2016

Complete Construction

May 2017

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item was presented to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

No cost consideration to the City

OWNER

PIHV Mountain Creek, LLC

Christopher Manley, CFO

Carbonlite Recycling, LLC

Rick Zirkler, Executive Vice President

MAP

Attached.

DRAFT

February 8, 2017

WHEREAS, the City recognizes the importance of its role in local economic development; and

WHEREAS, on December 14, 2016, pursuant to Resolution No. 16-1984, the City Council elected to continue its participation in tax abatement and established appropriate Public/Private Partnership Program Guidelines and Criteria governing tax abatement agreements to be entered into by the City as required by the Property Redevelopment and Tax Abatement Act, as amended, V.T.C.A. Tax Code, Chapter 312 (the "Act") by Resolution No. 10-1731; and

WHEREAS, Chapter 378 of the Local Government Code allows the City to create a neighborhood empowerment zone if the City finds that the creation of the zone would promote: (1) the creation or rehabilitation of affordable housing in the zone, or (2) an increase in economic development in the zone, or (3) an increase in the quality of social services, education or public safety provided to the residents of the zone

WHEREAS, on February 11, 2015, pursuant to Resolution No. 15-0290, City Council designated approximately 15.1 acres of property located on the west side of Mountain Creek Parkway, in Dallas, Texas, Mountain Creek Neighborhood Empowerment Zone No. 1 to promote an increase in economic development in the zone; and

WHEREAS, Section 378.004 empowers municipalities to enter into agreements abating municipal property taxes on property in a neighborhood empowerment zone subject to the duration limits of Section 312.2004, Tax Code; and

WHEREAS, on February 11, 2015, pursuant to Resolution No. 15-0291, City Council authorized a 75 percent real property tax abatement agreement for 8 years with PIHV Mountain Creek, LLC, a Delaware Limited Partnership affiliated with The Pauls Corporation for the development of a speculative warehouse development consisting of approximately 225,000 square feet located within Mountain Creek NEZ No. 1: and

WHEREAS, the City desires to rescind Resolution No. 15-0291 and enter into a business personal property tax abatement agreement with PIHV Mountain Creek, LLC and/or Carbonlite Recycling, LLC for added value to business personal property located within Mountain Creek NEZ No. 1.

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DALLAS:



Section 1. That the City Manager upon approval as to form by the City Attorney is hereby authorized to execute a business personal property tax abatement agreement PIHV Mountain Creek, LLC and/or Carbonlite Recycling, LLC and/or its affiliates for added value to the business personal property in accordance with Chapter 378 of the Local Government Code and the City's Public/Private Partnership Guidelines and Criteria.

Section 2. That the approval and execution of the tax abatement agreement by the City is not conditional upon approval and execution of any other tax abatement agreement by any other taxing entity.

Section 3. That the property which will be described in the tax abatement agreement, attached hereto as **Exhibit A (Metes and Bounds)** and depicted on the attached site map as **Exhibit B (Map - the "Property")**, is located within Mountain Creek NEZ No. 1.

Section 4. That the tax abatement agreement shall provide, among other provisions, the following:

- (a) The Property subject to tax abatement shall be located entirely within Mountain Creek NEZ No. 1.
- (b) None of the Property subject to tax abatement is owned or leased by a member of the City Council of the City of Dallas or by a member of the City Plan Commission.
- (c) That the development of the Property will conform to all requirements of the City's zoning ordinance, and that the use of the Property is consistent with the general purpose of encouraging development or redevelopment in the zone during the period the tax abatement is in effect.
- (d) The City will provide a 75 percent abatement of the added value to the business personal property for a period of eight years for business personal property located within Mountain Creek NEZ No. 1. The tax abatement will commence on January 1, 2018.
- (e) That a minimum of \$5,000,000 in expenditures associated with the improvements to the property will be substantially completed by December 31, 2017. The Director of the Office of Economic Development may, at his sole discretion, extend the substantial completion date for a period up to six months for just cause.



Section 4. (Continued)

- (h) That a proportionate percentage of the property tax revenue lost as a result of the tax abatement agreement will be recaptured by the City if improvements to real property and/or job creation numbers are not made as provided by the tax abatement agreement.
- (i) A description of the kind, number, location and costs of all proposed improvements to the Property will be provided to the Office of Economic Development.
- (j) That access to the Property will be provided to allow for the inspection by City inspectors and officials to ensure that the improvements or repairs are made according to the specification and terms of the tax abatement agreement.
- (k) A requirement that the owner of the Property subject to tax abatement certify annually that the owner is in compliance with each applicable term of the agreement.
- (l) That the City may terminate or modify the agreement if the property owner fails to comply with the agreement.
- (m) That the tax abatement agreement shall be personal to PIHV Mountain Creek, LLC and/or Carbonlite Recycling, LLC and shall only be assignable upon written approval of the assignment by the City's Director of the Office of Economic Development.
- **Section 5.** Carbonlite Recycling, LLC and/or its affiliates shall agree to create a minimum of 100 jobs at the property within Mountain Creek NEZ No. 1 in Dallas by December 31, 2018 and maintain the jobs during the tax abatement period.
- **Section 6.** That Resolution No. 15-0291, approved on February 11, 2015, is hereby rescinded.
- **Section 7.** That this resolution take effect immediately from and after its passage in accordance with the provisions of the Charter of the City of Dallas, and it is accordingly so resolved.







EXHIBIT A

DESCRIPTION, of a 15.101 acre tract of land situated in the John J. Blair Survey, Abstract No. 211, Dallas County, Texas and in City Block 6113, Official Numbers of the City of Dallas, Texas; said tract being all of that certain tract of land described in General Warranty Deed to E.R. Carpenter, L.P. recorded in Instrument No. 20070280585 of the Official Public Records of Dallas County, Texas; said 15.101 acre tract being more particularly described as follows:

BEGINNING, at a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner in the northwest right-of-way line of Mountain Creek Parkway (a 100-foot wide public right-of-way); said point being North 13 degrees, 44 minutes, 55 seconds East, a distance of 179.25 feet from the northeast corner of Lot 3, Block 211/6113, Mountain Creek Business Park Building No. 3 Addition, an addition to the City of Dallas, Texas according to the plat recorded in Volume 2004136, Page 31 of said Official Public Records;

THENCE, North 76 degrees, 15 minutes, 05 seconds West, departing the said northwest line of Mountain Creek Parkway, a distance of 963.54 feet to a 3 1/4-inch aluminum disk stamped "PACHECO KOCH" set for corner in a southeast line of that certain tract of land described in Special Warranty Deed to ExTex Laporte L.P. recorded in Volume 2002082, Page 3283 of the Deed Records of Dallas County, Texas; said point being North 10 degrees, 03 minutes, 10 seconds East, a distance of 179.63 feet from the northwest corner of said Lot 3;

THENCE, North 10 degrees, 03 minutes, 10 seconds East, along the said southeast line of the ExTex Laporte L.P. tract, a distance of 636.65 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner; said point being the southwest corner of a 75-foot wide Drainage Easement recorded in Volume 2002039, Page 6393 of said Deed Records; said point also being the southwest corner of that certain tract of land described as Exhibit "D", "Tract VI" in Special Warranty Deed to Mountain Creek Business Park Association, Inc. recorded in Volume 2003009, Page 7341 of said Deed Records;

THENCE, South 79 degrees, 56 minutes, 50 seconds East, departing the said southeast line of the ExTex Laporte, L.P. tract and along the southwest line of said Drainage Easement and said "Tract VI", a distance of 987.85 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found at an angle point;

THENCE, South 76 degrees, 15 minutes, 05 seconds East, continuing along said southwest line of the Drainage Easement and "Tract VI", a distance of 18.79 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner in the said northwest line of Mountain Creek Parkway; said point being the southeast corner of said Drainage Easement and said "Tract VI";

THENCE, South 13 degrees, 44 minutes, 55 seconds West, along the said northwest line of Mountain Creek Parkway, a distance of 699.01 feet to the POINT OF BEGINNING;

CONTAINING, 657,788 square feet or 15.101 acres of land, more or less.



KEY FOCUS AREA:

Economic Vibrancy

AGENDA DATE:

February 8, 2017

COUNCIL DISTRICT(S):

3

DEPARTMENT:

Office of Economic Development

CMO:

Mark McDaniel, 670-3256

MAPSCO:

61B E, F

SUBJECT

Authorize a Chapter 380 e-commerce sales tax grant agreement with Chewy, Inc., a Delaware Corporation, to provide a 10-year e-commerce grant equal to 50 percent of the e-commerce sales taxes paid annually by Chewy.com customers to the City of Dallas for the ten year period beginning March 1, 2017 through February 28, 2027 from its leased facility at 7243 Grady Niblo Road in Dallas, in accordance with the City's Revised Public/Private Partnership Program; - Revenue: First year revenue estimated at \$400,000; ten-year revenue is not capped but is estimated to be approximately \$7,015,939 (Estimated ten-year grant agreement payment of \$7,015,939) - Financing: Current Funds (subject to future appropriations)

BACKGROUND

For the past several months, City staff has been in discussions with Chewy, Inc., a Delaware Corporation ("Chewy") regarding a 10-year lease of an approximately 660,000 square foot distribution and warehouse facility ("Facility") at 7243 Grady Niblo Road in the Mountain Creek area of Southern Dallas within Reinvestment Zone No. 83. The facility is owned by CH Realty VI/I Dallas Mt Creek I, LP ("CH Realty"), a Crow Holdings Capital limited partnership, who secured through assignment of Resolution 14-0550 a 10-year, 90-percent real property tax abatement with the City of Dallas on March 26, 2014. Chewy has leased the facility from CH Realty based upon the anticipation of favorable City Council consideration of the requested sales tax economic development grant incentive.

Chewy has committed that approximately \$8 million in real property improvements, including hard and soft costs, will be spent to develop the site to accommodate their operational needs. Approximately \$5 million in business personal property (including machinery, equipment, furniture and fixtures) will be on-site by December 31, 2017 with an additional \$9 million in business personal property on-site by 2020.



Furthermore, Chewy anticipates the employment of at least 600 full-time equivalent ("FTE") employees at the facility with an average annual wage of \$29,895. The employment of at least 600 FTE will be achieved with the following schedule: 330 full-time equivalent FTE employees by December 31, 2017, 460 FTE employees by December 31, 2019.

Founded in 2011, Chewy is an on-line retailer based in Dania Beach, Florida. In addition to its headquarters in Florida, Chewy also maintains fulfillment centers in Nevada, Pennsylvania, and Indiana. The company offers around 30,000 items for dog and cats including food, treats, and supplies. The company also offers water care, filters and media, cleaning and maintenance, cages and accessories, litter and nesting, perches, grooming and health products for a wide range of animals. The company was formerly known as Chewy.com, LLC.

The proposed e-commerce 380 grant will be paid annually during the 10-year term subject to annual verification and audit of the company's e-commerce sales tax collections and subject to annual appropriation. Also, the economic development grant agreement shall provide that Chewy will secure a 10-year lease of the facility at 7243 Road and invest \$5,000,000 in business personal (non-inventory/furniture, fixtures and equipment) by December 31, 2017. Additionally, the e-commerce grant will require that Chewy meet the 600 FTE job creation schedule as described above or the incentives will be reduced as follows: For any given year that Chewy would maintain fewer than the required jobs but at least 50 percent of the required jobs, then the e-commerce grant will be reduced by half. However, should Chewy maintain less than 50 percent of the jobs required in a given year, the company will not be eligible for the described incentive in that year. A failure by Chewy to maintain a minimum of 50 percent of the jobs for two successive years will result in termination of the e-commerce 380 grant agreement.

Chewy anticipates annual taxable e-commerce (on-line) sales to begin at approximately \$80 million in Year 1 of the facility and is estimated to exceed \$177 million by Year 10. Total taxable sales over the 10-year period is estimated to exceed \$1.4 billion with approximately \$14 million (or one percent) estimated to be collected as revenue by the City of Dallas. As such, the 10-year economic development grant (calculated based on sales taxes paid by Chewy customers beginning by April, 2017), is estimated to result in a grant of approximately \$7 million to Chewy over the 10-year period with the City estimated to retain approximately \$7 million in sales taxes over the same 10-year period.

Annual e-commerce sales taxes will be collected by Chewy and remitted to the state each year. The e-commerce 380 grant will be subject to annual verification and audit of Chewy sales tax collections and annual appropriation by the City Council.



Chewy has currently negotiated a 120 month base (10-year) lease with CH Realty (expiring January 31, 2027). Chewy request City Council consideration of the proposed economic development grant.

Net fiscal impact from the project after incentives is estimated at \$1,833,093 over 10 years and \$21,834,541 over 20 years. This proposed project conforms to minimum eligibility criteria for the City's Public/Private Partnership Program Guidelines and Criteria as it has a private investment exceeding \$1 million and creates more than 25 jobs. Staff recommends the proposed incentive be approved.

ESTIMATED SCHEDULE OF THE PROJECT

Begin property/tenant improvements December 2016 Complete property/tenant improvements March 2017

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item was provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

\$7,015,939 - Current Funds (Based on e-commerce sales taxes) (subject to future appropriations)

OWNER

Chewy, Inc., a Delaware Corporation

Jim Grube - Chief Financial Officer

MAP

Attached.



WHEREAS, the City recognizes its role in economic development and the importance of expanding its employment and tax base; and

WHEREAS, many municipalities within the Dallas-Fort Worth region have economic development programs to compete with the City of Dallas for e-commerce retail facilities; and

WHEREAS, site selection decisions made by developers and businesses are often significantly influenced by a municipality's ability to provide competitive economic development incentives; and

WHEREAS, the City desires to support and secure new retail within the City of Dallas, providing employment opportunities and local sales tax revenue that e-commerce retail will bring for Dallas residents; and

WHEREAS, the proposed development will not occur within the City of Dallas without an offer of economic development incentives from the City of Dallas; and

WHEREAS, on March 26, 2014, the City Council authorized the creation of Reinvestment Zone No. 83; and

WHEREAS, the City Council pursuant to Resolution No. 14-0550 as approved on March 26, 2014 and as amended on June 11, 2014, authorized a real property tax abatement agreement with Courtland Group, LLC's Phase II Improvements, as assigned to CH Realty VI/I Dallas Mt Creek I, LP, for added value to real property located at 7243 Grady Niblo Road within Reinvestment Zone No. 83; and

WHEREAS, on December 14, 2016, the City Council authorized the continuation of its Public/Private Partnership Program - Guidelines and Criteria, which established certain guidelines and criteria for the use of City incentive programs for private development projects; and (2) established programs for making loans and grants of public money to promote local economic development and to stimulate business and commercial activity in the City of Dallas pursuant to the Economic Development Programs provisions under Chapter 380 of the Texas Local Government Code, (the "Act"); and

WHEREAS, the City desires to enter into an economic development sales tax grant agreement with Chewy, Inc., a Delaware corporation, regarding a lease of a new distribution and warehouse facility located on approximately 38.6495 acres within Reinvestment Zone No. 83, attached hereto as Exhibit A (Metes and Bounds) and depicted on the attached site map as Exhibit B (Map - the "Property").

NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

Section 1. That the City Manager is hereby authorized, upon approval as to form by the City Attorney, to execute a Chapter 380 development sales tax grant with Chewy, Inc., a Delaware corporation ("Chewy"), related to the lease of a new distribution and warehouse facility to be located within Reinvestment Zone No. 83, attached hereto as Exhibit A (Metes and Bounds) and depicted on the attached site map as Exhibit B (Map - the "Property").

Section 2. That the economic development grant agreement shall provide an annual rebate of an amount not to exceed 50% of sales taxes paid to the City of Dallas from e-commerce sales originating at the proposed facility located within Reinvestment Zone No. 83, attached hereto as Exhibit A (Metes and Bounds) and depicted on the attached site map as Exhibit B (Map - the "Property") for a period not to exceed 10 years (120 months). The effective date will be the first day of the month following the month of an issued Certification of Occupancy for the facility.

Section 3. That the City will create a specific program grant collection fund for this specific Chapter 380 development grant sales tax incentive with Chewy which will serve as the sole funding source for this grant.

Section 4. That the economic development grant agreement shall provide that Chewy will secure a 10 year lease of a distribution/warehouse facility ("Facility") at the Property on or before March 1, 2017, invest \$5,000,000 in business personal property (non-inventory/furniture, fixtures & equipment) by December 31, 2017, and provide for the employment of at least 600 full-time equivalent ("FTE") employees at the Facility. The employment of at least 600 FTE will be achieved with the following schedule: 330 full-time equivalent FTE employees by December 31, 2017, 460 FTE employees by December 31, 2018, and 600 FTE employees by December 31, 2019.

Section 5. That grant payments, upon meeting on-going program compliance, will be paid annually on or before December 31 during the tax calendar term of the final program agreement. Yearly grant payments will be based upon sales taxes received to the City of Dallas within the 12 month yearly cycle between July and June.



Section 5. (Continued)

Due to the current anticipated March 1, 2017 occupancy date by Chewy, and subject to all City terms and conditions being met, grant payments are anticipated as of this resolution date to be made upon the following program payment sales tax calendar:

Payment Year 1:March 1, 2017 – June 30, 2017 (4 Months)
 Grant Payment - December 31, 2017

Payment Year 2-9: July 1 – June 30 (12 Months)

Grant Payment - December 31 of Payment Year 2-9

(Years 2018-2026)

Payment Year 10: July 1, 2026 – February 28, 2027 (8 Months)

Grant Payment – December 31, 2027

The anticipated program payment sales tax calendar noted is subject to change contingent upon the final project occupancy date of the facility by Chewy. The Director of Economic Development, or his appointed designee, is hereby authorized to finalize and approve the grant payment program schedule with Chewy upon finalization of the occupancy date.

Section 6. That the City Controller is hereby authorized to encumber and disburse funds subject to future appropriations from: Fund 0680, Department ECO, Unit 6701, Object 3016, Activity PPPF, Encumbrance No. ECO6701D302, Vendor No.VS93584

Section 7. That this resolution shall take effect immediately from and after its passage in accordance with the Charter of the City of Dallas, and it is accordingly so resolved.

UKALI

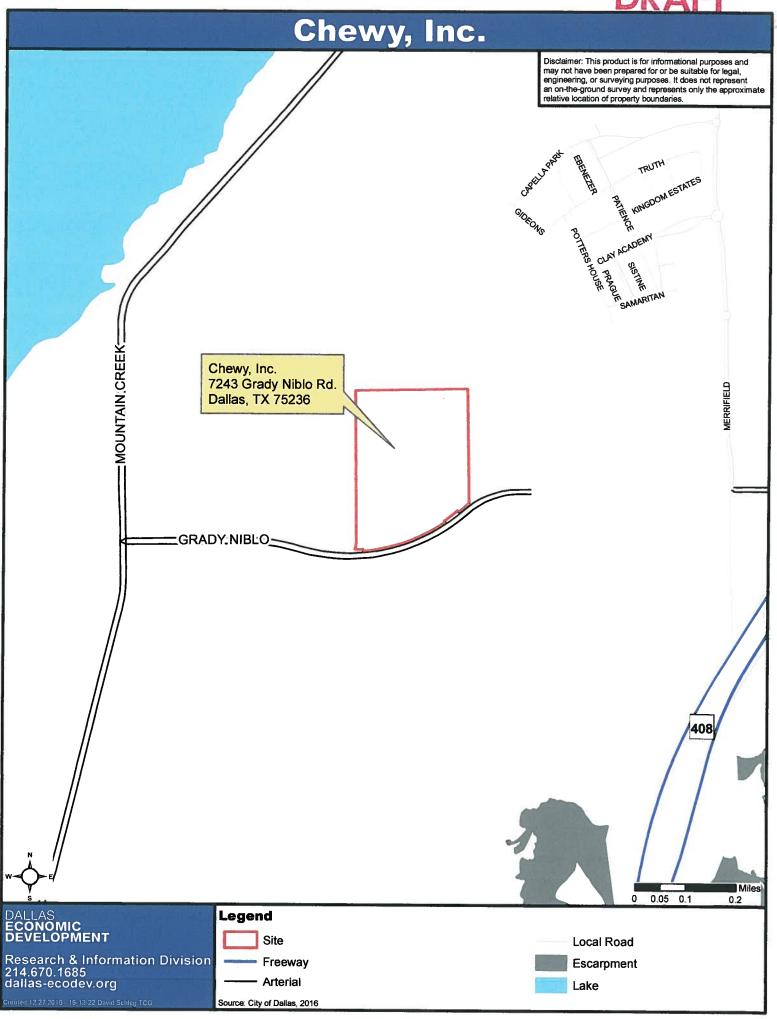




Exhibit A – Metes and Bounds

DESCRIPTION, of a 40.770 acre tract of land situated in the Field Secrest Survey, Abstract No. 1379 and the Aaron B. Wilson Survey, Abstract No. 1550, Dallas County, Texas and in City Block 8720, Official Numbers of the City of Dallas, Texas; said tract being part of that certain tract of land described in Special Warranty Deed to CH REALTY VI/I DALLAS MT. CREEK I, L.P. recorded in Instrument No. 201400171934 of the Official Public Records of Dallas County, Texas; said 40.770 acre tract being more particularly described as follows:

COMMENCING, at a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner at the northeast terminus of Grady Niblo Road (a 107-foot wide right-of-way, Volume 2003094, Page 1427, Deed Records of Dallas County, Texas); said point being the southwest corner of said CH Realty tract, the northwest corner of that certain tract of land described in Warranty Deed to the City of Dallas recorded in Instrument No. 201400165702 of said Official Public Records (said tract of land being described in Exhibit "A" of said Warranty Deed as Street Right-of-Way Dedication), the southeast corner of Lot 1, Block 8720, Mountain Creek Business Park Phase 1, Industrial Park, an addition to the City of Dallas, Texas according to the plat recorded in Volume 2003012, Page 246 of said Deed Records and the beginning of a non-tangent curve to the right;

THENCE, along the south, the southwest and the south lines of said CH Realty tract and the north, the northeast and north lines of said City of Dallas tract, the following two (2) calls:

In an easterly direction, along said curve to the right, having a central angle of 17 degrees, 23 minute, 22 seconds, a radius of 1,883.50 feet, a chord bearing and distance of South 81 degrees, 58 minutes, 02 seconds East, 569.46 feet, an arc distance of 571.65 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found at the end of said curve; said point being the beginning of a reverse curve to the left;

In an easterly direction, along said curve to the left, having a central angle of 21 degrees, 42 minutes, 21 seconds, a radius of 1,776.50 feet, a chord bearing and distance of South 84 degrees, 07 minutes, 31 seconds East, 668.99 feet, an arc distance of 673.00 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner at the POINT OF BEGINNING;

THENCE, departing the said south line of the CH Realty tract and the said north line of the City of Dallas tract, and into and across the said CH Realty tract, the following four (4) calls:

North 04 degrees, 58 minutes, 41 seconds West, a distance of 20.00 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner, said point being the beginning of a non-tangent curve to the right;

In a westerly direction, along said curve to the right, having a central angle of 02 degrees, 47 minutes, 06 seconds, a radius of 1,756.50 feet, a chord bearing and distance of South 86 degrees, 24 minutes, 52 seconds West, 85.37 feet, an arc distance of 85.38 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner at the end of said curve;

Exhibit A - Metes and Bounds



North 13 degrees, 21 minutes, 07 seconds East, a distance of 70.76 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner;

North 00 degrees, 38 minutes, 48 seconds West, a distance of 1,593.05 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner in the north line of said CH Realty tract and the south line of that certain tract of land described in Special Warranty Deed to The Potter's House of Dallas, Inc. recorded in Volume 99063, Page 5361 of said Deed Records;

THENCE, North 89 degrees, 10 minutes, 29 seconds East, along the said north line of the CH Realty tract and the said south line of the Potter's House tract, a distance of 1,165.24 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner; said point being the northeast corner of said CH Realty tract, the southeast corner of said Potter's House tract, the southwest corner of that certain tract of land described in General Warranty Deed to Clay Academy, Inc. recorded in Volume 2004159, Page 7653 of said Official Public Records and the northwest corner of that certain tract of land described in General Warranty Deed to The Potter's House of Dallas, Inc. recorded in Instrument No. 201100012615 of said Official Public Records;

THENCE, South 00 degrees, 57 minutes, 56 seconds East, along the east line of said CH Realty tract and the west line of the last mentioned Potter's House tract, a distance of 1,191.15 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found for corner; said point being the southeast corner of said CH Realty tract and the northernmost corner of said City of Dallas tract;

THENCE, departing the said west line of the last mentioned Potter's House tract and along the southeast and south lines of said CH Realty tract and the northwest and north lines of said City of Dallas tract, the following two (2) calls:

South 49 degrees, 22 minutes, 03 seconds West, a distance of 123.73 feet to a 1/2-inch iron rod with "PACHECO KOCH" cap found at the beginning of a tangent curve to the right;

In a southwesterly direction, along said curve to the right, having a central angle of 35 degrees, 39 minutes, 16 seconds, a radius of 1,776.50 feet, a chord bearing and distance of South 67 degrees, 11 minutes, 41 seconds West, 1,087.74 feet, an arc distance of 1,105.49 feet to the POINT OF BEGINNING;

CONTAINING, 1,775,924 square feet or 40.770 acres of land, more or less.



KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: February 8, 2017

COUNCIL DISTRICT(S): 4

DEPARTMENT: Sustainable Development and Construction

City Attorney's Office

Convention and Event Services

CMO: Mark McDaniel, 670-3256

Larry Casto, 670-3491 Ryan S. Evans, 671-9837

MAPSCO: 55P

SUBJECT

Authorize a sixteen-year lease agreement with Dallas Area Rapid Transit for approximately 1,068 square feet of office space located at 2111 South Corinth Street, Suite 106, to be used as South Oak Cliff Community Court for the period February 1, 2017 through January 31, 2033, plus a one-time payment for leasehold improvements in an amount not to exceed \$138,600 - Not to exceed \$138,601 - Financing: Convention and Event Services Current Funds (subject to annual appropriations)

BACKGROUND

This item authorizes a sixteen-year lease agreement with Dallas Area Rapid Transit (DART) for approximately 1,068 square feet of office space located at 2111 South Corinth Street, Suite 109. This item provides a one-time payment for leasehold improvements in an amount not to exceed \$138,600. This lease will provide office space for South Oak Cliff Community Court that will serve the residents in the South Oak Cliff area.

The community court has been occupying this space since March 21, 2012. The community court focuses on rehabilitating the defendant and restoring the community. Persons arrested for 'quality of life', Class C misdemeanor crimes within a community court's geographical service area are brought swiftly before the community court judge. Defendants who plead guilty or no contest may be ordered to perform community service restitution in the neighborhood or the judge can also require the defendant to attend rehabilitative and educational programs. Typical offenses heard by the judge include assaults, manifestation of prostitution, and possession of drug paraphernalia, illegal dumping, and code violations. Community prosecutors serve as the prosecutors in the community court.



The lease will begin on February 1, 2017 through January 31, 2033.

PRIOR ACTION/REVIEW (COUNCIL, BOARDS, COMMISSIONS)

Information about this item will be provided to the Economic Development Committee on February 6, 2017.

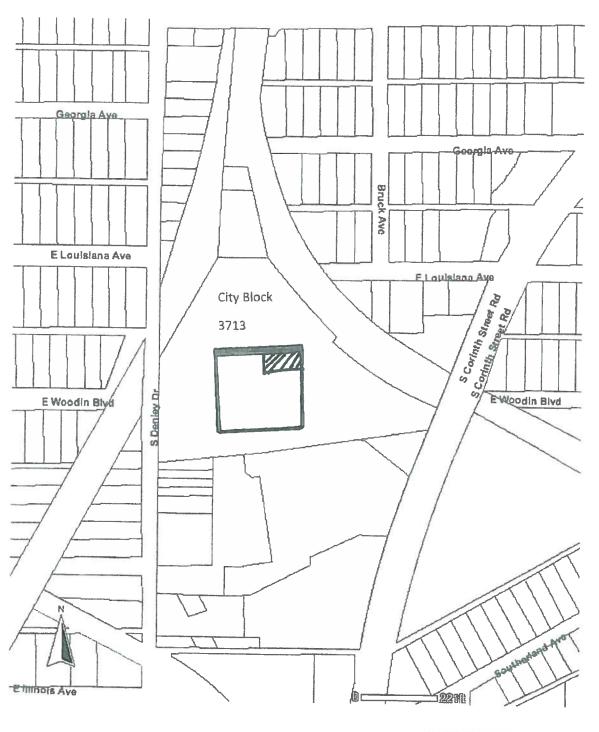
FISCAL INFORMATION

\$138,601 - Convention Center and Event Services Current Funds (subject to annual appropriations)

MAP

Attached

DRAFT



2111 S. Corinth Street, Suite # 106



Lease Premises



KEY FOCUS AREA: Economic Vibrancy

AGENDA DATE: February 8, 2017

COUNCIL DISTRICT(S): 14

DEPARTMENT: Sustainable Development and Construction

CMO: Mark McDaniel, 670-3256

MAPSCO: 36 Y

SUBJECT

Authorize an historic preservation tax exemption for the Lakewood Theater building located at 1825 Abrams Road for a ten-year period on the added value of the land and structure - Revenue Foregone: First year tax revenue foregone estimated at \$7,825 (Estimated revenue foregone over ten years is \$78,250)

BACKGROUND

Article XI of the Dallas Development Code established the Historic Preservation Tax Incentive Program, which allows property owners to receive tax exemptions for restorations of historic properties. The Historic Tax Incentive Program was reviewed and approved by the Dallas City Council on November 26, 2007. Revisions to the program were approved by City Council on December 9, 2015, by Ordinance No. 29953. Dallas Development Code Section 11.201(e) requires City Council to review any exemption over \$50,000. The City Council may approve or deny any portion of the exemption over \$50,000.

The Lakewood Theater, built in 1938, and addressed at 1825 Abrams Road northeast of downtown Dallas, was designated a City of Dallas landmark in September 2016.

The architect, Norman Alston, has applied for a historic tax exemption on behalf of the owner of the theater in support of approximately \$1 million in investment to rehabilitate the building. The building qualifies under the "Citywide" exemption which allows for exemption of the city portion of the property taxes on the added value for up to a ten year period. To qualify for this exemption, the cost of rehabilitation must exceed 50 percent of the pre-rehabilitation value of the structure.

The 2015 Dallas Central Appraisal District appraised value for the 1825 Abrams Road account is \$290,000, with an improvement value of \$36,170 and land value of \$253,830. The applicant is therefore required to invest approximately \$18,085 into the property to qualify for the exemption. The total estimated project cost is approximately \$1,000,000.



The owner will continue to pay taxes on the pre-rehabilitation value. The 2015 City of Dallas taxes are estimated to be \$2,269. Currently the building stands vacant, and the applicant has proposed to redevelop the historic building into restaurant and retail space.

The new value after completion is estimated to be \$1,290,000. Without accounting for any increase in value due to appreciation, it is estimated that the annual City tax assessment at the end of the exemption period will be \$10,094.

Prior to the initiation of the tax abatement, verification of expenditures is required. The Historic Development Program requires that an applicant submit receipts, copies of checks, bank draws, or other information that documents the required expenditures.

The applicant must also provide evidence to show that there are no delinquent property taxes, city fees, fines or penalties on the property. The owner has signed an affidavit stating that they are current on their taxes and do not owe any city fees, fines, or penalties.

The Lakewood Theater is not in a TIF district, and the owner has not applied for TIF funds for this building.

PRIOR ACTION/ REVIEW (COUNCIL, BOARDS, COMMISSIONS)

On September 6, 2016, City Council established Historic Overlay District No. 148 (the Lakewood Theater) by Ordinance Number 30192.

On December 5, 2016, the Landmark Commission approved the certificate of eligibility for the Lakewood Theater.

Information about this item was provided to the Economic Development Committee on January 17, 2017.

FISCAL INFORMATION

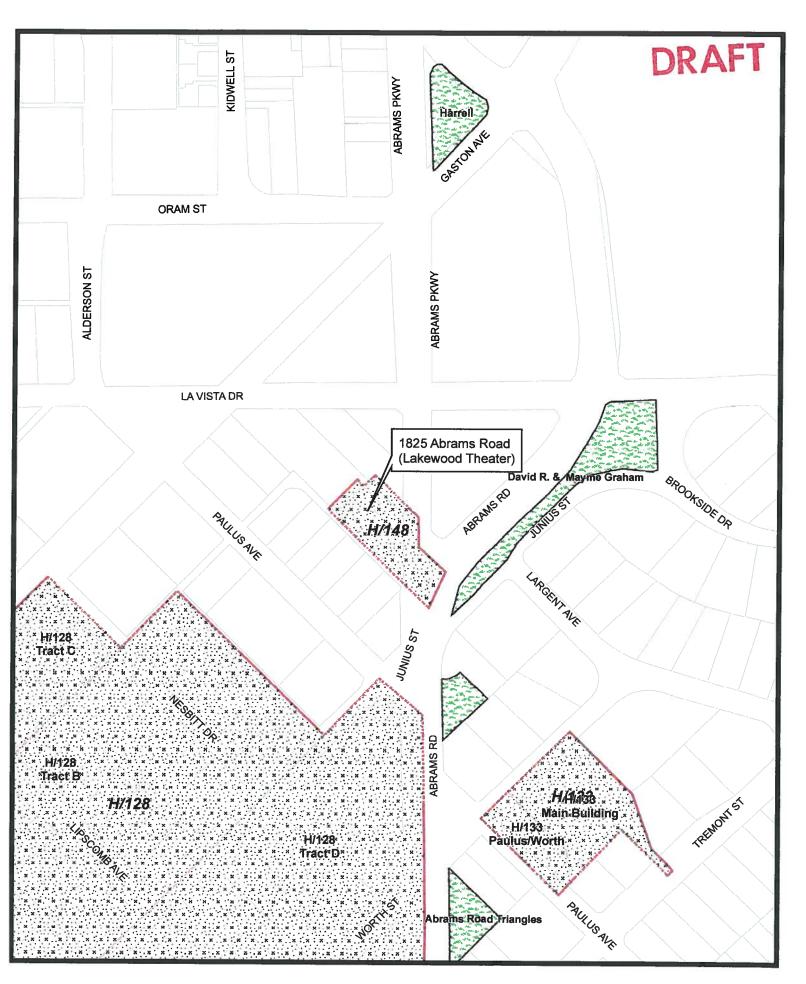
Revenue Foregone: First year tax revenue foregone estimated at \$7,825 (Estimated revenue foregone over ten years is \$78,250)

OWNERS

Willingham W W III, Willingham W W III TR, and Gartner 720 Ltd

MAP

Attached





Printed Date: 1/3/2017