"A Historic Past"

"A Bright Future"

CITY OF DELAWARE CITY
407 Clinton Street - P.O. Box 4159
Delaware City, Delaware 19706
302-834-4573

CITY OF DELAWARE CITY
DELAWARE CITY, DELAWARE
Ordinance No. 14 – 1215-01

ORDINANCE TO REPEAL AND REPLACE CHAPTER 23 OF THE CITY OF DELAWARE CITY CODE FOR THE PURPOSE OF, AMONG OTHER THINGS, AMENDING AND REPLACING THE EXISTING STANDARDS AND ENFORCEMENT PROCEDURES FOR BUILDING, PLUMBING, MECHANICAL AND OTHER CODES

The City of Delaware City

WHEREAS, pursuant to Article V, Section 5-02(A) of The City of Delaware City Charter ("Charter"), and pursuant to the "Powers of the City," outlined in Article II, § 2-1 of the Charter, the Mayor and the Council of The City of Delaware City ("City Council") possess the authority to adopt, amend, modify, or repeal The City of Delaware City Code ("Code");

WHEREAS, the Mayor and City Council desire to amend Chapter 23 of the Code entitled "Building Regulations" by adopting new standards and requirements for the construction, inspection and control of buildings and structures located in the City, as set forth in Exhibit A attached hereto (the "Proposed Code Sections");

WHERAS, the Mayor and City Council believe that the Proposed Code Sections enhance the health, safety, and welfare of the City of Delaware City;

WHEREAS, the City Council has held a public hearing, noticed fifteen (15) days in advance, regarding the Proposed Code Sections;

WHEREAS, in addition to the notice provided above, under Article V, Section 5-02(B) of the Charter, the Proposed Code Sections were introduced at a regular meeting, duly read in full or in abstract, and prominently posted for seven (7) days in The City of Delaware City.

NOW, THEREFORE, the Mayor and the City Council of The City of Delaware City hereby ordain:

Section 1. Chapter 23 of the Code entitled "Building Regulations" upon an affirmative vote of the City Council, is hereby repealed in its entirety and is replaced by the newly created Chapter 23 also entitled "Building Regulations" attached to this Ordinance as Exhibit A.

Section 2. Inconsistent Ordinances and Resolutions Repealed. All Ordinances or parts of Ordinances and all resolutions or parts of resolutions that are in direct conflict herewith are hereby repealed.

Section 3. Severability. The provisions of this Ordinance shall be severable. If any provisions of this Ordinance are found by any court of competent jurisdiction to be unconstitutional or void, the remaining provisions of this Ordinance shall remain valid, unless the court finds that the valid provisions of this Ordinance are so essentially and inseparably connected with, and so dependent upon, the unconstitutional or void provision that it cannot be presumed that City Council would have enacted the remaining valid provisions without the unconstitutional or void provision; or unless the court finds that the remaining valid provisions, standing alone, are incomplete and incapable of being executed in accordance with City Council's intent.

Section 4. **Effective Date**. This Ordinance shall become effective immediately upon its adoption by a majority vote of the City Council.

Signature Page Follows

ADOPTED BY THE MAYOR AND COUNCIL, this _____ day of _____, 2014.

ATTEST:

_____
City Secretary

_____
Mayor

APPROVED AS TO FORM:

_____
Council Member

_____
City Solicitor

_____
Council Member

_____
Council Member

_____
Council Member

_____
Council Member

First Reading on: December 15, 2014

Date of Publication: November 26 & December 3, 2014

Second Reading, Public Hearing, and Final Passage on: _____.

CHAPTER 23
BUILDING REGULATIONS

Article I – Building Code

Section 23-1 Adoption of International Building Code

Section 23-2 Additions, Insertions, Deletions sand Changes

Article II – Existing Building Code

Section 23-3 Adoption of International Existing Building Code

Section 23-4 Additions, Insertions, Deletions and Changes

Article III – Energy Conservation Code

Section 23-5 Adoption of International Energy Conservation Code

Section 23-6 Additions, Insertions, Deletions and Changes

Article IV – Plumbing Code

Section 23-7 Adoption of International Plumbing Code

Section 23-8 Additions, Insertions, Deletions and Changes

Article V – Fuel Gas Code

Section 23-9 Adoption of International Fuel Gas Code

Section 23-10 Additions, Insertions, Deletions and Changes

Article VI – Mechanical Code

Section 23-11 Adoption of International Mechanical Code

Section 23-12 Additions, Insertions, Deletions and Changes

Article VII – Residential Code

Section 23-13 Adoption of International Residential Code

Section 23-14 Additions, Insertions, Deletions and Changes

CHAPTER 23.
BUILDING REGULATIONS
BUILDING CODE.

Section 23-1 **Adoption of International Building Code**

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Building Code, 2012 edition, and any supplements to this International Code, as published by the International Code Council, Inc., be and hereby is adopted as the Building Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Building Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-2 of this chapter.

Section 23-2 **Additions, Insertions, Deletions and Changes**

Certain sections and subsections of the International Building Code, 2012 edition, and any supplements thereto are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 52 of the Code of City of Delaware City – Department of Building Inspection and Code Enforcement; Permits and Approvals."

B. Section 305.2 "Day care" is amended in the third line by deleting the phrase "five children" and substituting it with the phrase "twelve (12) children."

C. Section 308.5 "Group I-4, day care facilities" is amended in the sixth line by deleting the word "persons" and substituting the phrase "adults or 12 or fewer children".

D. Section 308.5.2 "Child care facility" is amended in the third line by deleting the phrase "five children" and substituting the phrase "twelve children".

E. Section 308.5.2 "Child Care facility, Exception" is amended in the second line by deleting the word "five" and substituting the word "twelve".

F. Section 310.1 " Residential Group R, R-3" is amended by deleting the subsection in its entirety and substituting the following:

> Section 310.1 **Residential Group R, R-3.** Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2 or I and where buildings do not contain more than two dwelling units, or adult care facilities

that provide accommodations for five or fewer persons, or child care facilities that provide accommodations for twelve or fewer persons of any age for less than 24 hours. A child care facility which accommodates twelve or less children of any age shall meet the following restrictions: (i) a license shall be obtained from the State of Delaware Department of Services for Children, Youth and Their Families. All regulations of such Department shall be met; (ii) Rooms to be occupied by infants shall have a direct path of egress, on the same floor level, to the exterior of the house; (iii) Smoke detectors shall be installed in accordance with Section 907.

G. Section 402.6.2 "Kiosks" is amended by deleting item number two (2) in its entirety and substituting the following:

Section 402.6.2. **Kiosks.** Kiosks or similar structures located within the mall shall be provided with approved fire suppression and detection devices when there is anything that shields the mall sprinkler system from areas within the kiosk.

H. Section 405.9 "Emergency Power" is amended by adding the following subsection:

405.9.2. **Pick-up Time**. The standby power system shall pick-up its connected loads within 10 seconds of failure of the normal power supply.

I. Section 406.3.4 "Separation" is amended in item number one (1) by deleting the second sentence and substituting the following: "Garages below habitable living space shall have at the minimum a one-hour fire rating in all interior walls, supports, and ceilings (e.g., two (2) layers of 5/8ths inch Type X Gypsum or equivalent material)."

J. Table 601 "Fire-Resistance Rating Requirements for Building Elements" is amended in the first column, second row by adding footnote 'h' after 'a' and by adding the following footnote: "h. See Section 704.10 for additional requirements."

K. Section 603.1.3 "Electrical" is amended by deleting the subsection in its entirety.

L. Section 903.2.1.2 "Group A-2" is amended in item number one (1) by deleting "5,000 square feet (464.5 m^2)" and substituting "10,000 square feet (929 m^2)".

M. Section 1013.4 "Opening limitations" is amended by adding the following at the end of the first paragraph: "Required guards shall not be constructed with horizontal rails or other ornamental pattern that results in a ladder effect."

N. Section 1024.1 "General" is amended in the second line by deleting the phrase "high-rise buildings" and substituting the phrase "buildings having three (3) or more stories".

O. Section 1301.1.1 "Criteria" is amended by deleting the subsection in its entirety and substituting the following:

> Section B1301.1.1 **Criteria**. Buildings shall be constructed in accordance with the 2012 International Energy Conservation Code (IECC), and any supplements to the International Codes, all published by the International Code Council, Inc., as adopted as the energy conservation code of the City.

P. Section 1608.2 "Ground snow loads" is amended to indicate the ground snow loads to be used in determining the design snow loads for roofs is 25 pounds per square foot.

Q. Section 1705.5 "Wood construction" is amended by adding a new subsection as follows:

> Section 1705.5.3 **Wood truss construction**. Special inspection is required for temporary and permanent bracing of wood trusses. The special inspector shall perform an inspection of the truss bracing and truss construction to verify compliance with the details shown on the approved construction documents, truss design drawings, and bracing drawings.
>
> Exceptions:
>
> 1. Timber trusses that do not have a flat bottom chord and that span less than 30 feet between supports.
> 2. Flat bottom chord trusses that span less than 50 feet between supports.
> 3. Girder trusses that span less than 40 feet between supports.

R. Section 1802.6 "Reports" is amended by adding the following to the end of the first paragraph: "All applications in subsidence areas shall include a report, prepared by a professional geologist or a professional geotechnical engineer registered in the State of Delaware, evaluating the vulnerability of the subsurface of subsidence (sinkholes). The application and report shall be sufficient to establish to the satisfaction of the Code Official after consulting with the Delaware Geological Survey, that the construction methods to be employed will be adequate to minimize the potential for subsidence. A soils report shall not be required for one- and two-family dwellings unless field inspections indicate questionable soils or conditions or it is located in a subsidence area."

S. Section 1805.4.3, Drainage discharge, is amended by deleting the subsection in its entirety and substituting the following:

> Section 1805.4.3 **Drainage system.** In other than Group I soils, a sump shall be provided to drain the porous layer of footings. The sump shall be at least 18 inches in diameter or 18 inches square, shall extend at least 24 inches below the bottom of the basement floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. The sump piping shall conform to the International Plumbing Code, Sections 712 and 1114.The sump shall discharge to the exterior of the structure at a sufficient distance to prevent recycling. The sump pump crock must have a removable cover.

T. Table 1807.1.6.2 "Concrete foundation walls" is amended by adding the following footnote:

> f. In the absence of soil data, the following ratings shall be used for the lateral soil load: 60 PSF/FT for basement walls; 45 PSF/FT of depth for retaining walls; and 200 PSF/FT of depth for passing pressure.

U. Table 1807.1.6.3(1) "Plain masonry foundation walls" is amended by adding the following footnote:

> g. In the absence of soil data, the following ratings shall be used for the lateral soil load: 60 PSF/FT for basement walls; 45 PSF/FT of depth for retaining walls; and 200 PSF/FT of depth for passing pressure.

V. Section 1809.5 "Frost Protection" is amended by deleting item number 1 in its entirety and substituting the phrase "extending below a depth of not less than 32 inches below grade".

W. Section 2205.1 "General" is amended by adding the following sentence at the beginning of the paragraph: "The structural engineer of record shall be responsible for the design and adequacy of all structural steel, including connections."

X. Section 2304.11 "Protection against decay and termites" is amended by adding the following subsection:

2304.11.2.8. **Foundation sill plates**. All sill plates anchored to foundation walls shall be of approved naturally durable or preservative treated wood.

Y. Section 2304.11.1 "General" is amended by adding the following at the end of the first paragraph: "All wood against masonry or concrete must be approved naturally durable, preservative treated wood, or protected in an approved manner."

Z. Section 2403.1 "Identification" is amended by adding the following sentence to the end of the subsection: "Glass that is not labeled shall be assumed to be annealed or plate glass."

AA. Chapter 30 "Elevators and conveying systems" is amended by adding the following section and subsections:

Section 3009 **Certificate of Compliance.**

Section 3009.1 **General.** The operation of all equipment governed by the provisions of this Chapter and hereafter installed, relocated or altered shall be unlawful by persons other than the installer thereof until such equipment has been inspected and tested as herein required and a final or limited certificate of compliance has been issued thereof by the Code Official.

Section 3009.2 **Final certificate of compliance**. The Code Official shall issue a final certificate of compliance for each unit of equipment which has satisfactorily met all of the inspections and tests required by this Chapter. The final certificate shall also include the necessary space for inserting the name of the person who made the periodic inspection and witnessed the periodic and maintenance tests and the date of the periodic inspection and the maintenance test.

Section 3009.3 **Limited certificate of compliance.** The Code Official is authorized to issue a limited certificate of compliance for any equipment covered by this Chapter, which is hereafter installed, relocated or altered, to permit limited use by the person designated

therein during the period of such installation, relocation or alteration. Such certificate shall be signed by the Code Official, shall bear the dates of issue, renewal and expiration, and shall designate the class of service allowed.

Section 3009.3.1 **Tests and minimum safeguards required.** A limited certificate shall not be issued for an elevator until such elevator has satisfactorily passed tests for rated load, car and counterweight safety, and terminal stopping devices. Permanent or temporary guards and enclosures shall be installed on the car, around the hoistway and at the landing entrances. Equipment other than elevators shall be tested and protectives shall be provided as deemed necessary by the Code Official to ensure safe operation for the limited service specified.

Section 3009.3.2 **Special conditions**. Automatic and continuous pressure operation elevators shall not be placed in temporary operation from the landing pushbuttons unless the door-locking device and interlocks required by ASME A17.1 listed in Chapter 35 of the International Building Code are installed and operative. Where the car is operable only from inside, landing entrance guards shall be provided with locks that are releasable from the hoistway side only.

Section 3009.3.3 **Time limitation.** Limited certificates of operation shall be issued for periods of not more than thirty (30) days. The Code Official is authorized to renew the limited certificates of operation for additional periods of not more than thirty (30) days each.

Section 3009.4 **Posting certificates of compliance.** The owner or lessee shall post the last-issued certificate of compliance in a conspicuous place available to the Code Official.

BB. Section 3107.1 "General" is amended by deleting the subsection in its entirety and substituting the following:

Section B107.1 **General.** Signs shall be designed, constructed and maintained in accordance with the International Building Code and with Code of the City of Delaware City.

CC. Section 3109 "Swimming Pool Enclosures and Safety Devices, is amended in title to read as follows: "Swimming Pools".

DD. Section 3109.1 "General" is amended by adding the following subsections:

Section 3109.1.1. **Construction documents**. Construction documents shall accurately show dimensions and construction of the pool and appurtenances and properly established distances to lot lines, buildings, walks and fences, as well as details of the water supply system, drainage and water disposal systems, and all appurtenances pertaining to the swimming pool. Detailed construction documents of structures, vertical elevations and sections through the pool showing depth shall be included.

Section 3109.1.2 **Locations.** Private swimming pools shall not encroach on any front or side yard required by this code or by the Delaware City Code. Locations shall be in accordance with the Delaware City Code.

EE. Section 3109.4.1.8 "Dwelling wall as a barrier" is amended in the second line by deleting the word "one" and substituting "all".

FF. Section 3109.4.1.8 "Dwelling wall as a barrier," exception number three, is amended by deleting it in its entirety and substituting the following: "The pool shall be equipped with a pool alarm that complies with ASTM F 2208."

GG. Section 3109.4.1.9 "Pool structure as barrier" is amended by deleting the subsection in its entirety and substituting the following:

Section 3109.4.1.9 "Pool structure as barrier" Where an aboveground 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 shall be surrounded by a barrier that meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8.

HH. Section 3109.4 "Residential swimming pools" is amended by adding the following subsection:

Section 3109.4.4 **Overhead wires.** No public or private swimming pool shall be constructed below any overhead utility wires unless in accordance with the latest edition of the National Electrical Code. The location of any overhead utility wires relative to the placement and operation of any public or private swimming pool shall be in compliance with the latest edition of the National Electrical Code.

II. Section 3109 "Swimming pools" is amended by adding the following subsections:

Section 3109.6 **Structural design.** The pool structure shall be engineered and designed to withstand the expected forces to which the pool will be subjected.

Section 3109.6.1 **Wall slopes.** To a depth up to 2 feet 9 inches (838 mm) from the top, the wall slope shall not be more than one unit horizontal in five units vertical (1:5).

Section 3109.6.2 **Floor slopes.** The slope of the floor on the shallow side of the transition point shall not exceed one unit vertical to seven units horizontal (1:7). For public pools greater than 1,200 square feet, the slope of the floor on the shallow side of the transition point shall not exceed one unit vertical to ten units horizontal (1:10). The transition point between shallow and deep water shall not be more than 5 feet (1524 mm) deep.

Section 3109.6.3 **Surface cleaning.** All swimming pools shall be provided with a recirculating skimming device or overflow gutters to remove scum and foreign matter from the surface of

the water. Where skimmers are used for private pools, there shall be at least one skimming device for each 1,000 square feet of surface area or fraction thereof. For public pools where water skimmers are used, there shall be at least one skimming device for each 600 square feet of surface area or fraction thereof. Overflow gutters shall not be less than 3 inches (76 mm) deep and shall be pitched to a slope of one unit vertical 48 units horizontal (1:48) toward drains, and constructed so that such gutters are safe, cleanable and that matter entering the gutters will not be washed out by a sudden surge of entering water.

Section 3109.6.4 **Walkways.** All public swimming pools shall have walkways not less than 4 feet (1219 mm) in width extending entirely around pool. Curbs or sidewalks around any swimming pool shall have a slip-resistant surface for a width of not less than 1 foot (305 mm) at the edge of the pool, and shall be so arranged as to prevent return of surface water to the pool.

Section 3109.6.5 **Steps and ladders.** At least one means of egress shall be provided from private pools. Public pools shall provide ladders or other means of egress at both sides of the diving section and at least one means of egress at the shallow section; or at least one means of egress in the deep section and the shallow section if diving boards are not provided. Treads of steps and ladders shall have slip-resistant surfaces and handrails on both sides, except that handrails are not required where there are not more than four steps or where the steps extend the full width of the side or end of the pool. Treads and risers of the pool steps shall conform to the following:

1. Step treads shall have a minimum unobstructed horizontal depth of 10 inches (254 mm) and a minimum unobstructed surface area of 240 square inches.

2. Risers shall have a maximum uniform height of 12 inches (305 mm) as measured at the centerline of the tread. The height of the bottom riser shall not vary more than plus or minus 2 inches (51 mm) from the uniform riser height.

Section 3109.7 **Equipment installations.** Pumps, filters and other mechanical and electrical equipment for public swimming pools shall be enclosed in such a manner as to provide access only to authorized persons and not to bathers. Construction and drainage shall be arranged to avoid the entrance and accumulation of water in the vicinity of electrical equipment.

Section 3109.8 **Diving boards**. Minimum water depths and distances for diving hoppers for pools, based on board height above water, shall comply with Table B3109.8(1) for public pools and Table B3109.8(2) for private pools. The maximum slope permitted between point D_2 and the transition point shall not exceed one unit vertical to three units horizontal (1:3) in private and public pools. D_1 is the point directly under the end of the diving boards. D_2 is the point at which the floor begins to slope upwards to the transition point (see Figure 3109.8).

Figure 3109.8

Minimum water depths and distances based on board height for public and private pools.

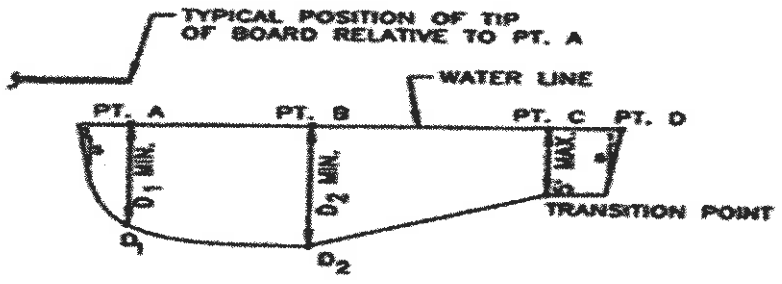

Table 3109.8(1)

Minimum water depths and distances based on board height for public pools.

Board height	Minimum depth[a] at D_1 directly under end of board	Distance[a] between D_1 and D_2	Minimum depth[a] at D_2
2'2" (2/3meter)	7'0"	8'0"	8'6"
2'6" (¾ meter)	7'6"	9'0"	9'0"
1 meter	8'6"	10'0"	10'0"
3 meter	11'0"	10'0"	12'0"

Note a. 1 foot = 304.8 mm.

Table 3109.8(2)
Minimum water depths and distances based on board height for private pools.

Board height	Minimum depth[a] at D_1 directly under end of board	Distance[a] between D_1 and D_2	Minimum depth[a] at D_2
1'8" (½ meter)	6'0"	7'0"	7'6"
2'2" (⅔ meter)	6'10"	7'6"	8'0"
2'6" (¾ meter)	7'5"	8'0"	8'0"
3'4" (1 meter)	8'6"	9'0"	9'0"

Note a. 1 foot = 304.8 mm.

JJ. Section 3303.6 "Utility connections" is amended by deleting the subsection in its entirety and substituting the following:

Section 3303.6 **Utility connections.** Before a structure is demolished or removed, the owner or agent shall notify all utilities having service connections within the structure such as water, electric, gas, sewer and other connections. A permit to demolish or remove a structure shall not be issued until a release is obtained from the utilities, stating that their respective service connections and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

KK. Section 3303 "Demolition" is amended by adding the following subsection:

Section 3303.7 **Notice to adjoining owners.** Only when notice owners of wires or other facilities, of which the temporary removal is necessitated by the proposed work, shall a permit be granted for the removal of a building or structure.

LL. Section 3305 "Sanitary" is amended by adding the following subsections:

Section 3305.2 **Storage of construction and demolition waste.** Construction and demolition waste may be stored upon the land where actual construction or demolition is in progress; provided, however, that such waste shall not be stored for a period exceeding one hundred and twenty (120) days and all other

waste not stored in a dumpster shall not be stored for periods exceeding thirty (30) days.

Section 3305.3 **Handling and storage of construction and demolition waste, trash, and litter.** During all construction activities, the lot(s) shall be kept neat of trash and building materials. All construction sites shall be required to obtain and maintain on the site a container of suitable size and design to hold and confine trash, scraps, and other construction and demolition waste created or accumulated on the site, which might be blown from the site. All such construction refuse shall be maintained in a closed container, or a container of sufficient depth to prevent construction and demolition waste from blowing out of the container, at all times, until transferred to a landfill. Containers may be placed in setback areas, provided that the placement of the container does not obstruct the view of motorists and thereby create traffic hazards. It shall be a violation to permit accumulated debris, litter, or trash attributable to the construction site and the construction activity to blow or scatter onto adjoining properties, including the public street or to accumulate on the site outside of the container, or in transit to a landfill or dump. The owner or contractor shall service the container as frequently as needed to prevent trash from over-flowing.

Section 3305.4 **Final Inspection**. A final cleanup is required, including the removal of all building debris, stumps, portable toilets, etc. within five (5) days after the final inspection on that parcel.

> Exception: Stumps located outside of the limit of disturbance that are not required to be removed by any plan approved by the Department are not subject to this section.

Section 3305.5 **Enforcement.** Any person who fails to comply with the requirements found in this Section shall be subject to the penalty and enforcement provisions provided in this Chapter.

MM. Chapter 34 "Existing Structures" is amended by deleting the chapter in its entirety. NOTE: Chapter 34 of the IBC is replaced with the International Existing Building Code as amended by the City of Delaware City.

Article II. EXISTING BUILDING CODE

Section 23-3 Adoption of International Existing Building Code

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Existing Building Code, 2012 edition, and any supplements to this International Code, as published by the International Code Council, Inc., be and hereby is adopted as the Existing Building Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Existing Building Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-4 of this Chapter.

Article III. Existing Building Code

Section 23-4 Additions, Insertions, Deletions and Changes

Certain sections and subsections of the International Existing Building Code, 2012 edition, and any supplements to the International Code adopted in Section 23-3 are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Scope and Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 52 of the Code of City of Delaware City – Department of Building Inspection and Code Enforcement."

B. Section 202 "General Definitions" is hereby amended by deleting the definition of "existing building" and substituting it with the following definition: "a building erected prior to the date of adoption of the appropriate code, or one for which a legal certificate of occupancy has been issued."

C. Section 202 "General Definitions" is amended by adding the following:

> **INTERNATIONAL BUILDING CODE.** The International Building Code as adopted and amended by the City of Delaware City.
>
> **INTERNATIONAL FUEL GAS CODE.** The International Fuel Gas Code as adopted and amended by the City of Delaware City.

INTERNATIONAL MECHANICAL CODE. The International Mechanical Code as adopted and amended by the City of Delaware City.

INTERNATIONAL PLUMBING CODE. The International Plumbing Code as adopted and amended by the City of Delaware City.

INTERNATIONAL RESIDENTIAL CODE. The International Residential Code as adopted and amended by the City of Delaware City.

D. Section 301 "Compliance Methods" is hereby amended by deleting 301.2 in its entirety and replacing it with the following:

Section 301.2 "Compliance with other codes, standards, and guides." Compliance with the structural provisions of the 2000 International Building Code, 2003 International Building Code, 2006 International Building Code, 2009 International Building Code, 2012 International Building Code or 1996 BOCA National Building Code shall be deemed exceeding or equivalent to compliance with the structural provisions of the Existing Building Code.

E. Section 301 "Compliance Methods" is hereby amended by addition of the following subsection:

Section 301.3 **Application and permits.** The Code Official is authorized to require an existing building to be investigated by a registered design professional to determine the existence of any nonconformance with the provisions of this chapter.

F. Section 501 is amended by adding the following subsections:

Section 501.3. 1 **Application and Permits.** The Code Official is authorized to require an existing building to be investigated and evaluated by a registered design professional to determine the existence of any potential nonconformance with the provisions of this Chapter.

> Section 501.4 **Compliance with other codes, standards, and guides.** Compliance with the structural provisions of the 2000 International Building Code, 2003 International Building Code, 2006 International Building Code, 2009 International Building Code, 2012 International Building Code or 1996 BOCA National Building Code shall be deemed exceeding or equivalent to compliance with the structural provisions of the Existing Building Code.

G. Section 504.1 " Scope" is amended by deleting the subsection in its entirety and substituting the following:

> Section 504.1 **Scope.** Level 2 alterations include the reconfiguration of space, including the addition or elimination of any wall over 6 feet high, the addition or elimination of any door or window the reconfiguration or extension of any system, or the installation of any additional equipment.

H. Section 607 "Electrical" is amended by deleting the subsection in its entirety.

I. Section 702.4 "Materials and methods" is amended in the second through forth lines by deleting the phrase "International Energy Conservation Code."

J. Section 707 "Energy Conservation" is amended by deleting the subsection in its entirety.

K. Section 808 "Electrical" is amended by deleting the subsection in its entirety.

L. Section 1008 "Electrical" is amended by deleting the subsection in its entirety.

M. Section 1012.4.1 "Means of Egress for change to higher hazard category" is amended by adding the following at the end of the section: "An existing operable window with clear opening area no less than 4 square feet (0.38m) and with minimum opening height and width of 22 inches (559 mm) and 20 inches (508mm), respectfully, and a sill height not greater than 44 inches (1118 mm) shall be accepted as an emergency escape and rescue opening."

N. Section 1012.5.1 "Height and area for change to higher hazard category" is amended by deleting the "exception" in its entirety.

Article IV. Energy Conservation Code

Section 23-5 Adoption of International Energy Conservation Code

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Energy Conservation Code, 2012 edition, and any supplements to this International Energy Code, as published by the International Code Council, Inc., be and hereby is adopted as the Energy Conservation Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Energy Conservation Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-6 of this chapter.

Section 23-6 Additions, Insertions, Deletions and Changes

Certain sections and subsections of the International Energy Conservation Code, 2012 edition, and any supplements to the International Code adopted in Section 23-5 are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 55 of the City of Delaware City Code– Licensing and Inspection."

B. Section 107.5 "Refunds" is amended by deleting the section in its entirety and substituting the following"

> Section 107.5 **Refunds.** There shall be no refund of any permit fees and/or any associated fees once paid.

Article V. Plumbing Code

Section 23-7 Adoption of International Plumbing Code

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Plumbing Code, 2012 edition, and any supplements to this International Code, as published by the International Code Council, Inc., be and hereby is adopted as the Plumbing Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Existing Building Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-8 of this Chapter.

Section 23-8 Additions, Insertions, Deletions and Changes

Certain sections and subsections of the International Plumbing Code, 2012 edition, and any supplements to the International Code adopted in Section 23-7 are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 52 of the Code of City of Delaware City – Department of Building Inspection and Code Enforcement; Permits and Approvals."

B. Section 301 "General" is amended by adding the following subsections:

Section 301.8 **Disconnected septic systems and wells.** If any septic tank, water well or leeching well shall cease to be used, it shall be abandoned in accordance with the provisions of the State of Delaware regulations for the design, installation and operation of on-site wastewater treatment and disposal systems.

Section 301.9 **Prohibited connections.** It shall be unlawful for any person to connect sump pumps, French drains, area drainage, storm drainage, roof drainage, swimming pool drainage, condensate pump drainage, or drainage from any device directly or indirectly into any public of private sewer, except when such connection has been specifically authorized in writing by the City of Delaware City and New Castle County.

Exception: Heater condensate drains connected into the sanitary sewer system from slab-on-grade foundation or total crawl space dwellings. The connection of this drain shall be upstream of a trap to block the backflow of any sewer gases into the dwelling.

C. Section 305.3 "Pipes through foundation walls" is amended in the third and fourth lines by deleting the word "or" and after the phrase "foundation wall" and adding the phrase "or other approved alternative."

D. Section 305.6.1 "Sewer depth" is amended by adding the following subsection:

Section 305.6.1 **Sewer depth.** Building sewers shall be a minimum of 32 inches (762 mm) below grade.

E. Section 312.1 "Required tests" is amended in the 10th and 11th lines by deleting the phrase "for piping systems other than plastic."

F. Section 312.1.1 "Test gauges" is amended by deleting the subsection in its entirety and substituting the following:

Section 312.1.1 **Test Gauges**. Gauges used for testing shall be as follows:

1. Test Requiring a pressure of less than or equal to 100 psi shall utilize a testing gauge having increments of one psi or less.
2. Test requiring a pressure of greater than 100 psi shall utilize a testing gauge having increments of two psi or less.

G. Table 403.1 "Minimum Number of Fixtures" is amended in the fifth column, row number five, under Institutional, I-4 lavatories, by adding the phrase "1 per 15."

H. Section 412.3 "Size of floor drains, is amended in the second line by deleting "2-inch-diameter (51 mm)" and substituting "3-inch-diameter (76 mm)."

I. Section 417.3 "Shower waste outlet" is amended by in the second line by deleting "1 1/2 inches (38 mm) in diameter" and substituting "2 inches (51 mm)."

J. Section 502.1 "General" is amended by adding the following subsection:

Section 502.6 **Material**. When nonmetallic water distribution pipe is being used, the first 19 inches (458 mm) of both hot and cold water lines shall be nonflexible metallic pipe as listed in Table 605.4 of the International Plumbing Code.

K. Section 504.6 "Requirements for discharge piping, number 13" is amended by deleting it in its entirety and substituting the following: "13. Relief valve discharge piping shall be of nonflexible metallic piping. Safety pans and drains shall be tested and rated for that use."

L. Section 603.2 "Separation of water service and building sewer, Exceptions" is amended by deleting exception number 2 in its entirety.

M. Table 605.3 "Water Service Pipe" is amended by deleting the second row in its entirety and types "M" and "WM" in the sixth row, first column.

N. Table 605.4 "Water Distribution Pipe" is amended by deleting types "M" and "WM" in the fourth row, first column.

O. Section 605.16.2 "Solvent cementing" is amended by adding the following sentence: "The use of all-purpose glue is prohibited." Section 605.19, Polybutylene plastic, is amended by deleting the subsection, including Subsections 605.19.1, 605.19.2, and 605.19.3, in its entirety.

P. Section 607.2 "Hot or tempered water supply fixtures" is amended by adding the following:

Exception: One and two single-family dwellings.

Q. Section 608.17 "Protection of individual water supplies" is amended by deleting the subsection, including Subsections 608.17.1 through and including 608.17.8, and Table 608.17.1, in its entirety.

R. Section 701 "General" is amended by adding the following subsections:

Section 701.10 **Regulations for cleaning sewer laterals.** All licensees who clean sewer laterals are required to clean the lateral thoroughly to the collector sewer. The entire lateral will be considered thoroughly cleaned only when a cutter one inch smaller than the pipe diameter has been passed through the entire lateral from the cleanout collector sewer. For building drains, the cutter size shall be the maximum diameter than can be passed through the cleanout access.

Section 701.11 **Regulations for repairing or replacing sewer laterals.** The licensee shall thoroughly clean the laterals to the collector as described in Section 701.10. All repairs and replacements outside the building envelope shall be made pursuant to a validity issued plumbing permit. Before completing the pipe connection, all repairs must be inspected

pursuant to rules and procedures promulgated by the City of Delaware City and New Castle County.

S. Table 702.2 "Underground Building Drainage and Vent Pipe" is amended in the second row by deleting "asbestos-cement pipe" and in the third row, first column, by adding "coated" in front of "cast-iron pipe."

T. Table 702.3 "Building Sewer Pipe" is amended in the first row, first column, by adding footnote "a" and the third row, first column, by deleting "asbestos-cement pipe" and in the fourth row, first column, by adding "coated" in front of "cast-iron pipe."

U. Table 702.4 "Pipe Fittings" is amended in the fourth row, first column, by adding the word "coated" in front of "cast iron."

V. Section 703 "Building Sewer" is amended by adding the following subsection:

Section 703.6 **Minimum size building sewer.** The gravity building sewer shall not be less than six inches (152mm) in size.

W. Section 708.3.4 "Base of stack" is amended by adding to the end of the sentence the following: "A kitchen cleanout shall be required at the base of the kitchen sink waste stack and shall be in accordance with Section 708.8."

X. Table 709.1 "Drainage Fixture Units for Fixtures and Groups" is amended in the 12th and 13th rows, third column, by deleting "2" and substituting "3."

Y. Section 712.3.5 "Pump connection to the drainage system" is amended by adding the following sentence to the end of the paragraph: "A sewage ejector must tie into a four-inch (101 mm) diameter or larger waste line."

Z. Section 802.1.4 "Swimming pools" is amended by deleting the subsection in its entirety.

AA. Section 1002.4 "Trap seals" is amended in the fifth line after the phrase "trap seal primer valve" by adding the phrase "or other approved alternative."

BB. Section 1003.3.4 "Grease interceptors and automatic grease removal devices" is amended by adding the following sentence to the end of the paragraph: "Grease traps/interceptors shall be located outside the building and easily accessible for inspection, cleaning, and maintenance. The recommended minimum size of an exterior grease trap/interceptor is 1,000 gallons. However, under no circumstances should exterior grease traps/interceptors have a capacity less than 500 gallons. In circumstances of 'single-service kitchens' with no food preparation (heat/serve only), and which use only paper service items, a smaller grease trap/interceptor may be used and must be approved by the Code Official. The applicant for such work shall provide the City of Delaware City written acknowledgement if modifications occur. All grease interceptors shall comply with all ordinances of the City of Delaware City.

CC. Section 1003.3.4.1 "Hydromechanical interceptor capacity" is amended by deleting the subsection in its entirety.

DD. Section 1003.3.4.2 "Rate of flow controls" is amended by deleting the subsection in its entirety.

EE. Table 1003.3.4.1 "Capacity of Grease Interceptors" is amended by deleting the table in its entirety.

FF. Section 1112.1 "Subsoil drains" is amended in the eighth line by deleting the following sentence: "The subsoil sump shall not be required to have either a gas-tight cover or a vent."

GG. Section 1113.1 "Building subdrains" is amended by adding the phrase "stormwater" in the fourth line after the phrase "discharged into the."

HH. Section 1201 "General" is amended by deleting the section in its entirety and substituting the following:

> Section 1201 **General**. Special piping and storage systems referred to in Chapter 12 of the International Plumbing Code shall be governed by the State Fire Prevention Regulations as adopted by the State Fire Prevention Commission pursuant to Title 16, Chapter 66, of the Delaware Code and shall be regulated by the Office of the State Fire Marshall.

II. Section 1202 "Medical Gases" is amended by deleting the section in its entirety.

JJ. Section 1203 "Oxygen Systems" is amended by deleting the section in its entirety.

Article VI. Fuel Gas Code

Section 23-9 Adoption of International Fuel Gas Code

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Fuel Gas Code, 2012 edition, and any supplements to this International Code, as published by the International Code Council, Inc., be and hereby is adopted as the Fuel Gas Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Fuel Gas Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-10 of this chapter.

Section 23-10 Additions, Insertions, Deletions and Changes

Certain sections and subsections of the International Fuel Gas Code, 2012 edition, and any supplements to the International Code adopted in Section 23-9 are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Scope and Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 52 of the Code of City of Delaware City – Department of Building Inspection and Code Enforcement; Permits and Approvals."

B. Section 301.1 "Scope" is amended by deleting the subsection in its entirety and substituting the following:

> Section 301.1 **Scope.** This code shall apply to the installation of fuel gas piping systems, fuel gas utilization equipment, and related accessories as follows:
>
> 1. Coverage of piping systems shall extend from the point of delivery to the connections with gas utilization equipment (see "Point of delivery").
> 2. Systems with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less. Piping systems for gas-air mixtures within the flammable range with an operating pressure of 10 psig (69 kPa gauge). LP-gas piping systems with an operating pressure of 20 psig (140 kPa gauge) or less.

3. Piping systems requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation, and maintenance.
4. Requirements for gas utilization equipment and related accessories shall include installation, combustion and ventilation air and venting.

Section 301.1 **Exceptions.** This code shall not apply to the following:

1. Portable LP-gas equipment of all types that is not connected to a fixed fuel piping system.
2. Installation of farm 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 chemical reactions 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 LP-gas and compressed natural gas (CNG) systems on vehicles.
16. Exception as provided for 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.

C. Section 301.1.1 "Other fuels" is amended by adding the following sentence to the end of the paragraph: "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 International Mechanical Code, as amended."

D. Section 301 "General" is amended by adding the following subsection:

Section 301.16 **Prohibited connections.** It shall be unlawful for any person to connect sump pump, french drains, area drainage, storm drainage, roof drainage, swimming pool drainage, condensate pump drainage, or drainage from any device directly or indirectly into any public or private sewer, except when such a connection has been specifically authorized in writing by the Code Official.

Exception: Heater condensate drains connected into the sanitary sewer system for slab-on-grade foundation or total crawl space dwellings. The connection of this drain shall be upstream of a trap to block the backflow of any sewer gases in to the dwelling.

E. Section 303.3 "Prohibited locations, Exceptions" is amended by adding an exception to read as follows: "5. Where unvented room heaters are permitted, a UL-approved and -listed carbon monoxide detector shall be installed in the same room as the unvented appliance. All detectors shall be installed in accordance with the manufacturer's instructions."

F. Section 307.2, Fuel-burning appliances, is amended in the third line by deleting the phrase "approved plumbing fixture or."

G. Section 403.4.4, Aluminum, is amended by deleting the subsection in its entirety.

H. Section 403.5, Metallic tubing, is amended by deleting the subsection in its entirety and substituting the following:

> Section 403.5 **Metallic tubing.** Seamless copper or steel tubing shall not be allowed inside a building. Seamless copper or steel tubing shall be permitted to be used with gasses not corrosive to such materials.

I. Section 403.5.3, Aluminum tubing, is amended by deleting the subsection in its entirety.

J. Section 403.9, Metallic pipe threads, is amended by adding the following sentence to the end of the paragraph: "Running threads shall not be permitted."

K. Section 403.9.3, Thread joint compounds, is amended by adding the following sentence to the end of the paragraph: "Pipe joint compounds shall be used on the male threads only. No Teflon™ tape shall be permitted to be used. Teflon™ bearing pipe dope shall be compatible with both the piping material and the contents of the piping."

L. Section 403.10, Metallic piping joints and fittings, is amended by adding the following sentence to the end of the paragraph: "Close nipples and pipe plugs shall not be permitted."

M. Section 403.10.4, Metallic fittings, numbers 4 through 7, are amended by deleting the numbers and text in their entirety.

N. Section 403.12.1, Flange facings, is amended by deleting the second sentence.

O. Section 403.13, Flange gaskets, is amended by deleting the last sentence of the paragraph.

P. Section 404.9, Above-ground outdoor piping, is amended by adding the following paragraph: "Piping installed above ground outdoors within three feet of a driveway shall be protected in accordance with specifications provided by the gas supplier. In the absence of these specifications, two six-inch treated posts, or four-inch concrete-filled pipes, or cement post may be utilized. These posts shall have a height from grade between 30 inches and 36 inches tall and shall be set in a minimum of 12 inches of concrete. Alternative materials that satisfy the intent of the code will be considered by the department supervisor."

Q. Section 404.12, Minimum burial depth, is amended in the second line by deleting "12 inches (305 mm)" and substituting "18 inches (457 mm)."

R. Section 404.9.1, Individual outside appliances, is amended by adding a new subsection as follows:

> Section 404.9.1 **Individual outside appliance.** Any underground gas piping serving an individual outside appliance that cannot meet the 18 inches depth requirement shall be allowed providing there is a minimum cover of at least 8 inches, the pipe is sleeved in a suitable material to prevent physical

damage, and it is installed in a location not susceptible to physical damage.

S. Section 406.1, General, is amended in the second line by deleting "installations" and substituting "systems."

T. Section 408.4, Sediment trap, is amended by adding the following in the eighth line after "clothes dryers" the phrase "manually operated decorative appliances."

U. Section 409.5, Equipment shutoff valve, is amended by deleting the subsection in its entirety and substituting the following:

Section 409.5 **Equipment shutoff valve.** Location of gas valves do not have to be located in same room as a gas appliance, but must be readily accessible and their location must be within five (5) feet of the appliance and clearly marked.

Exception: When the shutoff valve is located within a crawlspace, the shutoff valve shall be located at the entrance of the crawlspace, readily accessible and clearly marked

V. Section 410, Flow Controls, is amended by adding the following subsection:

Section 410.6 **Location**. Gas meter regulators shall be located at least three (3) feet from sources of ignition.

W. Section 411.1, Connecting appliances, number 2, is amended by deleting the number in its entirety.

Article VII. Mechanical Code

Section 23-11 Adoption of International Mechanical Code

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Mechanical Code, 2012 edition, and any supplements to this International Code, as published by the International Code Council, Inc., be and hereby is adopted as the Mechanical Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Mechanical Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-12 of this chapter.

Section 23-12 Additions, Insertions, Deletions and Changes

Certain sections and subsections of the International Mechanical Code, 2012 edition, and any supplements to the International Code adopted in Section 23-11 are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Scope and Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 52 of the Code of City of Delaware City – Department of Building Inspection and Code Enforcement; Permits and Approvals."

B. Section 301, General, is amended by adding the following subsection:

> Section 301.19 **Prohibited connections.** It shall be unlawful for any person to connect sump pump, french drains, area drainage, storm drainage, roof drainage, swimming pool drainage, condensate pump drainage, or drainage from any device directly or indirectly into any public or private sewer, except when such a connection has been specifically authorized in writing by the Code Official and New Castle County.
>
> Exception: Heater condensate drains connected into the sanitary sewer system for slab-on-grade foundation or total crawl space dwellings. The connection of this drain shall be upstream of a trap to block the backflow of any sewer gases into the dwelling.

C. Section 304.1, General, is amended by adding the following subsection:

Section 304.1.1, Temporary heating or cooling. Heating and air conditioning systems that shall be permanently installed shall not be used for temporary heating or cooling during construction.

D. Section 307.1, Fuel-burning appliances, is amended in the third line by deleting the phrase "approved plumbing fixture or".

E. Section 603.6.1.1, Duct length, is amended by deleting the subsection in its entirety and substituting the following:

Section 603.6.1.1 **Duct length.** Flexible air ducts and flexible air connectors shall be limited to fourteen (14) feet in length and shall only be used as a final supply or return lead connected to a rigid trunk. Trunks shall be constructed of materials listed in Sections 603.4, 603.5, 603.5.1 or 603.8.3.

Exception: Where an air distribution system is to be designed and installed utilizing flexible air ducts and flexible air connectors, a rigid trunk shall be installed at a minimum length of ten (10) feet attached directly to the air handler. The system shall be designed and sealed by a registered design professional.

F. Section 603.6, Flexible air ducts and flexible air connectors, is amended by adding the following subsections:

Section 603.6.5 **Turn radius.** Flex air connectors and flexible ducts shall not be used to make turns 90 degrees or greater.

Section 603.6.6 **Concealed locations.** Flexible non-metallic ducts shall not be installed in concealed locations.

G. Section 603.18, Registers, grilles and diffusers, is amended by deleting the second sentence and substituting "Balancing dampers shall have an accessible adjustable diffuser installed within three (3) feet of the main trunk connection. In a concealed location the register, grille, or diffuser at the end of each individual duct may be used to control airflow provided the register, grille, or diffuser is adjustable."

Exception: Engineered systems where the design does not require dampers for balancing shall be exempt from this section."

H. Section 603.18, Registers, grilles and diffusers, is amended by adding the following subsection:

> Section 603.18.3 **Return air grilles**. In all dwelling units, return air grilles shall be provided in each habitable space unless such rooms are openly connected, as not separated by a door, and at the same level. Return openings shall be capable of returning air approximately equal to the supply and ducted back to furnace.

I. Section 1301.1, Scope, is amended by deleting the subsection in its entirety and substituting the following:

> Section 1301.1 **Scope.** This Chapter shall govern the design, installation, construction and repair of fuel-oil storage and piping systems. The storage of fuel oil exceeding the quantity limitation of this Chapter and flammable and combustible liquids shall be in accordance with the State Fire Regulations as adopted by the State Fire Prevention Commission pursuant to 16 Del. C. § 6601 et seq. (Fire Prevention) and National Fire Protection Association (NFPA) 13 (Sprinkler systems).

J. Section 1301.2, Storage and piping systems, is amended by deleting the subsection in its entirety and substituting the following:

> Section 1301.2 **Storage and piping systems.** Fuel-oil storage systems shall comply with the State Fire Regulations as adopted by the State Fire Prevention Commission pursuant to 19 Del. C. § 6601 et seq. (Fire Prevention) and NFPA 13 (Sprinkler systems).
>
> Section 1301.2.1 **Fuel Oil Tanks.** Underground tanks shall be of circular cross-section #7 gauge steel. Above-ground outside tanks shall be of #12 gauge steel. Proper corrosion resistance coatings shall be applied to all tanks.
>
> Section 1301.2.2 **Installation of tanks inside buildings.** Oil supply tanks larger than sixty (60) gallon capacity shall be 12 gauge and shall not be located in buildings above the lowest story, cellar or basement. Inside storage tanks and auxiliary tanks that are not enclosed, shall not be located within seven (7) feet, horizontally, of any fire or flame. Oil supply tanks located inside

buildings shall not exceed two-hundred seventy-five (275) gallons individual capacity or five-hundred fifty (550) gallons aggregate capacity (in one building), unless installed in an enclosure or casing constructed as follows: The walls of the enclosure shall be constructed of reinforced concrete at least six (6) inches thick or of block at least eight (8) inches thick, and shall be bonded to the floor. The space between the tank and the enclosure shall be completely filled with sand or well tamped earth. Where the floor or other construction immediately above the tank is of fire-resistive construction capable of safely sustaining a load of one-hundred fifty (150) pounds per square foot, the walls of the enclosure shall be carried to a height not less than one (1) foot above the tank and the space filled with sand or well tamped earth or concrete at least five (5) inches thick or of equivalent construction. Instead of an enclosure as above described, the tank may be encased in reinforced concrete not less than six (6) inches in thickness, applied directly to the tank so as to completely eliminate any air space. In buildings of ordinary construction, the nominal gross capacity of tanks shall not exceed five thousand (5,000) gallons. In fire-resistive buildings, the nominal gross capacity of the tanks shall not exceed fifteen thousand (15,000) gallons. In any building, if in a fire-resistive or detached room cut off vertically and horizontally in an approved manner from other floors of the main building, the nominal gross capacity of tanks shall not exceed fifty thousand (50,000) gallons with an individual tank capacity not exceeding twenty-five thousand (25,000) gallons. Inside storage tanks and piping taken out of service or not in use shall be removed.

Section 1301.2.3 **Installation of underground tanks.** Underground tanks shall be buried at sufficient depth to provide two (2) feet of earth cover or covered with an approved concrete slab.

Article VIII. Residential Code

Section 23-13 Adoption of International Residential Code

A certain document, a copy of which is on file in City Hall of the City of Delaware City, being marked and designated as the International Residential Code, 2012 edition, and any supplements to this International Code, as published by the International Code Council, Inc., be and hereby is adopted as the Residential Code of the City of Delaware City in the State of Delaware for the control of buildings and structures as herein provided; providing for the issuance of permits and collection fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said International Residential Code are hereby referred to, adopted and made part hereof as if fully set forth in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in Section 23-14 of this chapter.

Section 23-14 Additions, Insertions, Deletions and Changes

Certain sections and subsections of the International Residential Code, 2012 edition, and any supplements to the International Code adopted in Section 23-13 are hereby added, inserted, deleted, amended and clarified as follows:

A. Chapter 1 "Scope and Administration" is amended by deleting the chapter in its entirety and substituting the following "Chapter 52 of the Code of City of Delaware City – Department of Building Inspection and Code Enforcement; Permits and Approvals."

B. Section 202, Definitions, is amended by adding the following definition:

> "**Decorative coating.** A single coat of plaster, cementious or other approved material applied to a concrete or masonry for cosmetic purposes only."

C. Table 301.2(1), Climatic and Geographic Design Criteria, is filled in as follows:

GROUND SNOW LOAD	Wind Speed (mph)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			Winter Design Temp	Ice Shield Under-layment Required	Flood Hazards	Air Freezing Index	Mean Annual Temp
			Weathering	Frost line depth	Termite					
25 lbs./sq.ft.	90 3-sec. gusts	B	Severe	32"	Yes	15°F	No	10/05/	596	54°F

	75 fastest mile							2000		

D. Figure 301.2(4)(A), Basic Wind Speeds is clarified to depict that all of Delaware City shall fall within the seventy-five-mile-per-hour fastest mile speed, with ninety-mile-per-hour three-second gust wind speed area.

E. Figure 301.2(5), Ground Snow Loads, is clarified to depict that all of Delaware City shall fall within the 25 pounds per square foot area.

F. Table 302.1, Exterior Walls, is amended in the third column, third row by deleting "5 feet" and substituting "3 feet" and in the third column, fourth row by deleting "5 feet" and substituting "2 feet" and in the third column, fifth row by deleting "5 feet" and substituting "3 feet."

G. Section 303.3, Bathrooms, is amended by deleting the subsection in its entirety and substituting the following:

> Section 303.3 **Bathrooms.** Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than three square free (0.3 m2), ½ of which must be able to be opened. Mechanical ventilations systems shall be required. The minimum ventilation rate shall be 50 cubic feet per minute (24 l/s) for intermediate ventilation. Ventilation air from the space shall be exhausted directly to the outside.
>
> Exception: The glazed areas shall not be required where artificial light is provided.

H. Section 303.6, Outside opening protection, is amended by deleting the subsection in its entirety.

I. Section 305.1, Minimum height, exception number 4, is amended in the second line by deleting the phrase "over the fixture and."

J. Section 309.1, Floor surface, is amended by deleting the second sentence and substituting the following: "That area of the floor used for parking automobiles or other vehicles shall have a four-inch step between the garage and the living space and shall be sloped to facilitate the movement of liquids toward the main vehicle doorway."

K. Section 311.4.1, Door type and size, is amended by deleting the second sentence and substituting the following: "All interior doors in the path of egress shall have a minimum width of two feet six inches and a minimum height of six feet six inches. Doors to bathrooms or powder rooms may have a width of two feet four inches."

L. Section 311, is amended by adding the following subsection:

Section 3011.4.2 **Separation required.** Garages attached side by side to rooms shall be completely separated from the adjacent living space and the attic areas by means of ½-inch gypsum board or equivalent material applied to the garage side of the framing. All interior walls, supports and the ceiling in garages below habitable living space shall have at the minimum a one-hour fire rating (e.g., two (2) layers of 5/8ths inch Type X Gypsum or equivalent material). Concrete-filled steel lolly columns used in the structure supporting the separation shall not require a gypsum board application.

M. Section 312.1.3, Guard openings limitations, is amended by adding the following sentence to the end of the paragraph: "Required guards shall not be constructed with horizontal rails or other ornamental pattern that results in a ladder effect."

N. Section 313.3, Alterations, repairs and additions, is amended by deleting it in its entirety and substituting the following subsections:

Section 313.3 **Alterations, repairs and additions.**

Section 313.2.1.1 **Additions.**

1. No addition of sleeping rooms. When interior additions occur without the addition of sleeping rooms, a hard wired smoke alarm is required in the new addition unless the existing dwelling has a hard wired smoke alarm on the same level. In addition, battery operated alarms are required in all other locations required by the International Residential Code.
2. Add or create sleeping rooms. When one or more sleeping rooms are added or created in existing dwellings, a hard wired interconnected smoke alarm is required in each new sleeping room and outside each new sleeping area in the immediate vicinity of the bedrooms. In addition, battery operated alarms are required in all other locations required by the International Residential Code.

Section 313.2.1.2 **Alterations and repairs.**

1. Minor renovations. Minor interior renovations to dwellings require the installation of battery operated smoke alarms in all locations required by the International Residential Code.
2. Major renovations. Major interior renovations to dwellings require the installation of hard wired interconnected smoke alarms as required by the International Residential Code for new single family dwelling.
3. Living space in basement. When living space in a basement is added or created, the installation of a hard wired smoke alarm on that level is required and battery operated smoke alarms in all other locations required by the International Residential Code. For sleeping rooms in a basement area, see sleeping room requirements in Section 313.2.1.1.
4. Decks and exterior surface modifications. Alterations and repairs to decks and exterior surface modifications do not invoke smoke alarm requirements.

O. Section 319.1, Location required, Number 2, is amended in the second line by deleting "and are less than 8 inches (203 mm) from the exposed ground."

P. Section 300 is amended by the addition of the following section:

Section 324 **Sanitary.**

Section 324.1, Facilities Required. Sanitary facilities shall be provided during construction, remodeling or demolition activities in accordance with the International Plumbing Code.

Section 324.2, Storage of construction and demolition waste. Construction and demolition waste may be stored upon the land where actual construction or demolition is in progress; provided, however, that such waste shall not be stored for a period exceeding one hundred and twenty (120) days and all other waste not stored in a dumpster shall not be stored for periods exceeding thirty (30) days.

Section 324.3, Handling and storage of construction and demolition waste, trash, and litter. During all

construction activities, the lot(s) shall be kept neat of trash and building materials. All construction sites shall be required to obtain and maintain on the site a container of suitable size and design to hold and confine trash, scraps, and other construction and demolition waste created or accumulated on the site, which might be blown from the site. All such construction refuse shall be maintained in a closed container, or a container of sufficient depth to prevent construction and demolition waste from blowing out of the container, at all times, until transferred to a landfill. Containers may be placed in setback areas, provided that the placement of the container does not obstruct the view of motorists and thereby create traffic hazards. It shall be a violation to permit accumulated debris, litter, or trash attributable to the construction site and the construction activity to blow or scatter onto adjoining properties, including the public street or to accumulate on the site outside of the container, or in transit to a landfill or dump. The owner or contractor shall service the container as frequently as needed to prevent trash from over-flowing.

Section 324.4, Final Inspection. A final clean-up is required, including the removal of all building debris, stumps, portable toilets, etc. within five (5) days after the final inspection on that parcel.

> Exception: Stumps located outside of the limit of disturbance that are not required to be removed by any plan approved by the Department are not subject to this section.

Section 324.5, Enforcement. Any person who fails to comply with the requirements found in this Section shall

be subject to the penalty and enforcement provisions provided in this Chapter.

Q. Table 403.1, Minimum Width of Concrete or Masonry Footings, is amended by deleting the table in its entirety and substituting the following:

Table R403.1

MINIMUM WIDTH OF CONCRETE OR MASONRY FOOTINGS

(inches)

	LOAD-BEARING VALUE OF SOIL (psf)			
	1,500	2,000	3,000	= 4,000
Conventional light-frame construction				
1-story	16	16	16	16
2-story	16	16	16	16
3-story	23	17	16	16
4-inch brick veneer over light frame or 8-inch hollow concrete masonry				
1-story	16	16	16	16
2-story	21	16	16	16
3-story	32	24	16	16
8-inch solid or fully grouted masonry				
1-story	16	16	16	16
2-story	29	21	16	16
3-story	42	32	21	16

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m^2.

R. Section 403.1.1, Minimum size, is amended in the fifth line by deleting "6 inches (152 mm)" and substituting "8 inches." The sentence "but shall be a minimum of 12 inches except stairway pier footings shall be a minimum of 8 inches" is added to the 10th line following "Table R401.4.1."

S. Section 403.1.6, Foundation anchorage, is amended in the 11th and 12th lines by deleting the phrase "or less than seven bolt diameters from each end of the plate section" and adding the phrase "from the corners."

T. Section 404.1.7, Backfill placement, is amended by deleting the subsection in its entirety and substituting the following:

> Section 404.1.7 **Backfill placement.** Backfill shall not be placed against the wall until the wall has sufficient strength to prevent damage by the backfill.

U. Section 405.1, Concrete or masonry foundations, is amended by adding the following subsections:

> Section 405.1.3 **Drainage system.** In other than Group I soils a sump shall be provided to drain the porous layer and footings. The sump shall be at least 18 inches in diameter or 18 inches square, shall have a depth of at least 24 inches below the bottom of the basement floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. The sump piping shall conform to Sections 705 and 1113.1.4 of the International Plumbing Code. The sump shall discharge to the exterior of the structure at a sufficient distance to prevent recycling. The sump pump crock must have a removable cover designed for such purpose.

V. Section 405.2.3, Drainage system, is amended by deleting the section in its entirety and substituting the following:

> Section 405.2.3 **Drainage system.** In other than Group I soils a sump shall be provided to drain the porous layer and footings. The sump shall be at least 18 inches in diameter or 18 inches square, shall have a depth of at least 24 inches below the bottom

of the basement floor and shall be capable of positive gravity or mechanical drainage to remove any accumulated water. The sump piping shall conform to Sections 705 and 1113.1.4 of the International Plumbing Code. The sump shall discharge to the exterior of the structure at a sufficient distance to prevent recycling. The sump pump crock must have a removable cover designed for such purpose.

W. Section 406.2, Concrete and masonry foundation waterproofing, Number 5, is amended after the phrase "40 mil (1 mm) polymer-modified asphalt" by adding the phrase "or other method approved by the department supervisor."

X. Section 407.3, Structural requirements, is amended by deleting the first sentence and substituting the following: "The columns shall be restrained to prevent lateral displacement at the top end and the bottom end."

Y. Section 502, Wood Floor Framing, is amended by adding the following Table 502.2.2:

Table R502.2.2

Connection Detail*	Residential Deck Joist Span (feet)						
	6	8	10	12	14	16	18
½" Lag Screws	30"	23"	18"	15"	13"	11"	10"
½" Lag Bolts	36"**	36"**	34"	29"	24"	21"	19"
½" Lag Bolts with ½" Stacked Washers	36"**	36"**	29"	24"	21"	18"	16"

Z. Section 703.6.2, Plaster, is amended in the sixth line after the phrase "gypsum backing" by adding the following: "Decorative coatings applied to a concrete or masonry surface shall be in accordance with the manufacturer's installation instructions and are not required to comply with Table 702.1(1)."

AA. Chapter 11, Energy Efficiency, is amended by deleting the chapter in its entirety and substituting the following:

> Section 1101 General. Buildings shall be constructed in accordance with the 2006 International Energy Conservation Code (IECC), and any supplements to the International Codes, all published by the International Code Council, Inc., as adopted as the energy conservation code of the City of Delaware City.

BB. Section 1201 through and including Section 4204.5, together with all tables and figures contained therein, are amended by deleting the chapters in their entirety.

CC. Appendix E, Manufactured housing used as dwellings, is adopted with the following modifications: Subsection 102.5 and Sections 305, 505 are hereby deleted.