AGENDA REVIEW MEETING
CHESTERFIELD CITY COUNCIL
VIRTUAL MEETING VIA ZOOM
Monday, May 4, 2020
5:45PM

Due to the recommendations of the President, the Governor, and the CDC, we will be conducting the meeting virtually. We invite you to join the virtual meeting at https://zoom.us/j/96773601533 or call (312) 626-6799 and enter Webinar ID 967 7360 1533.

I. Appointments

A. Statutory Committee Member Re-appointment
- Board of Adjustment – Melissa Heberle

II. Planning and Public Works Committee – Chairperson Mary Ann Mastorakos, Ward II

A. Bill No. 3296 - P.Z. 18-2019 Clarkson Centre (2264 Clarkson Road) An ordinance amending the Unified Development Code of the City of Chesterfield by changing the boundaries of an existing "R-2" Residence District and "C-8" Planned Commercial District to an "R-4" Residence District for 0.99 acres located on the southern corner of the intersection of Clarkson Road and Clarkson Woods Drive. (P.Z. 18-2019 Clarkson Centre [2264 Clarkson Road] 20T610716). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

B. Bill No. 3297 - P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd.) An ordinance repealing City of Chesterfield Ordinance Number 2213 creating a Planned Environment Unit Procedure within an "R-3" Residence District for two (2) tracts of land totaling 29.4 acres located on Olive Boulevard (P.Z. 19-2019 Briarcliffe Villas {13987 & 14001 Olive Blvd} 16R340207 & 16R340151). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

C. Bill No. 3298 - P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd.) An ordinance amending the Unified Development Code of the City of Chesterfield by changing the boundaries of an "R-3" Residence District to a "PUD" Planned Unit Development for a 29.4 acre tract of land located on the north side of Olive Boulevard. (P.Z. 20-2019 Briarcliffe Villas {14001

Olive Blvd} 16R340151). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends denial.**

D. Bill No. 3299 - Dumpsters in Residential Areas An ordinance amending Section 07 "Building and Building Regulations" of the City of Chesterfield Municipal Code and creating a new Section 07-03 "Dumpsters in Residential Areas" that provides the procedures and requirements for placement, use, and duration of dumpsters in residential areas within the City of Chesterfield (PP 2020-06 City of Chesterfield [Dumpsters in Residential Areas]). **(First Reading) Planning & Public Works Committee recommends approval.**

E. Proposed Resolution - Resolution of Notice to Adopt St. Louis County Technical Codes Expressing the intention of the City Council to adopt the Revised Building, Residential, Existing Building, Mechanical, Electrical, Plumbing and Property Maintenance Codes of St. Louis County as the Plumbing and Electrical Codes for the City of Chesterfield; giving notice that said codes are on file with the Office of the City Clerk **(Voice Vote) Planning & Public Works Committee recommends approval.**

F. Bill No. 3300 - Adoption of St. Louis County Technical Codes An ordinance adopting and enacting the Building, Existing Building, Mechanical, Residential, Existing Building, Electrical, Plumbing, Property Maintenance, Swimming Pool and Spa, and Explosives Codes of the City of Chesterfield, Missouri. **(First Reading) Planning & Public Works Committee recommends approval.**

G. Chesterfield Presbyterian Church Sign Package A request for a Sign Package consisting of an Electronic Message Center for a 12.44-acre tract of land located on the north side of Clayton Road, west of Baxter Road (21S620485) **(Voice Vote) Planning Commission recommends approval. Planning & Public Works Committee recommends approval, as amended.**

H. Budget Adjustment Recommendation - August Hill Drive Streetlighting Recommendation for a budget adjustment of $50,000 from the General Fund-Fund Reserves to the Capital Projects Fund for streetlights on August Hill. If approved Staff will pursue project to install seven Clearworld solar streetlights on August Hill Drive; six between Willow Weald Path and Monarch Trace Court and one at the Baxter intersection. Streetlights will be installed in-house by Street Maintenance personnel when furlough ends. Currently (post-furlough) there are twelve Street Maintenance Workers, with an approved staffing of 25 (11 workers furloughed, 2 positions vacant). **(Roll Call Vote) Planning & Public Works Committee recommends approval.**

I. Next Meeting – Thursday, May 7, 2020 (5:30pm)

III. Finance and Administration Committee – Chairperson Michael Moore, Ward III

A. **Bill No. 3303 – Codification** An Ordinance adopting and enacting a new code for the City of Chesterfield, Missouri; providing for the repeal of certain Ordinances not included therein, except as herein expressly provided; providing a penalty for the violation thereof; providing for the manner of amending such code; and providing when such code and this Ordinance shall become effective. **(First Reading) Finance & Administration Committee recommends approval.**

IV. Parks, Recreation and Arts Committee – Chairperson Tom DeCampi, Ward IV

V. Public Health and Safety Committee – Chairperson Mary Monachella, Ward I

VI. Report from the City Administrator & Other Items Requiring Action by City Council – Mike Geisel

A. **Bid Recommendation - Old Chesterfield Road Culvert Replacement Project** Recommendation to authorize the City Administrator to enter into an Agreement with Gershenson Construction Company Incorporated in an amount not to exceed $550,000. The 2020 Capital Projects Budget includes $550,000 for the replacement of the culvert and an asphalt overlay on Old Chesterfield Road. **(Roll Call Vote) Department of Public Works recommends approval.**

B. **Bid Recommendation – Public Works Facility Roof Replacement (Equipment Storage Building and Material Storage Building)** Recommendation to authorize the City Administrator to enter into an Agreement with Glandt Roofing LLC in an amount not to exceed $77,000. The 2020 Capital Projects Budget includes $123,000 for the replacement of the roofs on the Equipment Storage Building and the Material Storage Building located at the Public Works Facility. **(Roll Call Vote) Department of Public Works recommends approval.**

C. **Bid Recommendation - 2020 Sidewalk Replacement Project B** Recommendation to authorize the City Administrator to enter into an Agreement with Amcon Municipal Concrete in an amount not to exceed $200,000. The funding for 2020 contractual sidewalk repair is $535,000. 2020 Sidewalk Replacement Project A was approved by City Council in March in an amount not to exceed $335,000, leaving $200,000 available for Project B**. (Roll Call Vote) Department of Public Works recommends approval.**

D. **Financial Services Agreement – Piper Sandler** The firm of Piper Sandler (formerly Piper Jaffray) serves as the City's financial adviser with regard to public debt. They provide counsel to the City as necessary, advise the City relative to timing and issuance, and finally they represent the City to the various rating agencies when Debt is anticipated. Staff recommends and requests that Council authorize the City Administrator to execute the Financial Services Agreement with Piper Sandler for the purpose of representing the financial aspects of debt issuance associated with the

potential parks land acquisition. **(Roll Call Vote) The Department of Finance recommends approval.**

E. Pandemic Recommendations
- **Aquatic Facility**
- **4th of July Event**
- **Financial Strategy**

VII. Other Legislation

A. Bill No. 3301 - Installation of Fire Hydrant, West County Acres, Lots 21 and 22 Approves the installation of one fire hydrant in West County Acres located within the City of Chesterfield. **(First & Second Readings) Department of Public Works recommends approval.**

B. Bill No. 3302 - Suspension of Application or Enforcement of Ordinances An ordinance granting the City Administrator and Director of Planning the authority to suspend the application or enforcement of ordinances as necessary to support the reopening of businesses across the City of Chesterfield and protect the public health, safety, and general welfare during this period. **(First & Second Readings) Department of Planning recommends approval.**

VIII. Unfinished Business – Mayor Bob Nation

IX. New Business – Mayor Bob Nation

X. Adjournment

NOTE: *City Council will consider and act upon the matters listed above and such other matters as may be presented at the meeting and determined to be appropriate for discussion at that time.*

Notice *is hereby given that the City Council may also hold a closed meeting for the purpose of dealing with matters relating to one or more of the following: legal actions, causes of action, litigation or privileged communications between the City's representatives and its attorneys (RSMo 610.021(1) 1994; lease, purchase or sale of real estate (RSMo 610.021(2) 1994; hiring, firing, disciplining or promoting employees with employee groups (RSMo 610.021(3)1994; Preparation, including any discussions or work product, on behalf of a public governmental body or its representatives for negotiations with employee groups (RSMo 610.021(9) 1994; and/or bidding specification (RSMo 610.021(11) 1994.*

PERSONS REQUIRING AN ACCOMMODATION TO ATTEND AND PARTICIPATE IN THE CITY COUNCIL MEETING SHOULD CONTACT CITY CLERK VICKIE MCGOWND AT (636) 537-6716, AT LEAST TWO (2) WORKDAYS PRIOR TO THE MEETING.

AGENDA
CITY COUNCIL MEETING
VIRTUAL MEETING VIA ZOOM
Monday, May 4, 2020
7:00PM

Due to the recommendations of the President, the Governor, and the CDC, we will be conducting the meeting virtually. We invite you to join the virtual meeting at https://zoom.us/j/97017581449 or call (312) 626-6799 and enter Webinar ID 970 1758 1449.

I. CALL TO ORDER – Mayor Bob Nation

II. PLEDGE OF ALLEGIANCE – Mayor Bob Nation

III. MOMENT OF SILENT PRAYER – Mayor Bob Nation

IV. ROLL CALL – City Clerk Vickie McGownd

V. APPROVAL OF MINUTES – Mayor Bob Nation

A. Special City Council Meeting Minutes – April 6, 2020

VI. INTRODUCTORY REMARKS – Mayor Bob Nation

A. Thursday, May 7, 2020 – Planning & Public Works (5:30pm)

B. Monday, May 11, 2020 – Planning Commission (7pm)

C. Monday, May 18, 2020 – City Council (7pm)

VII. COMMUNICATIONS AND PETITIONS – Mayor Bob Nation

A. National Public Works Week Proclamation

VIII. APPOINTMENTS – Mayor Bob Nation

A. Statutory Committee Member Re-appointment

- Board of Adjustment – Melissa Heberle

IX. COUNCIL COMMITTEE REPORTS

A. Planning and Public Works Committee – Chairperson Mary Ann Mastorakos, Ward II

1. **Bill No. 3296 - P.Z. 18-2019 Clarkson Centre (2264 Clarkson Road)** An ordinance amending the Unified Development Code of the City of Chesterfield by changing the boundaries of an existing "R-2" Residence District and "C-8" Planned Commercial District to an "R-4" Residence District for 0.99 acres located on the southern corner of the intersection of Clarkson Road and Clarkson Woods Drive. (P.Z. 18-2019 Clarkson Centre [2264 Clarkson Road] 20T610716). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

2. **Bill No. 3297 - P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd.)** An ordinance repealing City of Chesterfield Ordinance Number 2213 creating a Planned Environment Unit Procedure within an "R-3" Residence District for two (2) tracts of land totaling 29.4 acres located on Olive Boulevard (P.Z. 19-2019 Briarcliffe Villas {13987 & 14001 Olive Blvd} 16R340207 & 16R340151). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

3. **Bill No. 3298 - P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd.)** An ordinance amending the Unified Development Code of the City of Chesterfield by changing the boundaries of an "R-3" Residence District to a "PUD" Planned Unit Development for a 29.4 acre tract of land located on the north side of Olive Boulevard. (P.Z. 20-2019 Briarcliffe Villas {14001 Olive Blvd} 16R340151). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends denial.**

4. **Bill No. 3299 - Dumpsters in Residential Areas** An ordinance amending Section 07 "Building and Building Regulations" of the City of Chesterfield Municipal Code and creating a new Section 07-03 "Dumpsters in Residential Areas" that provides the procedures and requirements for placement, use, and duration of dumpsters in residential areas within the City of Chesterfield (PP 2020-06 City of Chesterfield [Dumpsters in Residential Areas]). **(First Reading) Planning & Public Works Committee recommends approval.**

5. **Proposed Resolution - Resolution of Notice to Adopt St. Louis County Technical Codes** Expressing the intention of the City Council to adopt the Revised Building, Residential, Existing Building, Mechanical, Electrical, Plumbing and Property Maintenance Codes of St. Louis County as the

Plumbing and Electrical Codes for the City of Chesterfield; giving notice that said codes are on file with the Office of the City Clerk (**Voice Vote) Planning & Public Works Committee recommends approval.**

6. **Bill No. 3300 - Adoption of St. Louis County Technical Codes** An ordinance adopting and enacting the Building, Existing Building, Mechanical, Residential, Existing Building, Electrical, Plumbing, Property Maintenance, Swimming Pool and Spa, and Explosives Codes of the City of Chesterfield, Missouri. **(First Reading) Planning & Public Works Committee recommends approval.**

7. **Chesterfield Presbyterian Church Sign Package** A request for a Sign Package consisting of an Electronic Message Center for a 12.44-acre tract of land located on the north side of Clayton Road, west of Baxter Road (21S620485) **(Voice Vote) Planning Commission recommends approval. Planning & Public Works Committee recommends approval, as amended.**

8. **Budget Adjustment Recommendation - August Hill Drive Streetlighting** Recommendation for a budget adjustment of $50,000 from the General Fund-Fund Reserves to the Capital Projects Fund for streetlights on August Hill. If approved Staff will pursue project to install seven Clearworld solar streetlights on August Hill Drive; six between Willow Weald Path and Monarch Trace Court and one at the Baxter intersection. Streetlights will be installed in-house by Street Maintenance personnel when furlough ends. Currently (post-furlough) there are twelve Street Maintenance Workers, with an approved staffing of 25 (11 workers furloughed, 2 positions vacant). **(Roll Call Vote) Planning & Public Works Committee recommends approval.**

9. **Next Meeting – Thursday, May 7, 2020 (5:30pm)**

B. Finance and Administration Committee – Chairperson Michael Moore, Ward III

1. **Bill No. 3303 – Codification** An Ordinance adopting and enacting a new code for the City of Chesterfield, Missouri; providing for the repeal of certain Ordinances not included therein, except as herein expressly provided; providing a penalty for the violation thereof; providing for the manner of amending such code; and providing when such code and this Ordinance shall become effective. **(First Reading) Finance & Administration Committee recommends approval.**

C. Parks, Recreation and Arts Committee – Chairperson Tom DeCampi, Ward IV

D. Public Health and Safety Committee – Chairperson Mary Monachella, Ward I

X. REPORT FROM THE CITY ADMINISTRATOR – Mike Geisel

A. Bid Recommendation - Old Chesterfield Road Culvert Replacement Project Recommendation to authorize the City Administrator to enter into an Agreement

with Gershenson Construction Company Incorporated in an amount not to exceed $550,000. The 2020 Capital Projects Budget includes $550,000 for the replacement of the culvert and an asphalt overlay on Old Chesterfield Road**. (Roll Call Vote) Department of Public Works recommends approval.**

B. Bid Recommendation – Public Works Facility Roof Replacement (Equipment Storage Building and Material Storage Building) Recommendation to authorize the City Administrator to enter into an Agreement with Glandt Roofing LLC in an amount not to exceed $77,000. The 2020 Capital Projects Budget includes $123,000 for the replacement of the roofs on the Equipment Storage Building and the Material Storage Building located at the Public Works Facility**. (Roll Call Vote) Department of Public Works recommends approval.**

C. Bid Recommendation - 2020 Sidewalk Replacement Project B Recommendation to authorize the City Administrator to enter into an Agreement with Amcon Municipal Concrete in an amount not to exceed $200,000. The funding for 2020 contractual sidewalk repair is $535,000. 2020 Sidewalk Replacement Project A was approved by City Council in March in an amount not to exceed $335,000, leaving $200,000 available for Project B. **(Roll Call Vote) Department of Public Works recommends approval.**

D. Financial Services Agreement – Piper Sandler The firm of Piper Sandler (formerly Piper Jaffray) serves as the City's financial adviser with regard to public debt. They provide counsel to the City as necessary, advise the City relative to timing and issuance, and finally they represent the City to the various rating agencies when Debt is anticipated. Staff recommends and requests that Council authorize the City Administrator to execute the Financial Services Agreement with Piper Sandler for the purpose of representing the financial aspects of debt issuance associated with the potential parks land acquisition. **(Roll Call Vote) The Department of Finance recommends approval.**

E. Pandemic Recommendations Council was provided updated financial projections on April 20th, prior to distribution of the Council packet to allow more time for you to review. There are three general decision areas contained within the memorandum, where Council was asked for direction and\or approval:

- **Aquatic Facility**
- **4th of July Event**
- **Financial Strategy**

XI. OTHER LEGISLATION

A. Bill No. 3301 - Installation of Fire Hydrant, West County Acres, Lots 21 and 22 Approves the installation of one fire hydrant in West County Acres located within the City of Chesterfield. **(First & Second Readings) Department of Public Works recommends approval.**

B. Bill No. 3302 - Suspension of Application or Enforcement of Ordinances An ordinance granting the City Administrator and Director of Planning the

authority to suspend the application or enforcement of ordinances as necessary to support the reopening of businesses across the City of Chesterfield and protect the public health, safety, and general welfare during this period. **(First & Second Readings) Department of Planning recommends approval.**

XII. UNFINISHED BUSINESS – Mayor Bob Nation

XIII. NEW BUSINESS – Mayor Bob Nation

XIV. ADJOURNMENT

Public comment will be available to users logging in online. Public comment will also be available to users calling in to the meeting; however, you must call (636) 537-6716 no later than 5:00 p.m. on the day of the meeting to inform the City Clerk of the telephone number you will be calling in from.

Members of the public may also submit comments for this meeting by calling (636) 537-6716 and leaving a message or by emailing vmcgownd@chesterfield.mo.us no later than 5:00 p.m. on the day of the meeting. Comments left over voicemail and emailed in will be read at the meeting.

RECORD OF PROCEEDING

SPECIAL MEETING OF THE CITY COUNCIL
OF THE CITY OF CHESTERFIELD
VIRTUAL MEETING VIA ZOOM

APRIL 6, 2020

The meeting was called to order at 7 p.m.

Mayor Bob Nation led everyone in the Pledge of Allegiance and followed with a moment of silent prayer.

A roll call was taken with the following results:

PRESENT	ABSENT
Mayor Bob Nation	
Councilmember Mary Monachella	
Councilmember Barbara McGuinness	
Councilmember Ben Keathley	
Councilmember Mary Ann Mastorakos	
Councilmember Dan Hurt	
Councilmember Michael Moore	
Councilmember Tom DeCampi	
Councilmember Michelle Ohley	

APPROVAL OF MINUTES

The minutes of the March 16, 2020 City Council meeting were submitted for approval. Councilmember McGuinness made a motion, seconded by Councilmember Ohley, to approve the March 16, 2020 City Council minutes. A voice vote was taken with a unanimous affirmative result and the motion was declared passed.

The minutes of the March 16, 2020 Executive Session were submitted for approval. Councilmember Ohley made a motion, seconded by Councilmember Moore, to approve the March 16, 2020 Executive Session minutes. A voice vote was taken with a unanimous affirmative result and the motion was declared passed.

The minutes of the March 16, 2020 Public Hearing were submitted for approval. Councilmember Hurt made a motion, seconded by Councilmember Mastorakos, to approve the March 16, 2020 Public Hearing minutes. A voice vote was taken with a unanimous affirmative result and the motion was declared passed.

INTRODUCTORY REMARKS

Mayor Nation announced that the next meeting of City Council is scheduled for Monday, May 4, at 7 p.m.

COMMUNICATIONS AND PETITIONS

Mayor Nation read a statement for the record:

> This evening is our first meeting since the stay at home order in St. Louis County and the state of Missouri. While we are having to change how we operate, we are still committed to a transparent process and encourage public comment to the elected officials of the City of Chesterfield. We will be accepting public comments based on using the "hand raise" feature for those of you in the audience. You may raise your hand at any time and I will recognize you when we get to the communications portion of the agenda.

City Clerk Vickie McGownd stated that she has not received any requests via email or voice mail to make public comments this evening.

APPOINTMENTS

There were no appointments.

COUNCIL COMMITTEE REPORTS AND ASSOCIATED LEGISLATION

Planning/Public Works Committee

Councilmember Mary Ann Mastorakos, Chairperson of the Planning/Public Works Committee, indicated that she had no report this evening.

Finance and Administration Committee

Councilmember Michael Moore, Chairperson of the Finance and Administration Committee, announced that this Committee recommended approval of the codification

process at its meeting on March 3, 2020; however, a public hearing is required before this legislation may be enacted. Since a public hearing may not be held in a virtual setting, this item will be addressed as soon as possible after the stay at home order has been lifted.

Bill No. 3294 Adopts and implements revisions to the City of Chesterfield employee salary administration manual **(Second Reading) Finance and Administration Committee Recommends approval**

Councilmember Moore made a motion, seconded by Councilmember DeCampi, for the second reading of Bill No. 3294. A voice vote was taken with a unanimous affirmative result and the motion was declared passed. Bill No. 3294 was read for the second time. A roll call vote was taken for the passage and approval of Bill No. 3294 with the following results: Ayes – DeCampi, Ohley, Moore, Keathley, Hurt, McGuinness, Monachella and Mastorakos. Nays – None. Whereupon Mayor Nation declared Bill No. 3294 approved, passed it and it became **ORDINANCE NO. 3101.**

Parks, Recreation & Arts Committee

Councilmember Tom DeCampi, Chairperson of the Parks, Recreation & Arts Committee, indicated that he had no report this evening.

Public Health & Safety Committee

Councilmember Mary Monachella, Chairperson of the Public Health & Safety Committee, indicated that she had no report this evening.

REPORT FROM THE CITY ADMINISTRATOR

City Administrator Mike Geisel presented proposed revisions to the 2020 City Council Meeting Schedule due to the Governor's Executive Order postponing the April Municipal election. Councilmember Ohley made a motion, seconded by Councilmember Moore, to approve proposed revisions to the 2020 City Council Meeting Schedule. A voice vote was taken with a unanimous affirmative result and the motion was declared passed.

Each Department Head gave a brief update on their department's response to the COVID-19 pandemic and actions taken relative to the "stay at home" order.

- Director of Planning Justin Wyse reported that the Planning Department is functioning to the greatest extent possible, utilizing a combination of remote and in-office staffing as the ability to perform work either off-site or on-site dictates.
- Director of Public Works/City Engineer Jim Eckrich reported that the Public Works Department has taken the following steps to reduce potential exposure within each of its divisions:
    - Facilities Division – Schedules have been adjusted to reduce exposure and cover weekend hours. Primary focus is keeping facilities clean and

disinfected, especially higher traveled areas in the Police Department and City Hall.
    - Capital Projects/Engineering Division – Engineers are working remotely, coming in as necessary; project managers and inspectors are working mostly from their vehicles.
    - Fleet and Streets Divisions (working out of the Public Works Facility) – Schedules have been adjusted to half shift on and half shift off/on-call, rotating by weeks, to reduce possible exposure. On-call employees are available to work any time as needed.
- Director of Parks, Recreation and Arts Thomas McCarthy reported that professional Parks staff is working remotely, and if they need to come in, they report to alternate locations. No part time staff is working at this time. Parks maintenance staff continues to work on three day shifts, reporting to different areas in an effort to reduce possible exposure. The community garden, Eberwein dog park, park restrooms and drinking fountains are currently closed.
- Captain Mike Thompson reported that the Police Department has worked with St. Louis County Emergency Operations Center, Department of Health, and other area departments, to create a Pandemic Operations Plan, specific to Chesterfield but consistent with other departments throughout St. Louis County. The main focus with patrols is to increase visibility in neighborhoods, business areas, and parks. In an effort to minimize exposure to officers, operational changes have been made and all in-service training and outside service training has been canceled or suspended.
- Director of Information Technologies Matt Haug reported that Information Technologies (IT) staff is working a split shift, and working on-site as needed. GIS staff is working remotely. Capacity has been added to the network, internet and firewall, and all remote function is performing at a satisfactory level. Support efforts in Town & Country and Frontenac are very similar to Chesterfield, and IT staff goes to those facilities as necessary.
- Director of Finance Jeannette Kelly reported that Finance and Human Resource department staff are working off-site and remote as well as on-site as needed in order to limit potential exposure within the group. They have adapted to remain operational in all areas including but not limited to payroll, accounts payable, business licenses, financial reporting and human resources.

Although revenue loss associated with the COVID-19 pandemic and the associated "stay at home" order is anticipated to be temporary, staff is committed to reduce expenses where possible. A temporary hiring freeze has been implemented, non-essential purchases have been delayed and deferred, business travel has been restricted, some capital projects have been delayed and deferred, and operational adjustments have been made to further decrease costs.

OTHER LEGISLATION

There were no action items for other legislation.

UNFINISHED BUSINESS

There was no unfinished business.

NEW BUSINESS

There was no new business.

ADJOURNMENT

There being no further business to discuss, Mayor Nation adjourned the meeting at 8:15 p.m.

_____
Mayor Bob Nation

ATTEST:

_____
Vickie McGownd, City Clerk

APPROVED BY CITY COUNCIL: _____

AGENDA REVIEW – MONDAY 05/04/2020 – 5:45 PM

An AGENDA REVIEW meeting has been scheduled to start at **5:45 PM, on Monday, May, 2020.**

Please note:
The meeting(s) will be conducted virtually. Unfortunately, there are three separate meetings, each of which will require a separate login and each will have distinct, different login invitations. This is necessary in order to conduct the Closed, Executive Session portion of Monday's scheduled series of meetings.

We will have to initially log in to our Work Session meeting at 5:45 p.m., at the end of the Work Session, we will vote to go into Executive, Closed Session.

After the vote to go into closed session, we will exit the work session and log into the Closed Session meeting, which will require a second login.

Finally, after we leave the Closed, Executive Session, you will necessarily be required to login a third time, to the regular, open City Council meeting.

Please let me know, ASAP, if you will be unable to attend this meeting.

UPCOMING MEETINGS/EVENTS

A. Thursday, May 7, 2020 – Planning & Public Works (5:30pm)

B. Monday, May 11, 2020 – Planning Commission (7pm)

C. Monday, May 18, 2020 – City Council (7pm)

Proclamation

City of Chesterfield, Missouri

Whereas: *The services provided by Public Works in our community are of vital importance to the health, safety, and well-being of the people of the City of Chesterfield; and*

WHEREAS, *The quality and effectiveness of our public infrastructure is dependent upon the dedicated efforts of Public Works professionals, engineers, managers, and employees of the City of Chesterfield as well as employees from State, County, utilities, and the private sector, who are responsible for and who plan, design, build, operate, and maintain Public Works systems and programs such as water, sewers, street and highways, fleet services, public buildings, and waste collection; and,*

WHEREAS, *The support of an understanding and informed citizenry is vital to the efficient operation of Public Works systems and programs; and,*

WHEREAS, *The efficiency of the qualified and dedicated personnel who staff Public Works departments is materially influenced by the people's attitude and understanding of the importance of the work they perform; and,*

WHEREAS, *This year's theme "The Rhythm of Public Works" is a tribute to all Public Works employees who create the foundation of a stronger, more livable, and sustainable community*

NOW, THEREFORE, I, BOB NATION, MAYOR OF THE CITY OF CHESTERFIELD, DO HEREBY PROCLAIM THE WEEK OF MAY 17 THROUGH MAY 23, 2017 AS

NATIONAL PUBLIC WORKS WEEK IN THE CITY OF CHESTERFIELD

And I upon all citizens and civic organizations to acquaint themselves with the challenges involved in providing Public Works services and to recognize the contributions which Public Works officials make every day to our health, safety, welfare, and quality of life.

Adopted this 4th Day of May, 2020.

SEAL

MISSOURI

Bob Nation

Bob Nation, Mayor

Vickie McGownd

Vickie McGownd, City Clerk

APPOINTMENTS

Statutory Committee Member Re-appointment

- **Board of Adjustment – Melissa Heberle**
- **Ward 1**
- **New term expires 6/1/2025**

Mayor Nation intends to nominate the following individual for re-appointment at the May 4, 2020 City Council meeting:

If you have any questions or require additional information, please contact me prior to Monday's meeting.

City of Chesterfield

DATE: **April 20, 2020**

TO: **Michael O. Geisel, City Administrator**

FROM: **Vickie McGownd, City Clerk**

SUBJECT: **Statutory Committee Member Re-Appointment**

Mayor Nation intends to nominate the following individual for re-appointment at the May 4, 2020 City Council meeting:

Board of Adjustment

Melissa Heberle
248 Brixham Drive
Chesterfield, MO 63017
314-275-8306
heberle26@gmail.com
Ward I
New term expires 6/1/25

Please add this re-appointment to the May 4 City Council agenda.

PLANNING AND PUBLIC WORKS COMMITTEE

Chair: Councilmember Mastorakos
Vice-Chair: Councilmember Hurt

The Planning and Public Works Committee has the following action items for the
May 4, 2020 City Council Meeting.

Bill No. 3296 - P.Z. 18-2019 Clarkson Centre (2264 Clarkson Road) An ordinance amending the Unified Development Code of the City of Chesterfield by changing the boundaries of an existing "R-2" Residence District and "C-8" Planned Commercial District to an "R-4" Residence District for 0.99 acres located on the southern corner of the intersection of Clarkson Road and Clarkson Woods Drive. (P.Z. 18-2019 Clarkson Centre [2264 Clarkson Road] 20T610716). **(First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

- ***Bill No. 3296 is on the agenda for Monday's meeting, but the petitioner has requested that it be held until 6/17/2020 to allow them adequate time to complete their due diligence.***

Bill No. 3297 - P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd.) An ordinance repealing City of Chesterfield Ordinance Number 2213 creating a Planned Environment Unit Procedure within an "R-3" Residence District for two (2) tracts of land totaling 29.4 acres located on Olive Boulevard (P.Z. 19-2019 Briarcliffe Villas {13987 & 14001 Olive Blvd} 16R340207 & 16R340151). **First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

Bill No. 3298 - P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd.) An ordinance amending the Unified Development Code of the City of Chesterfield by changing the boundaries of an "R-3" Residence District to a "PUD" Planned Unit Development for a 29.4 acre tract of land located on the north side of Olive Boulevard. (P.Z. 20-2019 Briarcliffe Villas {14001 Olive Blvd} 16R340151). **First Reading) Planning Commission recommends approval. Planning & Public Works Committee recommends denial.**

Bill No. 3299 - Dumpsters in Residential Areas An ordinance amending Section 07 "Building and Building Regulations" of the City of Chesterfield Municipal Code and creating a new Section 07-03 "Dumpsters in Residential Areas" that provides the procedures and requirements for placement, use, and duration of dumpsters in residential areas within the City of Chesterfield (PP 2020-06 City of Chesterfield [Dumpsters in Residential Areas]).
(First Reading) Planning & Public Works Committee recommends approval.

Proposed Resolution- Resolution of Notice to Adopt St. Louis County Technical Codes Expressing the intention of the City Council to adopt the Revised Building, Residential, Existing Building, Mechanical, Electrical, Plumbing and Property Maintenance Codes of St. Louis County as the Plumbing and Electrical Codes for the City of Chesterfield; giving notice that said codes are on file with the Office of the City Clerk **(Voice Vote) Planning & Public Works Committee recommends approval.**

Bill No. 3300 - Adoption of St. Louis County Technical Codes An ordinance adopting and enacting the Building, Existing Building, Mechanical, Residential, Existing Building, Electrical, Plumbing, Property Maintenance, Swimming Pool and Spa, and Explosives Codes of the City of Chesterfield, Missouri. **(First Reading) Planning & Public Works Committee recommends approval.**

Chesterfield Presbyterian Church Sign Package A request for a Sign Package consisting of an Electronic Message Center for a 12.44-acre tract of land located on the north side of Clayton Road, west of Baxter Road (21S620485) **(Voice Vote) Planning Commission recommends approval. Planning & Public Works Committee recommends approval.**

Budget Adjustment Recommendation - August Hill Drive Streetlighting Recommendation for a budget adjustment of $50,000 from the General Fund-Fund Reserves to the Capital Projects Fund for streetlights on August Hill. If approved Staff will pursue project to install seven Clearworld solar streetlights on August Hill Drive; six between Willow Weald Path and Monarch Trace Court and one at the Baxter intersection. Streetlights will be installed in-house by Street Maintenance personnel when furlough ends. Currently (post-furlough) there are twelve Street Maintenance Workers, with an approved staffing of 25 (11 workers furloughed, 2 positions vacant). **(Roll Call Vote) Planning & Public Works Committee recommends approval.**

NEXT MEETING

The next meeting of the Planning & Public Works Committee is scheduled for Thursday, May 7, 2020

MEMORANDUM

TO: Mike Geisel, City Administrator

FROM: Justin Wyse, Director of Planning JW
James Eckrich, Director of Public Works/City Engineer

SUBJECT: Planning & Public Works Committee **VIRTUAL** Meeting Summary Thursday, April 23, 2020

A meeting of the Planning and Public Works Committee of the Chesterfield City Council was held virtually via Zoom on Thursday, April 23, 2020.

In attendance were: **Chair Mary Ann Mastorakos** (Ward II), **Councilmember Mary Monachella** (Ward I), **Councilmember Dan Hurt** (Ward III), and **Councilmember Tom DeCampi** (Ward IV).

Also in attendance were: Mayor Bob Nation; Councilmember Ben Keathley (Ward II); Councilmember Michael Moore (Ward III); Councilmember Michelle Ohley (Ward IV); Planning Commission Chair Merrell Hansen; City Attorney Chris Graville; Jim Eckrich, Director of Public Works/City Engineer; Justin Wyse, Director of Planning; Annisa Kumerow, Planner; and Kathy Juergens, Recording Secretary.

The meeting was called to order at 5:30 p.m.

I. APPROVAL OF MEETING SUMMARY

A. Approval of the February 20, 2020 Committee Meeting Summary

Chair Mastorakos made a motion to approve the Meeting Summary of February 20, 2020. The motion was seconded by Councilmember Hurt and **passed by a voice vote of 3-0.** *(Councilmember Monachella was not logged in at the time of the vote.)*

II. UNFINISHED BUSINESS

A. P.Z. 18-2019 Clarkson Centre (2264 Clarkson Rd): A change in zoning from "C-8" Planned Commercial District and "R-2" Residence District to a "R-4" Residence District for a 0.99 acre tract of land at 2264 Clarkson Road (20T610716). (Ward 4)

STAFF PRESENTATION

Annisa Kumerow, Planner, presented the request for a zoning map amendment from a "C8" Planned Commercial District and an "R-2" Residence District to an "R-4" Residence District to allow for development of a place of worship on the site.

A Public Hearing was held on January 13, 2020 at which time the Planning Commission recommended approval by a vote of 7-0. At the January 23, 2020 Planning & Public Works Committee meeting, per the applicant's request, the Committee postponed taking action on the petition.

DRAFT

Ms. Kumerow noted the following uses were permitted in the "R-4" Residence District:

- Churches and other places of worship
- Daycare center
- Single family dwelling
- Group home
- Public utility facility
- Nursery school

PLANNING COMMISSION REPORT

Merrell Hansen, Planning Commission Chair, stated that the Planning Commission had concerns regarding the use, the number of people who would be attending the Chabad, parking, and how it would evolve as they continued to acquire new participants. The Petitioner did provide satisfactory answers to their questions and the Commission ultimately approved it.

DISCUSSION

Councilmember Hurt stated that the "R-4" zoning will eliminate any type of commercial use at this site, which has been a contentious issue with the surrounding neighborhood. When asked about the possibility of rezoning to another residential district, Justin Wyse, Director of Planning, replied that the only applicable district would be "R-4" as "R-2" and "R-3" districts have a minimum lot size of greater than three acres for churches and other houses of worship. This parcel is 0.99 acres and it does comply with the minimum requirement for a church or house of worship in the "R-4" zoning district. Councilmember Hurt stated that if the rezoning is approved, he wants to ensure that the applicant adheres to all of the "R-4" requirements. Mr. Wyse stated that the petitioner has been informed of their obligation to fully comply with the City's Code.

When asked what the City's definition of a church or house of worship is, Chris Graville, City Attorney, stated that churches and houses of worship are protected by federal law. He cited that RLUIPA is a Federal religious act that protects religious denominations and explained that while it is a broad definition, he and Mr. Wyse are in agreement that the Rabbi's intent clearly falls within that definition. Councilmember Ohley stated that this definition should help the residents to understand the City's position and the Rabbi's. She further stated that it is important to the residents that the proposed Chabad fits in with the character of the neighborhood and that it is not going to be overwhelming.

Mayor Nation expressed his concern that if the Chabad is not the intended use, there are at least two or more of the permitted uses in the "R-4" zoning district that might be high traffic generators. He asked if those uses could be removed as that might alleviate concern for future problems. Mr. Wyse replied that the City does not have the ability to eliminate any potential uses in any of the City's straight zoning districts. Mr. Graville stated that the applicant has said that if they do not follow through on the purchase of the property, they intend to withdraw the petition.

Councilmember Hurt made a motion to forward P.Z. 18-2019 Clarkson Centre (2264 Clarkson Rd to City Council with a recommendation to approve. The motion was seconded by Chair Mastorakos.

Discussion after the Motion

Councilmember DeCampi expressed his concern for future uses and stated that just 18 months ago the Council voted not to approve a rezoning on this property because they did not want to

DRAFT

set a precedent. Councilmember Ohley stated they did vote down a rezoning 18 months ago, however, that was for a planned commercial district and not a residential district. Councilmember DeCampi recalled that the discussion at that time centered around any rezoning and he believes the Council should remain consistent with that decision.

The above motion **passed by a voice vote of 3-1 with Councilmember DeCampi voting nay.**

Note: One Bill, as recommended by the Planning Commission, will be needed for the May 4, 2020 City Council Meeting. See Bill #

[Please see the attached report prepared by Justin Wyse, Director of Planning, for additional information on P.Z. 18-2019 Clarkson Centre (2264 Clarkson Road).]

III. NEW BUSINESS

A. POWER OF REVIEW: Chesterfield Presbyterian Church Sign Package: A request for a Sign Package consisting of an Electronic Message Center for a 12.44-acre tract of land located on the north side of Clayton Road, west of Baxter Road (21S620485). (Ward 3)

STAFF PRESENTATION

Annisa Kumerow, Planner, presented the request for a sign package that converts one existing V-shaped free-standing sign from a static sign display to an Electronic Message Center (EMC). In addition, the sign package also inventories the existing signage throughout the site.

The Planning Commission recommended approval of the request on April 13, 2020 by a vote of 9-0. Power of Review was called on April 15, 2020 in accordance with Section 31-02-20 of the Unified Development Code.

DISCUSSION

Councilmember Hurt stated that he and Councilmember Moore called Power of Review. He stated that during the Planning Commission meeting, there was no discussion on how often the sign messaging would change. EMCs have been discussed previously and Council previously approved the EMC at the Phillips 66 on Long Road and Edison with the requirement that the sign cannot change more than once a day. Councilmember Hurt stated that he is not attempting to regulate the sign content, but only the delivery of the message, i.e., the duration and frequency of changes. In addition, since this area is largely residential, he is concerned how this EMC will affect nearby residents.

Councilmember Moore reiterated that this is largely a residential area. He too is concerned about the nature and frequency of messaging in residential areas.

Councilmember Hurt made a motion to forward the Chesterfield Presbyterian Church Sign Package to City Council with a recommendation to approve with the stipulation that the message board can only change once a day.

Discussion after the Motion

Councilmember Monachella expressed concern that allowing the sign to change only once a day might be too restrictive for the church. They may want to advertise their Sunday worship times and then display an advertisement for an event that will be taking place that same

DRAFT

evening. Allowing the message to change twice a day would give them more flexibility. Chair Mastorakos was in agreement.

The above motion died due to lack of a second.

There was further discussion regarding what is currently allowed in the Code regulating EMCs. Justin Wyse, Director of Planning, stated that the Code establishes a minimum duration of ten seconds while being displayed; the image shall be static with no motion blinking, scrolling, color change or special effects. The code also regulates brightness, pixels and onsite and offsite advertising.

Councilmember Moore stated he wants to achieve consistency throughout the City in terms of restrictions or limitations on this type of signage. Since the gas station at Long and Edison is limited to one message a day; it would be inconsistent to allow the church to display a new message every ten seconds.

Councilmember Monachella made a motion to forward the Chesterfield Presbyterian Church Sign Package to City Council with a recommendation to approve with the stipulation that the message may only change twice within one 24-hour period. The motion was seconded by Councilmember Hurt and **passed by a voice vote of 4-0.**

[Please see the attached report prepared by Justin Wyse, Director of Planning, for additional information on Chesterfield Presbyterian Church Sign Package.]

B. P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd): A request to repeal City of Chesterfield Ordinance 2213 establishing a Planned Environmental Unit over two parcels of land zoned R-3 Residence District and totaling 29.4 acres (16R340207 & 16R340151). (Ward 1)

STAFF PRESENTATION

Annisa Kumerow, Planner, presented the request for a zoning map amendment from the "R-3" Residence District with a "PEU" Planned Environmental Unit to the "R-3" Residence District. The petitioner is requesting to repeal the "PEU."

A Public Hearing was held on February 10, 2020 and there were no issues raised by the Planning Commission at that time. On April 13, 2020, the Planning Commission recommended approval by a vote of 9-0.

Councilmember Monachella made a motion to forward P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd) to City Council with a recommendation to approve. The motion was seconded by Chair Mastorakos and **passed by a voice vote of 4-0.**

Note: One Bill, as recommended by the Planning Commission, will be needed for the May 4, 2020 City Council Meeting. See Bill #

[Please see the attached report prepared by Justin Wyse, Director of Planning, for additional information on P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd).]

DRAFT

C. P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd): A request for a change in zoning from R-3 Residence District to PUD Planned Unit Development for a maximum of 117 residential units (16R340151). (Ward 1)

STAFF PRESENTATION

Annisa Kumerow, Planner, presented the request for a zoning map amendment from the "R-3" Residence District to a PUD Planned Unit Development. The PUD request is for a maximum of 117 lots to include single-family detached, single-family attached and multi-family.

A Public Hearing for this request was held on February 10, 2020. At that time, the Planning Commission requested additional information regarding several items including utilities, traffic issues, tree preservation, lot types and development density and access road. The applicant addressed these items and at the April 13, 2020 Planning Commission meeting, the Planning Commission recommended approval of the change in zoning by a vote of 6-3 with the following amendments to the Attachment A:

- The addition of the minimum lot size of 6,000 square feet for single family attached and single family detached.
- Revision of the setback from the right-of-way line of any roadway from 20 feet to 15 feet.
- Include in the Attachment A that the site development plan review process include added design features.

DISCUSSION

Councilmember Monachella expressed concern that not enough information is available at this time regarding any amenities that may be proposed for the PUD. She is not against the PUD, but she does not have enough information.

Councilmember Hurt stated that at the Planning Commission meeting, it was suggested that approval of PUDs be done later in the review process and with a site development plan submitted and the Commission is looking at this question.

PLANNING COMMISSION REPORT

Planning Commission Chair Merrell Hansen stated that the Planning Commission had a lengthy discussion on this. The core of the problem was that the Articles in the Code that relate to both the application for and the definition of a PUD, list a variety of requirements for a PUD. However, there was not enough information for the Planning Commission to determine what this was really going to be. The Petitioner explained over and over that no one had bought the land, there was no developer or builder at this time and they could not offer the specifics that were needed for this important designation. The Planning Commission ultimately approved the request by a vote of 6-3.

Chair Mastorakos made a motion to forward P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd) to City Council with a recommendation to deny. The motion was seconded by Councilmember Monchella.

Discussion after the Motion

In response to Councilmember Hurt's question, Ms. Hansen stated that she was under the impression that without the ability to offer this as a PUD to a potential builder, the applicant would not be interested in the change of zoning.

To clarify voting, Justin Wyse, Director of Planning, stated that a "yes" vote would be to deny the request and a "no" vote would be in opposition to the motion.

The above motion to deny passed by a voice vote of 3-1 with Councilmember DeCampi voting no.

Note: One Bill, as recommended by the Planning Commission, will be needed for the May 4, 2020 City Council Meeting. See Bill #

[Please see the attached report prepared by Justin Wyse, Director of Planning, for additional information on P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd).]

D. August Hill Drive Streetlighting

STAFF PRESENTATION

Jim Eckrich, Director of Public Works/City Engineer stated that the report in the packet regarding streetlights on August Hill was completed at the direction of the Planning and Public Works Committee. Mr. Eckrich stated that he is prepared to provide the presentation remotely, but stated that it may be more effective if provided in person. Mr. Eckrich also stated that much has changed in the world since the direction from the Committee, and he was not certain whether the Committee would prefer that this presentation be deferred until a later date. This topic was discussed by the Committee, and there was consensus that the presentation should be provided at this time in order to give the Committee and Council the opportunity to move this project forward.

Mr. Eckrich stated that at the February 6, 2020 Planning and Public Works Committee meeting, the Committee directed Staff to obtain costs for streetlighting on August Hill Drive from Central Park to Baxter Road for the purpose of lighting the road for pedestrians accessing Central Park.

Two estimates were prepared. Both estimates include nine new street lights beginning approximately 230 feet west of the existing light at Monarch Trace and extending to the intersection at Baxter Road. In both cases, the intersection of August Hill and Stonebrook/Willow Weald Path had been skipped as there are two existing streetlights at that intersection.

Electric Streetlights through Ameren

Two options for streetlighting were considered. The first was conventional lighting that is powered by electricity. These lights would generally match the lighting at Monarch Trace. To install these lights, Ameren would require that the City install underground conduit so that Ameren can pull the cable necessary to power the lights. The estimated cost for conventional streetlighting is $89,527. There would also be an additional monthly cost of $22.59 per month, per light for street lighting. This would result in an annual charge to the City of $2,440.

Solar Streetlights

The second option was solar streetlighting. Mr. Eckrich stated that he has researched solar streetlighting and found a company called ClearWorld that has a patented system utilizing solar LED technology. The ClearWorld lights eliminate the raised solar panel/pad typically seen on conventional solar lights. Instead, the solar power system is incorporated into the light. The cost estimate for nine ClearWorld lights is $38,907, excluding shipping and installation. It is possible that these lights could be installed by Public Works maintenance personnel, with

training provided by ClearWorld, once the furlough is over and the Street Division is fully staffed. As these lights are solar, there would be no annual charge associated with the lights.

Mr. Eckrich stated that one factor the Committee should consider is that additional street lighting will change the character of August Hill Drive. Some residents will be in favor of street lights while others will oppose them, especially when it affects the lighting of their house. Mr. Eckrich provided photos showing the proximity of area homes to August Hill.

Mr. Eckrich stated that when reviewing the City's Code, he noted that the Code requires streetlighting within subdivisions to be provided by Ameren. Also, the City's Streetlighting Policy clearly addresses how to request a light at the intersection of a county road and city road; however, it does not address how subdivisions can request additional lights or the removal of specific street lights. Currently, such requests are presented to the Planning Commission. Since this may not be the best way to handle these requests, he recommends a thorough review of the City's Code and the City's Streetlighting Policy.

If the City wants to move forward with this project, Mr. Eckrich recommended the ClearWorld proposal, along with a budget transfer of $50,000 from the General Fund/Fund Reserves to the Capital Projects Fund in order to accommodate the purchase. This budget adjustment includes the estimated cost of lighting as well as funds for material and tools necessary for installation of the lights.

DISCUSSION

In response to Chair Mastorakos' question, Mr. Eckrich stated that installation is not included in the solar light proposal. However, the proposal includes a kit for installation and training at a cost of $1,500. The labor cost for the City's workforce is not included.

There was further discussion on the number of street lights that are needed for pedestrian safety and whether the proposed street lights would be considered residential lighting.

Councilmember Hurt agreed that lighting should be considered for the area. However, he stated that he was not certain the money should be spent at this time. If the City were to proceed with the project, Councilmember Hurt stated he believes lighting should only be added from Central Park to the Willow Weald Path intersection. He believes that any lighting west of Willow Weald Path/Stonebrook should be installed by the subdivisions.

Mr. Eckrich stated that another factor to consider is that the existing streetlights in the vicinity of Baxter Road and August Hill do not really illuminate that intersection, and that the City has received complaints about the lighting at that intersection in the past. If the Committee does not want to fund all lighting west of Willow Weald Path, it may still want to consider a streetlight at the intersection of Baxter Road and August Hill.

To summarize, Chair Mastorakos stated that the Committee needs to decide the following:

- The type and number of streetlights to install.
- When to pursue the project. Specifically should the project be installed now under the present financial constraints, or defer the decision to a future meeting.
- Whether the Committee should direct Staff to look into revising the City's Streetlight Policy and Code.

DRAFT

Councilmember DeCampi made a motion to forward the original ClearWorld solar lighting proposal to City Council with a recommendation to approve. The motion was seconded by Chair Mastorakos.

After some further discussion, **Councilmember Hurt made a motion to amend the above motion to reduce the number of street lights to seven on August Hill Drive from Central Park to the intersection of Willow Weald Path/Stonebrook Court plus the lighting at Baxter Road.** The motion was seconded by Councilmember Monachella and **passed by a voice vote of 4-0.**

Councilmember DeCampi made a motion to forward the ClearWorld solar lighting proposal, as amended, to City Council with a recommendation to approve. The motion was seconded by Councilmember Monachella and **passed by a voice vote of 4-0.**

In addition, the Committee reached a consensus to direct Staff to review the Streetlighting Code and Streetlighting Policy and to make recommendations for improvements.

[Please see the attached report prepared by Jim Eckrich, Director of Public Works/City Engineer, for additional information on August Hill Streetlighting.]

E. Dumpsters in Residential Areas

STAFF PRESENTATION

Justin Wyse, Director of Planning, stated that the City has received complaints regarding a single-family residential property under construction; specifically, the issue of the duration of a dumpster in conjunction with renovation of the home.

The City currently regulates dumpsters in residential areas through the building code which allows for a residential dumpster in conjunction with an active building permit. In other municipalities, dumpsters are either addressed through the building code or a separate permit is required. These permits typically allow for a dumpster to remain for 30 or 45 days with the ability for an additional 30-45 day extension.

If the Council wishes to regulate the duration of such dumpsters, Staff recommends that the following language be considered for inclusion in Section 07-03 of the City Code:

> *The placement of any container on or adjacent to residential property shall require approval of a Municipal Zoning Approval (MZA). Said permit shall be issued for a period not to exceed thirty (30) days. Extensions may be granted by the Director of Planning for an additional thirty (30) days. The container must be wholly on the permittee's property.*

DISCUSSION

Councilmember Monachella cited two incidents in Ward 1 where this has been an ongoing problem. In one instance, for over a year, debris is being brought in from other sites and is being dumped there. They have been approached by the City, but since the City does not have a ruling against it, nothing can really be done. They do have an open building permit but still there is nothing the City can do about it.

Councilmember Monachella made a motion to approve a revision to the Unified Development Code to include restrictions on the use of dumpsters in residential areas

DRAFT

and to forward to City Council with a recommendation to approve. The motion was seconded by Chair Mastorakos.

Discussion after the Motion
There was some discussion with regard to including portable storage units and trailers in the regulation. Mr. Wyse replied that there are already regulations on portable storage units, but trailers are considered licensed vehicles and that can create a problem. He also noted that the City needs to be mindful of instances where extensions are warranted so as not to create another issue whereby trash is being piled up. If someone has a use for a dumpster and it stems from work associated with that property, the City needs to be reasonable in allowing them to dispose of trash.

The above motion passed by a voice vote of 4-0.

[Please see the attached report prepared by Justin Wyse, Director of Planning, for additional information on Dumpsters in Residential Areas.]

F. Ordinance Adopting the Technical Codes as Amended and Adopted by St. Louis County

STAFF PRESENTATION
Justin Wyse, Director of Planning, stated that since 1988, the City has contracted with St. Louis County for enforcement of our building codes; i.e., building, mechanical, plumbing, and electrical. The County has recently adopted the updated 2015 codes and pursuant to our ongoing agreement, it is necessary for the City to adopt the updated editions of the St. Louis County Codes as our minimum standards for construction, alteration, use and occupancy of buildings and structures. If the Committee recommends approval, a resolution of notice to adopt will be forwarded to City Council and the required comment period would commence.

If the new codes are not adopted, the City will no longer be operating in accordance with the agreement for the services and the City would need to immediately start the process of creating a building department within the City.

Councilmember Monachella made a motion to recommend adoption of the 2015 Building Code, 2015 Residential Code, 2015 Existing Building Code, 2015 Mechanical Code, 2014 Electrical Code, 2015 Plumbing Code and the 2015 Property Maintenance Code and forward to City Council for approval. The motion was seconded by Chair Mastorakos and **passed by a voice vote of 4-0.**

Note: One Bill, as recommended by the Planning & Public Works Committee, will be needed for the May 4, 2020 City Council Meeting. See Bill #

[Please see the attached report prepared by Justin Wyse, Director of Planning, for additional information on Ordinance Adopting the Technical Codes as Amended and Adopted by St. Louis County.]

G. Revised 2020 Planning and Public Works Meeting Schedule

Chair Mastorakos made a motion to adopt the Revised 2020 Planning and Public Works Meeting Schedule. The motion was seconded by Councilmember Hurt and **passed by a voice vote of 4-0.**

IV. OTHER

V. ADJOURNMENT

The meeting adjourned at 7:17 p.m.

DRAFT

Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Bill No. 3296

Date: May 4, 2020

RE: **P.Z. 18-2019 Clarkson Centre (2264 Clarkson Road):** A request for a change in zoning from a "C8" Planned Commercial District and an "R-2" Residence District to an "R-4" Residence District for a 0.99 acre tract of land at 2264 Clarkson Road.

Summary

The Chabad of Chesterfield is requesting a zoning map amendment from the City of Chesterfield to change the zoning of a tract of land currently zoned "C8" Planned Commercial District and "R-2" Residence District to an "R-4" Residence District. The new "R-4" Residence District would allow for development of a place of worship on the site.

A Public Hearing was held on January 13, 2020, at which time the Planning Commission passed a motion recommending approval by a vote of 7-0. As this is a conventional zoning, there is no Attachment A.

A Planning & Public Works Committee meeting was held on January 23, 2020. At the request of the applicant, the Planning & Public Works Committee passed a motion to postpone P.Z. 18-2019 by a vote of 4-0.

On April 23, 2020 the Planning & Public Works Committee met and discussed the petition. A motion to recommend approval passed by a vote of 3-1.

Attachments: Boundary Survey

Figure 1: Subject Site Aerial

Chabad of Chesterfield, Inc.

137 Brighthurst Drive, Chesterfield, MO 63005

Under the auspices of Chabad of Greater St. Louis * Affiliated with Chabad on Campus and Lubavitch World Headquarters

ב"ה

Tuesday, April 28, 2020

Dear Annisa,

Let this letter serve to request that the petition for rezoning P.Z. 18-2019 be continued and reset to first go before the City of Chesterfield Council on 6/17/2020.

The purpose of this request is to allow adequate time for us to be able do our due diligence according to our contractual obligation.

Very truly yours,

Rabbi Avi Rubenfeld

BILL NO. 3296 **ORDINANCE NO._____**

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT CODE OF THE CITY OF CHESTERFIELD BY CHANGING THE BOUNDARIES OF AN EXISTING "R-2" RESIDENCE DISTRICT AND "C-8" PLANNED COMMERCIAL DISTRICT TO AN "R-4" RESIDENCE DISTRICT FOR 0.99 ACRES LOCATED ON THE SOUTHERN CORNER OF THE INTERSECTION OF CLARKSON ROAD AND CLARKSON WOODS DRIVE. (P.Z. 18-2019 Clarkson Centre [2264 Clarkson Road] 20T610716).

WHEREAS, the petitioner, Chabad of Chesterfield, has requested a change in zoning from an "R-2" Residence District and "C-8" Planned Commercial District to an "R-4" Residence District for 0.99 acres of land at 2264 Clarkson Road; and,

WHEREAS, a Public Hearing was held before the Planning Commission on January 13, 2020; and,

WHEREAS, the Planning Commission having considered said request, recommended approval of the change of zoning by a vote of 7-0; and

WHEREAS, the Planning and Public Works Committee, having considered said request on April 23, 2020 recommended approval of the change of zoning by a vote of 3-1; and,

WHEREAS, the City Council, having considered said request, voted to approve the change of zoning request.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. City of Chesterfield Unified Development Code and the Official Zoning District Map, which are part thereof, are hereby amended by establishing an "R-4" Residence District designation for 0.99 acres south of Clarkson Wood Drive and east of Clarkson Road and as described as follows:

> A TRACT OF LAND IN NORTH 1/2 OF SECTION 21, TOWNSHIP 45 NORTH, RANGE 4 EAST, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
> BEGINNING AT A POINT IN THE EAST AND WEST CENTERLINE OF SAID SECTION 21, TOWNSHIP 45 NORTH, RANGE 4 EAST; SAID POINT BEING DISTANT EASTWARDLY ALONG SAID EAST AND WEST CENTERLINE NORTH 89 DEGREES 48 MINUTES 58 SECONDS EAST 420.80 FEET FROM THE INTERSECTION OF SAID EAST AND WEST CENTERLINE WITH THE EAST LINE OF CLARKSON ROAD, 60 FEET WIDE; THENCE NORTH 27 DEGREES 44 MINUTES 50 SECONDS EAST 42.45 TO A REBAR BEING THE POINT OF BEGINNING; THENCE NORTH 50 DEGREES 01 MINUTES 12 SECONDS WEST A DISTANCE OF 368.01 FEET TO A CUT CROSS ON THE SOUTHERN RIGHT OF WAY LINE OF CLARKSON AVENUE (60 FEET WIDE); THENCE ALONG AN ARC TO THE RIGHT HAVING A RADIUS OF 1402.69 FEET AND A LENGTH OF 50.40 FEET WITH A CHORD BEARING NORTH 44 DEGREES 09

MINUTES 53 SECONDS EAST AND A CHORD DISTANCE OF 50.40 FEET TO A CUT CROSS; THENCE SOUTH 86 DEGREES 08 MINUTES 26 SECONDS EAST A DISTANCE OF 104.31 FEET TO A REBAR BEING ON THE SOUTHERN LINE OF CLARKSON WOODS DRIVE (60' W); THENCE SOUTH 59 DEGREES 53 MINUTES 27 SECONDS EAST A DISTANCE OF 137.00 FEET TO A POINT; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 475.00 FEET AND A LENGTH OF 151.44 FEET WITH A CHORD BEARING SOUTH 69 DEGREES 01 MINUTES 27 SECONDS EAST AND A CHORD LENGTH OF 150.79 FEET TO A CUT CROSS; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 20.00 FEET AND A LENGTH OF 29.60 FEET WITH A CHORD BEARING SOUTH 60 DEGREES 21 MINUTES 38 SECONDS WEST AND A CHORD LENGTH OF 26.95 FEET TO A REBAR; THENCE SOUTH 16 DEGREES 52 MINUTES 42 SECONDS WEST A DISTANCE OF 149.62 FEET TO AN IRON PIPE; THENCE SOUTH 27 DEGREES 44 MINUTES 50 SECONDS WEST A DISTANCE OF 12.44 FEET TO THE POINT OF BEGINNING AND CONTAINING 41,231.5 SQUARE FEET OR 0.9 ACRES MORE OR LESS.

Section 2. The preliminary approval, pursuant to the City of Chesterfield Unified Development Code is granted, subject to all of the ordinances, rules and regulations.

Section 3. The City Council, pursuant to the petition filed by Chabad of Chesterfield in P.Z. 18-2019, requesting the rezoning embodied in this ordinance, and pursuant to the recommendation of the City of Chesterfield Planning Commission that said petition be granted and after a public hearing, held by the Planning Commission on the 13th day of January 2020, does hereby adopt this ordinance pursuant to the power granted to the City of Chesterfield under Chapter 89 of the Revised Statutes of the State of Missouri authorizing the City Council to exercise legislative power pertaining to planning and zoning.

Section 4. This ordinance and the requirements thereof are exempt from the warning and summons for violations as set out in Section 8 of the City of Chesterfield Unified Development Code.

Section 5. This ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____ day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

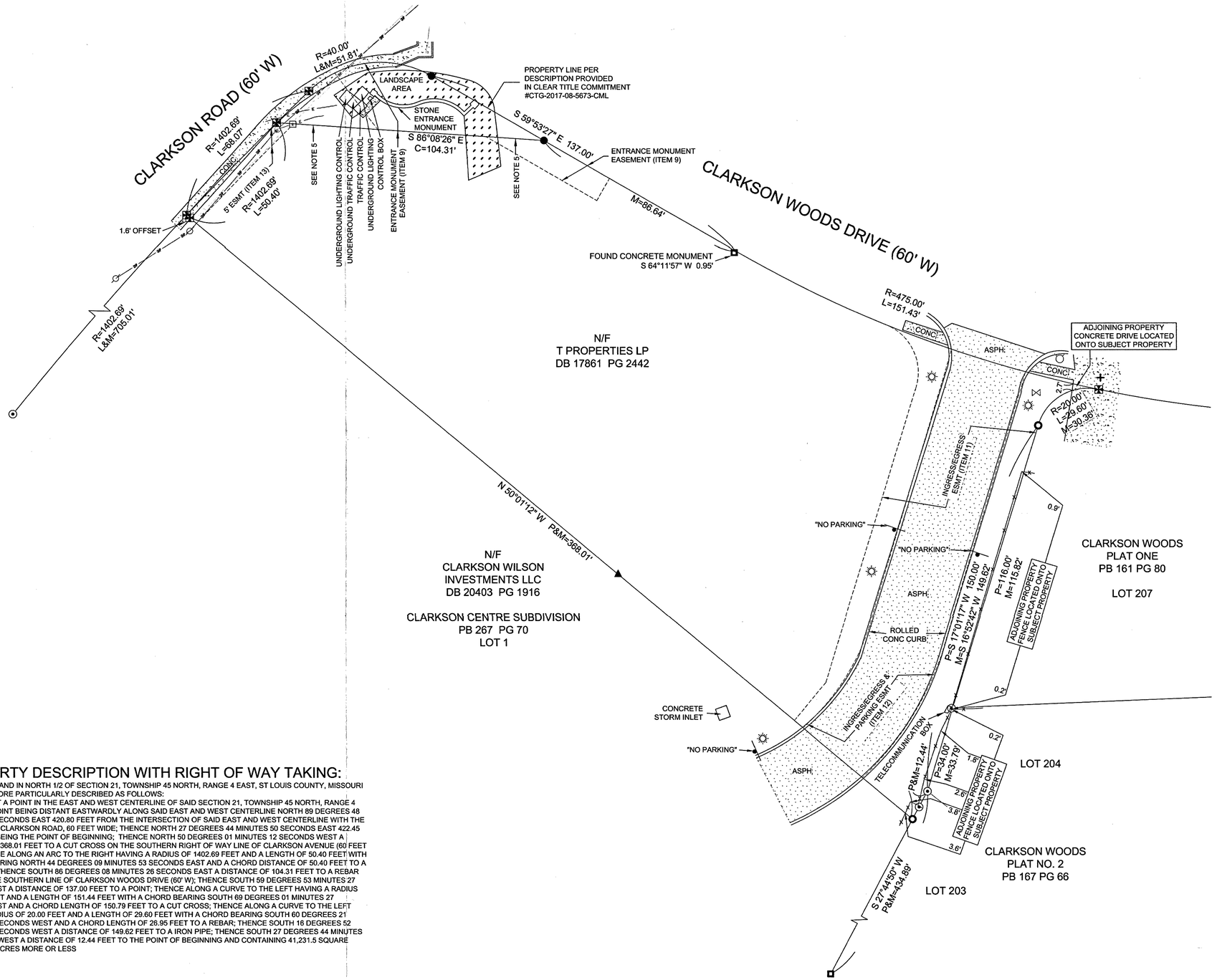
_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: 5/04/2020

TRACT OF LAND IN THE NORTH 1/2 OF SECTION 21, TOWNSHIP 45 NORTH, RANGE 4 EAST

ST LOUIS COUNTY, MISSOURI



- SET REBAR
- SET POINT ONLINE
- SET CROSS
- FOUND REBAR
- FOUND IRON PIPE
- FOUND CROSS 4.5'± OFFSET
- FOUND CONCRETE MONUMENT
- UTILITY POLE
- WATER VALVE
- LIGHT STANDARD
- GAS VALVE
- FIRE HYDRANT
- —E— ELECTRIC LINE
- —OHP— OVERHEAD UTILITY
- —G— UNDERGROUND GAS LINE
- —T— UNDERGROUND TELEPHONE

1" = 20'

SURVEYORS NOTES:

1. BASIS OF BEARING ADOPTED FROM THE RECORD PLAT OF CLARKSON CENTRE SUBDIVISION AS RECORDED IN PLAT BOOK 267 PAGE 70 OF THE ST LOUIS COUNTY RECORDS.

2. TITLE COMMITMENT PROVIDED BY CLEAR TITLE GROUP ON AUGUST 9, 2017 COMMITMENT NO CTG-2017-08-5673-CML. PROPERTY SUBJECT TO FOLLOWING EXCEPTIONS PER TITLE COMMITMENT SCHEDULE B-II AS FOLLOWS:

ITEM 1 - 8 - NOT OF A SURVEY NATURE

ITEM 9 - EASEMENT GRANTED TO RFS, INC., A MISSOURI CORPORATION, AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 6804 AT PAGE 2314, IN THE LAND RECORDS OF ST LOUIS COUTY, MISSOURI (EASEMENT FOR ENTRANCE MONUMENT, EXHIBIT IN DEED IS NOT LEGIBLE, APPROXIMATE LOCATION SHOWN ON DRAWING PER SCALED MEASUREMENTS)

ITEM 10 - AGREEMENT AND SUBORDINATION OF EASEMENT RIGHTS GRANTED TO ST LOUIS COUNTY, AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 6861 AT PAGE 2033, IN THE LAND RECORDS OF ST LOUIS COUNTY, MISSOURI. (DOES NOT APPEAR TO AFFECT)

ITEM 11 - EASEMENT GRANTED TO CLARKSON CENTRE ASSOCIATION, AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 7980 AT PAGE 44, IN THE LAND RECORDS OF ST LOUIS COUNTY, MISSOURI (AS SHOWN ON DRAWING)

ITEM 12 - EASEMENT GRANTED TO WILLIAM H ERKER, AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 7980 AT PAGE 46, IN THE LAND RECORDS OF ST. LOUIS COUNTY, MISSOURI (AS SHOWN ON DRAWING)

ITEM 13 - PERMANENT SIDEWALK EASEMENT GRANTED TO CITY OF CHESTERFIELD, AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 13779 AT PAGE 390, IN THE LAND RECORDS OF ST LOUIS COUNTY, MISSOURI. (AS SHOWN ON DRAWING)

3. UTILITY LINES AS SHOWN ON THIS DRAWING ARE THOSE LINES THAT WERE VISIBLY IDENTIFIED AT THE TIME OF FIELD WORK AND LOCATED PER MISSOURI ONE CALL TICKET #172400887. ADDITIONAL LINES AND UTILITIES MAY BE LOCATED ON THE SUBJECT PROPERTY.

4. OWNERSHIP OF THE IMPROVEMENTS AS SHOWN ON THIS DRAWING ARE THE OPINION OF THE SURVEYOR AT THE TIME THE SURVEY WAS EXECUTED AND HAS NOT BEEN VERIFIED TO ANY EXTENT, NOR IMPLIES ANY EXCLUSIVE OWNERSHIP.

5. APPROXIMATE PROPERTY LINE/RIGHT OF WAY CALCULATED BY CARDINAL SURVEYING FROM MODOT PLANS (JOB #6-U-340-692) AND EASEMENT EXHIBIT RECORDED IN BOOK 13779 PAGE 390. ACCURATE LOCATION NOT ABLE TO BE DETERMINED FROM THE INFORMATION PROVIDED AND OBTAINED.

PROPERTY DESCRIPTION WITH RIGHT OF WAY TAKING:

A TRACT OF LAND IN NORTH 1/2 OF SECTION 21, TOWNSHIP 45 NORTH, RANGE 4 EAST, ST LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT IN THE EAST AND WEST CENTERLINE OF SAID SECTION 21, TOWNSHIP 45 NORTH, RANGE 4 EAST; SAID POINT BEING DISTANT EASTWARDLY ALONG SAID EAST AND WEST CENTERLINE NORTH 89 DEGREES 48 MINUTES 58 SECONDS EAST 420.80 FEET FROM THE INTERSECTION OF SAID EAST AND WEST CENTERLINE WITH THE EAST LINE OF CLARKSON ROAD, 60 FEET WIDE; THENCE NORTH 27 DEGREES 44 MINUTES 50 SECONDS EAST 422.45 TO A REBAR BEING THE POINT OF BEGINNING; THENCE NORTH 50 DEGREES 01 MINUTES 12 SECONDS WEST A DISTANCE OF 368.01 FEET TO A CUT CROSS ON THE SOUTHERN RIGHT OF WAY LINE OF CLARKSON AVENUE (60 FEET WIDE); THENCE ALONG AN ARC TO THE RIGHT HAVING A RADIUS OF 1402.69 FEET AND A LENGTH OF 50.40 FEET WITH A CHORD BEARING NORTH 44 DEGREES 09 MINUTES 53 SECONDS EAST AND A CHORD DISTANCE OF 50.40 FEET TO A CUT CROSS; THENCE SOUTH 86 DEGREES 08 MINUTES 26 SECONDS EAST A DISTANCE OF 104.31 FEET TO A REBAR BEING ON THE SOUTHERN LINE OF CLARKSON WOODS DRIVE (60' W); THENCE SOUTH 59 DEGREES 53 MINUTES 27 SECONDS EAST A DISTANCE OF 137.00 FEET TO A POINT; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 475.00 FEET AND A LENGTH OF 151.44 FEET WITH A CHORD BEARING SOUTH 69 DEGREES 01 MINUTES 27 SECONDS EAST AND A CHORD LENGTH OF 150.79 FEET TO A CUT CROSS; THENCE ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 20.00 FEET AND A LENGTH OF 29.60 FEET WITH A CHORD BEARING SOUTH 60 DEGREES 21 MINUTES 38 SECONDS WEST AND A CHORD LENGTH OF 26.95 FEET TO A REBAR; THENCE SOUTH 16 DEGREES 52 MINUTES 42 SECONDS WEST A DISTANCE OF 149.62 FEET TO A IRON PIPE; THENCE SOUTH 27 DEGREES 44 MINUTES 50 SECONDS WEST A DISTANCE OF 12.44 FEET TO THE POINT OF BEGINNING AND CONTAINING 41,231.5 SQUARE FEET OR 0.9 ACRES MORE OR LESS

SURVEYORS CERTIFICATE

To: CLEAR TITLE GROUP, BTR PC.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 4, 7, 8, 9, 11 AND 13 OF TABLE A THEREOF. FIELDWORK WAS PERFORMED ON AUGUST 30, 2017. THIS SURVEY WAS EXECUTED IN COMPLIANCE WITH THE CURRENT STANDARDS FOR PROPERTY BOUNDARY SURVEYS (20 CSR 2030-16.040) OF THE MISSOURI DEPARTMENT OF NATURAL RESOURCES. THIS SURVEY MEETS THE ACCURACY STANDARDS SET FORTH FOR AN URBAN PROPERTY.

WILLIAM JACOB CLARK PLS 2002014101
STATE OF MISSOURI

CARDINAL SURVEYING AND MAPPING INCORPORATED
CORPORATE #2005000229

RECEIVED
DEC 17 2019
City of Chesterfield
Department of Public Services

STATE OF MISSOURI
WILLIAM JACOB CLARK
NUMBER PLS 2002014101
9/8/17
PROFESSIONAL LAND SURVEYOR

PO BOX 278 COTTLEVILLE, MO 63338
636.922.1001 OFFICE 636.922.1002 FAX
DRAWN BY: JLK CHECKED BY: WJC
JOB #1709053 FB 444:32

Cardinal Surveying & Mapping

Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Date: May 4, 2020 Bill No. 3297

RE: **P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd)**: A request to repeal City of Chesterfield Ordinance 2213 establishing a Planned Environmental Unit over two parcels of land zoned R-3 Residence District and totaling 29.4 acres (16R340207 & 16R340151).(Ward 1)

Summary
Stock & Associates Consulting Engineers, Inc. has submitted a request for a zoning map amendment from the "R-3" Residence District with a "PEU" Planned Environmental Unit to the "R-3" Residence District. The petitioner is requesting to repeal the "PEU".

A Public Hearing was held on February 10, 2020, and there were no issues raised by the Planning Commission pertaining to this petition.

On April 13, 2020 this petition was next brought before the Planning Commission. Planning Commission made a motion to approve P.Z. 19-2019 Briarcliffe Villas (13987 & 14001 Olive Blvd). The motion passed by a vote of 9-0.

On April 23, 2020, the Planning & Public Works Committee met and discussed this petition. A motion to recommend approval was passed by a vote of 4-0.

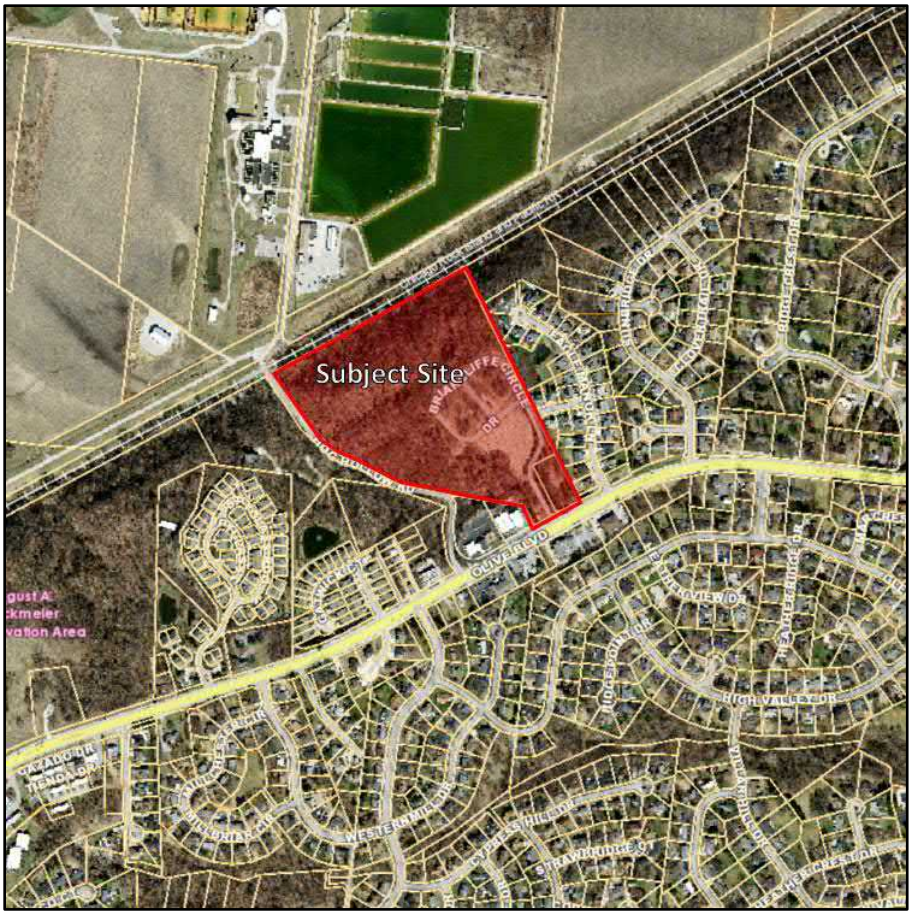


Figure 1: Subject Site Aerial

BILL NO. 3297 **ORDINANCE NO._____**

AN ORDINANCE REPEALING CITY OF CHESTERFIELD ORDINANCE NUMBER 2213 CREATING A PLANNED ENVIRONMENT UNIT PROCEDURE WITHIN AN "R-3" RESIDENCE DISTRICT FOR TWO (2) TRACTS OF LAND TOTALING 29.4 ACRES LOCATED ON OLIVE BOULEVARD (P.Z. 19-2019 BRIARCLIFFE VILLAS {13987 & 14001 Olive Blvd} 16R340207 & 16R340151).

WHEREAS, the petitioner, Stock & Associates Consulting Engineers, Inc., has requested a change in zoning from "R-3" Residence District with a "PEU" Planned Environment Unit to "R-3" Residence District for a 29.4 acre tract of land located on the north side of Olive Boulevard; and,

WHEREAS, a Public Hearing was held before the Planning Commission on February 10, 2020; and,

WHEREAS, the Planning Commission, having considered said request, recommended approval of the change of zoning; and,

WHEREAS, the Planning and Public Works Committee, having considered said request, recommended approval of the change of zoning; and,

WHEREAS, the City Council, having considered said request voted to approve the change of zoning request.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. City of Chesterfield Unified Development Code and the Official Zoning District Map, which are part thereof, are hereby amended by establishing an "R-3" Residence District for a 29.4 acre tract of land located on the north side of Olive Boulevard, described as follows:

TRACTS OF LAND BEING PART OF LOT 11 OF D.J. TALBOTS ESTATE SUBDIVISION, IN U.S. SURVEYS 2030 AND 206, TOWNSHIP 46 NORTH, RANGE 4 EAST, IN ST. LOUIS COUNTY, MISSOURI, AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTER LINE OF HOG HOLLOW ROAD, 40 FEET WIDE, AT ITS INTERSECTION WITH THE SOUTH LINE OF U.S. SURVEY 2030; THENCE ALONG THE CENTER LINE OF SAID ROAD, NORTH 45 DEGREES 03 MINUTES 31 SECONDS WEST 86.69 FEET, NORTH 74 DEGREES 44 MINUTES 26 SECONDS WEST 142.55 FEET; THENCE NORTH 47 DEGREES 14 MINUTES 26 SECONDS WEST 211.20 FEET AND NORTH 28 DEGREES 14 MINUTES 26 SECONDS WEST 353.81 FEET TO A POINT; THENCE LEAVING SAID ROAD LINE AND RUNNING NORTH 59 DEGREES 31 MINUTES 48 SECONDS EAST 1,249.07 FEET TO A POINT; THENCE SOUTH 25 DEGREES 49 MINUTES 00 SECONDS EAST 1,460.05 FEET TO A POINT IN THE NORTH LINE OF OLIVE STREET ROAD, 60 FEET WIDE; THENCE ALONG THE NORTH LINE OF OLIVE STREET ROAD SOUTH 61 DEGREES 58 MINUTES 49 SECONDS WEST 294.51 FEET TO A POINT; THENCE NORTH 28 DEGREES 33 MINUTES 00 SECONDS WEST 175.96 FEET TO A POINT IN THE SOUTH LINE OF U.S. SURVEY 2030; THENCE ALONG SAID SURVEY LINE, NORTH 82 DEGREES 32 MINUTES 26 SECONDS WEST 854.19 FEET TO THE POINT OF BEGINNING AND CONTAINING 1,282,091 SQUARE FEET OR 29.433 ACRES MORE OR LESS, ACCORDING TO CALCULATIONS BY STOCK & ASSOCIATES CONSULTING ENGINEERS, INC. ON AUGUST 11, 2004.

Section 2. The preliminary approval, pursuant to the City of Chesterfield Unified Development Code is granted, subject to all of the ordinances, rules and regulations and the specific conditions as recommended by the Planning Commission in its recommendation to the City Council.

Section 3. The City Council, pursuant to the petition filed by Stock & Associates Consulting Engineers, Inc., in P.Z. 19-2019, requesting the amendment embodied in this ordinance, and pursuant to the recommendation of the City of Chesterfield Planning Commission that said petition be granted and after a public hearing, held by the Planning Commission on the 10th day of February 2020, does hereby adopt this ordinance pursuant to the power granted to the City of Chesterfield under Chapter 89 of the Revised Statutes of the State of Missouri authorizing the City Council to exercise legislative power pertaining to planning and zoning.

Section 4. This ordinance and the requirements thereof are exempt from the warning and summons for violations as set out in Section 8 of the City of Chesterfield Unified Development Code.

Section 5. This ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____ day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: 05/04/2020

Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Date: May 4, 2020 Bill No. 3298

RE: **P.Z. 20-2019 Briarcliffe Villas (14001 Olive Blvd)**: A request for a change in zoning from R-3 Residence District to PUD Planned Unit Development for a maximum of 117 residential units (16R340151).

Summary

Stock & Associates Consulting Engineers, Inc. has submitted a request for a zoning map amendment from the "R-3" Residence District to the "PUD" Planned Unit Development.

The "PUD" request is for a maximum of 117 lots. Typical lot exhibits have been provided in the Preliminary Plan for each of the requested uses, including single-family detached, single-family attached, and multi-family. The Preliminary Plan specifies that multi-family housing will be located a minimum of 200' from the east property line.

A Public Hearing for this request was held on February 10th, 2020. At the Public Hearing, the Planning Commission requested additional information regarding several items, which are discussed in the attached Planning Commission Staff report. At the April 13th, 2020 Planning Commission meeting, the Planning Commission recommended approval of this change of zoning by a vote of 6-3, with the following amendments to the Attachment A:

- The addition of the minimum Lot Size of 6,000 square feet
- Revise Structure Setback from the right-of-way line of any roadway from: 20 feet to 15 feet
- Include an addendum that the site plan review process includes added design features

There was significant discussion at the April 13th meeting regarding the proposal, specifically related to Design Features as part of a future Site Development Plan submission instead of in conjunction with the establishment of the PUD.

On April 23, 2020 the Planning & Public Works Committee met and discussed the petition. A motion to recommend denial was passed by a vote of 3-1.

Attachments: Updated Attachment A
Preliminary Development Plan
Concept Landscape Plan

Figure 1: Subject Site Aerial

ATTACHMENT A

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified herein.

I. SPECIFIC CRITERIA

A. PERMITTED USES

1. The uses allowed in this "PUD" District shall be:
   a. Dwelling, single-family attached
   b. Dwelling, single-family detached
   c. Dwelling, multiple-family
2. The above uses in the "PUD" District shall be restricted as follows:
   a. There shall be no more than one hundred seventeen (117) units.
   b. There shall be no more than forty (40) multiple-family dwelling units.
   c. The minimum lot size for dwelling, single-family attached and dwelling, single-family detached shall be 6,000 square feet.

B. FLOOR AREA, HEIGHT, BUILDING AND PARKING STRUCTURE REQUIREMENTS

1. Height

   No building elevation of any dwelling, structure or building accessory to a dwelling structure shall exceed three (3) stories or forty-five (45) feet in height, whichever is less.

2. Building Requirements
   A minimum of 30 percent (30%) openspace is required for this development.

C. SETBACKS

1. Structure Setbacks

   No building or structure, other than: a freestanding project identification sign, light standards, or flag poles will be located within the following setbacks:

   a. Fifteen (15) feet from the right-of-way line of any roadway.
   b. Six (6) feet of any side property line.

DRAFT

c. Fifteen (15) feet from the rear property line.

2. Multiple-Family Setbacks

   No multiple-family dwelling will be located within two-hundred (200) feet from the eastern property line.

D. PARKING AND LOADING REQUIREMENTS

1. Parking and loading spaces for this development will be as required in the City of Chesterfield Code.

2. No construction related parking shall be permitted within Olive Boulevard right-of-way or on any other existing roadways. All construction related parking shall be confined to the development.

E. LANDSCAPE AND TREE REQUIREMENTS

1. The development shall adhere to the Landscape and Tree Preservation Requirements of the City of Chesterfield Code.

2. Buffering:

   a. A minimum of a thirty (30) foot wide buffer strip shall be provided between this development and Eagle Ridge Subdivision.

   b. A minimum of a thirty (30) foot wide buffer strip shall be provided between this development and the commercial development to the southwest.

   c. A minimum of a thirty (30) foot wide buffer strip shall be provided along Hog Hollow Road and Olive Boulevard

F. SIGN REQUIREMENTS

1. Signs shall be permitted in accordance with the regulations of the City of Chesterfield Code or a Sign Package may be submitted for the planned district. Sign Packages shall adhere to the City Code and are reviewed and approved by the City of Chesterfield Planning Commission.

2. Ornamental Entrance Monument construction, if proposed, shall be reviewed by the City of Chesterfield, and/or the St. Louis County Department of Highways and Traffic (or MoDOT), for sight distance considerations prior to installation or construction.

G. LIGHT REQUIREMENTS

Provide a lighting plan and cut sheet in accordance with the City of Chesterfield Code.

H. ARCHITECTURAL

1. The development shall adhere to the Architectural Review Standards of the City of Chesterfield Code.
2. Trash enclosures: All exterior trash areas will be enclosed with a minimum six (6) foot high sight-proof enclosure complemented by adequate landscaping. The location, material, and elevation of any trash enclosures will be as approved by the City of Chesterfield on the Site Development Plan.

I. ACCESS/ACCESS MANAGEMENT

1. There shall be no access to Hog Hollow from this development. Accordingly, there are no road improvements to Hog Hollow associated with this development.

2. Ingress and egress must conform to MoDOT's Access Management Guidelines and must be reviewed and approved by MoDOT. Any changes to the entrance geometrics and drainage design shall be in accordance with Missouri Department of Transportation (MoDOT) standards and shall be reviewed and approved by MoDOT.

3. Access to Olive Boulevard (State Highway 340) shall be limited to one (1) street approach. The street approach shall be located as directed by the City of Chesterfield and MoDOT.

4. No direct access to Olive Boulevard (State Highway 340) or to Hog Hollow Road will be permitted from any lot within the subdivision.

5. If adequate sight distance cannot be provided at the access location(s), acquisition of right-of-way, reconstruction of pavement and other off-site improvements may be required to provide the required sight distance as required by the City of Chesterfield and the agency in control of the right of way off which the access is proposed.

6. Provide direct right-of-way access to the proposed internal street for 13987 Olive Boulevard.

J. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. Any request to install a gate at the entrance to this development must be approved by the City of Chesterfield. No gate installation will be permitted on public right-of-way.

2. If a gate is installed on a street in a development, the streets within the development or that portion of the development that is gated shall be private and shall remain private forever.

3. All roadway and related improvements in each plat or phase of the development shall be constructed prior to issuance of building permits exceeding 60% for that plat or phase. Delays due to utility

relocation and/or adjustment, for which the developer is responsible monetarily, shall not constitute a cause to issue permits in excess of 60%.

4. Provide a 5-foot wide sidewalk, conforming to ADA standards, along the Olive Boulevard frontage of the site as approved and permitted by MoDOT. The grades for the sidewalk shall accommodate the extension of the sidewalk eastward to Eagle Manor Lane. The sidewalk may be located within MoDOT State right-of-way, if permitted by MoDOT, or within a 6-foot wide sidewalk, maintenance and utility easement.

5. Provide sidewalks along both sides of internal streets as directed by the City of Chesterfield.

6. Provide a pedestrian connection along the proposed Fire Access Road from Eagle Manor Court to the proposed internal street.

7. Provide a minimum of fifty (50) feet of right-of-way dedication along Hog Hollow Road. The right-of-way shall be centered on the centerline of the existing roadway, with a minimum of 25 feet on either side.

8. Additional right-of-way and road improvements shall be provided, as required by the Missouri Department of Transportation and the City of Chesterfield.

K. TRAFFIC STUDY

Provide a traffic study as directed by the City of Chesterfield and/or the Missouri Department of Transportation. The scope of the study shall include internal and external circulation and may be limited to site specific impacts, such as the need for additional lanes, entrance configuration, geometrics, sight distance, traffic signal modifications or other improvements required, as long as the density of the proposed development falls within the parameters of the City's traffic model. Should the density be other than the density assumed in the model, regional issues shall be addressed as directed by the City of Chesterfield.

L. POWER OF REVIEW

The development shall adhere to the Power of Review Requirements of the City of Chesterfield Code.

M. STORMWATER

1. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point or an adequate piped system. The adequacy and condition of the existing downstream systems shall be verified and upgraded if necessary.

2. Detention/retention and channel protection measures are to be provided in each watershed as required by the City of Chesterfield and MSD. The storm water management facilities shall be operational

prior to paving of any driveways or parking areas in non-residential developments or issuance of building permits exceeding sixty percent (60%) of the approved dwelling units in each plat, watershed or phase of residential developments. The location and types of storm water management facilities shall be identified on all Site Development Plans.

3. Emergency overflow drainage ways to accommodate runoff from the 100-year storm event shall be provided for all storm sewers, as directed by MSD and the City of Chesterfield.

4. Offsite storm water shall be picked up and piped to an adequate natural discharge point. Such bypass systems must be adequately designed.

5. The lowest opening of all structures shall be set at least two (2) feet higher than the one hundred (100) year high water elevation in detention/retention facilities. All structures shall be set at least thirty (30) feet horizontally from the limits of the one hundred (100) year high water.

6. Locations of site features such as lakes and detention ponds must be approved by the City of Chesterfield and MSD.

7. Grading and stormwater systems shall be designed so as to collect all surface water from all disturbed areas along the northwestern portion of the development, parallel and adjacent to the top of the slope draining to the northwest, and convey that surface water to an adequate discharge point where extraordinary measures will be employed to dissipate energy, attenuate flows, and protect slopes from degradation. No stormwater shall be allowed to flow from an area which has been graded, to the undisturbed slope.

8. Grading and stormwater systems shall be designed so as to collect surface water from the rear of the lots on the northern side of the development and the western side of the development (those units tributary to bluffs along the Missouri River valley and the steep slopes above Hog Hollow Road) and convey that surface water to an adequate discharge point where extraordinary measures will be employed to dissipate energy, attenuate flows, and protect the slopes from degradation. No stormwater from the aforementioned lots shall be allowed to flow to the undisturbed or reconstructed slopes, as directed by the City of Chesterfield.

9. The proposed storm sewer adjacent to Hog Hollow Road shall be designed to ensure there are no negative impacts to the existing roadside drainage swale.

N. SANITARY SEWER

Sanitary sewers shall be as approved by the City of Chesterfield and the Metropolitan St. Louis Sewer District.

O. ROADWAY IMPROVEMENTS AND CURB CUTS

Obtain approval from the City of Chesterfield Department of Public Works and the Missouri Department of Transportation (MoDOT) for the locations of proposed curb cuts, areas of new dedication, and roadway improvements.

P. GEOTECHNICAL REPORT

Prior to Site Development Plan approval, the developer shall provide a geotechnical report, prepared by a registered professional engineer licensed to practice in the State of Missouri, as directed by the City of Chesterfield. The report shall verify the suitability of grading and proposed improvements with soil and geologic conditions and address the existence of any potential sinkhole, ponds, dams, septic fields, etc., and recommendations for treatment. A statement of compliance, signed and sealed by the geotechnical engineer preparing the report, shall be included on all Site Development Plans and Improvement Plans.

Q. MISCELLANEOUS

1. All utilities will be installed underground. The development of this parcel will coordinate the installation of all utilities in conjunction with the construction of any roadway on site.

2. An opportunity for recycling will be provided. All provisions of Chapter 25, Article VII, and Section 25-122 thru Section 25-126 of the City Code shall be required where applicable.

3. Road improvements and right-of-way dedication shall be completed prior to the issuance of an occupancy permit. If development phasing is anticipated, the developer shall complete road improvements, right-of-way dedication, and access requirements for each phase of development as directed by the City of Chesterfield and MoDOT. Delays due to utility relocation and adjustments will not constitute a cause to allow occupancy prior to completion of road improvements.

4. Prior to Site Development Plan approval, the developer shall provide a copy of the recorded deed restriction proposed in the applicant's letter dated March 4th, 2020.

5. Prior to record plat approval, the developer shall cause, at his expense and prior to the recording of any plat, the reestablishment, restoration, or appropriate witnessing of all Corners of the United States Public Land Survey located within, or which define or lie upon, the out boundaries of the subject tract in accordance with the Missouri Minimum Standards relating to the preservation and maintenance of the United States Public Land Survey Corners, as necessary.

6. Retaining walls along public right-of-way shall be private and remain private forever and shall be located outside of right-of-way such that they are not necessary to support any public improvements.

7. Prior to final release of subdivision construction deposits, the developer shall provide certification by a registered land surveyor that all monumentation depicted on the record plat has been installed and United States Public Land Survey Corners have not been disturbed during construction activities or that they have been reestablished and the appropriate documents filed with the Missouri Department of Natural Resources Land Survey Program, as necessary.

8. The Site Development Plan review process shall include added design features in accordance with Section 31.03-04.K.

II. TIME PERIOD FOR SUBMITTAL OF SITE DEVELOPMENT PLANS

A. The developer shall submit a concept plan within eighteen (18) months of City Council approval of the change of zoning.

B. In lieu of submitting a Site Development Concept Plan and Site Development Section Plans, the petitioner may submit a Site Development Plan for the entire development within eighteen (18) months of the date of approval of the change of zoning by the City.

C. Failure to comply with these submittal requirements will result in the expiration of the change of zoning and will require a new public hearing.

D. Said Plan shall be submitted in accordance with the combined requirements for Site Development Section and Concept Plans. The submission of Amended Site Development Plans by sections of this project to the Planning Commission shall be permitted if this option is utilized.

E. Where due cause is shown by the developer, the City Council may extend the period to submit a Site Development Plan for eighteen (18) months.

III. COMMENCEMENT OF CONSTRUCTION

A. Substantial construction shall commence within two (2) years of approval of the Site Development Concept Plan or Site Development Plan, unless otherwise authorized by ordinance.

B. Where due cause is shown by the developer, the City Council may extend the period to commence construction for two (2) additional years.

IV. GENERAL CRITERIA

A. SITE DEVELOPMENT PLAN SUBMITTAL REQUIREMENTS

1. Location map, north arrow, and plan scale. The scale shall be no greater than one (1) inch equals one hundred (100) feet.

2. Outboundary plat and legal description of property.

3. Density calculations.

4. Parking calculations. Including calculation for all off street parking spaces, required and proposed, and the number, size and location for handicap designed.

5. Provide openspace percentage for overall development including separate percentage for each lot on the plan.

6. Provide Floor Area Ratio (F.A.R.).

7. A note indicating all utilities will be installed underground.

8. A note indicating signage approval is a separate process.

9. Depict the location of all buildings, size, including height and distance from adjacent property lines, and proposed use.

10. Specific structure and parking setbacks along all roadways and property lines.

11. Indicate location of all existing and proposed freestanding monument signs.

12. Zoning district lines, subdivision name, lot number, dimensions, and area, and zoning of adjacent parcels where different than site.

13. Floodplain boundaries.

14. Depict existing and proposed improvements within 150 feet of the site as directed. Improvements include, but are not limited to, roadways, driveways and walkways adjacent to and across the street from the site, significant natural features, such as wooded areas and rock formations, and other karst features that are to remain or be removed.

15. Depict all existing and proposed easements and rights-of-way within 150 feet of the site and all existing or proposed off-site easements and rights-of-way required for proposed improvements.

16. Indicate the location of the proposed storm sewers, detention basins, sanitary sewers and connection(s) to the existing systems.

17. Depict existing and proposed contours at intervals of not more than one (1) foot, and extending 150 feet beyond the limits of the site as directed.

18. Address trees and landscaping in accordance with the City of Chesterfield Code.

19. Comply with all preliminary plat requirements of the City of Chesterfield Subdivision Regulations per the City of Chesterfield Code.

20. Signed and sealed in conformance with the State of Missouri Department of Economic Development, Division of Professional Registration, Missouri Board for Architects, Professional Engineers and Land Surveyors requirements.

21. Provide comments/approvals from the appropriate Fire District, Monarch Levee District, Spirit of St. Louis Airport, Metropolitan St. Louis Sewer District (MSD) and the Missouri Department of Transportation.

22. Compliance with Sky Exposure Plane.

23. Compliance with the current Metropolitan Sewer District Site Guidance as adopted by the City of Chesterfield.

V. RECORDING

Within sixty (60) days of approval of any development plan by the City of Chesterfield, the approved Plan will be recorded with the St. Louis County Recorder of Deeds. Failure to do so will result in the expiration of approval of said plan and require re-approval of a plan by the Planning Commission.

VI. ENFORCEMENT

A. The City of Chesterfield, Missouri will enforce the conditions of this ordinance in accordance with the Plan approved by the City of Chesterfield and the terms of this Attachment A.

B. Failure to comply with any or all the conditions of this ordinance will be adequate cause for revocation of approvals/permits by reviewing Departments and Commissions.

C. Non-compliance with the specific requirements and conditions set forth in this Ordinance and its attached conditions or other Ordinances of the City of Chesterfield shall constitute an ordinance violation, subject, but not limited to, the penalty provisions as set forth in the City of Chesterfield Code.

D. Waiver of Notice of Violation per the City of Chesterfield Code.

E. This document shall be read as a whole and any inconsistency to be integrated to carry out the overall intent of this Attachment A.

BILL NO. 3298 **ORDINANCE NO._____**

AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT CODE OF THE CITY OF CHESTERFIELD BY CHANGING THE BOUNDARIES OF AN "R-3" RESIDENCE DISTRICT TO A "PUD" PLANNED UNIT DEVELOPMENT FOR A 29.4 ACRE TRACT OF LAND LOCATED ON THE NORTH SIDE OF OLIVE BOULEVARD. (P.Z. 20-2019 BRIARCLIFFE VILLAS {14001 OLIVE BLVD} 16R340151).

WHEREAS, the petitioner, Stock & Associates Consulting Engineers, Inc., has requested a change in zoning from "R-3" Residence District to "PUD" Planned Unit Development located on the north side of Olive Boulevard; and,

WHEREAS, a Public Hearing was held before the Planning Commission on February 10, 2020; and,

WHEREAS, the Planning Commission, having considered said request, recommended approval of the change of zoning with amendments by a vote of 6-3; and,

WHEREAS, the Planning and Public Works Committee, having considered said request, recommended approval of the change of zoning; and,

WHEREAS, the City Council, having considered said request voted to approve the change of zoning request.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. City of Chesterfield Unified Development Code and the Official Zoning District Map, which are part thereof, are hereby amended by establishing a "PUD" Planned Unit Development for a 29.4 acre tract of land located on the north side of Olive Boulevard, described as follows:

> A tract of land in Lot 11 of D.J. Talbot Subdivision in U.S. Survey 2030, according to the plat thereof recorded in Plat Book 7 Page 43 of the St. Louis City (former County) Records and partly in U.S. Survey 206 Township 46 North Range 4 East in St. Louis County, Missouri more particularly described as:
>
> Beginning at a point in the center line of Hog Hollow Road, 40 feet wide, at its intersection with the South line of U.S. Survey 2030; thence along the center line of said road, North 45 degrees 03

minutes 31 seconds West, 86.69 feet; North 74 degrees 44 minutes 26 seconds West, 142.55 feet; North 47 degrees 14 minutes 26 seconds West, 211.20 feet and North 28 degrees 14 minutes 26 seconds West, 356.40 feet and North 07 degrees 12 minutes 34 seconds East, 85.40 feet to the south right-of-way line of the Missouri Central Rail Road Company, 100 feet wide; thence along said right-of-way line the following courses and distances: North 63 degrees 04 minutes 34 seconds East, 699.83 feet to a point of curvature to the left having a radius of 5,787.48 feet, an arc length of 242.07 feet and a chord which bears North 61 degrees 52 minutes 40 seconds East, 242.06 feet and North 60 degrees 40 minutes 46 seconds East, 257.43 feet to its intersection with the northwesterly prolongation of the western line of Eagle Ridge, a subdivision according to the plat thereof as recorded in Plat Book 344, Page 175 of the St. Louis County Records; thence departing said right-of-way line along said prolongation line and the western line of Eagle Ridge, South 25 degrees 49 minutes 00 seconds East, 1,176.10 feet to the northern corner of a tract of land as conveyed to WLF Investments LLC by instrument recorded in Book 21584, Page 1944 of above said records; thence along the northwest line of said WLF Investments LLC tract, South 64 degrees 11 minutes 00 seconds West, 145.90 feet to the western corner thereof; thence South 25 degrees 49 minutes 00 seconds East, 301.42 feet to the northwestern right-of-way line of Olive Boulevard, thence along said right-of-way line, South 61 degrees 59 minutes 00 seconds West, 148.50 feet to the southeastern corner of a tract of land as conveyed to Keymer Realty and Investments, LLC by instrument recorded in Book 21422, page 725 of above said records; thence along the eastern line of said Keymer tract, North 28 degrees 33 minutes 00 seconds West, 173.94 feet to the southeastern tract of land as awarded to Harvey A. and Sandra S. Keymer under Cause No. 09SL-CC023205 filed in the Circuit Court of St. Louis County; thence along the eastern and northern lines of said cause the following courses and distances: North 75 degrees 52 minutes 59 seconds East, 3.20 feet; North 14 degrees 07 minutes 01 seconds West, 10.86 feet; North 30 degrees 56 minutes 43 seconds West, 17.06 feet to the beginning of a non-tangent curve to the left having a radius of 46.59 feet; along said curve with an arc length of 57.24 feet and a chord which bears North 83 degrees 38 minutes 06 seconds West, 53.71 feet and South 61 degrees 11 minutes 37 seconds West, 37.17 feet to the south line of above said U.S. Survey 2030; thence along said south line, North 82

degrees 32 minutes 26 seconds West, 760.09 feet to the Point of Beginning and Containing 1,281,082 square feet or 29.410 acres more or less according to calculations performed by Stock and Associates Consulting Engineers, Inc. on June 12, 2019.

Section 2. The preliminary approval, pursuant to the City of Chesterfield Unified Development Code is granted, subject to all of the ordinances, rules and regulations and the specific conditions as recommended by the Planning Commission in its recommendation to the City Council, which are set out in the "Attachment A" and the preliminary plan indicated as "Attachment B" which is attached hereto as and made part of.

Section 3. The City Council, pursuant to the petition filed by Stock & Associates Consulting Engineers, Inc., in P.Z. 20-2019, requesting the amendment embodied in this ordinance, and pursuant to the recommendation of the City of Chesterfield Planning Commission that said petition be granted and after a public hearing, held by the Planning Commission on the 10th day of February, 2020, does hereby adopt this ordinance pursuant to the power granted to the City of Chesterfield under Chapter 89 of the Revised Statutes of the State of Missouri authorizing the City Council to exercise legislative power pertaining to planning and zoning.

Section 4. This ordinance and the requirements thereof are exempt from the warning and summons for violations as set out in Section 8 of the City of Chesterfield Unified Development Code.

Section 5. This ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____ day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: 05/04/2020

PRELIMINARY PLAN FOR 14001 OLIVE BOULEVARD, R-3 TO P.U.D.

A TRACT OF LAND BEING IN LOT 11 OF D.J. TALBOT SUBDIVISION IN IN U.S. SURVEY 2030 AS RECORDED IN PLAT BOOK 7 PAGE 43, TOWNSHIP 46 NORTH, RANGE 4 EAST OF THE 5TH PRINCIPAL MERIDIAN, CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

ABBREVIATIONS

ATG	–	ADJUST TO GRADE
B.C.	–	BACK OF CURB
C.O.	–	CLEANOUT
DB.	–	DEED BOOK
E	–	ELECTRIC
ELEV.	–	ELEVATION
EX.	–	EXISTING
F.C.	–	FACE OF CURB
FL	–	FLOWLINE
FT.	–	FEET
FND.	–	FOUND
G	–	GAS
H.W.	–	HIGH WATER
LFB	–	LOW FLOW BLOCKED
M.H.	–	MANHOLE
N/F	–	NOW OR FORMERLY
PB.	–	PLAT BOOK
PG.	–	PAGE
PR.	–	PROPOSED
P.V.C.	–	POLYVINYL CHLORIDE PIPE
R.C.P.	–	REINFORCED CONCRETE PIPE
R/W	–	RIGHT-OF-WAY
SQ.	–	SQUARE
T	–	TELEPHONE CABLE
T.B.A.	–	TO BE ABANDONED
T.B.R.	–	TO BE REMOVED
T.B.R.&R.	–	TO BE REMOVED AND REPLACED
TYP.	–	TYPICALLY
U.I.P.	–	USE IN PLACE
U.O.N.	–	UNLESS OTHERWISE NOTED
V.C.P.	–	VITRIFIED CLAY PIPE
W	–	WATER
(86'W)	–	RIGHT-OF-WAY WIDTH

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

LEGEND

EXISTING SANITARY SEWER
EXISTING STORM SEWER
EXISTING TREE
EXISTING BUILDING
EXISTING CONTOUR
SPOT ELEVATION
EXISTING UTILITIES
FOUND 1/2" IRON PIPE
SET IRON PIPE
FOUND CROSS
FOUND STONE
FIRE HYDRANT
LIGHT STANDARD
BUSH
SIGN
NOTES PARKING SPACES
GUY WIRE
POWER POLE
WATER VALVE
DENOTES RECORD INFORMATION
ACCESSIBLE PARKING
PROPOSED CONTOUR
PROPOSED SPOT
PROPOSED STORM
PROPOSED SANITARY
PROPOSED SPORT COURT FENCE

GENERAL NOTES

1. BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK & ASSOCIATES CONSULTING ENGINEERS, INC.
2. ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED.
3. NO GRADE SHALL EXCEED 3:1 SLOPE.
4. GRADING AND STORM WATER PER M.S.D., MODOT, AND THE CITY OF CHESTERFIELD.
5. STORMWATER SHALL BE DISCHARGED AT ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
6. ALL UTILITIES WILL BE INSTALLED UNDERGROUND.
7. SITE DEVELOPMENT SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL REPORT AND ALL ITS SUPPLEMENTAL PROVISIONS AND ADDENDUMS.
8. A PROVISION FOR COMMON OPEN SPACE SHALL BE PROVIDED IN THE PUD AT A MINIMUM OF THIRTY PERCENT (30%) OF THE TOTAL SITE ACREAGE, TO BE DISTRIBUTED THROUGHOUT THE PUD AND NOT CONCENTRATED IN ONE (1) AREA NOR SHALL IT CONTAIN ONLY THAT PORTION OF THE PROPOSED PUD THAT WOULD BE CONSIDERED UNDEVELOPABLE DUE TO TOPOGRAPHY OR ANY OTHER SITE SPECIFIC RELATED MATTER. ALL COMMON OPEN SPACE AREAS SHALL BE SHOWN ON ALL PRELIMINARY PLANS, SITE DEVELOPMENT PLANS, SITE DEVELOPMENT CONCEPT PLANS, SITE DEVELOPMENT SECTION PLANS, AND RECORD PLATS AND SHALL BE PRESERVED AND DEED RESTRICTED AS COMMON OPEN SPACE.

STANDARD NOTES

1. ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO CITY OF CHESTERFIELD AND/OR MODOT STANDARDS.
2. NO SLOPES WITHIN CITY OF CHESTERFIELD AND/OR MODOT RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).
3. STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
4. ALL PROPOSED ACCESS TO MODOT ROADS SHALL MEET MINIMUM MODOT SIGHT DISTANCE REQUIREMENTS.
5. ALL GRADING AND DRAINAGE SHALL BE IN CONFORMANCE WITH CITY OF CHESTERFIELD, MODOT, AND MSD STANDARDS.

Parcel Line Table

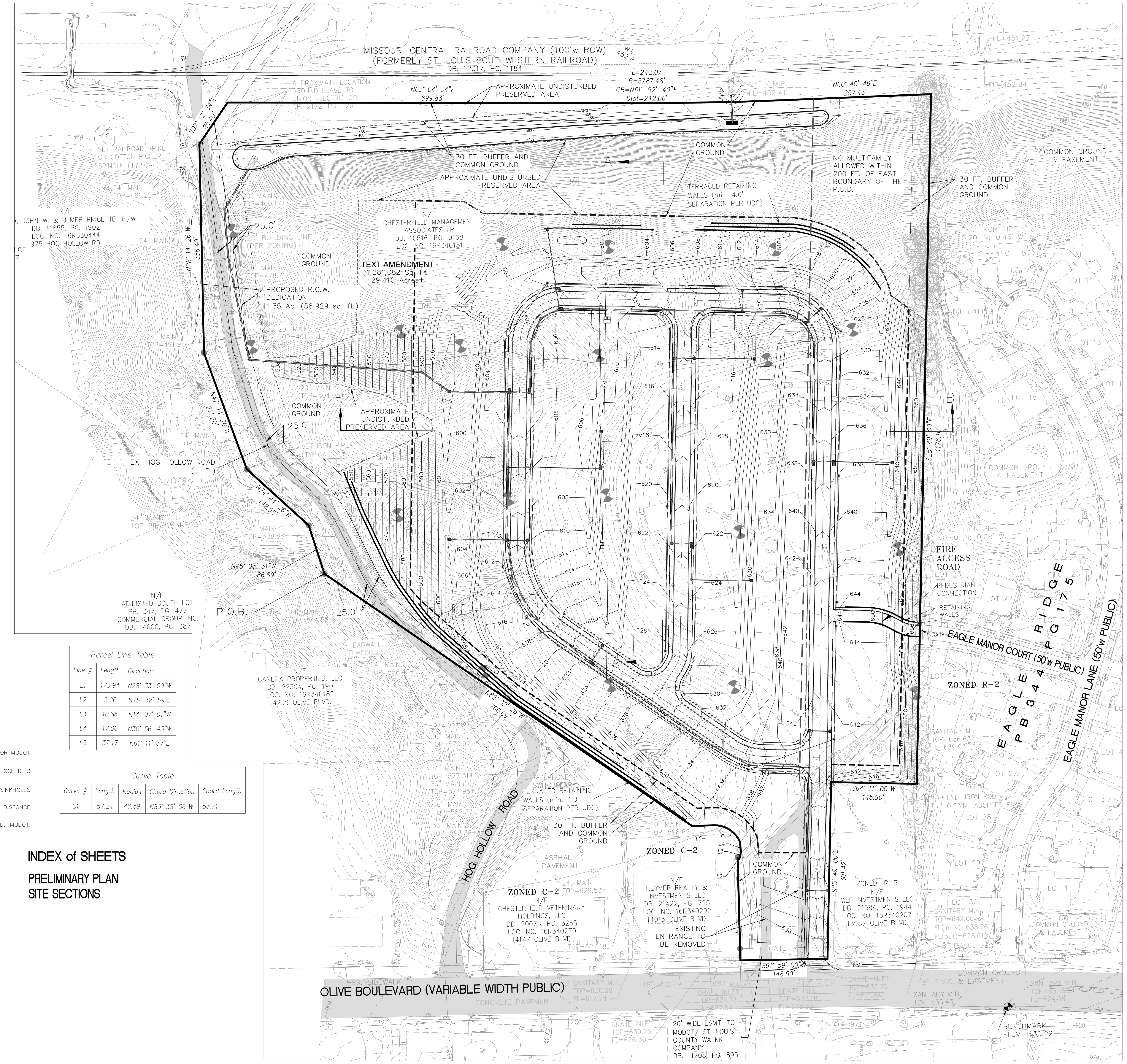
Line #	Length	Direction
L1	173.94	N28° 33' 00"W
L2	3.20	N75° 52' 59"E
L3	10.86	N14° 07' 01"W
L4	17.06	N30° 56' 43"W
L5	37.17	N61° 11' 37"E

Curve Table

Curve #	Length	Radius	Chord Direction	Chord Length
C1	57.24	46.59	N83° 38' 06"W	53.71

INDEX of SHEETS

1 PRELIMINARY PLAN
2 SITE SECTIONS



ST. LOUIS COUNTY BENCHMARK

BM 7-16 – ELEV. 630.22 NGVD 1929 (U.S.G.S.)
"U" ON THE BACK OF CURB OF EAST BOUND OLIVE BLVD. ON THE CENTERLINE PRODUCED OF EAGLE MANOR LANE.

STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. AND THE UNDERSIGNED ENGINEER HAVE NO RESPONSIBILITY FOR SERVICES PROVIDED BY OTHERS TO IMPLEMENT THE IMPROVEMENTS SHOWN ON THIS PLAN AND ALL OTHER DRAWINGS WHERE THE UNDERSIGNED ENGINEER'S SEAL APPEARS. THE CONSTRUCTION MEANS AND METHODS ARE THE SOLE RESPONSIBILITY OF THE OWNER AND CONTRACTOR. STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. HAS NO RESPONSIBILITY TO VERIFY FINAL IMPROVEMENTS AS SHOWN ON THIS PLAN UNLESS SPECIFICALLY ENGAGED AND AUTHORIZED TO DO SO BY THE OWNER OR CONTRACTOR.

PREPARED FOR:

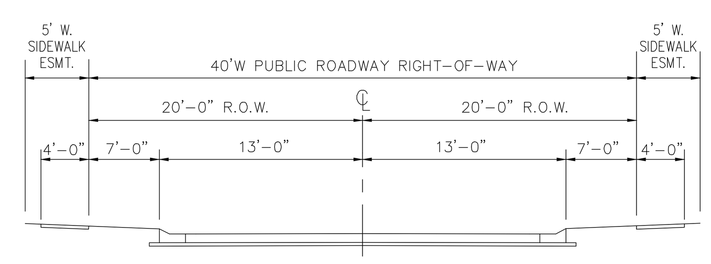
CHESTERFIELD MANAGEMENT ASSOCIATES LP
26 PORTLAND PLACE
ST. LOUIS, MO 63017
ATTN: ADELE DAAKE
PHONE: (513) 461-3291
FAX: (314) 367-1206

CONTRACTOR'S INSURANCE REQUIREMENTS

PRIOR TO OBTAINING A CONSTRUCTION PERMIT FROM THE METROPOLITAN ST. LOUIS SEWER DISTRICT, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE THE DISTRICT WITH A COPY OF AN EXECUTED CERTIFICATE OF INSURANCE INDICATING THAT THE PERMITTEE HAS OBTAINED AND WILL CONTINUE TO CARRY COMMERCIAL GENERAL LIABILITY AND COMPREHENSIVE AUTO LIABILITY INSURANCE. THE REQUIREMENTS AND LIMITS SHALL BE AS STATED IN THE "RULES AND REGULATIONS AND ENGINEERING DESIGN REQUIREMENTS FOR SANITARY AND STORMWATER DRAINAGE FACILITY", SECTION 10.090 (ADDENDUM).

UTILITY NOTE:

UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND , THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

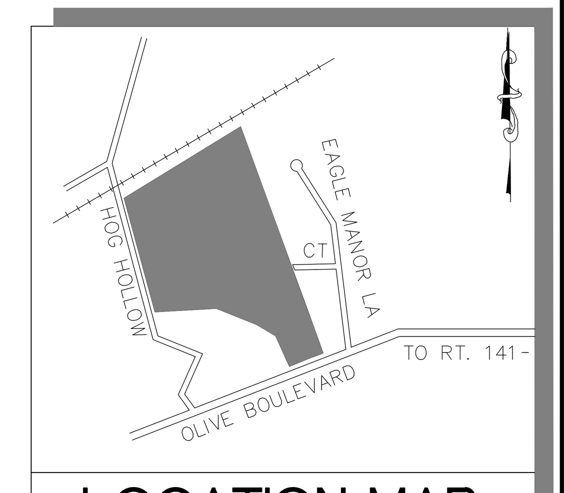


TYPICAL STREET SECTION

INTERAL STREETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ARTICLE 04-09 OF THE UNIFIED DEVELOPMENT CODE OF THE CITY OF CHESTERFIELD

DENSITY CALCULATIONS:

TOTAL SITE: 1,281,082 S.F.
LANDSCAPE BUFFERS: 115,982
BUILDABLE AREA (TOTAL SITE – LANDSCAPE BUFFER): 1,165,100 S.F.
R3 LOT SIZE: 10,000 S.F.
DENSITY: (1,165,100 S.F.) / (10,000 S.F.) = 117 LOTS



LOCATION MAP
(NOT TO SCALE)

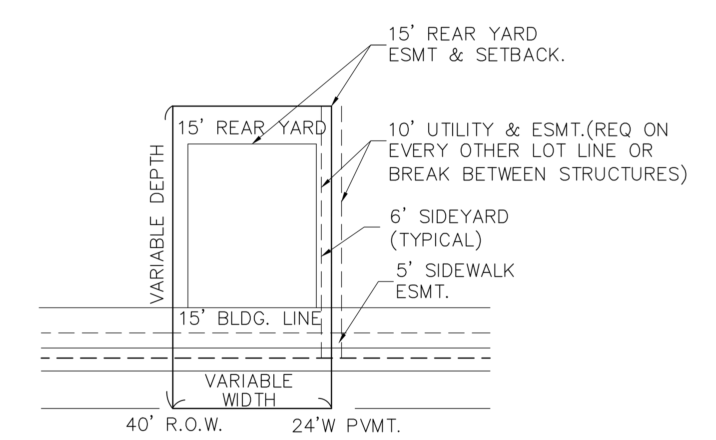
PERTINENT DATA

OWNER:	CHESTERFIELD MANAGEMENT ASSOCIATES LP
LOT AREA:	29.410 Acres ±
EXISTING ZONING:	P.U.E. WITHIN A "R3" (ORD. #2213)
SITE ADDRESS:	14001 OLIVE BLVD. CHESTERFIELD, MISSOURI 63017
LOCATOR NO:	16R340151
WUNNERNBERG'S:	PG. 22, GRID 16BB & 17BB
FIRE DISTRICT:	MONARCH FIRE PROTECTION DISTRICT
SCHOOL DISTRICT:	PARKWAY
SEWER DISTRICT:	METROPOLITAN ST. LOUIS SEWER DIST.
WATER SHED:	MISSOURI RIVER
FEMA MAP:	29189C0170K, FEB 4, 2015
ELECTRIC COMPANY:	AMEREN UE
GAS COMPANY:	SPIRE INC
PHONE COMPANY:	AT&T
WATER COMPANY:	MISSOURI AMERICAN WATER COMPANY

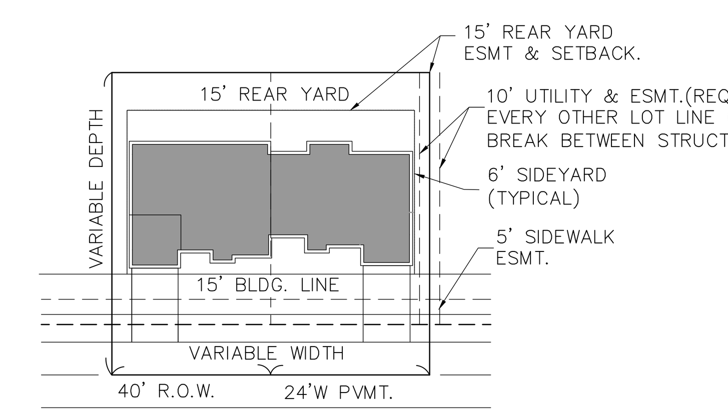
PROPERTY DESCRIPTION

A TRACT OF LAND IN LOT 11 OF D.J. TALBOT SUBDIVISION IN U.S. SURVEY 2030, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 7 PAGE 43 OF THE ST. LOUIS CITY (FORMER COUNTY) RECORDS AND PARTLY IN U.S. SURVEY 206 TOWNSHIP 46 NORTH RANGE 4 EAST IN ST. LOUIS COUNTY, MISSOURI, MORE PARTICULARLY DESCRIBED AS:

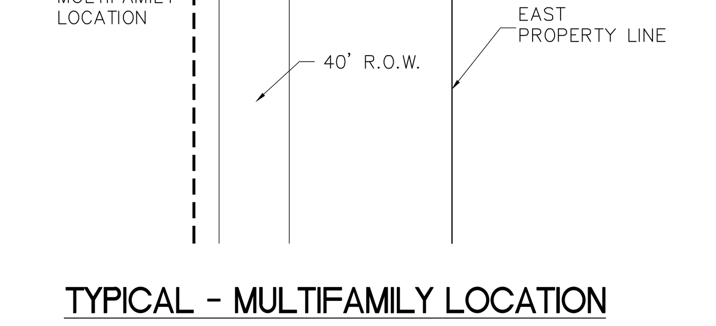
BEGINNING AT A POINT IN THE CENTER LINE OF HOG HOLLOW ROAD, 40 FEET WIDE, AT ITS INTERSECTION WITH THE SOUTH LINE OF U.S. SURVEY 2030; THENCE ALONG THE CENTER LINE OF SAID ROAD, NORTH 45 DEGREES 03 MINUTES 31 SECONDS WEST, 86.69 FEET; NORTH 74 DEGREES 44 MINUTES 26 SECONDS WEST, 142.55 FEET; NORTH 47 DEGREES 14 MINUTES 26 SECONDS WEST, 211.20 FEET AND NORTH 28 DEGREES 14 MINUTES 26 SECONDS WEST, 356.40 FEET AND NORTH 07 DEGREES 12 MINUTES 34 SECONDS EAST, 85.40 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF THE MISSOURI CENTRAL RAIL ROAD COMPANY, 100 FEET WIDE; THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING COURSES AND DISTANCES: NORTH 63 DEGREES 04 MINUTES 34 SECONDS EAST, 699.83 FEET TO A POINT OF CURVATURE TO THE LEFT HAVING A RADIUS OF 5,787.48 FEET, AN ARC LENGTH OF 242.07 FEET AND A CHORD WHICH BEARS NORTH 61 DEGREES 52 MINUTES 40 SECONDS EAST, 242.06 FEET AND NORTH 60 DEGREES 40 MINUTES 46 SECONDS EAST, 257.43 FEET TO ITS INTERSECTION WITH THE NORTHWESTERLY PROLONGATION OF THE WESTERN LINE OF EAGLE RIDGE, A SUBDIVISION ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 344, PAGE 175 OF THE ST. LOUIS COUNTY RECORDS; THENCE DEPARTING SAID RIGHT-OF-WAY LINE ALONG SAID PROLONGATION LINE AND THE WESTERN LINE OF EAGLE RIDGE, SOUTH 25 DEGREES 49 MINUTES 00 SECONDS EAST, 1,176.10 FEET TO THE NORTHERN CORNER OF A TRACT OF LAND AS CONVEYED TO WLF INVESTMENTS LLC BY INSTRUMENT RECORDED IN BOOK 21584, PAGE 1944 OF ABOVE SAID RECORDS; THENCE ALONG THE NORTHWEST LINE OF SAID WLF INVESTMENTS LLC TRACT, SOUTH 64 DEGREES 11 MINUTES 00 SECONDS WEST, 145.90 FEET TO THE WESTERN CORNER THEREOF; THENCE SOUTH 25 DEGREES 49 MINUTES 00 SECONDS EAST, 301.42 FEET TO THE NORTHWESTERN RIGHT-OF-WAY LINE OF OLIVE BOULEVARD; THENCE ALONG SAID RIGHT-OF-WAY LINE, SOUTH 61 DEGREES 59 MINUTES 00 SECONDS WEST, 148.50 FEET TO THE SOUTHEASTERN CORNER OF A TRACT OF LAND AS CONVEYED TO KEYMER REALTY AND INVESTMENTS, LLC BY INSTRUMENT RECORDED IN BOOK 21422, PAGE 725 OF ABOVE SAID RECORDS; THENCE ALONG THE EASTERN LINE OF SAID KEYMER TRACT, NORTH 28 DEGREES 33 MINUTES 00 SECONDS WEST, 173.94 FEET TO THE SOUTHEASTERN TRACT OF LAND AS AWARDED TO HARVEY A. AND SANDRA S. KEYMER UNDER CAUSE NO. 09SL-CC023205 FILED IN THE CIRCUIT COURT OF ST. LOUIS COUNTY; THENCE ALONG THE EASTERN AND NORTHERN LINES OF SAID CAUSE THE FOLLOWING COURSES AND DISTANCES: NORTH 75 DEGREES 52 MINUTES 59 SECONDS EAST, 3.20 FEET; NORTH 14 DEGREES 07 MINUTES 01 SECONDS WEST, 10.86 FEET; NORTH 30 DEGREES 56 MINUTES 43 SECONDS WEST, 17.06 FEET TO THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 46.59 FEET; ALONG SAID CURVE WITH AN ARC LENGTH OF 57.24 FEET AND A CHORD WHICH BEARS NORTH 83 DEGREES 38 MINUTES 06 SECONDS WEST, 53.71 FEET AND SOUTH 61 DEGREES 11 MINUTES 37 SECONDS WEST, 37.17 FEET TO THE SOUTH LINE OF ABOVE SAID U.S. SURVEY 2030; THENCE ALONG SAID SOUTH LINE, NORTH 82 DEGREES 32 MINUTES 26 SECONDS WEST, 760.09 FEET TO THE POINT OF BEGINNING AND CONTAINING 1,281,082 SQUARE FEET OR 29.410 ACRES MORE OR LESS ACCORDING TO CALCULATIONS PERFORMED BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. ON JUNE 12, 2019.



TYPICAL LOT - DETACHED



TYPICAL LOT - ATTACHED



TYPICAL - MULTIFAMILY LOCATION

PREPARED BY:
STOCK & ASSOCIATES Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63005
PH. (636) 530-9100
FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

PRELIMINARY PLAN FOR:
14001 OLIVE BOULEVARD, R-3 TO P.U.D.
PREVIOUSLY KNOWN AS BRIARCLIFFE VILLAS
14001 OLIVE BLVD
CHESTERFIELD, MO 63017

DATE:

STATE OF MISSOURI — GEORGE MICHAEL STOCK — NUMBER PE-25116 — PROFESSIONAL ENGINEER

3/18/20

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1.	CITY COMMENTS	01/14/20
2.	CITY COMMENTS	03/04/20
3.	CITY COMMENTS	03/18/20

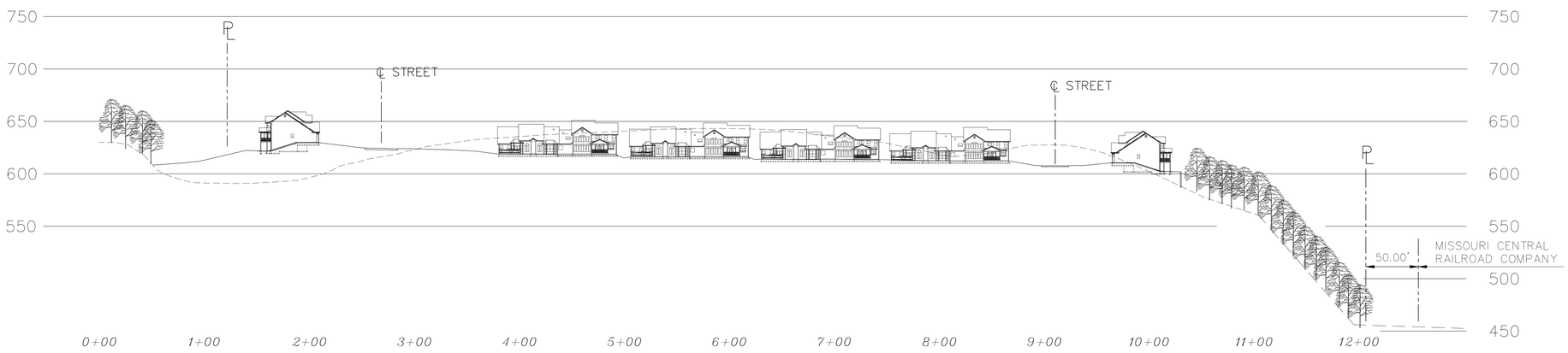
DRAWN BY: K.S.G.	CHECKED BY: G.M.S.
DATE: 11/12/2019	JOB NO: 219-6568
M.S.D. P #: 19MSD-	BASE MAP #: 16R
S.L.C. H&T #: –	H&T S.U.P. #: –
M.D.N.R. #: MORA	

SHEET TITLE: PRELIMINARY PLAN

SHEET NO.: C1.0

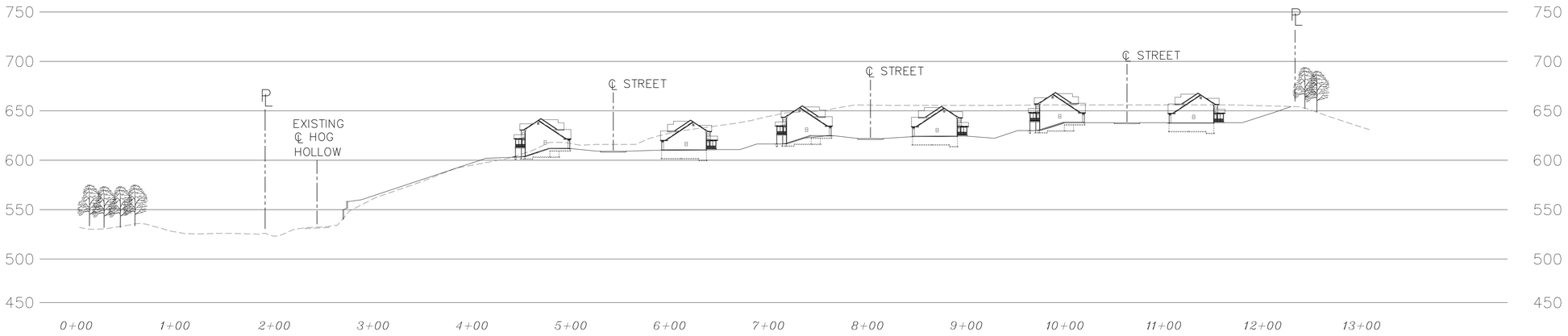
DRAWING FILE: O:\DRAW6500\219656\CIVIL\6568 - preliminary plan base-2020-03-02.dwg LAYOUT: C1.0 - PRELIMINARY PLAN PLOTTED: Mar 31, 2020 - 10:08am PLOTTED BY: kate.gitto

RECEIVED
City of Chesterfield
Mar 19 2020
Department of Public Services



SECTION A–A

SCALE: HORIZ. 1"=50'
VERT. 1"=50'



SECTION B–B

SCALE: HORIZ. 1"=50'
VERT. 1"=50'

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO. 63005
PH: (636) 530-9100
FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

PRELIMINARY PLAN FOR:

14001 OLIVE BOULEVARD, R-3 TO P.U.D.

PREVIOUSLY KNOWN AS BRIARCLIFFE VILLAS

14001 OLIVE BLVD
CHESTERFIELD, MO 63017

DATE:

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-25116
PROFESSIONAL ENGINEER

3/18/20

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1.	CITY COMMENTS	01/14/20
2.	CITY COMMENTS	03/04/20
3.	CITY COMMENTS	03/18/20

DRAWN BY: K.S.G.	CHECKED BY: G.M.S.
DATE: 11/12/2019	JOB NO: 219-6568
M.S.D. P #: 19MSD-	BASE MAP #: 16R
S.L.C. H&T #: --	H&T S.U.P. #: --
M.D.N.R. #: MORA	

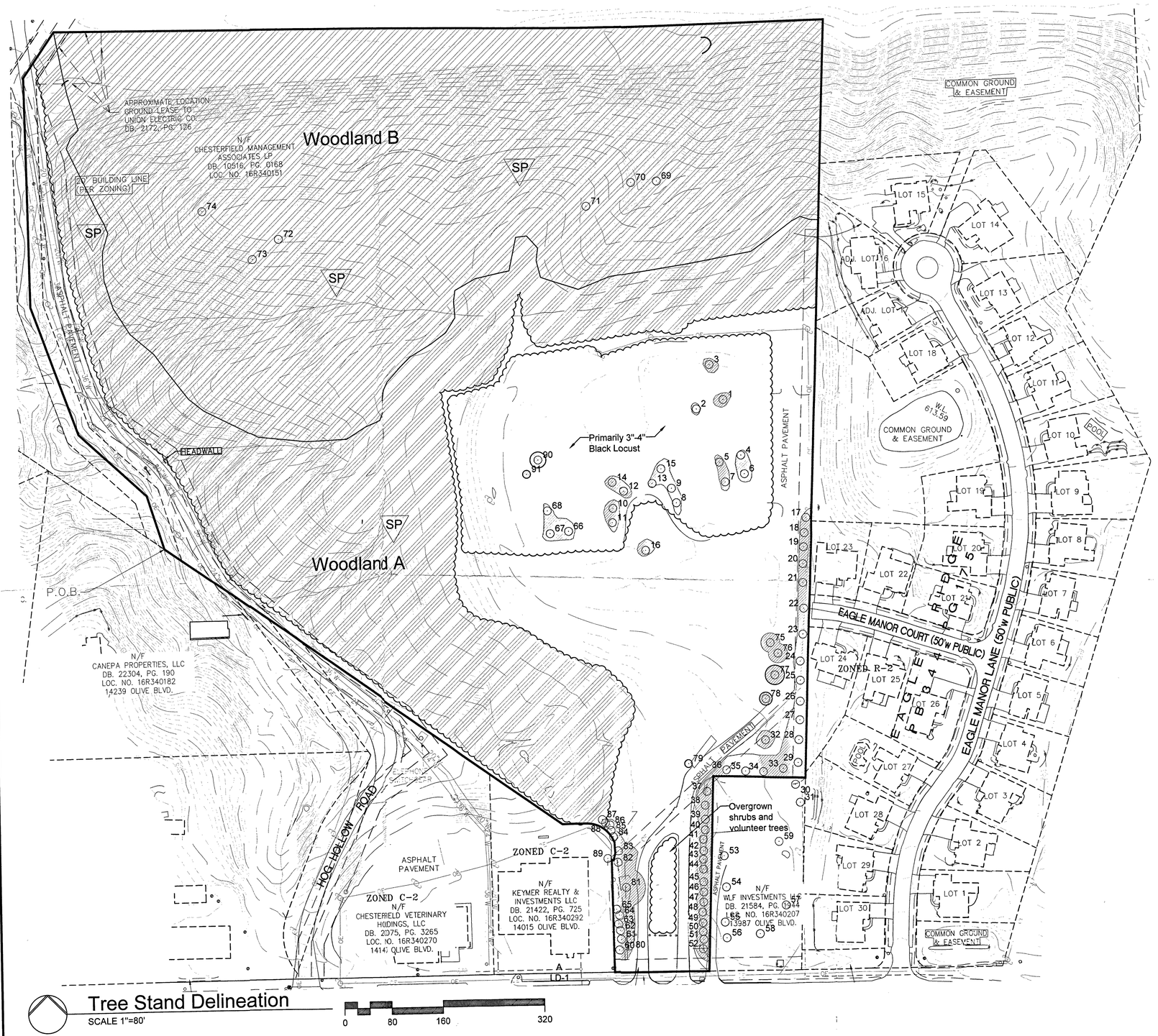
SHEET TITLE:

SITE SECTIONS

SHEET NO.:

C2.0

G:\Projects & Documents\219-6568\CAD\Site\Preliminary plan Sheets\219-6568 Prelim LAYOUT C2.0 SITE SECTIONS.dgn[SITE SECTIONS] Mon, 16 Mar 2020 - 3:56pm PLOTTED BY: Mike Jaffe



Tree Stand Delineation

SCALE 1"=80'

0 80 160 320

Legend:

Symbol	Description
○#	Existing Individual Trees/ Monarch Trees
SP	Location of Sample Plots
——	Woodland Delineation

Zoning Designation:
Present Zoning: R-2, CUP

Total Site Area: 29.41 acres

Floodplain Number:
Area is outside of 500-year floodplain
Fema Map # = 29189CO145

Woodland Data

Woodland	Forest Type	Area (sq.ft.)	Dominant and Co-dominant Species	Density (Trees/acre)	Average Diameter	Average Overstory Diameter	Frequency of Occurrence for Dominant Species	Understory Species
A	Successional/Edge	311,265.00	Black locust / Cottonwood / Sycamore / Hackberry	110	2.5"	10"	60 / 10 / 10 / 5	Black Cherry / American Elm Boxelder / Honeysuckle
B	Mixed Hardwoods	489,964.00	Green Ash / Red Oak / Sugar Maple / Walnut	80	4"	12"	20 / 20 / 20 / 10	Sugar Maple / Pawpaw

Tree Inventory

Tree #	Species	Inches	Rating	Comments
1	Common Apple	12	Fair	
2	Sweetgum	24	Good	
3	Sweetgum	20	Good	
4	Sweetgum	20	Good	
5	Sweetgum	23	Good	
6	Sweetgum	22	Good	
7	Sweetgum	22	Good	
8	Crabapple	10	Poor	
9	Crabapple	9	Poor	
10	Crabapple	12	Poor	
11	Crabapple	12	Poor	
12	Bradford Pear	14	Good	
13	Bradford Pear	13	Good	
14	Alder	22	Fair	
15	Alder	21	Excellent	
16	Crabapple	12	Poor	
17	Oak, Pin	18	Poor	Under Wires
18	Oak, Pin	28	Poor	Under Wires
19	Oak, Pin	28	Poor	Under Wires
20	Oak, Pin	32	Fair	Monarch
21	Oak, Pin	30	Fair	Monarch
22	Oak, Pin	28	Fair	
23	Oak, Pin	30	Fair	Monarch
24	Oak, Pin	29	Poor	
25	Oak, Pin	30	Fair	
26	Oak, Pin	30	Fair	Monarch
27	Oak, Pin	30	Poor	
28	Oak, Pin	30	Fair	Monarch
29	Oak, Pin	32	Good	Monarch
30	Maple, Silver	36	Fair	Offsite; Monarch
31	Maple, Silver	38	Fair	Offsite; Monarch
32	Pine, Austrian	15	Poor	
33	Oak, Pin	26	Poor	
34	Oak, Pin	38	Poor	
35	Oak, Pin	38	Fair	Hazard
36	Oak, Pin	36	Good	Monarch
37	Pine, White	18	Good	Monarch
38	Pine, White	24	Excellent	
39	Mulberry	24	Poor	
40	Pine, White	24	Good	Monarch
41	Pine, White	15	Excellent	
42	Pine, White	18	Excellent	
43	Pine, White	18	Fair	
44	Pine, White	20	Good	
45	Pine, White	18	Good	
46	Pine, White	26	Good	Monarch
47	Pine, White	24	Good	Monarch
48	Pine, White	28	Good	Monarch
49	Pine, White	18	Good	
50	Pine, White	28	Excellent	Monarch
51	Pine, White	13	Fair	
52	Pine, White	28	Excellent	Monarch
53	Pecan	38	Excellent	Offsite; Monarch
54	Maple, Sugar	26	Excellent	Offsite
55	Maple, Sugar	32	Good	Offsite; Monarch
56	Spruce, Colorado	16	Good	Offsite
57	Spruce, Colorado	20	Good	Offsite
58	Oak, Pin	36	Fair	Offsite; Disease
59	Tuliptree	26	Good	Offsite
60	Pine, White	22	Fair	30' canopy size
61	Pine, White	18	Fair	30' canopy size
62	Pine, White	14	Fair	20' canopy size
63	Pine, White	18	Fair	20' canopy size
64	Pine, White	18	Fair	20' canopy size
65	Pine, White	24	Fair	20' canopy size; Utility pruning
66	Sweetgum	18	Good	
67	Sweetgum	20	Good	
68	Sweetgum	20	Good	
69	Black Oak	36	Good	Monarch
70	Red Oak	28	Fair	Monarch
71	Red Oak	24	Good	Monarch
72	Chinkapin Oak	25	Good	Monarch
73	Chinkapin Oak	24	Good	Monarch
74	American Elm	26	Good	Monarch
75	Linden	14	Fair	30' canopy size
76	Linden	14	Fair	30' canopy size
77	Silver Maple	14	Good	30' canopy size
78	Linden	12	Fair	20' canopy size
79	Boxelder	7	Poor	12' canopy size
80	Pine, White	24	Fair	20' canopy size
81	Silver Maple	28	Fair	60' canopy size
82	Pine, White	9	Fair	22' canopy size
83	Pine, White	18	Fair	25' canopy size
84	Pine, White	15	Poor	20' canopy size
85	Pine, White	18	Poor	18' canopy size
86	Pine, White	18	Poor	Twin
87	Silver Maple	20	Poor	Dead; Twin
88	Silver Maple	36	Fair	60' canopy size
89	Silver Maple	24	Fair	Offsite; 40' canopy size; Utilities
90	Cottonwood	26	Poor	
91	Cottonwood	12	Poor	

TREE NOTES:
A) Woodland A is primarily composed of successional species such as black locust and cottonwood. This area has the most potential for disturbance due to the close proximity to Olive Blvd. and Hog Hollow Road.
B) Trees especially valuable to the site are those located along the north facing slope. This woodland is comprised of a mixture of high quality hardwoods.

WOODLAND = 854,425 sq.ft.
INDIVIDUAL TREES = 41,055 sq.ft
TOTAL SQ.FT. OF EXISTING CANOPY = 895,480 sq.ft.

Tree Stand Delineation based on plans prepared by SKA Forestry and Associates and Loomis Associates in September 2005

Tree Stand Delineation Prepared under the direction of:
Brian Bage
Certified Arborist MW-5033A

RECEIVED
DEC 17 2019
City of Chesterfield
Department of Public Services

STATE OF MISSOURI
JERALD A. SAUNDERS
NUMBER LA-7
LANDSCAPE ARCHITECT
8/13/19

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

TEXT ORDINANCE AMENDMENT TO ORD. 2213 PREVIOUSLY KNOWN AS BRIARCLIFFE VILLAS

Chesterfield, Missouri

Revisions:

Date	Description	No.

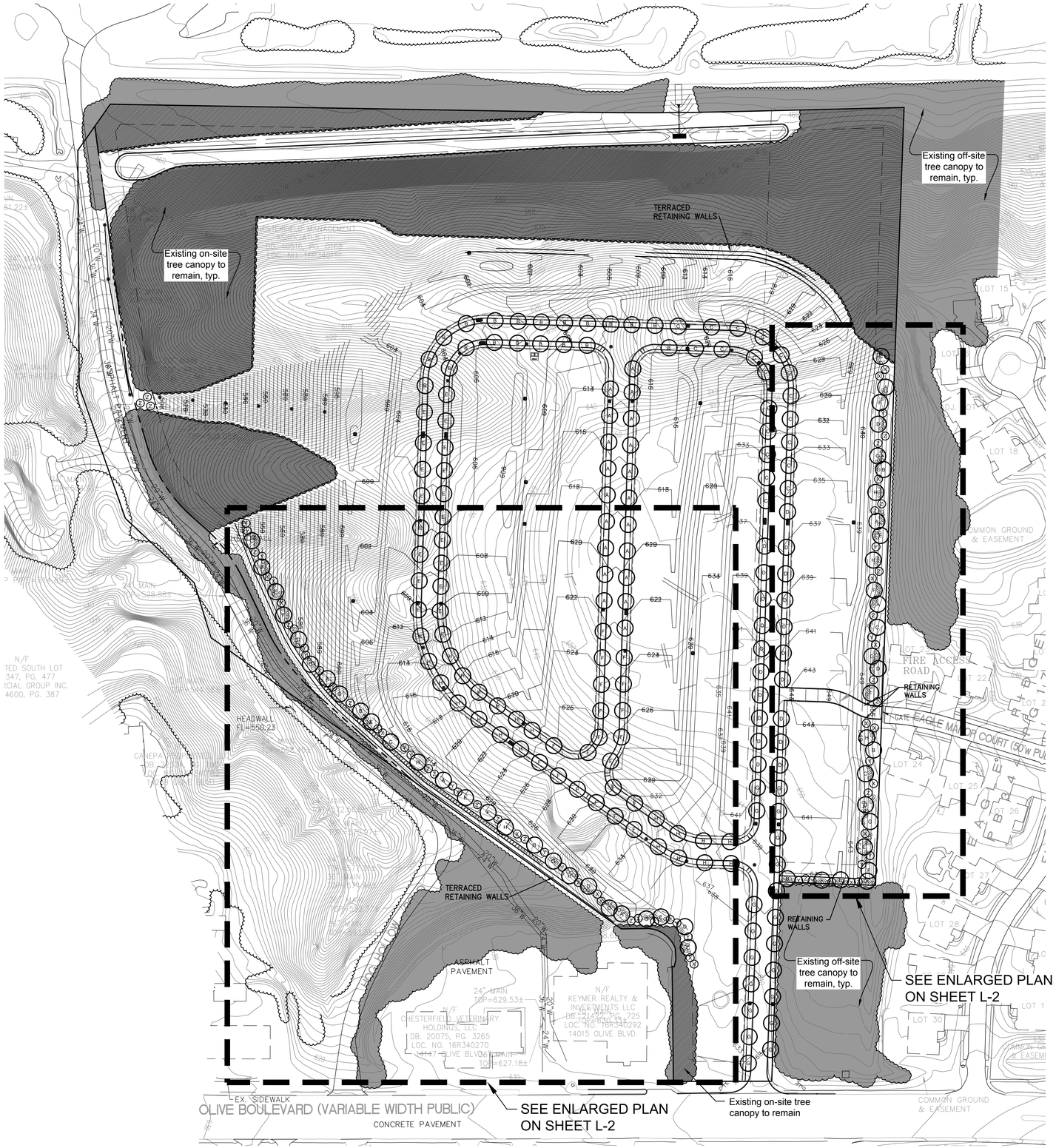
Drawn: KP
Checked: RS

loomisAssociates
landscape/architects/planners
750 Spirit 40 Park Drive
Chesterfield, Missouri 63005-1194
(636) 530-9100 fax (636) 530-9130
e-mail: lainfo@loomis-associates.com
Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Tree Stand Delineation

Sheet No: TSD

Date: 8/13/19
Job #: 813.080



Landscape Plan

SCALE 1"=80'

0 80 160 320

LANDSCAPE CALCULATIONS:

B) Street Trees

1 Street trees shall be installed for every 40 Lin. Ft. of proposed lot frontage.

6,390 Lin. Ft. / 40 Lin. Ft. = 159.75 or 160 Street Trees @ 2 ½" Caliper

NOTE:
160 Street Trees required per Landscape Guidelines, 149 street trees proposed to be installed. Remaining 11 street trees are proposed to be installed within the common ground areas due to conflicts with required utilities and driveways.

RECEIVED
City of Chesterfield
Mar 19 2020
Department of Public Services

PLANTING SCHEDULE					
CANOPY TREES					
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
A	27	Acer rubrum 'Red Sunset'	Red Sunset Maple	2.5" cal	B&B
B	26	Acer x freemanii 'Jeffersred'	Autumn Blaze Maple	2.5" cal	B&B
C	29	Ginkgo biloba 'Autumn Gold'	Autumn Gold Ginkgo	2.5" cal	B&B
D	25	Nyssa sylvatica	Blackgum	2.5" cal	B&B
E	27	Platinus x acerifolia 'Morton Circle'	Exclamation! London Planetree	2.5" cal	B&B
F	27	Quercus acutissima	Sawtooth Oak	2.5" cal	B&B
G	26	Quercus bicolor	Swamp White Oak	2.5" cal	B&B
H	26	Ulmus 'Homestead'	Homestead Elm	2.5" cal	B&B
EVERGREEN TREES					
X	24	Pinus strobus	Eastern White Pine	8' ht	B&B
Y	24	Picea abies	Norway Spruce	8' ht	B&B
Z	24	Picea pungens	Colorado Blue Spruce	8' ht	B&B
SHRUBS					
a	70	Viburnum prunifolium	Blackhaw Viburnum	24"	Cont.
b	139	Ilex x meserveae 'Blue Prince/Blue Princess'	Blue Prince/Blue Princess Holly (1:9 ratio)	24"	Cont.
c	60	Hamamelis vernalis	Ozark Witchhazel	24"	Cont.

NOTES:
1. ALL STREET TREES WILL BE LOCATED AT LEAST 3' FROM PROPOSED CURB.
2. ALL STREET TREES WILL BE LOCATED AT LEAST 10' FROM ALL HYDRANTS AND STORM SEWER STRUCTURES.
3. MULCH TO BE DOUBLE GROUND BARK MULCH.
4. ALL TURF AREAS TO BE SEEDED.
5. ALL 3:1 OR STEEPER SLOPES SHALL BE SEEDED AND HAVE EROSION CONTROL BLANKET.
6. TOPSOIL IN ALL DISTURBED LAWN AREAS AT 6" DEPTH.
7. SOIL MIX IN ALL SHRUB BEDS AT 8" DEPTH.
8. PROVIDE UNDERGROUND IRRIGATION SYSTEM. CONTRACTOR TO PROVIDE DESIGN-BUILD DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT.

STATE OF MISSOURI JERALD A. SAUNDERS NUMBER LA-7 LANDSCAPE ARCHITECT

Jerald Saunders - Landscape Architect
MO License # LA-007

LOCATION MAP
(NOT TO SCALE)

14001 Olive Blvd.

Chesterfield, Missouri

Revisions:

Date	Description	No.
3/4/20	Plan Changes	

Drawn: LWH
Checked: JAS

loomisAssociates

landscapeArchitects/planners
750 Spirit 40 Park Drive
Chesterfield, Missouri 63005-1194
(636) 519-1500
e-mail: lainfo@loomis-associates.com

Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Landscape Plan

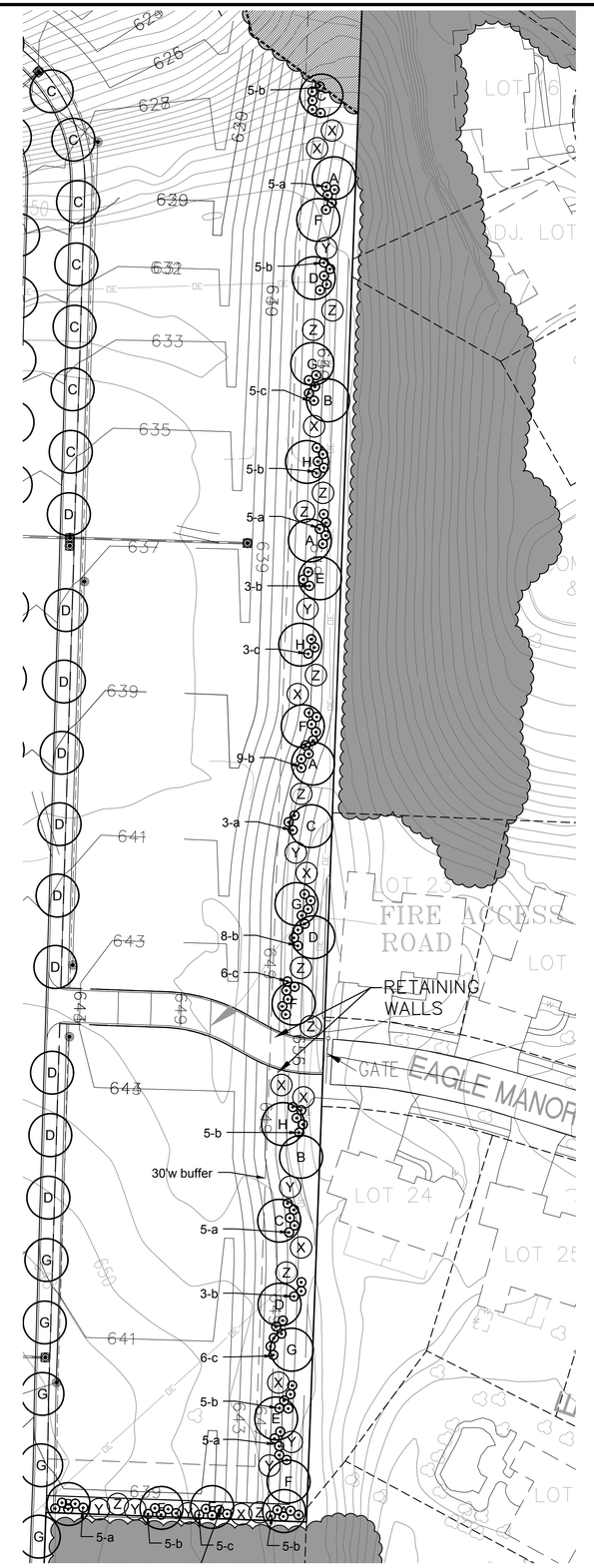
Sheet No: L-1

Date: 8/13/19
Job #: 813.080

Landscape Plan - West Bufferyard

SCALE 1"=40'

0 40 80 160



Landscape Plan - East Bufferyard

SCALE 1"=40'

STATE OF MISSOURI
JERALD A. SAUNDERS
NUMBER
LA-7
LANDSCAPE ARCHITECT

Jerald Saunders - Landscape Architect
MO License # LA-007

RECEIVED
City of Chesterfield
Mar 19 2020
Department of Public Services

14001 Olive Blvd.

Chesterfield, Missouri

Revisions:

Date	Description	No.
3/4/20	Plan Changes	

Drawn: LWH
Checked: JAS

loomisAssociates

landscapeArchitects/planners

750 Spirit 40 Park Drive
Chesterfield, Missouri 63005-1194
(636) 530-9100
e-mail: lainfo@loomis-associates.com

Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title: Landscape Plan

Sheet No: L-2

Date: 8/13/19
Job #: 813.080

City Council Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Date: April 24, 2020

Bill No. 3299

CC Date: May 4, 2020

RE: **Dumpsters in Residential Areas**

Summary

The City has received complaints regarding a single-family residential property under construction. Specifically, the issue of the duration of a dumpster in conjunction with a renovation of the home was raised.

Currently, regulation of dumpsters in residential areas are covered in two areas:

- Section 20-3 declares the following as a public nuisance: "Placement of a roll-off trash container on property for an uninterrupted period exceeding ninety (90) consecutive days or positioned so as to create an obstruction for a roadway, alley or sidewalk constituting an inconvenience or danger to the health, safety or welfare of the public or residents and occupants of the immediate vicinity.

- The building code permits dumpsters associated with an active building permit.

While dumpsters are necessary for many projects, a lack of regulation for duration of the dumpsters in residential areas can detract from the residential character of the neighborhood.

On April 23, 2020, Planning and Public Works Committee recommended approval of the inclusion of a requirement for a permit for dumpsters in residential areas into City Code by a vote of 4-0.

Attachments: Draft Legislation

BILL NO. 3299 **ORDINANCE NO.** _____

AN ORDINANCE AMENDING SECTION 07 "BUILDING AND BUILDING REGULATIONS" OF THE CITY OF CHESTERFIELD MUNICIPAL CODE AND CREATING A NEW SECTION 07-03 "DUMPSTERS IN RESIDENTIAL AREAS" THAT PROVIDES THE PROCEDURES AND REQUIREMENTS FOR PLACEMENT, USE, AND DURATION OF DUMPSTERS IN RESIDENTIAL AREAS WITHIN THE CITY OF CHESTERFIELD (PP 2020-06 CITY OF CHESTERFIELD [DUMPSTERS IN RESIDENTIAL AREAS]).

WHEREAS, the City of Chesterfield City Code provides standards to mitigate negative impacts of activity in residential neighborhoods; and

WHEREAS, the City of Chesterfield has identified issues regarding single-family residential properties under construction, pertaining specifically to the duration of dumpsters being placed on such properties in conjunction with a renovation of homes; and,

WHEREAS, the proposed regulations are consistent with the policies of the City of Chesterfield Comprehensive Plan as they conserve the existing quality of life and preserve the identity of existing neighborhoods; and

WHEREAS, on April 23, 2020, Planning and Public Works Committee recommended approval of the inclusion of additional language into City Code by a vote of 4-0; and,

WHEREAS, the City Council of the City of Chesterfield having considered said request, voted to approve the addition of language into Section 07-03 of City of Chesterfield's Municipal Code (Dumpsters in Residential Areas).

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. Section 07-03 is hereby created as follows:

The placement of any container on or adjacent to residential property shall require approval of a Municipal Zoning Approval (MZA). Said permit shall be issued for a period not to exceed thirty (30) days. Extensions may be granted by the Director of Planning for an additional thirty (30) days. The container must be wholly on the permittee's property.

Section 2. If any section, paragraph, subsection, clause or provision of this Ordinance shall be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this Ordinance as whole, or any part thereof.

Section 3. The provisions of the Ordinance may be amended in the future by the City Council of the City of Chesterfield, after notice and hearing as provided by law.

Section 4. Where this Ordinance differs or conflicts with other laws, rules and regulations, unless the right to do so is preempted or prohibited by the County, State, or Federal government, the more restrictive or protective of the City and the public shall apply.

Section 5. This Ordinance shall be codified within the Municipal Code of the City of Chesterfield.

Section 6. Enforcement and Penalties. Enforcement and penalties for this ordinance are subject to Section 31-08 of the City of Chesterfield Code.

Section 7. This Ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: 05/04/2020

RESOLUTION #____

EXPRESSING THE INTENTION OF THE CITY COUNCIL TO ADOPT THE REVISED BUILDING, RESIDENTIAL, EXISTING BUILDING, MECHANICAL, SWIMMING POOL AND SPA, ELECTRICAL, PLUMBING AND PROPERTY MAINTENANCE CODES OF ST LOUIS COUNTY AS THE PLUMBING AND ELECTRICAL CODES FOR THE CITY OF CHESTERFIELD; GIVING NOTICE THAT SAID CODES ARE ON FILE WITH THE OFFICE OF THE CITY CLERK.

WHEREAS, Section 2-261 of the Municipal Code of the City of Chesterfield authorizes a contract with the Department of Public Works of St Louis County for permitting, inspection and enforcement of certain technical codes including Building, Electrical, Mechanical, and Plumbing Codes and requires, as a condition of such contracts, that the City of Chesterfield adopt the St Louis County Building, Electrical, Mechanical, and Plumbing Codes as the Building, Electrical, Mechanical, and Plumbing Codes of the City; and

WHEREAS, the St. Louis County Council has adopted legislation to adopt a Revised St. Louis County Building Code (St. Louis County Ordinance #27,654), a Revised St. Louis County Residential Code (St. Louis County Ordinance #27,654), a Revised St. Louis County Existing Building Code (St. Louis County Ordinance #27,654), Revised St. Louis County Swimming Pool and Spa Code (St. Louis County Ordinance #27,654),a Revised St. Louis County Mechanical Code (St. Louis County Ordinance #27,619), a Revised St. Louis County Electrical Code (St. Louis County Ordinance #27,430), a Revised St. Louis County Plumbing Code (St. Louis County Ordinance #27,424), and a Revised St. Louis County Property Maintenance Code (St. Louis County Ordinance #27,617); and

WHEREAS, Section 67.280, RSMO, provides that local governments can adopt certain technical codes by reference provided that at least three (3) copies of such codes and all amendments thereto, are filed with the Office of the City Clerk and are available for public inspection for a period of not less than ninety (90) days prior to the date of adoption by reference; and

WHEREAS, copies of St Louis County Ordinances and the codes to which they relate are on file with the Office of the City Clerk and are available for public inspection and review during normal business hours and can also be found on the city website;

NOW THEREFORE BE IT RESOLVED THAT THE CITY OF CHESTERFIELD hereby givess notice that the City Council intends to consider the adoption of certain technical codes by reference together with

all amendments thereto as have been adopted by the St. Louis County Council:

Technical Code	St. Louis County Ordinance (Approved Date) (Adopted Date)
St. Louis County Building Code	County Ordinance #27,654 (12/18/19) (04/01/20)
St. Louis County Residential Code	County Ordinance #27,654 (12/18/19) (04/01/20)
St. Louis County Existing Building Code	County Ordinance #27,654 (12/18/19) (04/01/20)
St. Louis County Swimming Pool and Spa Code	County Ordinance #27,654 (12/18/19) (04/01/20)
St. Louis County Mechanical Code	County Ordinance #27,619 (12/05/19) (04/01/20)
St. Louis County Electrical Code	County Ordinance #27,430 (06/18/19) (04/01/20)
St. Louis County Plumbing Code	County Ordinance #27,424 (06/05/19) (04/01/20)
St. Louis County Property Maintenance Code	County Ordinance #27,617 (12/05/19) (04/01/20)

Passed and adopted this _____ day of May 2020.

_____ _____

Presiding Officer Bob Nation, Mayor

Attest:

_____

Vickie McGownd, City Clerk

City Council Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Date: April 24, 2020 Bill No. 3300

CC Date: May 4, 2020

Re: **Ordinance Adopting the Technical Codes as Amended and Adopted by St. Louis County**

Summary

On November 21, 1988, the City of Chesterfield entered into an agreement with St. Louis County for enforcement of their Building, Mechanical, Plumbing, Electrical, and Explosives codes within the City of Chesterfield. Pursuant to this ongoing agreement, it is necessary for the City of Chesterfield to periodically adopt the updated editions of the St. Louis County Codes as our minimum standards for construction, alteration, use and occupancy of building and structures.

St. Louis County recently passed legislation to repeal and re-enact various codes by amending and adopting the 2015 editions of the International Code Council (ICC) Building, Residential, Existing Building, Mechanical, Electrical (2014), Plumbing, Swimming Pool and Spa, and Property Maintenance Codes. No changes are proposed for the Explosives Code.

In order for the City of Chesterfield to continue utilization of the St. Louis County building permit, plan review, field inspection, and occupancy permit services, the above listed codes as amended by St. Louis County must be adopted by the City of Chesterfield.

The legislation for this adoption has been reviewed and approved by St. Louis County. The County ordinances for each of the code amendments are available in PDF format on the St. Louis County website at:

https://www.stlouisco.com/Your-Government/Public-Works/Codes

The request was reviewed by the Planning and Public Works Committee on April 23, 2020. The Committee voted 4-0 to recommend approval of adoption of the Technical Codes including a Resolution of Notice of Intent to Adopt. Following the resolution and first reading, a ninety (90) day period will allow for public review of the codes, as required by RSMo 67.280.2.

BILL NO. 3300 **ORDINANCE NO.**_____

AN ORDINANCE ADOPTING AND ENACTING THE BUILDING, EXISTING BUILDING, MECHANICAL, RESIDENTIAL, EXISTING BUILDING, ELECTRICAL, PLUMBING, PROPERTY MAINTENANCE, SWIMMING POOL AND SPA, AND EXPLOSIVES CODES OF THE CITY OF CHESTERFIELD, MISSOURI.

WHEREAS, it is necessary for the protection of the health, safety and welfare of the citizens of the City of Chesterfield, Missouri (the "City") to adopt and update minimum requirements and standards for the construction, use and occupancy of buildings and structures, the installation of mechanical, electrical and plumbing systems, fixtures and equipment, the proper maintenance of buildings, structures and properties, and the safe use of blasting agents for excavations and related construction (the "Technical Codes"); and

WHEREAS, Since November 21, 1988 the City has maintained an inter-governmental agreement with St. Louis County, Missouri (the "County") pursuant to the authority granted under § 70.220 RSMo for the administration and enforcement of the Technical Codes (the "Agreement"); and

WHEREAS, the County has recently amended its technical codes including Building, Existing Building, Mechanical, Residential, Existing Building, Electrical, Plumbing, Swimming Pool and Spa, and Property Maintenance Codes (the "Technical Code Amendments"); and

WHEREAS, the Agreement requires the City to adopt the Technical Codes and the Technical Code Amendments (Collectively, the "City Technical Codes"); and

WHEREAS, §67.280 RSMo requires copies of the City Technical Codes to be filed with the City Clerk for a period of ninety days prior to adoption by the City; and

WHEREAS, the Planning and Public Works Committee has reviewed the City Technical Codes and recommends adoption by ordinance; and,

WHEREAS, the City Council of the City of Chesterfield, after consideration of the recommendation of the Planning and Public Works Committee, hereby adopts the City Technical Codes.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. Section 2-263 of the City Code is hereby repealed in its entirety.

Section 2. Section 07-36 is hereby created as follows:

Section 07-36 Building Code

a) *Adoption*. A certain document, one (1) copy of which is on file in the office of the City Clerk, being marked and designated as the International Building Code, 2015 edition, including "APPENDIX C - GROUP U - AGRICULTURAL BUILDINGS" and "APPENDIX H - SIGNS" as published by the International Code Council, is hereby adopted as the Building Code of the City of Chesterfield, Missouri for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said International Building Code are hereby referred to, adopted, and made a part hereof, as if fully set out in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in this chapter.

b) *General Administrative Definitions*. Throughout the International Building Code, 2015 edition, whenever the term "jurisdiction" appears it shall be deemed to mean "City of Chesterfield." Likewise, whenever the term "Department of Building Safety" appears it shall be deemed to mean "City of Chesterfield Department of Planning." Whenever the terms "Code Official" or "building official" appear they shall mean the Director of Planning or the Director's duly authorized representative; and when the terms "code," "this code," or "Building Code" appear they shall be deemed to mean the International Building Code, 2015 edition as adopted herein with the additions, deletions and changes as prescribed in this section.

c) *References to Other Adopted Codes*. Throughout this section and the International Building Code, 2015 edition, wherever a reference appears to the "International Residential Code" it shall mean the "Residential Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Existing Building Code" it shall mean the "Existing Building Code" as adopted. Wherever a reference appears to the "International Mechanical Code" it shall mean the "Mechanical Code" as adopted. Wherever a reference appears to the "International Fuel Gas Code" it shall mean the "Mechanical Code" as adopted.

Wherever a reference appears to "NFPA 70" it shall mean the "Electrical Code" as adopted. Wherever a reference appears to the "International Plumbing Code" it shall mean the "Plumbing Code" as adopted. Wherever a reference appears to the "International Private Sewage Disposal Code" it shall mean the "Plumbing Code" as adopted. Wherever a reference appears to the "International Property Maintenance Code" it shall mean the "Property Maintenance Code" as adopted.

d) *Amendments*. The provisions attached as Attachment 'A' hereby amend Chapter 1 Scope and Administration in the International Building Code, 2015 edition. Each code section that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'A'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 3. Section 07-37 is hereby created as follows.

Section 07-37 Residential Code

a) *Adoption*. A certain document, one (1) copy of which is on file in the office of the City Clerk, being marked and designated as the International Residential Code for One- and Two-Family Dwellings, 2015 edition, including "APPENDIX K - SOUND TRANSMISSION," as published by the International Code Council, is hereby adopted as the Residential Code of the City of Chesterfield, Missouri, for regulating and governing the construction, alteration, movement, enlargement, replacement, repair, equipment, location, removal and demolition of detached one- and two-family dwellings and multiple single family dwellings (townhouses) not more than three (3) stories in height with separate means of egress as here-in provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said International Residential Code on file in the office of the City Clerk are hereby referred to, adopted, and made a part hereof, as if fully set out in this section, with the additions, insertions, deletions and changes as prescribed in this section.

b) *General Administrative Definitions*. Throughout the International Residential Code for One- and Two-Family Dwellings, 2015 edition, whenever the term "jurisdiction" appears it shall be deemed to mean "the City of Chesterfield." Likewise, whenever the term "Department of Building Safety" appears it shall be deemed to mean "City of Chesterfield Department of Planning" whenever the terms "Code Official" or "building official" appear it shall mean the Director of

Planning or the Director's duly authorized representative and when the terms "code," "this code," or "Residential Code" appear it shall be deemed to mean the International Residential Code for One- and Two-Family Dwellings, 2015 edition as adopted herein with the additions, deletions and changes as prescribed in this chapter.

c) *References to Other Adopted Codes*. Throughout this section and the International Residential Code, 2015 edition, wherever a reference appears to the "International Building Code" it shall mean the "Building Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Existing Building Code" it shall mean the "Existing Building Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Mechanical Code" it shall mean the "Mechanical Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Fuel Gas Code" it shall mean the "Mechanical Code" as adopted as amended with the additions, deletions and changes prescribed therein. Wherever a reference appears to "NFPA 70" it shall mean the "Electrical Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Plumbing Code" it shall mean the "Plumbing Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Private Sewage Disposal Code" it shall mean the "Plumbing Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Property Maintenance Code" it shall mean the "Property Maintenance Code" as adopted with the additions, deletions and changes prescribed therein.

d) *Amendments*. The provisions attached as Attachment 'B' hereby amend the International Residential Code, 2015 edition. Each code section that corresponds to one of the attached provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'B'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 4. Section 07-38 is hereby created as follows.

Section 07-38 Existing Building Code

a) *Adoption*. That a certain document, one (1) copy of which is on file in the office of the City Clerk, being marked and designated as the

International Existing Building Code, 2015 edition, including "APPENDIX A - GUIDELINES FOR SEISMIC RETROFIT OF EXISTING BUILDINGS (GSREB)" as published by the International Code Council, be and is hereby adopted as the Existing Building Code of the City of Chesterfield, Missouri, for regulating and governing the repair, alteration, change of occupancy, addition, and relocation of existing buildings, including historic buildings, as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said International Existing Building Code on file in the office of the City Clerk are hereby referred to, adopted, and made a part hereof, as if fully set out in this section, with the additions, insertions, deletions and changes prescribed in this section.

b) *General Administrative Definitions*. Throughout the International Existing Building Code, 2015 edition, whenever the terms "jurisdiction" or "local jurisdiction" appear it shall be deemed to mean "the City of Chesterfield," likewise whenever the term "department of building safety" appears it shall be deemed to mean "Department of Planning," wherever the terms "Code Official" or "building official" appear it shall mean the Director of Planning or the Director's duly authorized representative and whenever the terms "code," "this code," or "Existing Building Code" appear it shall be deemed to mean the International Existing Building Code, 2015 edition, as adopted herein with the additions, deletions and changes as prescribed in this chapter.

c) *References to Other Adopted Codes*. Throughout this chapter and the International Existing Building Code, 2015 edition, wherever a reference appears to the "International Building Code" it shall mean the "Building Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Residential Code" it shall mean the "Residential Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Mechanical Code" it shall mean the "Mechanical Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Fuel Gas Code" it shall mean the "Mechanical Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to "NFPA 70" it shall mean the "Electrical Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Plumbing Code" it shall mean the "Plumbing Code" as adopted with the additions, deletions and changes prescribed therein. Wherever a reference

appears to the "International Private Sewage Disposal Code" it shall mean the "Plumbing Code" as adopted as amended with the additions, deletions and changes prescribed therein. Wherever a reference appears to the "International Property Maintenance Code" it shall mean the "Property Maintenance Code" as adopted as amended with the additions, deletions and changes prescribed therein.

d) *Amendments*. The provisions attached as Attachment 'C' hereby amend the International Existing Building Code, 2015 edition. Each code section that corresponds to one of the attached provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'C'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 5. Section 07-39 is hereby created as follows.

Section 07-39 Mechanical Code

a) *Adoption*. Certain documents, one (1) copy of which is filed in the Office of the City Clerk, said copies being marked and designated as the International Mechanical Code, 2015 Edition, as published by the International Code Council, Inc., including Appendix A are hereby adopted as the Mechanical Code of the City of Chesterfield, Missouri for the regulation of mechanical equipment as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of said code are hereby referred to, adopted and made a part hereof, as if fully set out herein with the additions, deletions and changes as prescribed in this section.

b) *General Administrative Definitions*. Throughout the International Mechanical Code, 2015 Edition, wherever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear it shall be deemed to mean "City of Chesterfield, Missouri." Likewise, wherever the term "Department of Mechanical Inspection" or "Mechanical Inspection Department" appears it shall be deemed to mean "City of Chesterfield Department of Planning", whenever the terms "Code Official" or "Building Official" appear it shall mean the Director of Planning or the Director's duly authorized representative and wherever the terms "code", "this code" or "Mechanical Code" appears it shall mean the International Mechanical Code, 2015 Edition with the additions, deletions and changes prescribed in this Chapter.

c) *References to Other Adopted Codes*. Throughout the International Mechanical Code 2015 Edition, wherever a reference appears to the

"International Plumbing Code" or "plumbing code" it shall mean "The Plumbing Code" as adopted with the additions, deletions and changes prescribed by that section. Wherever a reference appears to the "International Electrical Code" or "electrical code" it shall mean "The Electrical Code" as adopted with the additions, deletions and changes prescribed by that section. Wherever a reference appears to the "International Building Code" or "building code" it shall mean "The Building Code" as adopted with the additions, deletions and changes prescribed by that section.

d) *Amendments*. The provisions attached as Attachment 'D' hereby amend the International Mechanical Code, 2015 edition. Each code section that corresponds to one of the attached provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'D'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 6. Section 07-40 is hereby created as follows.

Section 07-40 Electrical Code

a) *Adoption*. Certain documents, one (1) copy of which is filed in the Office of the City Clerk, said copies being marked and designated as "National Electrical Code, 2014 as published by the National Fire Protection Association, are hereby adopted as the Electrical Code of the City of Chesterfield, Missouri for the regulation of electrical equipment as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of said code are hereby referred to, adopted and made a part hereof as if fully set out herein with the additions, deletions and changes as prescribed in this chapter.

b) *General Administrative Definitions*. Throughout the National Electrical Code 2014, wherever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear it shall be deemed to mean "City of Chesterfield, Missouri." Likewise, wherever the term "Department of Electrical Inspection" appears it shall be deemed to mean "City of Chesterfield Department of Planning" and wherever the term "code" appears it shall mean the National Electrical Code 2014, as adopted herein with the additions, deletions and changes as prescribed in this chapter.

c) *Amendments*. The provisions attached as Attachment 'E' hereby amend the National Electric Code, 2014 edition. Each code section that corresponds to one of the attached provisions is hereby deleted

where so noted or amended to read as set forth in Attachment 'E'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 7. Section 07-41 is hereby created as follows.

Section 07-41 Plumbing Code

a) *Adoption*.

a. Certain documents, one (1) copy of which is filed in the Office of the City Clerk, said copy being marked and designated as the "Uniform Plumbing Code, 2015 (hereinafter "UPC") Edition" "IAPMO/ANSI UPC 1-2015," including Appendices A through G and I through L, as published by the International Association of Plumbing and Mechanical Officials, are hereby referred to, adopted, and made a part hereof, as if fully set out in this section, with the additions, deletions, insertions and changes prescribed by the following sections herein; provided that should any conflict of interpretations or requirements occur between the provisions of the aforementioned documents and the City of Chesterfield Ordinances, then said City of Chesterfield Ordinances shall apply and prevail. Whenever the term "this Code" is used in this chapter or in the Uniform Plumbing Code, it shall mean the Uniform Plumbing Code with the additions, deletions, and changes prescribed in this section.

b. The "Uniform Swimming Pool, Spa, and Hot Tub Code", 2015 (hereinafter "USPSHTC") and the "Uniform Solar Energy Code", 2015 (hereinafter "USEC"), as published by the International Association of Plumbing and Mechanical Officials, are hereby referred to, adopted, and made a part hereof, as if fully set out in this chapter.

b) *Amendments*. The provisions attached as Attachment 'F' hereby amend the International Plumbing Code, 2015 edition. Each code section that corresponds to one of the attached provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'F'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 8. Section 07-42 is hereby created as follows.

Section 07-42 Property Maintenance Code

a) *Adoption*. A certain document, one (1) copy of which is on file in the Office of the City Clerk, said copy being marked and designated as the ICC International Property Maintenance Code, year 2015 edition ("Code" or "code"), as published by the International Code Council, Inc., shall be and is hereby adopted as the Property Maintenance Code of the City of Chesterfield, Missouri, for the control of buildings and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of the code are hereby referred to, adopted and made a part hereof, as if fully set out in this chapter, with the additions, insertions, deletions, and changes prescribed in this chapter.

b) *General Administrative Definitions*. Throughout the code, whenever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear it shall be deemed to mean "City of Chesterfield, Missouri." Likewise, whenever the term "Department of Building Inspection" appears it shall be deemed to mean "City of Chesterfield Department of Planning" and whenever the term "Code" or "code" appears it shall mean the ICC International Property Maintenance Code, year 2015 edition, as adopted herein.

c) *Amendments*. The provisions attached as Attachment 'G' hereby amend the International Property Maintenance Code, 2015 edition. Each code section that corresponds to one of the attached provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'G'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 9. Section 07-43 is hereby created as follows.

Section 07-43 Swimming Pool and Spa Code

a) *Adoption*.

That a certain document, one (1) copy of which is on file in the Office of the City Clerk, being marked and designated as the International Swimming Pool and Spa Code, 2015 edition, as published by the International Code Council, be and is hereby adopted as the Swimming Pool and Spa Code of the City of Chesterfield, in the State of Missouri, for regulating and governing the construction, alteration, replacement, repair, equipment, location, and demolition of swimming pools and spas, as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of

said International Swimming Pool and Spa Code on file in the Office of the City Clerk are hereby referred to, adopted, and made a part hereof, as if fully set out in this chapter, with the additions, insertions, deletions and changes, if any, prescribed in this section.

b) *General Administrative Definitions*. Throughout the International Swimming Pool and Spa Code, 2015 edition, whenever the terms "jurisdiction" or "local jurisdiction" appear it shall be deemed to mean "City of Chesterfield," likewise whenever the term "department of building safety" appears it shall be deemed to mean "Department of Planning," wherever the terms "Code Official" or "building official" appear it shall mean the Director of Planning or the Director's duly authorized representative and whenever the terms "code," "this code," or "Swimming Pool and Spa Code" appear it shall be deemed to mean the International Swimming Pool and Spa Code, 2015 edition, as adopted herein with the additions, deletions and changes as prescribed in this chapter.

c) *Amendments*. The provisions attached as Attachment 'H' hereby amend the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one of the attached provisions is hereby deleted where so noted or amended to read as set forth in Attachment 'H'. Each provision set out in the attached without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Section 10. Section 07-44 is hereby created as follows.

Section 07-44 Explosives Code

a) The City of Chesterfield hereby adopts the 1997 Explosives Code as adopted by St. Louis County Ordinance 18,693 dated November 6, 1997, as detailed in Attachment 'I' as the Explosives Code for the City of Chesterfield.

Section 11. Enforcement and Penalties. Enforcement and penalties for this ordinance are subject to Section 31-08 of the City of Chesterfield Code.

Section 12. The Mayor and City Clerk are authorized and directed to evidence the approval of the said technical codes by affixing their signatures and the official seal of the City of Chesterfield as required on the said document.

Section 13. The Ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____ day of _____,

2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: 05/04/2020

Attachment 'A'

Amendments to the International Building Code, 2015 Edition—

Chapter 1 Scope and Administration. The following provisions amend Chapter 1 Scope and Administration in the International Building Code, 2015 edition. Each code section that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

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

101.2 *Scope.* The provisions of this code shall apply to the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height, shall comply with the International Residential Code.
2. The provisions of the International Existing Building Code shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

101.4 *Applicability of Chesterfield, Missouri codes and ordinances.* Throughout this code, whenever the terms NFPA 70, International Plumbing Code, International Mechanical Code, International Property Maintenance Code, International Building Code, International Residential Code, International Existing Building Code, International Swimming Pool and Spa Code, Zoning Ordinance or Floodplain Management Regulations Ordinance appears it shall be deemed to mean the codes adopted by Chesterfield as listed in Chapter 07 of the City Code, as amended, respectively.

101.4.1 *Gas.* - Delete.

101.4.2 *Mechanical.* - Delete.

101.4.3 *Plumbing.* - Delete.

101.4.4 *Property maintenance.* - Delete.

101.4.5 *Fire prevention.* - Delete.

101.4.6 *Energy.* - Delete.

101.4.7 *Existing buildings.* - Delete.

101.5 *Code.* When the phrase "this code" is used in Sections 102 through 118, the phrase shall mean the applicable Chesterfield Building Code, Residential Code for One- and Two-Family Dwellings, Existing Building Code or the Swimming Pool and Spa Code containing the origin of the reference to Sections 102 through 118.

101.6 *Correction of violations of other codes.* Repairs or alterations mandated by any property, housing, or fire safety maintenance code or mandated by any licensing rule or ordinance adopted pursuant to law shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this code unless the code requiring such repair or alteration so provides.

101.7 *Appendices.* Provisions in the appendices shall not apply unless specifically adopted.

102.2.1 *Licensing.* Applicable licensing provisions of the Mechanical Code, the Electrical Code and the Plumbing Code shall apply to work regulated under this code.

102.2.2 *Compliance with zoning and other applicable codes and ordinances.* Subject to the provisions of this code, neither the granting of a permit, nor the approval of construction documents, nor inspections made by the building official, or the building official's authorized representative, during the erection, movement or demolition of a building or structure, or any alteration or addition thereto, shall in any way relieve the owner or tenant of such building, structure or property from complying with the requirements of this code, the Zoning Ordinance, or other applicable laws. Provided, however, that nothing in this code shall be construed to subject any land or structure owned or controlled by Chesterfield to any municipal zoning or other ordinances.

102.4 *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 and as further regulated in Sections 102.4.1 through 102.4.3.

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 manufacturer's instructions shall apply.

102.4.3 *Standards and guidelines for structural evaluation.* The building official shall allow structural evaluation, condition assessment, and rehabilitation of buildings, structures, or individual structural members based on this code's appendix chapters, referenced standards, guidelines, or other approved standards and procedures.

102.6 *Existing structures.* The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change,

except as is specifically covered in this code, the International Existing Building Code, the International Property Maintenance Code or the International Fire Code, where the International Fire Code is referenced by this code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

104.1.1 *Rule-making authority.* The building official shall have authority, as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code, to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code or of violating accepted engineering practice involving public safety.

104.2 *Applications and permits.* The building official shall receive applications, review construction documents and issue permits for the erection, and alteration, demolition and moving of buildings and structures, change of occupancy and inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

104.2.2 *Preliminary meeting.* When requested by the permit applicant, the building official shall meet with the permit applicant and the registered design professional prior to the application for a construction permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this code.

104.2.3 *Authorization to proceed.* The building official may authorize the commencement of construction prior to issuance of a building permit, when it can be shown that:

1. The project is in compliance with the applicable regulations of Chesterfield for that portion of the work to be performed; and
2. The applicant agrees to proceed at their own risk.

All necessary inspections shall be performed as required by this code.

104.2.4 *Building evaluation.* The building official is authorized to require a structure to be investigated and evaluated by a registered design professional to determine the existence of any potential nonconformance with the provisions of this code.

104.6.1 *Disasters.* In the event of a disaster such as a windstorm, tornado, flood, fire, earthquake, bomb blast, explosion or similar natural or man-made type event the building official is hereby authorized to enter and inspect structures within the affected areas, subject to constitutional restrictions on unreasonable searches and seizures. When, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official shall take emergency measures in accordance with this code. If the building official

determines, after inspection, that a structure is unfit, the building official shall declare it a public nuisance, cause a report to be prepared and notify the affected parties in accordance with this code.

104.6.1.1 *Post-disaster inspections.* The building official is authorized to deputize Missouri Structural Assessment and Visual Evaluation (SAVE) Volunteer Inspectors certified by the Missouri State Emergency Management Agency (SEMA) to conduct emergency Post-Disaster Safety Evaluations of Buildings.

104.10 *Modifications.* Wherever there are practical difficulties involved in carrying out the provisions of this code, the building official shall have the authority to grant modifications for individual cases, upon written application of the owner or owner's authorized agent, provided that the building official shall first find that special individual reason makes the strict letter of this code impractical, the modification is in compliance with the intent and purpose of this code and that such modification does not lessen health, accessibility, life and fire safety or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department of building safety. A copy of the application and the final decision of the building official shall be distributed to the Building Code Review Committee and the Building Commission.

104.10.1 *Flood hazard areas.* The building official shall not grant modifications to any provision required in flood hazard areas as established by Section 1612.3 without the granting of a variance by the Board of Zoning Adjustment (BZA) and unless a determination has been made that:

1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards of Section 1612 in appropriate.
2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.
5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.

105.1 *Required.* Any owner or owner's authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or install or alter a ground level paved parking lot other than those lots serving a single-family dwelling, or establish a new or relocated lot line that affects an existing structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the building official and obtain the required permit.

105.1.1 *Disaster damage repair permit required.* It shall be unlawful to repair a structure when such repair is due to a disaster without first registering and filing an application with the building official in writing and obtaining a Disaster Damage Repair Permit. Disaster Damage Repair Permits may be obtained at discounted or no cost at the discretion of the building official if issued within 90 days after the end of a disaster, where such date is determined by the building official, and shall authorize the work indicated therein to be completed within one year of the date of issuance. The building official may extend the 90 day period with justifiable cause. For the purposes of this section, the cost of disaster damage repair shall be defined in accordance with the Federal Emergency Management Agency (FEMA) or Missouri State Emergency Management Agency (SEMA) regulations and definitions.

105.1.1.1 *Disaster contractor registration required.* It shall be unlawful for anyone other than the property owner to make repairs as defined in Section 105.1.1 unless this person is registered with the building official. The building official shall not register an applicant and/or issue a permit hereunder to any person, firm, or corporation, except the property owner, unless the following information is obtained: name, current address, permanent address, social security number or tax identification number, copy of driver's or operator's license, height, weight, eye color, hair color, race, build, at least two work references, and whether applicant is insured or bonded.

105.1.2 *Reroofing.* Permits are required for the recovering or replacement of an existing roof covering when either of the following conditions apply.

1. Permits are required for reroofing of roofs with a slope of less than 4:12. Plans and specifications are only required when reroofing a slope less than ¼ unit vertical in 12 units horizontal.
2. Permits, plans and specifications are required for all changes in a roof covering system regardless of the roof slope.

105.1.3 *Temporary buildings and structures.* No temporary building or structure, either mobile or stationary, shall be erected, operated, used or maintained for any purpose without first obtaining a temporary structures permit. All temporary buildings and structures shall meet the requirements of section 3103 Temporary Structures in the International Building Code.

105.1.4 *Integrated permits.* The building official may issue integrated building, plumbing, electrical and/or mechanical permits on a single permit application.

105.1.4.1 *Applicant responsibility.* The integrated permit applicant shall be responsible for the return to the Department of Transportation and Public Works copies of the plumbing, electrical and/or mechanical permit form with the name, signature and license number of the appropriate sub-contractor. Any change in the identity of the named sub-contractor after issuance of the permit shall result in the assessment of a transfer fee in the amount specified in Chapter 1100, SLCRO 1974, as amended.

105.1.5 *Separate permits.* Permit applicants may submit separate applications for building, mechanical, electrical, or plumbing permits. As a condition of approval the owner or owner's agent shall agree to assume full responsibility for the coordination of all applicable code requirements relating to these permits.

105.1.6 *Additional approval requirements.* If Chesterfield contracts with the County for the enforcement of their Building, Residential, Existing Building Codes, all plans for the construction or use of buildings and structures regulated by this code shall be reviewed and approved by the Department of Planning for compliance with the zoning or other regulatory ordinances or provisions prior to issuance of a permit under this code by St. Louis County.

The building official may issue a partial permit in accordance with section 107.3.3 when clearances pertaining to the scope of the work requested are obtained from the applicable municipality. The holder of such partial permit shall proceed at the owner's own risk without assurance that outstanding reviewing municipality final approvals can be obtained or that a permit for the entire structure will be granted.

105.1.7 *Addendums to permits.* Once a permit is issued all addendums submitted, as an amendment to the approved construction documents, shall be charged an additional review fee as specified in Chapter 1100, SLCRO 1974 as amended and in accordance with this code.

105.2 *Work exempt from permit.* Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. "Repair" work in compliance with requirements of Section 105.2.2 does not require a permit provided such required "repair" work is not the result of a disaster or lack of on-going routine maintenance. Damage repair permits are required for these situations per Sections 105.1.1 and 118.5.1. regardless of the nature of repair required.

2. Work by "Public service agencies" as specified in Section 105.2.3 does not require a permit.

3. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.15 m^2).

4. New fencing or replacement of existing fencing not more than 7 feet (2134 mm) in height, except when enclosing swimming pools, spas, or hot tubs, in the rear or side yards.

   Exception: Fences of any height, which utilize electrified components or barbed wire, razor ribbon, and like material are not exempt from permit requirements. See Section 3111 of the International Building Code for permits and regulations for electrified fences and fences utilizing barbed wire, razor ribbon or like material.

5. Retaining walls which are not over 3 feet (914 mm) in height measured from the finished grade on the non-retained side of the wall to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids, in which case the wall shall not be over 2 feet (610 mm) in height. A building permit is required if the wall is located less than or equal to its height from the property line or if the total height of the retaining wall and guard or fence on top of the wall exceeds 6 feet (1828 mm). Total height is measured from the top of the proposed finished grade at the non-retained side of the wall to the top of the guard or fence. Refer to Section 1807.2.4 for guard requirements.

6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

7. Prefabricated swimming pools accessory to one- and two-family dwellings, townhouses and Group R-3 occupancies which have a maximum water depth of 24 inches (610 mm), a maximum water volume of 5,000 gallons (18925 L) and are installed entirely above ground.

8. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support when attached to one- and two-family dwellings, townhouses and Group R-3 occupancies.

9. Movable cases, counters and similar fixtures not over 5 feet 9 inches (1753 mm) in height.

10. Clothes poles, arbors, garden trellises, basketball goals and standards, and other similar minor structures accessory to one- and two-family dwellings, townhouses and Group R-3 occupancies.

Electrical: Any work exempted from permits by NFPA 70.

Gas: Any work exempted from permits by the International Mechanical Code.

Mechanical: Any work exempted from permits by the International Mechanical Code.

Plumbing: Any work exempted from permits by the International Plumbing Code.

105.3.1.1 *Unpaid fees and prior violations.* If the building official determines that an applicant for a permit governed by this code has failed to pay any permit fees or related charges, the building official shall not issue such permit until the applicant pays such fees and related charges. If the building official determines that an applicant has failed to correct violations of this code, the building official shall not issue permits related to this code to such applicant except to correct such violations.

105.3.1.2 *Substantially improved or substantially damaged existing buildings located in flood hazard areas.* For applications for reconstruction, rehabilitation, addition, or other improvement of existing buildings or structures located in flood hazard areas, the building official shall examine or cause to be examined the construction documents and cost of construction consisting of labor and material costs provided by the applicant. For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its pre-damage condition. If the building official finds that the value of proposed work equals or exceeds 50 percent of the market value of the building or structure before the damage has occurred or the improvement is started, the entire building or structure shall comply with the International Building Code, the International Residential Code, or the International Existing Building Code, as applicable, as well as the Floodplain Management Regulations Ordinance and the Zoning Ordinance.

105.3.1.2.1 *Decisions by the Board of Zoning Adjustment honored.* Decisions or variances granted by the Board of Zoning Adjustment under the Floodplain Management Regulations and/or Zoning Ordinance regarding the reconstruction, rehabilitation, addition, or other improvement of existing buildings or structures located in flood hazard areas shall be honored under this code without the applicant also having to appeal the same issues to the Board of Building Appeals. The building official may require alternative safety measures under this code relative to construction, equipment, or systems located below the flood plain elevation.

105.3.1.3 *Application transfers prohibited.* The transfer of an application for building permits from one lot to another shall be prohibited. When relocation is necessary the original application shall be canceled and a new application submitted.

105.3.1.4 *Federal, state or county entities.* The building official may withhold issuance of a permit on any site if any federal, state or other public entity determines that such facility or site is in violation of any code or regulation of such entity.

105.3.2 *Time limitation of application.* An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued. The building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. An extension fee equal to the permit application extension fee in the amount specified in Chapter 1100, SLCRO 1974, as amended, shall be paid for each additional extension period of 90 days beyond the initial 180 days allowed after the date of filing. An additional inspection fee may be charged for an inspection to verify that work has not started. The extension shall be requested in writing and justifiable cause demonstrated. The building official shall notify delinquent applicants in writing and give 14 days notice prior to abandonment of the application and destruction of the plans.

105.5 *Expiration.* Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Exceptions:

1. Demolition permits shall expire as set out in Section 105.5.1.
2. Repair permits for rehabilitating an unfit structure shall expire as set out in Section 118.5.1.1.

105.5.1 *Expiration of demolition permits.* Permits for demolition work shall become invalid if permitted work is not started within 30 days after the date of issuance of a permit or if the permitted work is not completed within 90 days of such issuance date. The building official may, after receiving a written request from the applicant, extend the permit expiration date for one or more additional 30 day period(s) if the permit applicant presents evidence of justifiable cause.

105.7 *Placement of permit.* The building permit or copy shall be kept on the site of the work until the completion of the project. An inspection placard must be posted on the job site in accordance with Section 110.1.1.

105.8 *Responsibility.* It shall be the duty of every person who performs work for the installation or repair of a building, structure, electrical, gas, mechanical or plumbing systems, for which this code is applicable, to comply with this code.

107.1 *General.* The application for permit shall be accompanied by not less than four sets of construction documents. The construction documents and site plans for new construction, alteration, repairs, expansion, addition or modification for structures shall be prepared by a registered design professional. All construction documents and site plans shall be prepared by the appropriate registered design professional consistent with the professional registration laws

of the State of Missouri. All construction documents submitted with an application for a building permit shall bear an original embossed or wet ink seal, the date and original ink signature of the registered design professional for each discipline on the front sheet of each discipline within each set of construction documents; or, on the cover sheet of each set of construction documents. In addition, all other sheets of the construction documents other than specifications or calculations shall bear the original embossed, wet ink, or mechanically reproduced seals of the registered design professional. Any addenda or modifications submitted for changes to the construction documents shall also bear an original seal and signature of the registered design professional. Such changes shall be clearly indicated. The construction documents shall include the name and address of the design professional and shall be signed, sealed and dated by the registered design professional.

Exceptions:

1. Miscellaneous structures accessory to one- and two-family dwellings and townhouses, such as carports, garages, sheds and other similar structures.
2. Room additions or an aggregation of additions to one- and two-family dwellings and townhouses where the total floor area of the addition does not exceed 50 percent of the existing total floor area or 1,000 square feet (92.9 m^2). The total floor areas shall include all finished space.
3. Construction documents for the relocation of less than 5 automatic sprinkler heads.
4. Site plans for one- and two-family dwellings, townhouses, and R-2 Use Classification where all of the following occurs:

    4.1. The site contains no flood hazard areas.

    4.2. The site contains fill in the area of the proposed construction and there is a soils report sealed by a Missouri Professional Engineer on file with the building official.

    4.3. Individual site plans for R-2 Use Classification buildings when the entire site plan for the R-2 Use Classification development bearing the seal of a Missouri Registered Design Professional is on file with the building official.
5. Work of a minor nature approved by the building official.

107.2.1 *Information on construction documents.* Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted where approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and

regulations, as determined by the building official. The work areas shall be shown.

107.2.3 *Means of egress.* The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this code. The construction documents shall designate the number of occupants to be accommodated in every work area of every floor, and in all affected rooms and spaces.

107.2.4 *Exterior wall envelope.* Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

107.2.5.1 *Information for construction in flood hazard areas.* For buildings and structures in flood hazard areas, construction documents shall include:

1. Delineation of flood hazard areas, floodway boundaries, and flood zones, and the design flood elevation, as appropriate;
2. The elevation of the proposed lowest floor, including basement; in areas of shallow flooding (AO zones), the height of the proposed lowest floor, including basement, above the highest adjacent grade; and
3. The elevation of the bottom of the lowest horizontal structural member in coastal high hazard areas (V Zone); and
4. If design flood elevations are not included on the community's Flood Insurance Rate Map (FIRM), the building official and the applicant shall obtain and reasonably utilize any design flood elevation and floodway data available from other sources.

107.2.7 *Manufacturer's installation instructions.* Manufacturer's installation instructions, as required by this code, shall be available on the job site at the time of inspection.

107.2.8 *Private sewage disposal system.* The site plan shall indicate the location of a private sewage disposal system when a public sewer is not available. All technical data and soil data required by the International Plumbing Code shall be submitted with the site plan.

107.3.1 *Approval of construction documents.* When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Approved For Issuance." Two sets of construction documents so reviewed shall be retained by the building official. The other two sets shall be returned to the applicant. At least one set of the Site Plan, and Building, Electrical, Plumbing, Mechanical and Grading construction drawings and documents, that

have been marked by the building official with the "Approved For Issuance" stamp, may be kept at the site of work or shall be made available at the time of inspection and shall be open to inspection by the building official or a duly authorized representative.

107.3.3.1 *Mechanical, electrical and plumbing phased approval.* The building official is authorized to issue mechanical, electrical and plumbing permits prior to the review, approval and/or issuance of other applicable permit applications normally required prior to such issuance subject to the conditions provided for in the respective Mechanical, Electrical and Plumbing codes.

107.3.4 *Design professional in responsible charge.* Where it is required that documents be prepared by a registered design professional, the building official shall be authorized to require the owner or the owner's authorized agent to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner or the owner's authorized agent if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased submittal items, for compatibility with the design of the building.

Where structural observation is required by Section 1704.6, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also duties specified in Section 1704).

107.3.4.1 *Deferred Submittals* - Delete.

107.4 *Compliance with construction documents.* Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

108.1 *General.* No temporary building or structure, either mobile or stationary, shall be erected, operated, used or maintained for any purpose without first obtaining a temporary structures permit. All temporary buildings and structures shall meet the requirements of Section 105.1.3 Temporary buildings and structures and Section 3103 Temporary structures in the International Building Code.

108.2 *Conformance.* - Delete.

108.3 *Temporary power.* - Delete.

108.4 *Termination of approval.* - Delete.

109.1 *Payment of fees.* A permit shall not be valid until the fees prescribed by law have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid. The total estimated fee for the activity to be performed by the Department of Transportation and Public Works shall be paid in advance.

109.2 *Schedule of permit fees.* The fees for plan examinations, for filing appeals, issuing permits, making inspections, issuing certificates of occupancy and other administrative enforcement activities performed by the Department of Planning, or another agency under an authorized contract, shall be paid to the Treasurer of St. Louis County in accordance with the fee schedule set forth in Chapter 1100, SLCRO 1974, as amended. On buildings, structures, electrical, gas, mechanical and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established in Chapter 1100, SLCRO 1974, as amended.

109.3 *Building permit valuations.* The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations shall include total value of work, including materials and labor, for which the permit is being issued, such as electrical, gas, mechanical, plumbing equipment and permanent systems. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. The building official is authorized to estimate the total cost of construction of a structure, building or project, by multiplying the total floor area of the structure in square feet by an appropriate square foot cost rate. Structures or projects for which it is impractical to estimate the total construction cost by said square foot cost method shall be estimated by applying current, commonly accepted unit cost figures to the various components in a commonly accepted manner. In lieu of determining the total cost of construction as outlined above, the building official may accept a bona fide contract or any affidavit of the owner of the building structure or project, in which the total cost of construction, including site improvements related to the permit, is verified by applicant and owner. Final building permit valuation shall be set by the building official.

109.4 *Work commencing before permit issuance.* Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a no permit penalty fee established by the building official in accordance with Section 114.4.1 that shall be in addition to the required permit fees.

109.5.1 *Amending permits.* After a permit has been issued and an amendment or supplemental revision is applied for, the fee or service charge shall be as follows:

1. All amendments, which involve additional or deleted work not originally applied for to complete the project, shall be charged the appropriate fee for the additional or deleted work calculated in the normal manner plus the partial permit fee. The minimum fee shall be as established in Chapter 1100, SLCRO 1974, as amended.

2. All amendments or supplements not involving additional work either by area or dollar value, shall be charged a minimum fee as a service charge even though the project dollar value or building area may decrease. See Chapter 1100, SLCRO 1974, as amended for the amount of the service charge.

109.5.2 *Partial permit.* The fee for a partial permit as described in this code shall be charged in addition to the permit fee as normally computed for that part of the work involved. See Chapter 1100, SLCRO 1974, as amended for amount of fees.

109.5.3 *Permit extension.* Permits that are extended in accordance with this code are charged an extension fee at the rate prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.4 *Pier permit.* Structures that are to be constructed upon piers shall be charged an additional fee to cover the cost of the additional inspections required. The amount of the permit fee shall be as prescribed in Chapter 1100, SLCRO 1974, as amended. If the pier permit is issued as a separate permit then the partial permit fee described in this code shall be added to the normal fee.

109.5.5 *Extra inspections.* Extra inspection fees shall apply for each preliminary inspection required and for each re-inspection that the building official must perform due to noncompliance with the approved development or site plans, construction documents or the applicable requirements of this code or work not ready or accessible for inspection when requested. The amount of such extra inspection fee shall be as prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.5.1 *Work not commenced, suspended or abandoned:* An extra inspection fee may be charged for each inspection made to determine the status of a project when work is not commenced, or is suspended or abandoned, for more than six months.

109.5.6 *Certificate of occupancy (new structures).* The certificate of occupancy described in this code shall require a permit fee to be paid before issuance. The amount of such certificate of occupancy fee shall be as prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.7 *Certificate of occupancy (existing structures).* The fee for a certificate of occupancy for existing structures as required in this code shall be based upon the normal requirement of two inspections. The amount of such certificate of occupancy fee and the additional charge for extra inspections when required

shall be as prescribed for reoccupancy permits in Chapter 1100, SLCRO 1974, as amended.

109.5.8 *Temporary certificate of occupancy.* The fee for a temporary certificate of occupancy, as permitted in this code, shall be charged at the rate prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.9 *Board of appeals filing.* All appeals filed for review by the Board of Appeals under the procedures described in this code are to be accompanied by a filing fee as prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.10 *Moving buildings and structures.* The fee for a permit to move a building or structure from one location to another shall be at the rate prescribed in Chapter 1100, SLCRO 1974, as amended. This fee shall be based upon the cost of moving the building or structure plus the cost of excavations, new footings, new foundations and all work necessary to place the structure in its completed condition in the new location. A preliminary inspection shall be made of the structure prior to moving to determine what is necessary for code compliance. The fee for the preliminary inspection shall be paid when the permit is issued.

109.5.11 *Demolition.* The fee for a permit for the demolition of a structure shall include the necessary inspections required by the building official to verify the condition of the original site of the building or structure. A physical inspection of the structure prior to any demolition is also required. The fee for such demolition permits and inspections shall be charged at the rate specified in Chapter 1100, SLCRO 1974, as amended.

109.5.12 *Sign permits.* The fees for sign permits shall be based upon the square footage of sign face area including signs where multiple faces exist. A minimum of one inspection shall be applied to each sign permit, however, where multiple signs of the same type are included on the same application and at the same location fewer inspections may be charged for at the discretion of the building official. Where unusual or complex sign structures are involved additional inspections may be charged for at the rate specified. The sign permit and inspection fees required by this code shall be charged at the rate prescribed by Chapter 1100, SLCRO 1974, as amended.

109.5.13 *Building permit.* The building permit fee shall be composed of the permit processing fee, the inspection fee, the plan review fee, and the partial permit fee, where applicable. The amount of said fee shall be at the rate prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.14 *Integrated permit.* The amount of all integrated building, plumbing, electrical and/or mechanical permits shall be at the rate prescribed by Chapter 1100, SLCRO 1974, as amended.

109.5.15 *Subcontractor transfer.* A transfer fee shall be charged whenever a subcontractor is replaced by another subcontractor for whatever reason. The

amount of the transfer fee shall be at the rate prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.16 *Parking lot permit.* The amount of a parking lot permit fee shall be at the rate prescribed in Chapter 1100, SLCRO 1974, as amended.

109.5.17 *Reroofing permit.* The permit fee for a reroofing permit in accordance with Section 105.1.2 shall be based upon the permit processing fee, plan review fee when applicable and the inspection fee. The amount of such fees shall be charged at the rate specified in Chapter 1100, SLCRO 1974, as amended. Additional inspections shall be charged at the rate specified.

109.6 *Refunds.* In the case of revocation of a permit no refund shall be permitted. Any excess fee for the incomplete work on abandoned or discontinued projects shall be returned to the permit holder upon written request received not later than 12 months after the date the permit was issued. All plan examination and permit processing fees and all penalties that have been imposed upon the permit holder under the requirements of this code shall be deducted from the refund or paid by the permit holder prior to any refund being issued.

110.1.1 *Inspection placard.* Work requiring a permit shall not commence until the permittee or the permittee's agent posts an inspection placard at the job site for recording inspections. Failure to maintain this inspection placard will not relieve the permittee of responsibility as provided by this code. When work has progressed to a point of having windows, or when the job is an alteration or addition, the placard shall be attached to the available glass in view for recording the balance of inspections required by the code. Absence of inspection placard will result in imposition of fees for additional inspections as specified in Chapter 1100, SLCRO 1974, as amended.

110.2 *Preliminary inspections.* Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed. Except as stated in Section 110.2.1, fees for preliminary inspections shall be paid in accordance with Section 109.5.5.

110.2.1 *Preliminary disaster damage inspection report.* Whenever any structure damaged by disaster is vacated pursuant to this code or, when the owner of a structure or a duly authorized agent shall so request, the building official shall inspect such structure regarding its safe occupancy and shall prepare a Preliminary Disaster Damage Inspection Report at no cost.

110.3 *Required inspections.* The building official, upon notification, shall make the inspections set forth in Sections 110.3.1 through 110.3.14.2. These inspections may be made in conjunction with other inspections and are not necessarily required to be conducted as an individual inspection.

110.3.1 *Soil inspection.* A soil inspection shall be made after excavation for the structure is complete, and trenches for footings, column pads, spread footings, or other types of footings are ready for concrete. No concrete is to be poured without this inspection.

110.3.2 *Pier inspection.* A pier inspection shall be made where special foundations are required such as drilled and poured-in-place concrete piers, caissons and driven piles of all types. Additional inspections will be made when the building official determines that the size of the job warrants it. Reinforcing materials required in the above cases shall be placed to allow adequate inspections.

110.3.3 *Footing or foundation inspection.* Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready-mixed in accordance with ASTM C 94, the concrete need not be on the job.

110.3.3.1 *Lowest floor elevation.* Any building or structure permitted to be constructed on property designated a flood hazard area, shall have an elevation certificate prepared and sealed by a registered design professional certifying the lowest floor elevation, including the basement, submitted to the office of the building official before the required foundation inspection or any subsequent inspection approval can be given.

110.3.4 *Concrete slab or under-floor inspection.* Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories, and other ancillary equipment items are in place but before any concrete is placed or floor sheathing installed, including the sub floor.

110.3.5 *Mechanical, gas, electrical, and plumbing systems - rough-in inspections.* Rough inspection of mechanical, gas, electrical and plumbing systems shall be made by the appropriate inspection section prior to covering or concealment, before fixtures or appliances are set or installed, and prior to framing inspection.

Exception: Residential ground-source heat pump loop systems tested in accordance with Section M2105.28 in the International Residential Code shall be permitted to be backfilled prior to inspection.

110.3.6 *Frame inspection.* Framing inspections shall be made after the roof deck or sheathing, all framing, fireblocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

110.3.7 *Lath and gypsum board inspection.* Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

110.3.8 *Fire- and smoke-resistant penetrations.* Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.

110.3.9 *Energy efficiency inspections.* Inspections shall be made to determine compliance with Chapter 13 of the International Building Code or Chapter 11 of the International Residential Code, as applicable, and shall include, but not be limited to, inspections for: envelope insulation R and U values, fenestration U value, duct system R value, and HVAC and water-heating equipment efficiency.

110.3.10 *Additional inspections.* In addition to the required inspections specified above, the building official may make other inspections, which in the building official's judgment are reasonably necessary to enforce this code and the Zoning and Land Disturbance codes. The building official shall have the authority to inspect any construction work to verify compliance with this code and to properly enforce the rules promulgated pursuant to this code. These inspections may include, but are not limited to, examinations to determine whether zoning and land disturbance code requirements are being met and may include all other phases of building construction including forms, back fill, masonry, floors, floor slabs and site grading and other land disturbance or site development work. Fees for additional inspections shall be as specified in Chapter 1100, SLCRO 1974, as amended.

110.3.11 *Special inspections.* For special inspections, see Section 1704 in the International Building Code.

110.3.12 *Mechanical, gas, electrical, and plumbing systems - final inspections.* A final inspection of mechanical, gas, electrical and plumbing systems shall be made by the appropriate inspection section after all work required by the permit issued is completed and under operational conditions.

110.3.13 *Extra inspections.* In addition to the inspections otherwise required, the building official is authorized to perform extra inspections or re-inspections which in the building official's judgment are reasonably necessary due to non-compliance with Building, Zoning and Land Disturbance Code requirements, or work not ready or accessible for inspection when requested. Fees for extra inspections shall be as specified in Chapter 1100, SLCRO 1974, as amended.

110.3.14 *Final inspection.* No permit shall be completed until all work required by the permit is completed and approved by the building official.

110.3.14.1 *Flood hazard area.* All new or substantially improved structures, as defined by the Floodplain Management Regulations Ordinance, permitted to be constructed within a flood hazard area shall have a LOMR (Letter of Map Revision) or a LOMR-F (Letter of Map Revision Based on Fill) obtained from the Federal Emergency Management Agency (FEMA) removing the new or substantially improved building or structure from the special flood hazard area. A copy of this LOMR or LOMR-F shall be submitted to the building official prior to granting occupancy of the new building or structure.

Exceptions:

1. Substantially damaged structures, as defined by the Floodplain Management Regulations, that have their low floor elevated at least 1 foot (305 mm) above the base flood elevation in accordance with the Floodplain Management Regulations Ordinance as part of the reconstruction, rehabilitation, or repair.
2. Non-residential substantially damaged structures, as defined by the Floodplain Management Regulations, that are flood-proofed to at least 1 foot (305 mm) above the base flood elevation in accordance with the Floodplain Management Regulations Ordinance as part of the rehabilitation or repair.
3. New non-residential structures, as defined by the Floodplain Management Regulations Ordinance, that are less than 2,000 square feet (185.8 m^2) in area and either constructed with their low-floor elevated at least one foot (305 mm) above the base flood elevation or are flood-proofed to at least one foot (305 mm) above the base flood elevation.

110.5 *Inspection requests.* It shall be the duty of the holder of the permit or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code. Failure of the permit holder to request and obtain required inspections shall constitute a violation.

110.5.1 *Duty to request final inspection.* Upon completion of the work described in the permit application, the permit holder shall request and obtain a final inspection before any occupancy of the structure except as provided in Section 111. Failure of the permit holder to request and obtain a final inspection before occupancy will constitute a violation of this code.

111.1 *Use and occupancy.* A building or structure, an altered area of a building and a relocated building shall not be used or occupied, and a change in the existing use or occupancy classification of a building or structure or portion thereof shall not be made, until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of Chesterfield.

Exception: Certificates of occupancy are not required for work exempt from permits under Section 105.2.

111.1.1 *Existing structure certificates.* Certificates of occupancy for existing structures are required under the conditions described in Sections 111.1.1 through 111.1.3. The provisions of Sections 111.1.2 and 111.1.1.3 shall not require the removal, alteration, or abandonment or prevent the continuance of, the occupancy of a lawfully existing structure unless such is deemed to endanger public safety and welfare. Except for changes of use and occupancy

classification, as defined by this code, or as required in Conservation Districts as stipulated in the International Property Maintenance Code, the provisions of Sections 111.1.1.2 and 111.1.1.3 shall not apply to structures or portions of structures classified as individual dwelling units or sleeping units within an R-2 and R-3 residential use and occupancy classifications and structures regulated by the International Residential Code.

111.1.1.1 *Change in use and occupancy classification.* No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the International Existing Building Code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

111.1.1.2 *Change of occupant or tenant.* A change of occupant or tenant shall not be made to any structure or portion thereof without the approval of the building official and the issuance of an associated certificate of occupancy. Prior to issuance of the certificate of occupancy, the building official shall verify that:

1. The structure containing the new occupant or tenant complies with applicable provisions of the this code regarding maintenance of all equipment, systems, devices and safeguards required by this code for the applicable use and occupancy classification of the new occupant or tenant as well as applicable provisions of the International Property Maintenance Code and the Zoning Ordinance; and

2. Where the proposed change of occupancy or tenant also involves a change of use and occupancy classification as defined by this code, a permit application has been filed as prescribed by Section 105 of the International Building Code and the structure shall meet the applicable requirements of this code with regard to the newly proposed use and occupancy classification.

111.1.1.3 *Owner - tenant requests for certificates.* Upon written request from the existing occupant or tenant of an existing structure the building official shall issue a Certificate of Use and Occupancy provided that it is established after inspection and investigation that:

1. The alleged use or tenant of the structure has heretofore lawfully existed, and;

2. The structure containing the existing occupant or tenant complies with applicable provisions of this code for the use and occupancy classification of the existing occupant or tenant as well as applicable provisions of the International Property Maintenance Code and the Zoning Ordinance and;

3. There are no violations of law or orders of the building official pending.

111.1.2 *Required certificate of occupancy.* Failure of the owner or tenant of a structure to obtain a certificate of occupancy or use and occupancy as required by Section 111 and pay the applicable fees, shall be deemed a violation of this code and shall subject said owner or tenant to the penalties prescribed by this code.

111.2 *Certificate issued.* After the building official inspects the building or structure and does not find violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

1. The building permit number.
2. The address of the structure.
3. The name and address of the owner or the owner's authorized agent.
4. A description of that portion of the structure for which the certificate is issued. (Including tenant or business name.)
5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
6. The name of the building official.
7. The edition of the code under which the permit was issued.
8. The use and occupancy, in accordance with the provisions of the International Building Code.
9. The type of construction as defined in the International Building Code.
10. The design occupant load.
11. Whether an automatic sprinkler system is provided.
12. Any special stipulations and conditions of the building permit.

111.5 *Vacating dangerous structures.* Any structure vacated by reason of disaster or because it has been determined by the building official to be dangerous as defined by this code shall be deemed unsafe and its occupancy shall be prohibited until such time as the building official shall issue a certificate of occupancy. After said structure is vacated because of a dangerous condition and until such certificate of occupancy is issued it shall be unlawful for any person to enter such structure except for the purpose of securing, making repairs or for demolishing same pursuant to applicable permits where required, unless the building official shall issue a temporary certificate of occupancy which may include conditions within the building official's discretion and then only the persons specified on said temporary certificate of occupancy may enter the said structure pursuant to said certificate.

113.1 *General.* In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, the Building Commission shall act in the capacity of a Board of Appeals for this code. The board shall adopt rules of procedure for conducting its business.

113.3 *Membership of board.* The Board of Appeals shall consist of the members of the Building Commission.

113.4 *Disqualification of member.* A member shall not hear an appeal in which that member has any personal, professional or financial interest.

113.5 *Chairman, Vice Chairman and Secretary.* The Board shall select one of its members to serve as Chairman and one to serve as Vice Chairman. Both the Chairman and the Vice-Chairman will have full voting privileges on all matters to come before the board. The building official shall designate a representative of the Department of Transportation and Public Works to serve as Secretary to the Board, who shall keep a detailed record of all proceedings on file in the Department of Transportation and Public Works.

113.6 *Application.* The application for appeal shall be filed in writing on a form obtained from the building official.

113.6.1 *Time limitation and filing procedure.* All appeals shall be filed in writing with the building official. An application for appeal may not be filed more than 30 days after the affected individuals are notified of the building official's decision.

113.6.2 *Filing fee.* An application for appeal may not be filed without full payment of the filing fee prescribed in Chapter 1100, SLCRO 1974, as amended.

113.7 *Notice of hearing on appeal.* The board shall meet upon notice of the chairman and no later than 30 days after the notice of appeal is received by the building official or at stated periodic meetings if warranted by the volume of work. The board shall give notice of all appeals by one publication in a newspaper of general circulation in the City, at least seven days in advance of the hearing on that appeal.

113.8 *Postponed hearing.* When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

113.9 *Procedure.* Hearings shall be conducted in accordance with the requirements of Chapter 536 RSMo.

113.9.1 *Open hearing.* All hearings before the board shall be open to the public. The appellant, the appellant's representative, the building official and any person whose interests are affected shall be given an opportunity to be heard.

113.10 *Quorum required.* A quorum for the conduct of a hearing before the Building Commission shall consist of three members of the Board.

113.11 *Notification of decision.* The Secretary of the Board shall notify the appellant of the decision of the Board in writing in a timely manner.

113.12 *Judicial review.* Decisions of the Board of Appeals are subject to judicial review pursuant to Chapter 536 RSMo.

114.2 *Notice of violation.* The building official shall notify the person responsible for violating any provision of this code, including the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a permit or certificate issued under the provisions of this code. The notification shall be in writing and shall be hand delivered to the violator or the violator's legally authorized representative or mailed to the violator's last known address via Certified Mail. In the event either of the forgoing attempts at service do not result in actual service, other attempts reasonably calculated to achieve actual service shall be made, including publication in a newspaper of general circulation. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation. Any person having been notified that a violation exists by means other than a stop work order and who fails to promptly abate the violation after notification shall be subject to the penalties enumerated in this code.

114.4 *Violation penalties.* It shall be unlawful and deemed a violation of this code for any person, firm, corporation, limited liability company or other business entity to:

1. Fail to comply with any of the requirements of this code; or
2. Erect, construct, alter, occupy, or repair a structure in violation of the approved construction documents, a directive of the building official or a permit or certificate issued under the provisions of this code; or
3. Start any work requiring a permit without first obtaining such permit; or
4. Continue any work in or about a structure after having been served a stop work order, except for such work which that person, firm or corporation has been directed to perform to remove a violation or unsafe condition; or
5. Maintain any structure or premises in which a violation exists or fail to timely correct any deficiencies or violations of this code after notification; or
6. Fail to request a required inspection after a permit is issued; or
7. Perform any act prohibited by this code or fail to perform any act required by this code; or
8. Fail to commence work within six months of permit issuance or suspend or abandon work for more than six months.

A violation of this code may be punished by a fine of not more than $1,000 or by imprisonment not exceeding 90 days or by both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

114.4.1 *No-permit and no-inspection request penalties.* In addition to the penalties set out above, the following procedure shall be followed where the building official determines that work has been started prior to the acquisition of a permit required by this code or the permit holder failed to schedule the required inspection, or allowed the permit to lapse without requesting a final inspection:

1. The building official may issue a stop work order when work requiring a permit was started prior to the acquisition of that permit. The building official may issue a Notice of Violation when a required inspection was not requested.

2. The building official shall notify the holder of the license or permit of the action to be taken and allow sufficient time for response to such action if appropriate. A no-permit penalty shall not exceed the greater of $500 or 1 percent of the cost of construction of the work involved. A no-inspection request penalty shall not exceed $500.

   If 180 days has transpired since the last inspection on record or if the permit has automatically expired, a permit extension fee shall be added to a no-inspection request penalty amount.

3. The stop work order for failure to obtain a permit or the violation for failure to request an inspection shall remain in full force and effect until such time as the penalty amount is paid and the violator has complied with all other regulations pertaining to the issuance of the required permit, or requesting the required inspection.

4. No-permit and no-inspection request penalties are appealable to the Board of Appeals in the same manner as other decisions of the building official. The building official may revise the assessment upon notice to both the Board of Appeals and the alleged violator at any time prior to the hearing. At any time prior to the hearing, the violator may accept and pay the assessed penalty amount and the hearing will be canceled.

5. At the hearing before the Board of Appeals, said Board shall afford both the building official and the alleged violator an opportunity to present any evidence or make any statements they wish to have considered.

6. Following the hearing, the Board of Appeals shall determine whether a permit or inspection was required:

   6.1. If the Board of Appeals determines that a permit or inspection was required, an appropriate penalty amount shall be assessed, taking into account the same considerations as noted above. The stop work

order for failure to obtain a permit or the violation for failure to request an inspection shall remain in full force and effect until such time as the penalty amount is paid and the violator has complied with all other regulations pertaining to the issuance of the required permit, or requesting the required inspection.

6.2. If the Board of Appeals determines that a permit or inspection was not required, the building official shall immediately cancel the stop work order for failure to obtain a permit or abate the no-inspection request violation.

114.5 *Unlawful continuance.* Any person who fails to obtain permits when required, or fails to request a required inspection, or continues any work in or about a structure or premises after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as specified in this code.

116.5 *Restoration.* Where the structure or equipment determined to be unsafe by the building official is restored to a safe condition, to the extent that repairs, alterations or additions are made or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions and change of occupancy shall comply with the requirements of Section 105.2.2 and the International Residential Code or the International Existing Building Code, as applicable.

SECTION 117
EMERGENCY MEASURES

117.1 *Imminent danger.* When, in the opinion of the building official, there is imminent danger of failure or collapse of a building that endangers life, or when any building or part of a building has fallen and life is endangered by the occupation of the building, or when there is actual or potential danger to the building occupants or those in the proximity of any structure because of explosives, explosive fumes or vapors, or the presence of toxic fumes, gases, or materials, or operation of defective or dangerous equipment, the building official is hereby authorized and empowered to order and require the occupants to vacate the premises forthwith. The building official shall cause to be posted at each entrance to such structure a notice reading as follows: "This Structure Is Unsafe and Its Occupancy Has Been Prohibited by the building official." It shall be unlawful for any person to enter such structure except for the purpose of securing the structure, making the required repairs, removing the hazardous condition, or of demolishing the same.

117.2 *Temporary safeguards.* Notwithstanding other provisions of this code, whenever, in the opinion of the building official, there is imminent danger due to an unsafe condition, the building official shall order the necessary work to be done, including the boarding up of openings, to render such structure temporarily safe whether or not the legal procedure herein described has been

instituted; and shall cause such other action to be taken as the building official deems necessary to meet such emergency.

117.3 *Closing streets.* When necessary for public safety, the building official shall temporarily close structures and close or order the authority having jurisdiction to close sidewalks, streets, public ways, and places adjacent to unsafe structures, and prohibit the same from being utilized.

117.4 *Emergency repairs.* For the purposes of this section, the building official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

117.5 *Costs of emergency repairs.* Costs incurred in the performance of emergency work shall be paid by the jurisdiction. The legal counsel of the jurisdiction shall institute appropriate action against the owner of the premises where the unsafe structure is or was located for the recovery of such costs.

117.6 *Appeal.* Any person ordered to take emergency measures shall comply with such order forthwith. Any affected person shall thereafter, upon petition directed to the Board of Appeals, be afforded an appeal as described in this code.

SECTION 118
UNFIT STRUCTURES

118.1 *Inspections.* The building official shall inspect or cause to be inspected:

1. Any structure about which complaints are made by any person alleging that it is unfit.
2. Any structure reported by a police department, fire department or any other public agency as apparently unfit.
3. Any structure, which has been classified as apparently, unfit pursuant to any study or inspection program conducted by any City Agency or Department.

118.2 *Unfit structures.* All structures having one or more of the following defects are an unfit structure:

1. Those which are unoccupied and which have interior walls or other vertical structural members which list, lean or have buckled to such an extent that a plumb line passing through the center of gravity falls outside of the middle third of its base.
2. Those which are unoccupied and which have exterior portions, members, appurtenances, ornamentations, or components which are likely to fail or collapse, or to become detached or dislodged, and thereby injure persons or damage property.
3. Those which are unoccupied and are open at door and window.
4. Those which are unoccupied and have been damaged by fire, wind, vandalism or other causes so as to impair the life, health, or safety of

persons who are or might reasonably be in or on neighboring structures, or rights-of-way.

5. Those which are unoccupied and are so dilapidated or unsafe as to be likely to cause injury to the health, safety, or welfare of neighbors.

6. Those which have never been lawfully occupied and for which a certificate of occupancy could not be granted by reason of non completion, where construction has been substantially abandoned for more than 18 months.

7. Those unoccupied structures which are considered to be a fire hazard by having accumulations of combustible rubbish or waste materials, or the excess storage of any combustible material, or the storage of dangerous or unlawful amounts of flammable, explosive or otherwise hazardous materials.

8. Those unoccupied structures which have been damaged by fire, earthquake, wind, flood, vandalism, malicious mischief, or other cause, or have become so dilapidated, deteriorated or decayed as to come within any one or more of the following categories as affirmed by the building official and the Office of the City Attorney:

   8.1. The structure may attract and result in harm to children;

   8.2. The structure is, or is likely to become, a harbor for vagrants, criminals or immoral persons;

   8.3. The building or structure enables persons to resort thereto for the purpose of committing unlawful or immoral acts.

118.3 *Notice of nuisance.* If the building official determines, after inspection, that a structure is unfit, the building official shall declare it a public nuisance and shall cause a report to be prepared stating the use of said structure and the nature or extent of the damage, deterioration, dilapidation and or hazard as defined by Section 118.2 that was used in determining the structure to be an unfit structure. Said notice shall order the nuisance abated by repair, demolition or other approved means and that work shall commence within 15 days of the service of notice. The structure shall be posted in accordance with Section 118.4 and a copy of the notice of nuisance shall be posted in a prominent location on the premises.

If the repair, demolition or other approved means of abatement ordered has not begun or is not carried forth promptly within the time period stated above, the building official or a designated Hearing Officer may, after hearing, order the structure secured or demolished and the costs, together with the expenses of administration, assessed against the property as a special tax lien. The order to demolish may be appealed by an affected party as provided by law.

118.4 *Occupancy prohibited.* Upon the determination that a structure is an unfit structure as defined by Section 118.2 or otherwise poses a threat to the

general public, a condemnation or Notice of Declaration of Nuisance placard(s) shall be immediately posted in a conspicuous place(s) on the structure as a matter of public safety ordering all persons not directly associated with the securing or permitted repair or demolition of this structure to keep out. It will be considered a violation of this code for any person to enter or occupy a structure or portion thereof after posting of these placards without specific approval from the building official.

118.4.1 *Removal of placard prohibited.* No person shall deface or remove such notice without the prior authorization of the building official or a Court having jurisdiction on review of an order of the building official. Removal of condemnation or warning placard signs shall be considered a violation of this code.

118.5 *Standards for repair or demolition of unfit structure.* The following standards shall govern the building official or Hearing Officer in determining whether to order the repair or demolition of any unfit structure.

118.5.1 *Repairs permitted.* If, at the discretion of the building official or Hearing Officer, any structure found unfit by the building official can reasonably be repaired so that it will no longer be in violation of this chapter, or any other applicable law or ordinance, it shall be ordered rehabilitated and completed within a reasonable time. The repair permit shall include a completion date as determined by the building official or Hearing Officer. The issuance of the repair permit shall result in a hold being placed on the demolition order which shall remain in effect as long as progress is made towards rehabilitating the unfit structure in a timely manner relative to meeting the rehabilitation repair completion date.

118.5.1.1 *Expiration of rehabilitation repair permit.* Repair permits for rehabilitating an unfit structure shall become invalid unless the work on site authorized by such permit is commenced within 60 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 60 days after the time the work is commenced, or if the work is not completed by the completion date established for the permit, unless an extension is authorized. The building official is authorized to grant, in writing, one or more extensions of time, for periods of 30 days each. The extension shall be requested in writing and justifiable cause demonstrated. If progress is not made towards rehabilitating the unfit structure in a timely manner relative to meeting the completion date or if the repair permit becomes invalid the building official is authorized to execute the demolition order.

118.5.2 *Demolition required.* If at the discretion of the building official or Hearing Officer, it is determined that an unfit structure cannot be reasonably repaired so that it will be in compliance with this code due to being 50 percent or more damaged, decayed or deteriorated or the cost to repair is more than 50 percent of the appraised value of the structure or it has been affirmed by the building official and the City Attorney that the structure is detrimental to the

safety, health and welfare of the community, the structure shall be ordered demolished.

118.5.2.1 *Fifty percent damaged.* Fifty percent damaged will be interpreted as meaning 50 percent of the value of the structure or 50 percent of the structural components as determined by the building official.

When making a 50 percent damaged determination in regards to the value of the structure, the cost to repair the damage will be divided by the St. Louis County Assessor's current appraised value for the improvement only. The cost to repair will be determined either by using a square foot multiplier from a nationally recognized publication multiplied by the St. Louis County Assessor's Area Under Roof square foot value, a bona fide cost estimate from a contractor approved by the building official or any other means approved by the building official.

118.5.2.2 *Multiple structures on the same lot.* When there are multiple structures on the same lot, each will be analyzed individually for possible demolition, with the exception that demolition must include all structures accessory to the main structure so as not to cause a violation of the Zoning Ordinance.

118.5.3 *Service of notice of demolition.* The notice may be served personally or by certified mail, return receipt requested. If service is had in this manner, the affected party shall have 15 days from the date of service of the notice to repair or demolish the structure, unless the building official shall extend the time period set forth in said notice. If service cannot be had upon all affected parties by either of the modes set forth above, then notice shall be given by publication, or such other means as is reasonably calculated to actually serve the notice upon the affected party. If notice is given in this manner, the affected party shall have 15 days from the date of publication of said notice to repair or demolish the structure, unless the building official shall extend the time period set forth in said notice. If, at the discretion of the building official, additional time is necessary to perform the work required by the notice, the building official may extend the time period set forth in the notice for the performance of such work by specifying in an additional written notice the date to which said extension is made.

118.5.3.1 *Failure to demolish violation.* Failure of the owner to demolish the structure within the time specified by the building official or Hearing Officer shall be a violation of this code and shall be subject to the penalties specified in this code.

118.5.4 *Subsequent purchases.* The act of subsequent purchases shall not delay the hearing of such matter and shall be an exception to the time requirements of the said notice provided herein, unless at the discretion of the building official or Hearing Officer, such hearing should be continued, or unless such subsequent purchaser shall apply for and receive written authorization from the building official to either rehabilitate or demolish such structure, and shall perform the work within the time period allowed under such authorization.

118.5.5 *Authorization of affected parties to demolish unfit structure.* If, after a structure has been declared a public nuisance by the building official and it shall be determined by the building official that said structure must be demolished, and if one or more of the affected parties shall not cause the demolition of said structure, and if all affected parties and any subsequent purchaser shall agree in writing to the demolition of said unfit structure by the City, then such matter shall immediately be placed on the building demolition docket. A hearing shall then be held relative to such structure at which time evidence shall be presented to establish the location of the structure, the physical condition of the structure, and the fact that all affected parties and any subsequent purchaser have agreed in writing to the demolition of the structure. If the Hearing Officer shall so find, the Hearing Officer shall issue written findings-of-fact and shall issue an order to demolish the structure.

118.5.6 *Cost of demolition.* If the Hearing Officer issues an order whereby the structure is demolished, the costs of such demolition plus a reasonable cost, not to exceed the amount specified in Chapter 1100, SLCRO 1974, as amended, for the administration of the provisions of this chapter shall be imposed against the property to be prepared and collected by the Collector of Revenue in the same manner as other real property taxes. At the election of the taxpayer, the tax bill may be made in equal installments over a period of not more than ten years. The tax bill shall be a lien upon the property from the date of its issuance until paid.

118.6 *Securing required.* If in the judgment of the building official or Hearing Officer a structure is less than 50 percent decayed, damaged or deteriorated and such structure could reasonably be restored to useable condition, the building official shall post the structure in accordance with Section 118.4 and send a notice by certified mail to the owner of record as identified by the Department of Revenue records that they shall have no less than 15 days from the date of the notice to secure the structure or to show cause why the structure should not be secured. All board-ups used as a means of securement shall be painted to blend with the color of the structure.

118.6.1 *Responsibility and cost of securing.* Work needed to secure a structure shall be the responsibility of the owner. If the owner is unable, unwilling or fails to secure the structure within the time specified by the building official, then the building official is authorized to have such work done and a lien to ensure payment of all expenses related thereto shall be placed on the property. Evidence of the expenses associated with securing the structure shall be presented to the building official and forwarded to the Collector of Revenue.

118.6.2 *Service of notice to secure.* The notice may be served personally or by certified mail, return receipt requested, or by such other means as is reasonably calculated to achieve actual service upon the owner of record. If service is had in this manner, the owner of record shall have 15 days from the date of service of the notice to secure the structure, unless the building official shall extend the time period set forth in said notice. If service cannot be had upon the owner of

record by either of the modes set forth above, the building official shall cause the structure to be secured.

118.6.2.1 *Failure to secure violation.* Failure of the owner to secure the structure within the time specified by the building official shall be a violation of this code and shall be subject to the penalties specified in this code.

118.7 *Notice of declaration of nuisance.* Upon the declaration of public nuisance by the building official, a notice of declaration of nuisance shall be filed and recorded in the office of the Recorder of Deeds. Such notice shall be signed by the building official, or the building official's designated representative, and shall be notarized. A copy of such recorded instrument shall be retained by the building official. Upon the completion of the work necessary to cause the structure to comply with all applicable City ordinances, and the approval thereof by the building official, or upon the satisfaction and release of any and all liens imposed pursuant to the provisions of this Chapter, the building official shall provide to the affected party a notice of said compliance or satisfaction to be filed in the office of the Recorder of Deeds. A copy of such notice shall be retained by the building official.

118.8 *Hearing.* The building official may appoint a Hearing Officer. The Hearing Officer shall be a registered design professional and shall be appropriately compensated.

118.8.1 *Duties of hearing officer.* The Hearing Officer shall preside at all hearings held pursuant to Section 118 and shall hear and receive evidence, shall make rulings relating thereto, and shall perform all other usual or necessary functions of the presiding officer in an administrative hearing, all in accordance with the Missouri Administrative Procedure and Review Act, Chapter 536 RSMo. and the City of Chesterfield demolition hearings procedures.

118.8.2 *Duties of building official.* Upon the refusal or neglect of the affected parties to commence the work of rehabilitation, completion or demolition within the time specified in the notice or upon the failure to proceed continuously with the work without unnecessary delay, the building official shall either:

1. Advise the City Attorney of all the facts, whereupon the City Attorney shall institute the appropriate legal action to compel the compliance; or

2. Set the matter on the building demolition docket for a full evidentiary hearing. All hearings shall be recorded by electronic recording device or court reporter. Prior to any such hearing, all affected parties shall be given at least 15 days written notice of the hearing, which notice may be served in the same manner as required in Section 118.5.3. Any party may be represented by counsel at such hearing, and any interested person may be heard. If the Hearing Officer finds that the structure is unfit, the Hearing Officer shall issue an order making specific findings of fact, based upon competent and substantial evidence, which shows the structure to be a nuisance and detrimental to the health, safety or welfare of the residents of the City and the Hearing Officer shall order the

structure to be demolished and removed or repaired and completed. If the evidence does not support a finding that the structure is a nuisance or detrimental to the health, safety or welfare of the residents of the City of Chesterfield, no order shall be issued.

118.8.3 *Appeal.* Any party aggrieved by the Hearing Officer's order may petition for judicial review of such order as provided in Chapter 536 RSMo.

SECTION 119
DEMOLITION OF STRUCTURES

119.1 *Demolition of buildings or structures.* No person, firm or corporation shall demolish a building or other structure without first obtaining a demolition permit.

119.1.1 *Service connections.* Before a demolition permit is issued, the owner or agent shall provide proof that it notified all utilities having service connections within the building or structure such as water, electric, gas, sewer and other connections, and such utilities confirmed that their respective service connections and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

119.1.1.1 *Septic tanks.* In accordance with the Plumbing Code, abandoned individual sanitary sewage systems shall be disconnected from buildings, pumped out and the septic tank bottom shall be broken out. The septic tank shall be backfilled with crushed limestone, gravel or clean compacted dirt. Prior to issuance of a demolition permit, written verification from a licensed waste hauler which states that the septic tank has been pumped out shall be provided.

119.1.1.2 *Wells.* Wells shall be located by the demolition contractor, clearly marked and reported to the City in the demolition permit application.

119.1.1.3 *Propane tanks.* Propane tanks are the property of the company named on the tank. The demolition contractor must notify the propane tank company to have the tank properly disconnected and removed from the premises.

119.1.2 *Demolition permit fee.* The fee for a demolition permit and inspection for the demolition of any building or structure shall be as specified in Chapter 1100, SLCRO.

119.2 *Lot regulation.* Whenever a building or structure has been removed, the premises shall be maintained free from all unsafe or hazardous conditions.

119.2.1 *Slabs and foundation walls.* All on grade slabs and pavement, except public sidewalks, shall be removed unless directed otherwise by the building official. All foundation walls shall be broken down to at least two feet (610 mm) below grade and debris must not be larger than three feet (914 mm) in width and length. All concrete basement or crawl space slabs shall be broken into sections not exceeding eight feet (2438 mm) in any dimension. Cracks shall be of sufficient size to permit drainage.

119.2.3 *Grading and backfilling.* All grading and backfilling operations shall be conducted in such a manner as to provide clean, uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinder blocks and bricks. Demolition rubble, or any other rubble brought in from another site to be used as fill, shall be subject to laboratory testing for any contaminants at the discretion of the building official.

119.2.3 *Lot maintenance.* Whenever a building or structure has been demolished and no building or construction operation has been contemplated or projected in the immediate future, as evidenced by the fact that no application for a building permit has been filed with the building official, the excavation remaining after such demolition, including pavement removal, shall be immediately filled, graded and maintained in conformity with the existing grade immediately adjacent to such excavation, or stabilized as directed by the building official. The top six inches (152 mm) of fill shall be clean top soil and shall be planted with grass seed or other vegetation approved by the building official and covered with straw.

119.2.4 *Improper fill.* The building official shall be permitted to require the demolition contractor to reopen a completed excavation to determine if proper fill procedures have been followed. The cost of reopening shall be borne by the demolition contractor.

119.2.5 *Burial of debris.* On any demolition site where there is no basement or below grade crawl space, all demolition debris must be removed from the site. Excavation for the purpose of burying debris will not be allowed.

Exception: Demolition debris may be buried on-site in a manner and location approved by the building official.

119.2.6 *Open burning.* Open burning shall not be allowed unless permitted by the fire jurisdiction.

119.3 *Expiration of demolition permits.* Permits for demolition work shall become invalid if permitted work is not started within thirty days after the date of issuance or if the permitted work is not completed within ninety days of such issuance date. The building official, after receiving a written request from the applicant may extend the permit expiration date for one or more additional thirty day period(s) if the permit applicant presents written evidence of justifiable cause. An extension fee equal to the permit application extension fee in the amount specified in Chapter 1100, SLCRO 1974, as amended, shall be paid for each additional extension period of 30 days beyond the initial 90 days allowed after the date of filing. An additional inspection fee may be charged for an inspection to verify that work has not started. The building official shall notify delinquent applicants in writing and give 14 days notice prior to abandonment of the application.

1115.102 - Amendments to the International Building Code, 2015 Edition—Chapter 2 Definitions.

—The following provisions amend Chapter 2 Definitions in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

201.3 *Terms defined in other codes.* Where terms are not defined in this code and are defined in the International Fire Code, International Mechanical Code, International Plumbing Code, International Existing Building Code, International Residential Code, International Property Maintenance Code, NFPA 70, or International Energy Conservation Code, such terms shall have the meanings ascribed to them as in those codes.

SECTION 202
DEFINITIONS

Retain all definitions listed in Section 202 of the International Building Code, 2015 edition and add the following definitions to the section.

Adult Day Care Home. A family home, occupied as a permanent residence by the adult day care home provider, in which care is given to no more than 8 adults for any part of the 24 hour day.

Affected Parties. The owner, occupant, lessee, mortgagee, agent and all other persons having an interest in the structure or its premises as shown by the records of the Recorder of Deeds as of the date said structure is declared to be a public nuisance by the building official.

Board of Appeals. The Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Code Official. The Code Official as defined herein.

Building Code Review Committee. The Committee established by, and acting in accordance with the Building Code, SLCRO 1974, Title XI, Chapter 1115, as amended.

Building Commission. The Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Official. The Code Official as defined herein.

Child Day Care Home. A family home, occupied as a permanent residence by the child day care home provider, in which care is given to no more than 10 children, including children related to the day care provider for any part of the 24 hour period.

Code Official. The Director of Planning or the Director's duly authorized representative.

Dangerous. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, partially collapsed, has moved off its foundation or lacks the necessary support of the ground.

2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.

3. The building or structure or any portion thereof is likely to collapse partially or completely because:

   3.1. Of dilapidation, deterioration or decay;

   3.2. Of construction in violation of the this code;

   3.3. The soil supporting the foundation is unstable, moved or removed;

   3.4. The foundation is inadequate, decayed or deteriorated; or

   3.5. It is damaged due to fire, earthquake, wind or flood; or any other similar cause.

4. The exterior walls or other vertical structural member list, lean, or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.

5. Any building or structure with substantial structural damage.

Disaster. A disaster shall include but not necessarily be limited to flood, windstorm, tornado, severe storm, earthquake, bomb blast, explosion or similar natural or man-made type event. The building official shall make the determination whether an event shall be declared a disaster.

Electrical Code Review Committee. The Committee established by, and acting in accordance with the Electrical Code, SLCRO 1974, Title XI, Chapter 1102, as amended.

Flood Hazard Area. An area that has been determined to be prone to flooding in accordance with section 1612.

Lowest Floor. The floor of the lowest enclosed area, including a basement. An unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage, in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of section 1612.

Mechanical Code Review Committee. The Committee established by, and acting in accordance with the Mechanical Code, SLCRO 1974, Title XI, Chapter 1108, as amended.

Plumbing Code Review Committee. The Committee established by, and acting in accordance with the Plumbing Code, SLCRO 1974, Title XI, Chapter 1103, as amended.

Zoning Ordinance. City of Chesterfield Unified Development Code, Chapter 31.

1115.103 - Amendments to the International Building Code, 2015 Edition—Chapter 3 Use and Occupancy Classification.

—The following provisions amend Chapter 3 Use and Occupancy Classification in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

305.2 *Group E, day care facilities.* This group includes buildings and structures or portions thereof occupied by more than five children older than 2½ years of age who receive educational, supervision or personal care services for fewer than 24 hours per day.

Exception: Child day care homes as provided for in Section 310.5.1.

308.3.4 *Five or fewer persons receiving custodial care.* A facility with five or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3.

308.4.2 *Five or fewer persons receiving medical care.* A facility with five or fewer persons receiving medical care shall be classified as Group R-3 or shall comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3.

308.6 *Institutional Group I-4, day care facilities.* Institutional I-4 occupancy shall include buildings and structures occupied by more than five persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care

Child day care

Exception: Adult day care homes and child day care homes as provided for in Section 310.5.1.

310.2 *Definitions.* The following terms are defined in Chapter 2:

Adult Day Care Home.

Boarding House.

Child Day Care Home.

Congregate Living Facilities.

Dormitory.

Group Home.

Guest Room.

Lodging House.

Personal Care Service.

Transient.

310.5 *Residential Group R-3.* Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Adult day care homes

Buildings that do not contain more than two dwelling units

Boarding houses (nontransient) with 16 or fewer occupants

Boarding houses (transient) with 10 or fewer occupants

Care facilities that provide accommodations for five or fewer persons receiving care

Child day care homes

Congregate living facilities (nontransient) with 16 or fewer occupants

Congregate living facilities (transient) with 10 or fewer occupants

Lodging houses with five or fewer guest rooms

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 International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3.

Adult day care homes and child day care homes shall per permitted to be constructed in accordance with the International Residential Code.

1115.107 - Amendments to the International Building Code, 2015 Edition—Chapter 7 Fire and Smoke Protection Features.

—The following provisions amend Chapter 7 Fire and Smoke Protection Features in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below

without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

716.7 *Existing non-rated corridor walls in occupancy classification B.* New non-rated openings in corridors in existing buildings may be protected with a water curtain in lieu of an approved protective device where the following features are provided:

1. The corridor walls and ceiling of the tenant space are constructed to limit the transfer of smoke into the corridor.
2. Corridor doors shall provide an effective barrier to limit the transfer of smoke.
3. Sprinkler heads shall be placed within eighteen (18) inches (457 mm) of the corridor wall at a spacing of not more than six (6) feet (1829 mm) on-center on the tenant side of the wall.

1115.109 - Amendments to the International Building Code, 2015 Edition—Chapter 9 Fire Protection Systems.

—The following provisions amend Chapter 9 Fire Protection Systems in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

903.3.1.2 *NFPA 13 or 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 (18288 mm) in height above grade plane shall be permitted to be installed throughout in accordance with NFPA 13 or NFPA 13R.

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.

903.3.5.3 *Water flow safety factor.* A safety factor shall be applied to all flow tests for fire sprinkler systems. A parallel curve shall be drawn to the actual flow test curve that has been reduced by 10 percent of the static pressure. A sprinkler system design shall not exceed the 10 percent curve.

905.3 *Required installations.* Standpipe systems shall be installed where required by Sections 905.3.1 through 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.

1115.110 - Amendments to the International Building Code, 2015 Edition—Chapter 10 Means of Egress.

—The following provisions amend Chapter 10 Means of Egress in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1015.2 *Where required.* Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps, landings and walking surfaces adjacent to retaining walls that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with Section 1607.8.

Exception: Guards are not required for the following locations:

1. On the loading side of loading docks or piers.
2. On the audience side of stages and raised platforms, including stairs leading up to the stage and raised platforms.
3. On raised stage and platform floor areas, such as runways, ramps and side stages used for entertainment or presentations.
4. At vertical openings in the performance area of stages and platforms.
5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
6. Along vehicle service pits not accessible to the public.
7. In assembly seating areas at cross aisles in accordance with Section 1029.16.2.
8. Retaining walls four feet (1219 mm) or less in height.
9. Retaining walls in excess of four feet (1219 mm) in height where any walk, path, parking lot or driveway is located two feet (610 mm) or more away from the front face of the wall.

1115.111 - Amendments to the International Building Code, 2015 Edition—Chapter 11 Accessibility.

—The following provisions amend Chapter 11 Accessibility in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1101.2 *Design.* Buildings and facilities shall be designed and constructed to be accessible in accordance with this code, ICC A117.1 and as amended by Sections 1102.2.1, 1102.2.2 and 1102.2.3.

1101.2.1, *ICC A117.1, Section 502.2 Vehicle Space Size.* Car and van parking spaces shall be 96 inches (2440 mm) minimum in width.

1101.2.2, *ICC A117.1, Section 502.4.2 Width.* Access aisles serving car parking spaces shall be 60 inches (1525 mm) minimum in width. Access aisles serving van parking spaces shall be 96 inches (2440 mm) minimum in width.

1101.2.3, *ICC A117.1, Section 502.7 Identification.* Accessible parking spaces shall be identified by signs. The signs shall include the International Symbol of Accessibility complying with Section 703.6.3.1. Signs identifying van parking spaces shall contain the designation "Lift Van Accessible Only." Such signs shall be 60 inches (1525 mm) minimum above the floor of the parking space, measured to the bottom of the sign.

1106.5 *Van spaces.* For every four or fraction of four accessible parking spaces, at least one shall be a van accessible parking space.

Exception: In Group R-2 and R-3 occupancies, van accessible spaces located within private garages shall be permitted to have vehicular routes, entrances, parking spaces and access aisles with a minimum vertical clearance of 7 feet (2134 mm).

1115.112 - Amendments to the International Building Code, 2015 Edition—Chapter 12 Interior Environment.

—The following provisions amend Chapter 12 Interior Environment in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1203.1 *General.* Buildings shall be provided with ventilation as required by the International Mechanical Code. Where natural ventilation is permitted by the International Mechanical Code, the natural ventilation shall be in accordance with Section 1203.5 of this code.

1115.113 - Amendments to the International Building Code, 2015 Edition—Chapter 13 Energy Efficiency.

—The following provisions amend Chapter 13 Energy Efficiency in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding

section, subsection or clause number in the code is hereby enacted and added thereto.

1301.1.1 *Criteria.* Buildings shall be designed and constructed in accordance with the International Energy Conservation Code.

Exception: Buildings of Residential Groups R-2, R-3 and R-4 shall be permitted to be designed and constructed in accordance with Section N1101, General and Section N1102, Building Thermal Envelope of the International Residential Code.

1115.115 - Amendments to the International Building Code, 2015 Edition—Chapter 15 Roof Assemblies and Rooftop Structures.

—The following provisions amend Chapter 15 Roof Assemblies and Rooftop Structures in the International Building Code, 2015 edition. Each code section that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

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.

Exceptions:

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.

1511.2 *Structural and construction loads.* Structural roof components shall be capable of supporting the roof-covering system and the material and equipment loads that will be encountered during installation of the system.

Structural calculations are required when the proposed roof covering system results in a greater than 5 percent increase in the design load on any structural element in accordance with Sections 403.3, 403.3.1, 707.2 or 1401.4.1 of the International Existing Building Code. The structural calculations shall comply with Chapter 16 except as noted in the International Existing Building Code. The calculations shall include verification that ponding instability will not occur.

1115.116 - Amendments to the International Building Code, 2015 Edition—Chapter 16 Structural Design.

—The following provisions amend Chapter 16 Structural Design in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

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 in accordance with this code, the Zoning Ordinance and the Floodplain Management Regulations Ordinance. For buildings that are located in more than one flood hazard area, the provisions associated with the most restrictive flood hazard area shall apply.

1612.1.1 *Alterations and repairs.* Alterations and repairs to buildings located in any hazard zone shall require code compliance with Sections 104.6.1, 105.1.1, 105.1.1.1, 110.2.1, 110.3.14.1, 111, 1612.3 and the International Existing Building Code except that in the case of damages or cost of reconstruction or restoration in excess of 50 percent of the fair market value of the building, such structure shall comply in all respects with the requirements of this section.

1612.3 *Establishment of flood hazard areas.* Flood hazard areas shall be established by the Floodplain Management Regulations Ordinance.

1612.5 *Flood hazard documentation.* The following documentation shall be prepared and sealed by a registered design professional and submitted to the building official:

1. For construction in flood hazard areas other than coastal high hazard areas or coastal A zones:

    1.1. The elevation of the lowest floor, including the basement, as required by the lowest floor elevation inspection in Section 110.3.3.1 and for the final inspection in Section 110.3.14.1.

    1.2. For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.6.2.1 of ASCE 24, construction documents shall include a statement that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.2.2 of ASCE 24.

1.3. For dry flood-proofed nonresidential buildings, construction documents shall include a statement that the dry flood-proofing is designed in accordance with ASCE 24.

2. For construction in coastal High hazard areas and coastal A zones:

2.1. The elevation of the bottom of the lowest horizontal structural member as required by the lowest floor elevation inspection in Section 110.3.3.1 and for the final inspection in Section 110.3.14.1.

2.2. Construction documents shall include a statement that the building is designed in accordance with ASCE 24, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of Chapter 16.

2.3. For breakaway walls designed to have a resistance of more than 20 psf (0.96 kN/m^2) determined using allowable stress design, construction documents shall include a statement that the breakaway wall is designed in accordance with ASCE 24.

1613.3.1 *Acceleration parameters.* The earthquake spectral response acceleration at short periods (S_s) shall be 0.48g. The earthquake spectral response acceleration at 1-second periods (S_1) shall be 0.18g.

1115.118 - Amendments to the International Building Code, 2015 Edition—Chapter 18 Soils and Foundations.

—The following provisions amend Chapter 18 Soils and Foundations in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1807.2.4 *Guards.* Guards shall be provided in accordance with Section 1015.2.

1809.5 *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. Extending a minimum of 30 inches (762 mm) below the finish grade;
2. Constructing in accordance with ASCE-32; or
3. Erecting on solid rock.

Exception: Free-standing buildings meeting all of the following conditions shall not be required to be protected:

1. Assigned to Risk Category I;
2. Area of 600 square feet (56 m^2) or less for light-frame construction or 400 square feet (37 m^2) or less for other than light-frame construction; and
3. Eave height of 10 feet (3048 mm) or less.

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

1115.125 - Amendments to the International Building Code, 2015 Edition

—Chapter 25 Gypsum Board, Gypsum Panel Products and Plaster.

2503.1 *Inspection.* Lath and gypsum board shall be inspected in accordance with Section 110.3.7.

1115.129 - Amendments to the International Building Code, 2015 Edition—Chapter 29 Plumbing Systems.

—The following provisions amend Chapter 29 Plumbing Systems in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

2901.1 *Scope.* The provisions of this chapter and the International 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 constructed, installed and maintained in accordance with the International Plumbing Code. Private sewage disposal systems shall conform to the International Plumbing Code.

2902.1 *Minimum number of fixtures.* Plumbing fixtures shall be provided in accordance with the International Plumbing Code.

Table 2902.1 *Minimum Number Of Required Plumbing Fixtures.* - Delete.

2902.1.1 *Fixture calculations.* Fixture calculations shall be provided in accordance with the International Plumbing Code.

2902.2 *Separate facilities.* Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 10 or fewer.

3. Separate facilities shall not be required in business or mercantile occupancies in which the maximum occupant load is less than 50.

2902.3.2 *Location of toilet facilities in occupancies other than malls* and shopping centers. In occupancies other than covered and open mall buildings and shopping centers, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

Exception: The location and maximum distances of travel to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum distance of travel are approved.

2902.3.3 *Location of toilet facilities in malls and shopping centers.* In covered and open mail buildings and shopping centers, the required public and employee toilet facilities shall be located not more than one story above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 300 feet (91 m). In mall buildings and shopping centers, the required facilities shall be based on total square footage (m^2) within a covered mall building or shopping center or within the perimeter line of an open mall building, and facilities shall be installed in each individual store or in a central toilet area located in accordance with this section. The maximum distance of travel to central toilet facilities in mall buildings and shopping centers shall be measured from the main entrance of any store or tenant space. In mall buildings or shopping centers, where employees' toilet facilities are not provided in the individual store, the maximum distance of travel shall be measured from the employees' work area of the store or tenant space.

2902.3.6 *Prohibited toilet room location.* Public toilet rooms shall not open directly into a room used for the preparation of food for service to the public.

2902.5 *Drinking fountain location.* Drinking fountains shall be provided in accordance with the International Plumbing Code.

2905.6 *Small occupancies.* Drinking fountains shall not be required for an occupant load of 30 or fewer.

1115.131 - Amendments to the International Building Code, 2015 Edition—Chapter 31 Special Construction.

—The following provisions amend Chapter 31 Special Construction in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding

section, subsection or clause number in the code is hereby enacted and added thereto.

3102.1 *General.* The provisions of this section shall apply to air-supported, air-inflated, membrane-covered cable and membrane-covered frame structures, collectively known as membrane structures, erected for a period of 90 days or longer. 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.

3103.1 *General.* The provisions of this section shall apply to all types of temporary structures that are to remain at a location for a limited period of time. Temporary structures such as membrane structures, trailers, food stands, portable buildings, greenhouses and unoccupied display structures may be erected and remain in place for the duration of a specific event or season. The duration of the event or season shall not exceed a six-month period except as otherwise provided in this section. Membrane structures erected for a period of 90 days or longer shall comply with Section 3102. All other structures erected for a period of more than six months shall comply with all applicable sections of this code for permanent buildings and structures. In addition to the requirements of this section, special amusement buildings and structures shall also comply with Section 411.

Exceptions:

1. The following types of buildings and structures may be erected for a period of up to one year:

   1.1. Unoccupied display structures.

   1.2. Subdivision sales offices.

   1.3. Unoccupied trailers or portable buildings used only to house equipment for monitoring air quality, soil and/or water contamination clean-up operations, or other similar uses related to the betterment of public safety, health, and welfare.

2. Temporary structures occupied as classrooms may be erected for a maximum of 10 months.

3103.1.1 *Permitted uses.* Temporary structure permits shall only be issued for the following types of structures and occupancies:

1. Membrane structures erected for a period of less than 90 days.
2. Unoccupied display structures.
3. Outdoor sales facilities.

4. Structures to be occupied on a seasonal basis only, such as fruit stands, greenhouses, snow-cone stands, special amusement buildings, etc.

5. Temporary structures to be used while awaiting completion of construction of a permanent building on the same site such as temporary offices, clinics, or classrooms.

6. Subdivision sales offices.

7. Structures to be used as temporary shelter or operations center in an emergency due to a disaster.

8. Entertainment or assembly uses.

9. Unoccupied trailers or portable buildings used only to house equipment.

3103.2 *Permit required.* No temporary structure shall be erected, operated or maintained for any purpose without obtaining a temporary structure permit.

Exceptions:

1. Tents used exclusively for recreational camping purposes.

2. Tents or air supported structures covering an area not exceeding 900 square feet (83.6 m^2), including all connecting areas or spaces with a common means of egress or entrance, that are erected for a period of less than 90 days and with an occupant load of less than 50.

3103.2.1 *Permit fees.* Permit fees, as prescribed in Chapter 1100, SLCRO 1974 as amended shall be based on the estimated value of the proposed installation plus the value of any prefabricated construction. Such permit fee shall be charged for permits issued for one year. Permits issued for less than one year shall be prorated for the duration of the permit. The applicable minimum fee shall be assessed.

When permits are extended under Section 3103.2.2 the total fee for the permit extension shall include the permit extension fee plus a minimum of one additional inspection fee.

3103.2.2 *Inspection fees.* In addition to the permit fees prescribed in Section 3103.2.1, the required number of extra monthly inspections necessary shall be determined and the fee paid at the time of permit issuance.

3103.2.3 *Extension of permits.* The Board of Appeals may grant permit extensions for temporary structures used for unoccupied sales display purposes and for air-supported structures.

The building official may grant permit extensions of up to one-year periods for the types of structures and occupancies allowed under Exception 1.2 and 1.3 of Section 3103.1.

The building official may grant permit extensions for six month periods on temporary structures that are used while awaiting completion of construction of

a permanent building on the same site (such as temporary offices, clinics, or classrooms) provided that the temporary structure is removed within 30 days after the occupancy permit for the permanent building is granted. Fees for a permit extension shall be as prescribed in Chapter 1100, SLCRO 1974 as amended.

3103.2.4 *Multiple permits prohibited.* Not more than one temporary structure permit shall be issued for the same structure at the same location, within a twelve-month period.

3103.2.5 *Termination of approval.* The building official is hereby authorized to terminate approval for cause and to order the demolition or removal of any such temporary structure at the building official's discretion, or as directed by a decision of the Board of Appeals.

3103.3 *Other approvals.* The building official shall require the applicant to obtain the approval of the local fire protection district or fire department prior to the issuance of any temporary structure permit.

3103.4 *Bond.* The building official may, in the exercise of discretion, require a permit applicant to post a perpetual performance bond, prior to issuance of the permit, to guarantee removal of the structure upon expiration of the permit or as directed by the building official and/or the Board of Appeals. The amount of the bond shall be set by the building official.

3103.5 *Construction documents.* A permit application and construction documents shall be submitted for each installation of a temporary structure. The construction documents shall include a site plan indicating the location of the temporary structure and information delineating the means of egress and the occupant load.

3103.6 *Design features.* Temporary structures shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to insure the public health, safety and general welfare.

3103.7 *Location.* Temporary structures shall be located in accordance with the requirements of Table 602 based on the fire-resistance rating of the exterior walls for the proposed type of construction.

3103.7.1 *Setback from the street.* Temporary structures shall be located a minimum of 15 feet (4572 mm) from the street right-of-way.

3103.8 *Flame-resistant treatment.* Before a permit is granted, the owner or agent shall file with the building official a certificate executed by an approved testing laboratory, certifying that the tents, canopies and membrane structures and their appurtenances, sidewalls, drops and tarpaulins, bunting, shall be composed of flame-resistant material or shall be treated with a flame retardant in an approved manner and meet the requirements for flame resistance as

determined in accordance with NFPA 701, and that such flame resistance is effective for the period specified by the permit.

3103.9 *Label.* Membrane structures, tents or canopies shall have a permanently affixed label bearing the identification of size and fabric or material type.

3103.10 *Certification.* An affidavit or affirmation shall be submitted to the building official and a copy retained on the premises on which the tent or air-supported structure is located. The affidavit shall attest to the following information relative to the flame resistance of the fabric:

1. Names and address of the owners of the tent, canopy or air-supported structure.
2. Date the fabric was last treated with flame-resistant solution.
3. Trade name or kind of chemical used in treatment.
4. Name of person or firm treating the material.
5. Name of testing agency and test standard by which the fabric was tested.

3103.11 *Anchorage.* Temporary structures shall be anchored to the ground to resist the wind loads prescribed by Section 1609. At the discretion of the building official, the anchorage system shall be designed by a registered design professional.

3103.12 *Means of egress.* Temporary structures shall conform to the means of egress requirements of Chapter 10 and shall have a maximum exit access travel distance of 100 feet (30480 mm).

3103.13 *Report required.* The building official shall make a monthly report to the Building Commission on the number and types of permits for temporary structures issued by the Department of Transportation and Public Works. The report shall be presented at each regularly scheduled meeting of the Building Commission.

3103.14 *Monthly inspections.* Temporary structures that serve food shall be inspected monthly by the Departments of Health and Transportation and Public Works to verify that the scope and the menu of the food service facility remains consistent with the permitted activity.

3107.1 *General.* Signs shall be designed, constructed and maintained in accordance with Appendix H - SIGNS.

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 which meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8.

SECTION 3112
FENCES AND DRIVEWAY BARRIERS

3112.1 *Fences.* Fences shall be subject to the following requirements:

1. Fencing on a corner lot cannot be located within the site distance triangle.
2. A building permit shall be required to erect a new fence or replace an existing fence in accordance with Sections 105 and 109.
3. Electrically charged fences are prohibited.
4. The use of barbed wire, razor ribbon, and similar type fencing materials are prohibited on all new fence installations.

Exceptions:

1. Barbed wire may be installed on top of fencing for industrial use sites provided that the lowest strand is at least 7 feet (2134 mm) above the ground.
2. Barbed wire fences and fences topped with barbed wire may be permitted for fencing of agricultural use sites for the purpose of containing livestock including cropland areas/fields used for grazing/feeding of livestock.
3. Barbed wire, razor ribbon, and like material may be installed on top of fences on institutional use sites for prisons, jails, and similar correctional facilities where security measures are needed, provided the barbed wire, razor ribbon, or like material is no closer to the ground than 7 feet (2134 mm).

3112.2 *Driveway barriers.* A barrier measuring less than 3 inch (76 mm) in vertical depth that extends fully or partially across a driveway or parking lot is considered a hazardous condition. All barriers must be compliant with Department of Transportation and Public Works requirements.

Exceptions:

1. A barrier measuring less than 3 inches (76 mm) in vertical depth extending fully or partially across a driveway or parking lot is not considered a hazardous condition if permanent 1 inch (25 mm) horizontal by 12 inch (305 mm) vertical reflector strips are installed under the barrier at a maximum of 36 inches (914 mm) horizontally center to center for the entire length of the barrier.
2. A driveway or parking lot with such a barrier that is posted with a "No Trespassing" sign in the middle of the entrance(s) of the driveway or parking lot. The sign must be located outside of the road or street right-of-way.

SECTION 3113
ANTENNAS

3113.1 *Permits not required.* A building permit is not required for roof installation of antennal structures not more than 12 feet (3658 mm) in height for private reception. Such a structure shall not be erected so as to injure the roof covering, and when removed from the roof, the roof covering shall be repaired to maintain weather and water tightness. The installation of any antennal structure mounted on the roof of a building shall not be erected nearer to the lot line than the total height of the antennal structure above the roof, nor shall such structure be erected near electric power lines or encroach upon any street or other public space.

3113.2 *Permits required.* Approval shall be secured for all roof-mounted antennal structures more than 12 feet (3658 mm) in height above the roof. The application shall be accompanied by detailed drawings of the structure and methods of anchorage. All connections to the roof structure shall be properly flashed to maintain water tightness.

3113.3 *Dish antennas.* An antenna consisting of a radiation element which transmits or receives radiation signals generated as electrical, light or sound energy, and supported by a structure with or without a reflective component to the radiating dish, usually in a circular shape with a parabolic curve design constructed of a solid or open mesh surface, shall be known as a dish antenna.

3113.3.1 *Permits.* The approval of the building official shall be secured for all dish antenna structures more than 2 feet (610 mm) in diameter erected on the roof of or attached to any building or structure. A permit is not required for dish antennas not more than 2 feet (610 mm) in diameter erected and maintained on the roof of any building.

3113.3.2 *Structural provisions.* Dish antennas larger than 2 feet (610 mm) in diameter shall be subject to the structural provisions of Sections 1608 and 1609. The snow load provisions of Section 1608 shall not apply where the antenna has a heater to melt falling snow.

1115.135 - Amendments to the International Building Code, 2015 Edition—Chapter 35 Referenced Standards.

—The following provisions amend Chapter 35 Referenced Standards in the International Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI. Add the following St. Louis County Codes, Ordinances and Standards:

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI		St. Louis County Department of Highways & Traffic and Public Works 41 S. Central Ave. St. Louis, MO 63105
Standard reference number	Title	Referenced in code section number
Electrical Code - Title XI, Chapter 1102 SLCRO 1974, as amended	Electrical Code	102.2.1, 107.3.3.1, 202
Existing Building Code - Title XI, Chapter 1117 SLCRO 1974 as amended	Existing Building Code	101.2, 101.4, 101.5, 102.6, 105.1.6, 105.3.1.2, 116.5, 201.3, 1511.2, 1612.1.1
Floodplain Management Regulations - Title X, Chapter 1008 SLCRO 1974 as amended	Floodplain Management Regulations	101.4, 105.3.1.2, 105.3.1.2.1, 110.3.14.1, 1612.1, 1612.3
Mechanical Code - Title XI, Chapter 1108 SLCRO 1974, as amended	Mechanical Code	102.2.1, 105.2, 107.3.3.1, 202
Plumbing Code - Title XI, Chapter 1103 SLCRO 1974, as amended	Plumbing Code	102.2.1, 107.3.3.1, 119.1.1.1, 202
Zoning Ordinance - Title X, Chapter 1003 SLCRO 1974 as amended	Zoning Ordinance	102.2.2, 101.4, 105.3.1.2, 105.3.1.2.1, 110.3.10, 110.3.13, 111.1.1.2, 111.1.1.3, 202, 1612.1, H101.1.1

ICC - International Code Council. Amend Referenced Standards. (Standards not amended by this code and shown in the code as published are adopted without amendments.):

ICC	International Code Council, Inc. 500 New Jersey Ave., NW 6th Floor Washington, DC 20001	
Standard reference number	Title	Referenced in code section number
IMC-15	International Mechanical Code®	101.4, 102.2.1, 105.2, 107.3.3.1, 201.3, 202, 307.1.1, Table 307.1(1), 406.6.2, 406.8.2, 406.8.4, 409.3, 412.6.6, 414.1.2, 414.3, 415.8.1.4, 415.8.2, 415.8.2.7, 415.8.3, 415.8.4, 415.10.11, 415.10.11.1, 416.2.2, 416.3, 417.1, 419.8, 421.5, 603.1, 603.1.1, 603.1.2, 712.1.6, 712.2.2, 717.5.3, 717.5.4, 717.6.1, 717.6.2, 717.6.3, 718.5, 720.1, 720.7, 903.2.11.4, 904.2.1, 904.11, 907.3.1, 908.6, 909.1, 909.10.2, 909.13.1, 1006.2.2.3, 1011.6, 10.20.5.1, 1203.1, 1203.2.1, 1203.5.2, 1203.5.2.1, 1203.6, 1209.3, 2801.1
IPC-15	International Plumbing Code®	101.4, 102.2.1, 105.2, 107.2.8, 107.3.3.1, 119.1.1.1, 201.3, 202, 415.9.3, 603.1.2, 718.5, 903.3.5, 904.12.1.3, 912.6, 1206.3.3, 1503.4, 1503.4.1, 1805.4.3, 2901.1, 2902.1, 2902.1.1, 3305.1, A101.2
IPMC-15	International Property Maintenance Code®	101.4, 102.6, 103.3, 111.1.1.2, 111.1.1.3, 201.3

IRC-15	International Residential Code®	101.2, 101.4, 101.5, 105.1.6, 105.3.1.2, 110.3.5, 110.3.9, 111.1.1, 116.5, 201.3, 305.2.3, 308.3.4, 308.4.2, 308.6.4, 310.1, 310.5.1, 310.5.2, 1301.1.1, 2308.1

NFPA - National Fire Protection Association. Amend Referenced Standards. (Standards not amended by this code and shown in the code as published are adopted without amendments.):

NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	
Standard reference number	Title	Referenced in code section number
70-14	National Electric Code	101.4, 102.2.1, 105.2, 107.3.3.1, 201.3, 202, 415.11.1.8, 904.3.1, 907.6.1, 909.12.2, 909.16.3, 1205.4.1, 2701.1, 2702.1.2, G501.4, G1001.6, H106.1, H106.2, K101, K111.1
701-10	Standard Method of Fire Tests for Flame-Propagation of Textiles and Films	410.3.6, 424.2, 801.4, 806.1, 806.3, 806.4, 3102.3, 3102.3.1, 3102.6.1.1, 3103.8, 3105.4, D102.2.8, H106.1.1

1115.136 - Amendments to the International Building Code, 2015 Edition—Appendix H Signs.

—The following provisions amend Appendix H Signs in the International Building Code, 2015 edition. Each code section that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

H101.1.1 *Zoning law.* Where more restrictive, the limitations of the zoning ordinance shall take precedence over the regulations of this code.

H101.2 *Permits and construction documents.* Permits for signs shall be required as specified in Sections H101.2.1 and H101.2.2 except as provided for in Section H101.3. Construction documents shall be prepared and filed in accordance with Section H105.

H101.2.1 *New signs.* A new sign shall not hereafter be erected, constructed, altered or maintained except as provided for herein, and until a permit has been issued by the building official.

H101.2.2 *Alterations.* A sign shall not be enlarged or relocated unless such sign conforms to the provisions of this section for new signs, or until a proper permit has been secured. The changing of movable parts of an approved sign that is designed for such changes, or the repainting or reposting of display matter, shall not be deemed an alteration, provided that the conditions of the original approval and the requirements of this section are not violated.

H101.3 *Permit exemptions.* A permit shall not be required for signs exempt from permits in the Zoning Ordinance.

H105.3 *Wind load.* Signs shall be designed and constructed to withstand wind pressure as provided for in Chapter 16. Structural calculations are not required for ground signs or pole signs, as defined in Section H102, that are both less than 100 square feet (9.29 m^2) in area and less than 10 feet (3048 mm) in height.

H105.4 *Seismic load.* Signs designed to withstand wind pressures shall be considered capable of withstanding earthquake loads, except as provided for in Chapter 16. Structural calculations are not required for ground signs or pole signs, as defined in Section H102, that are both less than 100 square feet (9.29 m^2) in area and less than 10 feet (3048 mm) in height.

Attachment 'B'

1116.101 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—

Chapter 1 Scope and Administration.

—The following provisions amend Chapter 1 Scope and Administration in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R101.1 *Title.* These regulations shall be known as the Residential Code for One- and Two-Family Dwellings of Chesterfield, hereinafter referred to as "this code."

R101.2 *Scope.* The provisions of the International Residential Code for One- and Two-Family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade in height with a separate means of egress and their accessory structures not more than three stories above grade in height.

Exceptions:

1. Live/work units located in townhouses and complying with the requirements of Section 419 of the International Building Code shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings. Fire suppression required by Section 419.5 of the International Building Code where constructed under the International Residential Code for One- and Two-family Dwellings shall conform to Section 903.3.1.3 of the International Building Code.
2. Owner-occupied lodging houses with five or fewer guestrooms shall be permitted to be constructed in accordance with the International Residential Code for One- and Two-Family Dwellings where equipped with a fire sprinkler system in accordance with Section 903.3.1.3 of the International Building Code.

R101.4 *Applicability of Chesterfield, Missouri Codes and Ordinances.* Throughout this code, whenever the terms NFPA 70, International Plumbing Code, International Mechanical Code, International Property Maintenance Code, International Building Code, International Residential Code, International Existing Building Code, Zoning Ordinance or Floodplain

Management Regulations Ordinance appears it shall be deemed to mean the codes adopted by Chesterfield as listed in Chapter 07 as amended, respectively.

R101.5 *Reserved for future use.*

R101.6 *Reserved for future use.*

R101.7 *Reserved for future use.*

R101.8 *Correction of violations of other codes.* Repairs or alterations mandated by any property, housing, or fire safety maintenance code or mandated by any licensing rule or ordinance adopted pursuant to law shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this code unless the code requiring such repair or alteration so provides.

R102.2.1 *Licensing.* Applicable licensing provisions of the Mechanical Code, the Electrical Code and the Plumbing Code shall apply to work regulated under this code.

R102.2.2 *Compliance with zoning and other applicable codes and ordinances.* Subject to the provisions of this code, neither the granting of a permit, nor the approval of construction documents, nor inspections made by the building official, or the building official's authorized representative, during the erection, movement or demolition of a building or structure, or any alteration or addition thereto, shall in any way relieve the owner or tenant of such building, structure or property from complying with the requirements of this code, the Unified Development Code, or other applicable laws of the City.

R102.4 *Referenced codes and standards. The codes and standards referenced in this code and listed in* Chapter 44 shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall 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 manufacturer's instructions shall apply.

R102.4.3 *Standards and guidelines for structural evaluation.* The building official shall allow structural evaluation, condition assessment, and rehabilitation of buildings, structures, or individual structural members based on this code's appendix chapters, referenced standards, guidelines, or other approved standards and procedures.

R102.7 *Existing structures.* The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Building Code, the International Property Maintenance Code or the International Fire Code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

SECTION R103
DEPARTMENT OF BUILDING SAFETY

R103.1 *Creation of enforcement agency.* SECTION R103 DEPARTMENT OF BUILDING SAFETY (Sections R103.1 through R103.3) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 103 DEPARTMENT OF BUILDING SAFETY in the International Building Code.

SECTION R104
DUTIES AND POWERS OF BUILDING OFFICIAL

R104.1 *General.* SECTION R104 DUTIES AND POWERS OF BUILDING OFFICIAL (Sections R104.1 through R104.11.1) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL in the International Building Code.

SECTION R105
PERMITS

R105.1 *Required.* SECTION R105 PERMITS (Sections R105.1 through R105.9) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 105 PERMITS in the International Building Code.

SECTION R106
Reserved for future use.

SECTION R107
SUBMITTAL DOCUMENTS

R107.1 *General.* SECTION R106 CONSTRUCTION DOCUMENTS (Sections R106.1 through R106.5) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 107 SUBMITTAL DOCUMENTS in the International Building Code.

SECTION R108
TEMPORARY STRUCTURES AND USES

R108.1 *General.* SECTION R107 TEMPORARY STRUCTURES AND USES (Sections R107.1 through R107.4) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 108 TEMPORARY STRUCTURES AND USES in the International Building Code.

SECTION R109
FEES

R109.1 *Payment of fees.* SECTION R108 FEES (Sections R108.1 through R108.6) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 109 FEES in the International Building Code.

SECTION R110
INSPECTIONS

R110.1 *General.* SECTION R109 INSPECTIONS (Sections R109.1 through R109.4) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 110 INSPECTIONS in the International Building Code.

SECTION R111
CERTIFICATE OF OCCUPANCY

R111.1 *Use and occupancy.* SECTION R110 CERTIFICATE OF OCCUPANCY (Sections R110.1 through R110.5) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 111 CERTIFICATE OF OCCUPANCY in the International Building Code.

SECTION R112
SERVICE UTILITIES

R112.1 *Connection of service utilities.* SECTION R111 SERVICE UTILITIES (Sections R111.1 through R111.3) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 112 SERVICE UTILITIES in the International Building Code.

SECTION R113
BOARD OF APPEALS

R113.1 *General.* SECTION R112 BOARD OF APPEALS (Sections R112.1 through R112.4) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 113 BOARD OF APPEALS in the International Building Code.

SECTION R114
VIOLATIONS

R114.1 *Unlawful acts.* SECTION R113 VIOLATIONS (Sections R113.1 through R113.4) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 114 VIOLATIONS in the International Building Code.

SECTION R115
STOP WORK ORDER

R115.1 *Authority.* SECTION R114 STOP WORK ORDER (Sections R114.1 through R114.2) in the International Residential Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 115 STOP WORK ORDER in the International Building Code.

SECTION R116
UNSAFE STRUCTURES AND EQUIPMENT

R116.1 *Conditions.* SECTION 116 UNSAFE STRUCTURES AND EQUIPMENT (Sections 116.1 through 116.5) in the International Building Code, 2015 edition is adopted as part of this code.

SECTION R117
EMERGENCY MEASURES

R117.1 *Imminent danger.* SECTION 117 EMERGENCY MEASURES (Sections 117.1 through 117.6) of the Building Code is adopted as part of this code.

SECTION R118
UNFIT BUILDINGS AND STRUCTURES

R118.1 *Inspections.* SECTION 118 UNFIT BUILDINGS AND STRUCTURES (Sections 118.1 through 118.8.3) of the Building Code is adopted as part of this code.

SECTION R119
DEMOLITION OF STRUCTURES

119.1 *Demolition of structures.* SECTION 119 DEMOLITION OF STRUCTURES (Sections 119.1 through 119.3) of the Building Code is adopted as part of this code.

1116.102 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 2 Definitions.

—The following provisions amend Chapter 2 Definitions in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R201.3 *Terms defined in other codes.* Where terms are not defined in this code and are defined in the International Building Code, International Property Maintenance Code, International Mechanical Code, NFPA 70, International Plumbing Code, International Energy Conservation Code or the International Fire Code, such terms shall have the meanings ascribed to them as in those codes.

SECTION R202
DEFINITIONS

Such definitions set out in the International Residential Code, 2015 edition, are made part of this code. In addition, the following words or terms shall have the definitions ascribed to them herein.

Affected Parties. The owner, occupant, lessee, mortgagee, agent and all other persons having an interest in the structure or its premises as shown by

the records of the Recorder of Deeds as of the date said structure is declared to be a public nuisance by the building official.

Board of Appeals. The Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Code Official. The Code Official as defined herein.

Building Code Review Committee. The Committee established by, and acting in accordance with the Building Code, SLCRO 1974, Title XI, Chapter 1115, as amended.

Building Commission. The Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Official. The Code Official as defined herein.

Code Official. The Director of the Department of Transportation and Public Works or the Director's duly authorized representative.

Dangerous. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.
3. The building or structure or any portion thereof is likely to collapse partially or completely because:
    3.1. Of dilapidation, deterioration or decay;
    3.2. Of construction in violation of the this code;
    3.3. The soil supporting the foundation is unstable, moved or removed;
    3.4. The foundation is inadequate, decayed or deteriorated; or
    3.5. It is damaged due to fire, earthquake, wind or flood; or any other similar cause.
4. The exterior walls or other vertical structural member list, lean, or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.
5. Any building or structure with substantial structural damage.

Disaster. A disaster shall include but not necessarily be limited to flood, windstorm, tornado, severe storm, earthquake, bomb blast, explosion or similar natural or man-made type event. The building official shall make the determination whether an event shall be declared a disaster.

Electrical Code Review Committee. The Committee established by, and acting in accordance with the Electrical Code, SLCRO 1974, Title XI, Chapter 1102, as amended.

Flood Hazard Area. An area that has been determined to be prone to flooding in accordance with Section 1612 of the International Building Code or Section R322 of the International Residential Code.

Mechanical Code Review Committee. The Committee established by, and acting in accordance with the Mechanical Code, SLCRO 1974, Title XI, Chapter 1108, as amended.

Plumbing. For the purposes of this code, plumbing refers to those installations, repairs, maintenance and alterations regulated by the International Plumbing Code.

Plumbing Code Review Committee. The Committee established by, and acting in accordance with the Plumbing Code, SLCRO 1974, Title XI, Chapter 1103, as amended.

Zoning Ordinance. Chesterfield Unified Development Code, Chapter 31.

1116.103 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 3 Building Planning.

—The following provisions amend Chapter 3 Building Planning in the International Residential Code for One-and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

TABLE R301.2(1) Climatic and Geographic Design Criteria

Ground Snow Load (lbs./ft.^{2})	Wind Design				Seismic Design Category [f]	Subject to Damage from			Winter Design Temp [e]	Ice Barrier Under-Layment Required [h]	Flood Hazards [g]	Air Freezing Index [i]	Mean Annual Temp [j]
	Speed [d] (mph)	Topographic effects [k]	Special Wind Region [l]	Wind-borne debris zone [m]		Weathering [a]	Frost line depth [b]	Termite [c]					

20	V_{ult} = 115 V_{asd} = 89	NO	NO	NO	C	Severe	30 inches (762 mm)	Slight to Moderate	2° F	NO	May 24, 1985	1,000 days	55.2° 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 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). 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 is established in the International Mechanical Code. Additional design temperature criteria can be found in Section M1401.3.

f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.

g. Flood hazard areas shall be established by the Floodplain Management Regulations ordinance.

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 "NO."

i. The jurisdiction 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°)."

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 jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

l. 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.

R301.2.4 *Flood plain construction.* Buildings and structures constructed in whole or part in flood hazard areas (including A or V 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 Section R322, the Floodplain Management Regulations Ordinance and the Zoning Ordinance. 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 part in identified floodways shall be designed and constructed in accordance with ASCE 24.

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 NFPA 13D 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.
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. Cantilevered manufactured fireplaces.
7. Roof eave overhangs.
8. Uncovered decks.

Table R302.1(1) Exterior Walls

Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	Fire-resistance rated	1 hour - tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 3 Feet
	Not fire-resistance rated	0 hours	≥ 3 Feet
Projections	Not allowed	N/A	< 2 Feet
	Fire-resistance rated	1 hour on the underside [a, b]	≥ 2 Feet to < 3 Feet
	Not fire-resistance rated	0 hours	≥ 3 Feet

Openings in walls	Not allowed	N/A	< 3 Feet
	25% maximum of wall area	0 hours	3 Feet
	Unlimited	0 hours	3 Feet
Penetrations	All	Comply with Section R302.4	< 3 Feet
		None required	3 Feet

For SI: 1 foot = 304.8 mm
N/A = Not Applicable.

a. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.

b. Roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.

TABLE R302.1(2) EXTERIOR WALLS-DWELLINGS WITH FIRE SPRINKLERS

Exterior Wall Element		Minimum Fire-Resistance Rating	Minimum Fire Separation Distance
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from the outside	0 feet
	Not fire-resistance rated	0 hours	3 feet [a]

Projections	Not allowed	N/A	< 2 feet
	Fire-resistance rated	1 hour on the underside [b,c]	2 feet [a]
	Not fire-resistance rated	0 hours	3 feet
Openings in walls	Not allowed	N/A	< 3 feet
	Unlimited	0 hours	3 feet [a]
Penetrations	All	Comply with Section R302.4	< 3 feet
		None required	3 feet [a]

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable

a. For residential subdivisions where all dwellings are equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13D, the fire separation distance for nonrated exterior walls and rated projections shall be permitted to be reduced to 0 feet, and unlimited unprotected openings and penetrations shall be permitted, where the adjoining lot provides an open setback yard that is 6 feet (1829 mm) or more in width on the opposite side of the property line.

b. The roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave if fireblocking is provided from the wall top plate to the underside of the roof sheathing.

c. The roof eave fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave provided that gable vent openings are not installed.

R302.2 *Townhouses.* Common walls separating townhouses 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 NFPA 70. Penetrations of the membrane shall be in accordance with Section R302.4.

1. Where a fire sprinkler system in accordance with NFPA 13D 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 NFPA 13D 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, or the common wall may be two independent 1-hour fire-resistance-rated wall assemblies.

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.

R302.5.2 *Duct penetration.* Ducts in the garage and ducts penetrating the walls or ceilings separating the dwelling from the garage shall be constructed of a minimum No. 28 gage (0.41 mm) sheet steel or other approved material and shall not have openings into the garage.

R302.13 *Fire protection of floors.* Floor assemblies that are not required elsewhere in this code to be fire-resistance rated, shall be provided with 1/2-inch (12.7 mm) gypsum wallboard membrane, 5/8-inch (16 mm) wood structural panel membrane, or equivalent on the underside of the floor framing member. Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaires, wires, speakers, drainage, piping and similar openings or penetrations shall be permitted. Fire blocking, draftstopping, fire taping, and/or additional framing is not required.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with NFPA 13D or other approved equivalent sprinkler system.
2. Floor assemblies located directly over a crawl space not intended for storage or fuel-fired appliances.
3. Portions of floor assemblies shall be permitted to be unprotected where complying with the following:

   3.1 The aggregate area of the unprotected floor assembly does not exceed 100 square feet (9.3 m^2) per HVAC zone.

3.2 Areas of the floor assembly covered by HVAC metal plenum, trunk lines, and steel structural beams shall be considered protected. Gypsum wallboard membrane shall be within 2 inches (50.8 mm) of all previously listed items.

4. Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than 2-inch by 10-inch (50.8 mm by 254 mm) nominal dimension, or other approved floor assemblies demonstrating equivalent fire performance.

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 m^2), one-half of which must be openable.

Exceptions:

1. The glazed areas shall not be required where artificial light and a local ventilation system are provided.
2. The minimum local exhaust rates shall be determined in accordance with Section M1507.
3. Bathroom exhaust may discharge to an attic gable vent or ventilated soffit if attached or secured within 6" (152 mm) of same, without obstruction.

R303.5.2 *Exhaust openings.* Exhaust air shall not be directed below 6 feet 8 inches (2032 mm) onto a public walkway.

R303.8 *Exterior stairway illumination.* Exterior stairways shall be provided with an artificial light source. Exterior stairways providing access to a basement from the outdoor grade level shall be provided with an artificial light source located at the bottom landing of the stairway.

R306.5 *Rough-ins.* Within unfinished areas, rough-ins for drain waste vent only or for water supply only are permitted.

R306.6 *Hose bibb.* Every dwelling shall provide one outside frost-proof hose bibb. Hose bibbs shall be protected from backflow in accordance with the International Plumbing Code.

R306.7 *Floor drain.* A floor drain shall be installed within 15 feet (4572 mm) of and in the same room as the heating/cooling system(s) or hot water heater(s). The floor drain installations shall comply with the International Plumbing Code.

R307.1 *Space required.* Fixtures shall be spaced in accordance with Figure R307.1, and in accordance with the requirements of the International Plumbing Code.

R309.3 *Flood hazard areas.* For buildings located in flood hazard areas as established by Table R301.2(1), garage floors shall be constructed in

accordance with this section, the Floodplain Management Regulations Ordinance and the Zoning Ordinance:

1. Elevated to or above the design flood elevation as determined in Section R322; or
2. Located below the design flood elevation provided that the floors are at or above grade on not less than one side, are used solely for parking, building access or storage, meet the requirements of Section R322 and are otherwise constructed in accordance with this code.

R309.5 *Fire sprinklers.* Private garages shall be protected by fire sprinklers where the garage wall has been designed based on Table 302.1(2), Footnote a, and the homeowner has opted to purchase a fire sprinkler system for their residence, as per Missouri Revised Statutes. Sprinklers in garages shall be connected to an automatic sprinkler system that complies with NFPA 13D. Garage sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 gpm/ft ^{2} . Garage doors shall not be considered obstructions with respect to sprinkler placement.

R310.7 *Bathrooms in unfinished basements.* Bathrooms or bathroom rough-ins shall not be permitted within unfinished basements on new construction unless an emergency escape and rescue opening is provided to allow for future conversion to habitable space.

R311.3 *Floors and landings at exterior doors.* There shall be a landing or floor on each side of each exterior door. The width of each landing shall not be less than the door served. Every landing shall have a minimum dimension of 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall exceed ¼ unit vertical in 12 units horizontal (2 percent).

Exceptions:

1. Exterior balconies less than 60 square feet (5.6 m ^{2}) and only accessible from a door are permitted to have a landing less than 36 inches (914 mm) measured in the direction of travel.
2. Openings protected by a guard shall not be required to have an exterior landing.

R311.3.2 *Floor elevations for other exterior doors.* Doors other than the required egress door shall be provided with landings or floors not more than 7¾ inches (196 mm) below the top of the threshold.

Exception: A top landing is not required where a stairway of not more than four risers is located on the exterior side of the door, provided the door does not swing over the stairway.

R311.7.5 *Stair treads and risers.* Stair treads and risers shall meet the requirements of this section. For the purposes of this section, dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

Exceptions:

1. Existing stairways.
2. Any stairway replacing an existing stairway within a space where, because of existing construction, the pitch or slope cannot be reduced.

R312.1.1 *Where required.* Guards shall be located along open-sided walking surfaces, including stairs, ramps, landings and walking surfaces adjacent to retaining walls that are located more than 30 inches (762 mm) measured vertically at the edge of the walking surface to the floor or grade below. Insect screening shall not be considered as a guard.

Exception: Guards are not required for the following locations:

1. Retaining walls four feet (1219 mm) or less in height.
2. Retaining walls in excess of four feet (1219 mm) in height where any walk, path, parking lot or driveway is located two feet (610 mm) or more away from the front face of the wall.

R312.2 *Window fall protection.* - Delete.

R312.2.1 *Window sills.* - Delete.

R312.2.2.2 *Window opening control devices.* - Delete.

R313.1 *Townhouse automatic fire sprinkler systems.* A builder of townhouses shall offer to any purchaser on or before the time of entering into the purchase contract the option, at the purchaser's cost, to install or equip fire sprinklers in the townhouse. No purchaser of such a townhouse shall be denied the right to choose or decline to install a fire sprinkler system in such townhouse unit being purchased.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.1.1 *Design and installation.* Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with NFPA 13D.

R313.2 *One- and two-family dwellings automatic fire systems.* A builder of one- and two-family dwellings shall offer to any purchaser on or before the time of entering into the purchase contract the option, at the purchaser's cost, to install or equip fire sprinklers in the dwelling. No purchaser of such a one- or two-family dwelling shall be denied the right to choose or decline to install a fire sprinkler system in such dwelling being purchased.

R313.2.1 *Design and installation.* Automatic residential fire sprinkler systems shall be designed and installed in accordance with NFPA 13D.

NOTE: Sections R313.1 and R313.2 will be reviewed by the City upon the expiration of the December 31, 2024 deadline contained in Section 67.281 RSMo.

R322.1 *General.* Buildings and structures constructed in whole or 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 building and structures in flood hazard areas, shall be designed and constructed in accordance with the provisions contained in this section, the Floodplain Management Regulations ordinance, and the Zoning Ordinance. 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.

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 the floor level of such enclosure is constructed entirely above grade and such enclosure is not built so as to render the building or structure in violation of this section.

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 International Plumbing Code.

R322.2.1 *Elevation requirements.*

1. Buildings and structures in flood hazard areas including areas designated as Coastal A Zones, shall have the lowest floors elevated to or above the base flood elevation plus 1 foot (305 mm), or the design flood elevation.
2. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including basement) elevated to a height of not less than the highest adjacent grade as the depth number specified in feet (mm) on the FIRM plus 1 foot (305 mm), or not less than 3 feet (914 mm) if a depth number is not specified.
3. Basement floors that are partially or completely below grade shall be elevated to or above base flood elevation plus 1 foot (305 mm), or the design flood elevation whichever is higher.

Exception: Enclosed areas below the design flood elevation whose floors are at or above grade on all sides, shall meet the requirements of Section R323.2.2.

1116.104 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 4 Foundations.

—The following provisions amend Chapter 4 Foundations in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R404.1.3.2 *Reinforcement for foundation walls.* Concrete foundation walls shall be laterally supported at the top and bottom. Horizontal reinforcement shall be provided in accordance with Table R404.1.2(1). Vertical reinforcement shall be provided in accordance with Table R404.1.2(2), R404.1.2(3), R404.1.2(4), R404.1.2(5), R404.1.2(6), R404.1.2(7) or R404.1.2(8). Vertical reinforcement for flat basement walls retaining 4 feet (1219 mm) or more of unbalanced backfill is permitted to be determined in accordance with Table R404.1.2(9). For basement walls supporting above-grade concrete walls, vertical reinforcement shall be the greater of that required by Tables R404.1.2(2) through R404.1.2(8) or by Section R608.6 for the above-grade wall. In buildings assigned to Seismic Design Category D_0, D_1 or D_2, concrete foundation walls shall also comply with Section R404.1.4.2.

Exception: Where unstable soil or ground water conditions do not exist, concrete foundation walls may be constructed in accordance with Table R404.1.2(10).

Table R404.1.2(10) Concrete Foundation Walls

Maximum Wall Height	Maximum Depth of Unbalanced Backfill	Minimum Nominal Wall Thickness
7'-0"	6'-0" or less 7'-0"	8" 10" [a]
8'-0"	6'-0 or less 7'-0" 8'-0"	8" [a] 8" [a] 8" [a]
9'-0"	6'-0" or less 7'-0" 8'-0" 9'-0"	10" [b] 10" [b] 10" [b] 10" [b]

a. Concrete foundation walls shall be constructed a minimum of nominal 8 inches thick where the wall height from the top of the footing to the top of the wall does not exceed 8 feet. A minimum of two #4 reinforcing bars shall be placed horizontally in the top and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

b. Concrete foundation walls shall be constructed a minimum of nominal 10 inches thick. A minimum of two #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

The concrete minimum nominal wall thickness shall be 8 inches for foundation walls in soil classes SC, MH, ML-MC and inorganic CL when the maximum wall height is 8 feet.

The concrete minimum wall thickness shall be 10 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 9 feet.

The concrete minimum wall thickness shall be 12 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 10 feet.

R405.1 *Concrete or masonry foundations.* Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.

Exceptions:

1. A drainage system is not required where the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1.
2. Drains provided as detailed in Section R405.1.2 are approved as an alternate method to meet the requirements of this section.

R405.1.1 *Precast concrete foundation.* Precast concrete walls that retain earth and enclose habitable or useable space located below-grade that rest on crushed stone footings shall have a perforated drainage pipe installed below the base of the wall on either the interior or exterior side of the wall, at least one foot (305 mm) beyond the edge of the wall. If the exterior drainage pipe is used, an approved filter membrane material shall cover the pipe. The drainage system shall discharge into an approved sewer system or to daylight.

R405.1.2 *Soil evaluations.* An evaluation of the soil for the presence or absence of ground water is required. The evaluation report shall be based on either a subsurface soil investigation or satisfactory data from adjacent areas together with an inspection of the excavation prior to pouring concrete.

R405.1.2.1 *Groundwater present.* Provide drain tile, perforated pipe, or other approved foundation drainage system, such as a water channel system, around the perimeter of the outside of the foundation and inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

R405.1.2.2 *No ground water present.* Provide drain tile, perforated pipe, or other approved foundation drainage system, such as a water channel system, around the perimeter of the outside of the foundation or inside of the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

R405.1.2.3 *Filter membranes.* An approved filter membrane shall be placed over the top of the joints/pipe perforations. The tile/pipe shall be placed on 2 inches (51 mm) minimum gravel or crushed stone and have 6 inches (152 mm) minimum cover.

R405.1.2.4 *Drainage system.* The drainage system shall discharge by gravity to daylight or be connected to an approved sump. The sump shall be a minimum of 15 inches (381 mm) in diameter and a minimum of 18 inches (457 mm) deep and be provided with a fitted cover. A sump pump shall be provided if the basement is finished or partially finished with pump discharge by an approved method.

1116.105 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 5 Floors.

—The following provisions amend Chapter 5 Floors in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R502.11.1 *Design.* Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared and sealed by a Missouri Registered Professional Engineer.

R502.11.4 *Truss design drawings.* Truss design drawings, prepared in compliance with Section R502.11.1, shall be submitted to the building official and approved prior to the issuance of the building permit. Truss design drawings shall include, at a minimum, the information specified as follows:

1. Slope or depth, span, and spacing.
2. Location of all joints.
3. Required bearing widths.
4. Design loads as applicable:
    4.1. Top chord live load.
    4.2. Top chord dead load.
    4.3. Bottom chord live load.
    4.4. Bottom chord dead load.
    4.5. Concentrated loads and their points of application.
    4.6. Controlling wind and earthquake loads.
5. Adjustments to lumber and joint connector design values for conditions of use.
6. Each reaction force and direction.
7. Joint connector type and description, such as size, thickness or gauge, and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface.
8. Lumber size, species and grade for each member.
9. Connection requirements for:
    9.1. Truss-to-girder-truss.
    9.2. Truss ply-to-ply.
    9.3. Field splices.

10. Calculated deflection ratio and/or maximum description for live and total load.

11. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss drawing or on supplemental documents.

12. Required permanent truss member bracing location.

R507.2.4 *Deck lateral load connection.* - Delete.

1116.106 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 6 Wall Construction.

—The following provisions amend Chapter 6 Wall Construction in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R602.7.5 *Supports for headers.* Headers shall be supported on each end with one or more jack studs or with approved framing anchors in accordance with Table R602.7(1) or R602.7.(2). The full-height stud adjacent to each end of the header shall be end nailed to each end of the header with four-16d nails (3.5 inches x 0.135 inches). The minimum number of full-height studs at each end of a header shall be in accordance with Table R602.7.5.

Table R602.7.5 Minimum Number of Full Height Studs at Each End of Headers in Exterior Walls [a]

Maximum Header Span (feet)	Ultimate Design Wind Speed and Exposure Category	
	<140mph, Exposure B or <130mph, Exposure C	≤115mph, Exposure B [b]
4	1	1
6	2	1
8	2	1
10	3	2

12	3	2
14	3	2
16	4	2
18	4	2

a. For header spans between those given above, use the minimum number of full-height studs associated with the larger header span.

b. The tabulated minimum number of full-height studs is applicable where jack studs are provided to support the header at each end in accordance with Table R602.7.(1). Where a framing anchor is used to support the header in lieu of a jack stud in accordance with footnote "d" of Table R602.7.(1), the minimum number of full-height studs at each end of a header shall be in accordance with requirements for wind speed <140mph, Exposure B.

R602.10 *Wall bracing.* Buildings shall be braced in accordance with this section or, when applicable, Sections R602.12 or R602.13. Where a building, or portion thereof, does not comply with one or more of the bracing requirements in this section, those portions shall be designed and constructed in accordance with Section R301.1.

R602.13 *Basic bracing method.* One- and two-family dwellings located in wind exposure A or B may be braced in accordance with this section as an alternate to the requirements of Section R602.10. The construction documents shall detail the locations and widths of all braced wall panels in accordance with this section.

R602.13.1 *Wood structural sheathing.* The building exterior walls shall be sheathed with 7/16 inch (11.1 mm) or thicker plywood or OSB wood structural panels. The wood structural panels shall be applied to all exterior walls, gable ends, and band boards. All vertical joints between panels shall be blocked. Horizontal joints in braced wall panels shall be blocked.

R602.13.2 *Braced wall panel locations.* Exterior braced wall lines shall be determined in accordance with Section R602.10.1, exclusive of Section R602.10.1.3. Braced wall panels shall be located in every exterior braced wall line in accordance with the following criteria:

1. The outside edge of the first braced wall panel meeting the width established in Table R602.13.3 shall be a maximum of 12.5 feet (3810 mm) or less from each end of the braced wall line. The outside stud of the

first braced wall panels closest to the end of the braced wall line shall be secured with a hold-down device securing the end stud to the foundation with a minimum uplift design value of 800 pounds.

Exception: The 800 pound hold-down device is not required when the braced wall panel is placed at the end of the braced wall line and there is a 24 inch (610 mm) wide full height sheathed wall placed 90 degrees to the end of the braced wall line and panel.

2. The centerline spacing of braced wall panels in a braced wall line may not exceed 25 feet (7620 mm).

3. Braced wall panels shall be supported by continuous foundations or per Section R602.10.9.

R602.13.3 *Braced wall panel widths.* Braced wall panel locations shall be shown on the floor plans or the elevation views. Braced wall panels must meet the widths established in Table R602.13.3 without openings or vertical or horizontal offsets.

TABLE 602.13.3 BASIC BRACING PANEL WIDTHS

		Width of Solid Panel [a, b]			
		8' wall height	9' wall height	10' wall height	12' wall height
Plywood/OSB panel	3:1	32"	36"	40"	48"
Basic portal wall [c]	6:1	16" [d]	18" [d]	20" [d]	24" [d]

a. Linear interpolation is permitted

b. Wall height is the vertical distance from the bottom of the sole/sill plate to the top of the double top plate. An additional 2 inch (50.8 mm) variation in height is allowed for pre-cut stud framing.

c. The Basic Portal Wall, if applicable, shall be constructed in accordance with the applicable detail in Figure R602.13.3. The designer shall provide this detail on the construction documents.

d. The Basic Portal Wall width assumes the beam is placed under the top plate of the wall. A smaller width may be calculated for a lower top of beam height using the 6:1 height to width ratio.

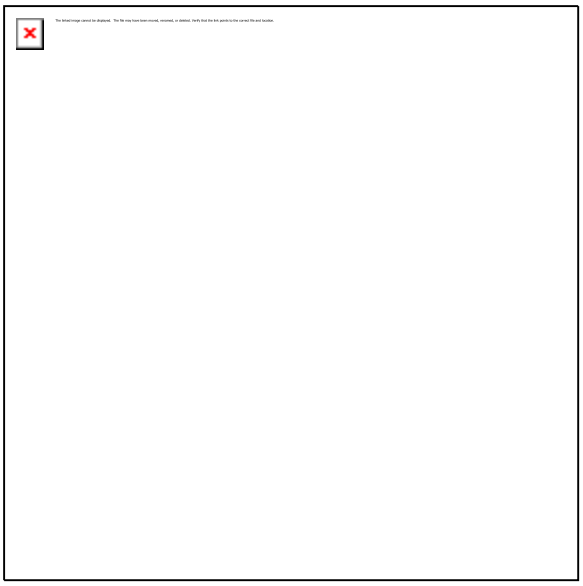
R602.13.4 *Corner framing.* The exterior wall corners shall be constructed in accordance with the applicable detail in Figure R602.13.4.

Exception: Braced wall panels located in accordance with Section R602.13.2.

R602.13.5 *Braced wall line spacing.* When the perpendicular distance between the exterior braced wall lines exceeds 50 feet (15240 mm), the registered design professional shall include the following certification on the drawings:

The interior and exterior wall configuration braces the structure in accordance with or equivalent to the lateral bracing provisions of Section R602.10 of the International Residential Code, 2015 edition or Section 2305 of the International Building Code, 2015 edition.

R602.13.6 *Maximum wall height.* Wall height may not exceed 12 feet (3658 mm) (12 feet 2 inches (3708 mm) actual). Walls greater than 12 feet (3658 mm) in height shall be designed and detailed by the registered design professional to resist wind loads in both the longitudinal and transverse directions.


The linked image cannot be displayed. The file may have been moved, renamed, or deleted. Verify that the link points to the correct file and location.

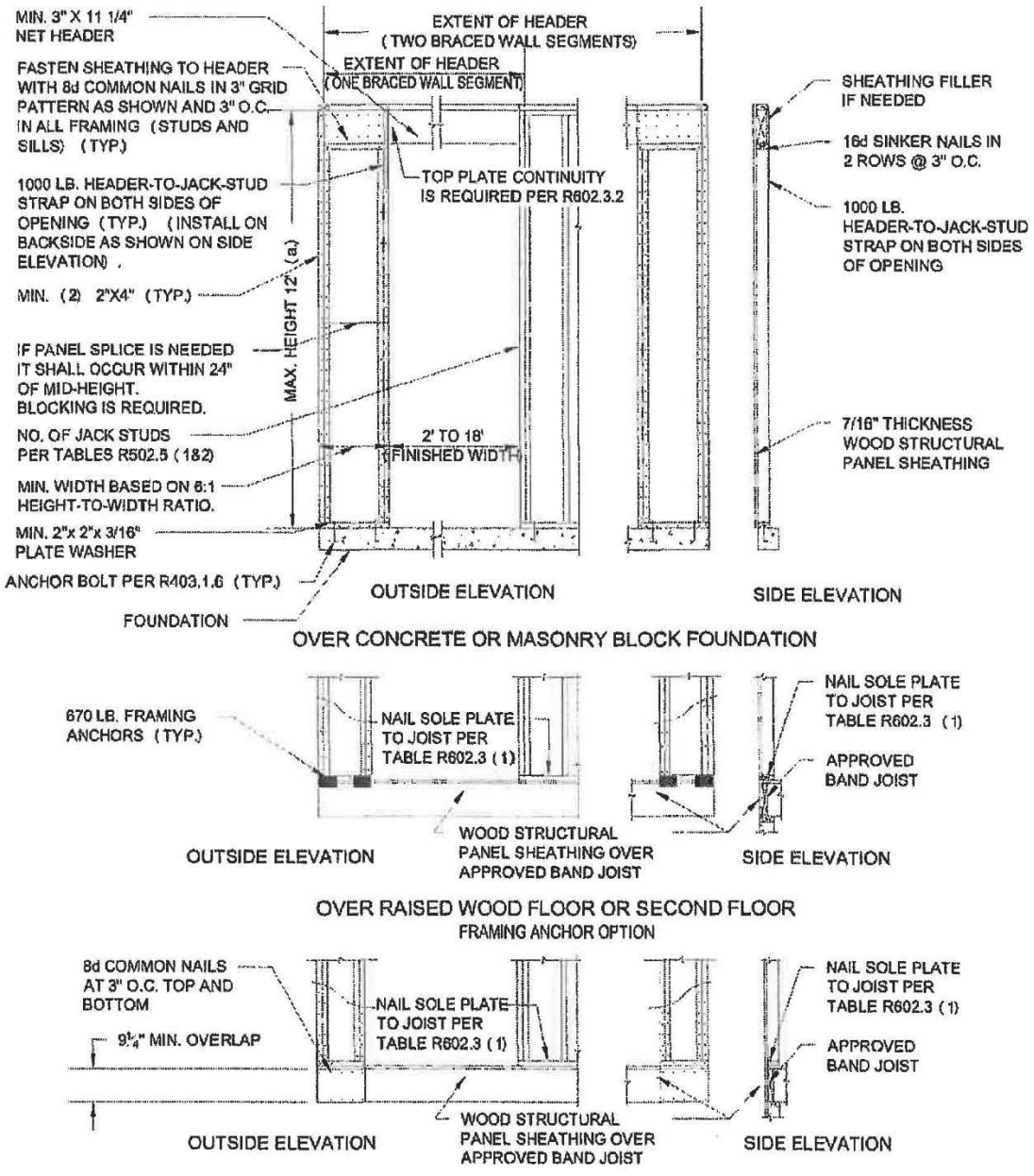
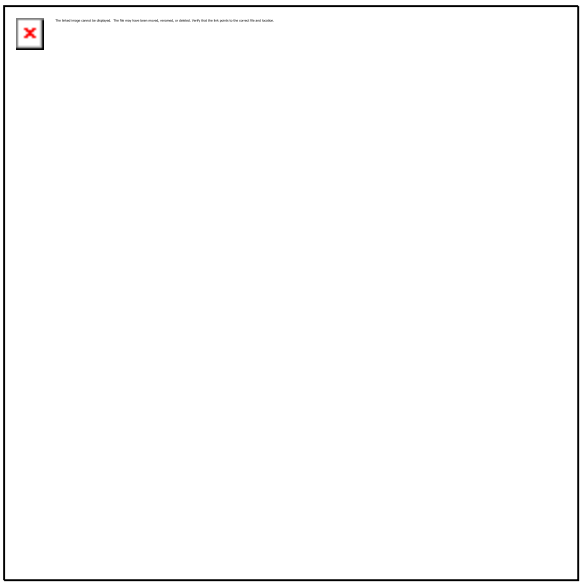


FIGURE R602.13.3
BASIC PORTAL WALL

a. CRIPPLE WALL FRAMING CONSISTING OF STUD FRAMING, SINGLE BOTTOM PLATE, AND DOUBLE TOP PLATE MAY BE ADDED TO THE TOP OF THE NARROW PORTAL WALL AS LONG AS THE COMBINED HEIGHT OF THE TWO WALLS IS LESS THAN OR EQUAL TO 12 FEET AND THE TWO WALLS ARE STRAPPED TOGETHER ON THE INTERIOR SIDE WITH A 16GUAGE METAL 1 1/2 INCH WIDE BY 21 INCH LONG STRAP. A MINIMUM 10 INCHES OF THE STRAP SHALL BE CONNECTED TO EACH WALL OR GABLE TRUSS WITH 9 - 16D NAILS FOR A TOTAL OF 18-16D NAILS IN THE ENTIRE STRAP. STRAPS SHALL BE LOCATED AT EACH END OF THE CONNECTED WALLS OR WALL AND GABLE TRUSS WHERE SPACE ALLOWS FOR THE 10 INCH LENGTH OF STRAP. THE SPACING BETWEEN THE STRAPS MAY NOT EXCEED 4 FEET ON CENTER. THE STRAPS SHALL NOT BE BENT HORIZONTALLY TO ACCOMMODATE WOOD FRAMING. IF APPLICABLE, NAILERS SHALL BE ADDED TO ONE OF THE WALLS OR GABLE END USING A MINIMUM OF 9-16D NAILS TO CREATE THE VERTICAL PLANE NEEDED TO MOUNT THE STRAP.


The linked image cannot be displayed. The file may have been moved, renamed, or deleted. Verify that the link points to the correct file and location.

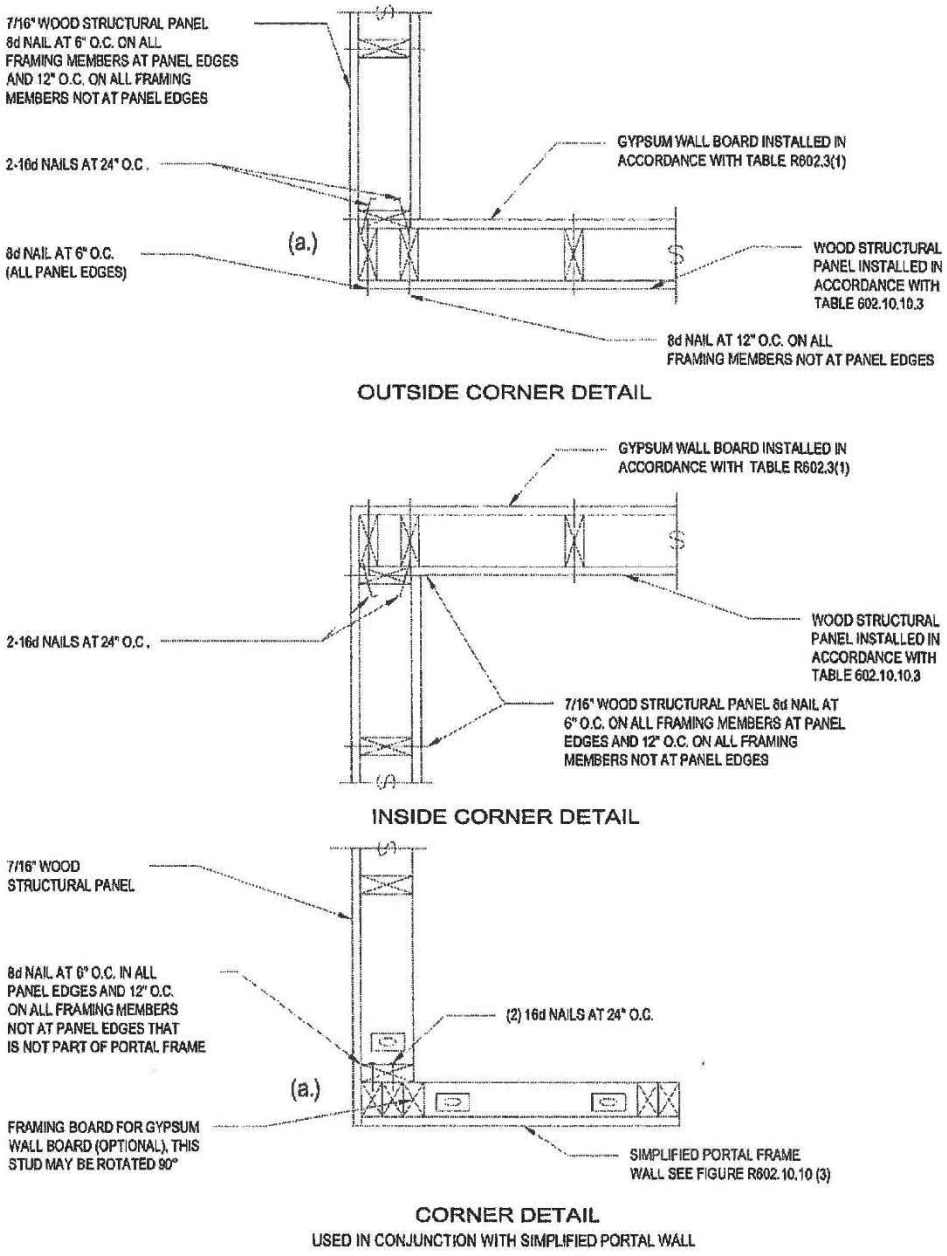


FIGURE R602.13.4
BASIC BRACING EXTERIOR CORNER FRAMING

a. END STUD INDICATED ON THE ABOVE DETAILS MAY BE SHIFTED 7/16" TO ALLOW STUD FACE TO BE ALIGNED WITH SHEATHING. OR AN OPTIONAL NON-STRUCTURAL FILLER PANEL MAY BE USED.

1116.108 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 8 Roof-Ceiling Construction.

—The following provisions amend Chapter 8 Roof-Ceiling Construction in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following

provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R802.10.1 *Truss design drawings.* Truss design drawings, prepared in compliance with Section R802.10.1, shall be provided to the building official and approved prior to the issuance of the building permit. Truss design drawings shall include, at a minimum, the information specified below.

1. Slope or depth, span, and spacing.
2. Location of all joints.
3. Required bearing widths.
4. Design loads as applicable.
    4.1. Top chord live load (as determined from Section R301.6).
    4.2. Top chord dead load.
    4.3. Bottom chord live load.
    4.4. Bottom chord dead load.
    4.5. Concentrated loads and their points of application.
    4.6. Controlling wind and earthquake loads.
5. Adjustments to lumber and joint connector design values for conditions of use.
6. Each reaction force and direction.
7. Joint connector type and description such as, size, thickness or gage and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface.
8. Lumber size, species and grade for each member.
9. Connection requirements for:
    9.1. Truss to girder-truss.
    9.2. Truss ply to ply.
    9.3. Field splices.
10. Calculated deflection ratio and/or maximum description for live and total load.
11. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss drawing or on supplemental documents.
12. Required permanent truss member bracing location.

R802.10.2 *Design.* Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared and sealed by a Missouri Registered Professional Engineer.

1116.109 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 9 Roof Assemblies.

—The following provisions amend Chapter 9 Roof Assemblies in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R905.2.8.2 *Valleys.* Valley linings shall be installed in accordance with the manufacturer's installation instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be at least 24 inches (610 mm) wide and of any of the corrosion-resistant metals in Table R905.2.8.2.
2. For open valleys, valley lining of two plies of mineral surfaced roll roofing, complying with ASTM D 3909 or ASTM D 6380 Class M, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
3. For closed valleys (valley covered with shingles), valley lining of one ply of smooth roll roofing complying with ASTM D 6380, or two plies of smooth roll roofing complying with ASTM D 226 Type I, ASTM D 4869 Type I or ASTM D 6757 and at least 36 inches wide (914 mm) or valley lining as described in Item 1 or 2 above shall be permitted. Self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 shall be permitted in lieu of the lining material.

R908.7 *Roof Ventilation.* Roof replacement requires roof ventilation to comply with Section R806. Roof replacement requires exhaust ducts terminating in enclosed attic or rafter spaces to be discharged directly to the exterior.

Exception: Bathroom exhaust ducts terminated at an attic gable vent or ventilated soffit.

1116.110 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 10 Chimneys and Fireplaces.

—The following provisions amend Chapter 10 Chimneys and Fireplaces in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

R1005.7 *Factory-built chimney offsets.* Where a factory-built chimney assembly incorporates offsets, no part of the chimney shall be at an angle of more than 30 degrees (0.52 rad) from vertical at any point in the assembly and the chimney assembly shall not include more than four elbows.

Exception: When chimneys are installed per manufacturer's installation instructions.

R1006.1.1 *Factory-built fireplaces.* Exterior combustion air ducts for factory-built fireplaces shall be a listed component of the fireplace or equivalent and shall be installed in accordance with the fireplace manufacturer's instructions.

1116.111 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 11 Energy Efficiency.

—The following provisions amend Chapter 11 Energy Efficiency in the International Residential Code for One-and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

N1101.4 (R102.1.1) *Above code programs.* The building official or other authority having jurisdiction shall be permitted to deem a national, state or local energy-efficiency program to exceed the energy efficiency required by this code. Buildings approved in writing by such an energy-efficiency program shall be considered in compliance with this code.

N1101.14 (R401.3) *Certificate (Mandatory).* - Delete.

Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements by Component [a]

Climate Zone	Fenestration U-Factor [b]	Skylight [b] U-Factor	Glazed Fenestration SHGC [b, e]	Ceiling R-Value	Woodframe Wall R-Value	Mass Wall R-	Floor R-Value	Basement [c] Wall R-Value	Slab [d] R-Value and	Crawl Space [c] Wall R-

						Value [i]			Depth	Value
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13 + 5 [h]	8/13	19	5/13 [f]	0	5/13
4 except Marine	0.34	0.55	NR	38	15	8/13	19	13 [j]	10, 2 ft	5 [k]
5 and Marine 4	0.32	0.55	NR	49	20 or 13 + 5 [h]	13/17	30 [g]	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	20 + 5 or 13 + 10 [h]	15/20	30 [g]	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20 + 5 or 13 + 10 [h]	19/21	38 [g]	15/19	10, 4 ft	15/19

a. R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.

b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
Exception: Skylights may be excluded from glazed fenestration SHGC

requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.

c. "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall. "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.

d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet (610 mm), whichever is less, in zones 1 through 3 for heated slabs.

e. There are no SHGC requirements in the Marine Zone.

f. Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.10 and Table N1101.10.

g. Or insulation sufficient to fill the framing cavity, R-19 minimum.

h. The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.

i. The second R-value applies when more than half the insulation is on the interior of the mass wall.

j. Unfinished basements may have a total of 20% of the total basement wall area exposed above the outside finished grade/ground level as un-insulated concrete foundation walls. The foundation wall area above the outside grade/ground level that may be un-insulated is determined by the formula 0.20 times the basement wall height of all walls (including insulated exterior frame walls for walkout basements and walls common to both basement and attached garages) times the perimeter of these basement walls. Exposed foundation wall area above the outside finished grade/ground level exceeding 20% of the total basement wall area shall be insulated with R-5 insulation. When required in unfinished areas, the basement foundation wall insulation shall extend down to the basement floor slab or to a minimum of 24 inches (610 mm) below the outside finished grade when the grade is above the floor slab elevation.

k. Naturally vented crawl space wall R-value may be 0.

N1102.2.4 *Access hatches and doors.* Access doors from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be insulated to a

level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood framed or equivalent baffle or retainer is required to be provided when loose-fill insulation is installed, the purpose of which is to prevent the loose-fill insulation from spilling into the living space when the attic access is opened and to provide a permanent means of maintaining the installed R-value of the loose-fill insulation.

Exception: Vertical doors that provide access from conditioned to unconditioned spaces shall be provided to meet the fenestration requirements of Table R1102.1.2 based on the applicable climate zone specified in Chapter 3.

N1102.2.13 (R402.2.13) *Sunroom insulation.* Sunrooms enclosing conditioned spaces shall meet the insulation requirements of this code.

Exception: For sunrooms with thermal isolation, and enclosing conditioned spaces, the following exceptions to the insulation requirements of this code shall apply:

1. The minimum ceiling insulation R-values shall be R-15 in Zones 1 through 4 and R-24 in Zones 5 through 8.
2. The minimum wall R-value shall be R-13 in all climate zones. Walls separating a sunroom with a thermal isolation from conditioned space shall meet the building thermal envelope requirements of this code.

Table N1102.4.1.1 (402.4.1.1) Air Barrier and Insulation Installation

Component	Air Barrier Criteria	Insulation Installation Criteria
General Requirements	A continuous air barrier shall be installed in the building envelope. The exterior thermal envelope contains a continuous air barrier. Breaks or joints in the air barrier shall be sealed.	Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	The air barrier in any dropped ceiling/soffit shall be aligned with the	The insulation in any dropped ceiling/soffit shall

	insulation and any gaps in the air barrier sealed. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.	be aligned with the air barrier.
Walls	The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of the exterior walls shall be sealed. Knee walls shall be sealed.	Cavities within comers and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum. Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.
Windows, skylights and doors	The space between window/door jambs and framing, and skylights and framing shall be sealed.	
Rim joists	Rim joists shall include the air barrier.	Rim joists shall be insulated.
Floors (including above garage and cantilevered floors)	The air barrier shall be installed at any exposed edge of Insulation.	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous

		insulation installed on the underside of floor framing; and extends from the bottom to the top of all perimeter floor framing members.
Crawl space walls	Exposed earth in unvented crawl spaces shall be covered with Class I vapor retarder with overlapping joists taped.	Where provided instead of floor insulation, insulation shall be permanently attached to the crawl space walls.
Narrow cavities		Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on Installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall	Exterior walls adjacent to showers and tubs shall be insulated.

	separate them from showers and tubs.	
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.	
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	

In addition, inspection of log walls shall be in accordance with the provisions of ICC 400.

N1102.4.1.2 (R402.4.1.2) *Testing.* Any building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding four air changes per hour in Climate Zone 4. Testing shall be conducted in accordance with ASTM E 779 or ASTM E1827 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.

N1102.4.2 (R402.4.2) *Fireplaces.* - Delete.

N1103.2 (R403.2) *Hot water boiler outdoor temperature setback.* Hot water boilers that supply heat to the building through one-or two-pipe heating systems shall have an outdoor setback control that lowers the boiler water temperature based on the outdoor temperature.

Exception: 80% - 84% efficient water boilers or boilers used as a backup source of heat.

N1103.3.2 (R403.3.2) *Sealing (Mandatory).* Ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with either the International Mechanical Code or Section M1601.4.1 of this code, as applicable.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.

2. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams of other than the snap-lock and button-lock types.

N1103.3.5 (R403.3.5) *Building cavities (Mandatory).* Building framing cavities shall not be used for supply air.

N1103.4.1 (R403.4.1) *Protection of piping insulation.* - Delete.

N1103.5.3 (R405.5.3) *Hot water pipe insulation (Prescriptive).* Insulation for hot water pipe with a minimum thermal resistance (R-value) of R-3 shall be applied to the following:

1. Piping larger than ¾ inch (19 mm) in nominal diameter.

2. Piping serving more than one dwelling unit.

3. Piping located outside the conditioned space.

4. Piping from the water heater to a distribution manifold.
5. Piping located under a floor slab.
6. Buried in piping.

Supply and return piping in recirculation systems other than demand recirculation systems.

N1103.6.1 (R403.6.1) *Whole-house mechanical ventilation system fan efficacy.* - Delete.

Table N1103.6.1 (R403.6.1) *Mechanical Ventilation System Fan Efficacy.* - Delete.

N1104 (R404) *Electrical Power and Lighting Systems (Mandatory).* - Delete.

N1104.1.1 (R404.1.1) *Lighting equipment (Mandatory).* - Delete.

1116.113 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 13 General Mechanical System Requirements.

—The following provisions amend Chapter 13 General Mechanical System Requirements in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

M1301.2 *Identification.* - Delete.

M1301.4 *Plastic pipe, fittings and components.* - Delete.

M1301.5 *Third-party testing and certification.* - Delete.

M1305.1.4.1. *Ground clearance.* Equipment and appliances supported from the ground shall be level and firmly supported on a concrete slab or other approved material extending not less than 2 inches (50.8 mm) above the adjoining ground. Such support shall be in accordance with the manufacturer's installation instructions. Appliances suspended from the floor shall have a clearance of not less than 6 inches (152 mm) from the ground.

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 Chapter 39. Exposed lamps shall be protected from damage by location or lamp guards.

Exception: Lamp guards are not required in basements.

M1307.2 *Anchorage of appliances.* Appliances designed to be fixed in position shall be fastened or anchored in an approved manner. In Seismic Design Categories D_0, D_1, and D_2 water heaters and thermal storage units

shall be anchored or strapped to resist horizontal displacement caused by earthquake motion in accordance with one of the following:

1. Anchorage and strapping shall be designed to resist a horizontal force equal to one-third of the operating weight of the water heater storage tank, acting in any horizontal direction. Strapping shall be at the points within the upper one-third and lower one-third of the appliance's vertical dimensions. At the lower point, the strapping shall maintain a minimum distance of 4 inches (102 mm) above the ground.
2. The anchorage strapping shall be in accordance with the appliance manufacturer's recommendations.

1116.114 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 14 Heating and Cooling Equipment and Appliances.

—The following provisions amend Chapter 14 Heating And Cooling Equipment And Appliances in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

M1401.3 *Sizing.* Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. The design temperatures for the City shall be in accordance with Table M1401.3.

Table M1401.3 Design Temperatures

	Outdoor	Indoor
Winter	DB 2°F	DB 72° F
Summer	DB 95°F WB 76°F	DB 75° F

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 evaporator coil where damage to any building components 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 not be

less than ¾-inch (19mm) 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 (76mm) 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 0.0179-inch (0.455 mm) (No. 26 Gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6mm).
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.
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.
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.

1116.115 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 15 Exhaust Systems.

—The following provisions amend Chapter 15 Exhaust Systems in the International Residential Code for One-and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

M1501.1 *Outdoor discharge.* The air removed by every mechanical exhaust system shall be discharged to the outdoors in accordance with Section M1506.2. Air shall not be exhausted into the attic, soffit, ridge vent or crawl space.

Exceptions:

1. Whole-house ventilation-type attic fans that discharge into the attic space of dwelling units having private attics shall be permitted.
2. Bathroom exhaust may discharge to an attic gable vent or ventilated soffit if attached or secured within 6" (152 mm) of same, without obstruction.

M1502.4.1 *Material and size.* Exhaust ducts shall have a smooth interior finish and be constructed of metal having a minimum thickness of 0.0157 inches (0.3950 mm) (No. 30). The duct shall be 4 inches (102 mm) nominal in diameter.

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.

M1502.4.5.1 *Specified length.* The maximum length of the exhaust duct shall be 35 feet (10688 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table M1502.4.5.1. The maximum length of the exhaust duct does not include the transition duct.

Exception: The total developed length of dryer exhaust ducts may be up to a maximum of 55 feet (16764 mm) when access panels for cleanouts and signage are provided. The access panels for cleanouts shall be provided for every 15 feet (4572 mm) of length, within 12 inches (305 mm) of the second elbow and at every elbow thereafter. Permanent signage shall be provided to identify each access panel for cleanout location. Permanent signage shall also be provided at the dryer exhaust connection to inform occupants of the periodic inspection and cleaning requirements.

M1503.1 *General.* All kitchens shall be equipped with means of mechanical exhaust directly over, or adjacent to, a range or a cook top. The mechanical exhaust system may be of the recirculating type or may exhaust directly to the outside. Recirculating systems shall be equipped with the appropriate filtration for grease removal and odor control and must be capable of operating in a moist environment. Either type of system shall be a listed exhaust system. With either type, the mechanical exhaust system shall be allowed to run on an intermittent basis. Exhaust systems shall be installed in accordance with Sections M1503, M1505, and M1507.3. Range hoods shall discharge to the outdoors through a single-wall duct. The duct serving the hood shall have a smooth interior surface, shall be air tight and shall be equipped with a backdraft damper and shall be independent of all other exhaust systems. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

Exception: Where installed in accordance with the manufacturer's installation instructions and where mechanical or natural ventilation is otherwise provided, listed and labeled ductless range hoods shall not be required to discharge to the outdoors.

M1503.4 *Makeup air required.* Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.19 m^3/s) shall be provided with makeup air approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

M1506.3 *Exhaust openings.* Air exhaust openings shall terminate not less than 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable openings into the building and 10 feet (3048 mm) from mechanical air intakes except where the opening is located 3 feet (914 mm) above the air intake. Openings shall comply with Sections R303.5.2 and R303.6.

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 in accordance with Section M1501.1.

1116.116 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 16 Duct Systems.

—The following provisions amend Chapter 16 Duct Systems in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

M1601.1 *Duct design.* Duct systems serving heating, cooling, and ventilation equipment shall be installed in accordance with the provisions of this section and ACCA Manual D, SMACNA-10, SMACNA-15, the appliance manufacturer's installation instructions or other approved methods.

M1601.1.1 *Above-ground duct systems.* Above-ground duct systems shall conform to the following:

1. Equipment connected to duct systems shall be designed to limit discharge air temperature to not greater than 250°F (121°C).
2. Fibrous glass duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.
3. Field-fabricated and shop-fabricated metal and flexible duct constructions shall conform to the SMACNA HVAC Duct Construction Standards - Metal and Flexible except as allowed by Table M1601.1.1. Galvanized steel shall conform to ASTM A 653.

4. The use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125°F (52°C) and exposed surfaces are not subject to condensation.
5. Duct systems shall be constructed of materials having a flame spread index of not greater than 200.
6. Stud wall cavities and the spaces between solid floor joists to be used as non-ducted air plenums shall comply with the following conditions:
    6.1. These cavities or spaces shall not be used as a plenum for air supply.
    6.2. These cavities or spaces shall not be a part of required fire-resistance-rated assembly.
    6.3. Stud wall cavities shall not convey air from more than one floor level.
    6.4. Stud wall cavities and joist-space plenums shall be isolated from adjacent concealed spaces by tight-fitting fireblocking in accordance with Section R602.8.
    6.5. Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.

Table M1601.1.1 Duct Construction Minimum Sheet Metal Thickness for Single Dwelling Units [a]

Round Duct Diameter (inches)	STATIC PRESSURE			
	½ inch water gage		1 inch water gage	
	Thickness (inches)		Thickness (inches)	
	Galvanized	Aluminum	Galvanized	Aluminum
≤12	0.013	0.018	0.013	0.018
12 to 14	0.013	0.018	0.016	0.023
15 to 17	0.016	0.023	0.019	0.027
18	0.016	0.023	0.024	0.034
19 to 20	0.019	0.027	0.024	0.034

Rectangular Duct Dimension (Longest dimension in inches)	STATIC PRESSURE			
	½ inch water gage		1 inch water gage	
	Thickness (inches)		Thickness (inches)	
	Galvanized	Aluminum	Galvanized	Aluminum
≤ 8	0.013	0.018	0.013	0.018
9 to 10	0.013	0.018	0.016	0.023
11 to 12	0.016	0.023	0.019	0.027
13 to 16	0.016	0.027	0.019	0.027
17 to 18	0.019	0.027	0.024	0.034
19 to 20	0.019	0.034	0.024	0.034

For SI: 1 inch = 25.4 mm, 1 inch water gage = 249 Pa.

a. Ductwork that exceeds 20 inches by dimension or exceeds a pressure of 1 inch water gage (250 Pa) shall be constructed in accordance with SMACNA HVAC Duct Construction Standards Metal and Flexible.

M1602.2 *Return air openings.* Return air openings for heating, ventilation and air conditioning systems shall comply with all of the following:

1. Openings shall not be located less than 10 feet (3048 mm) measured in any direction from an open combustion chamber or draft hood of another appliance located in the same room or space.
2. Return and transfer openings shall be sized in accordance with the appliance or equipment manufacturers' installation instructions, Manual D or the design of the registered design professional.
3. Return air shall not be taken from a closet, bathroom, toilet room, kitchen, garage, mechanical room, boiler room, furnace room or unconditioned attic.

Exceptions:

1. Taking return air from a kitchen is not prohibited where such return air openings serve the kitchen only, and are located not less than 10 feet (3048 mm) from the cooking appliances.
2. Dedicated forced-air systems serving only the garage shall not be prohibited from obtaining return air from the garage.
3. Taking return air from an unconditioned crawl space shall not be accomplished through a direct connection to the return side of a forced-air furnace. Transfer openings in the crawl space enclosure shall not be prohibited.
4. Return air from one dwelling unit shall not be discharged into another dwelling unit.
5. Where a closet is provided with a supply register, taking return air from the closet shall not be prohibited.

1116.121 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 21 Hydronic Piping.

—The following provisions amend Chapter 21 Hydronic Piping in the International Residential Code for One-and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

M2101.10 *Tests.* Hydronic piping systems shall be tested hydrostatically with at a pressure of one and one-half times the maximum system design pressure, but not less than 100 pounds per square inch (689 kPa). The duration of each test shall not be less than 15 minutes and not more than 20 minutes, in which time there shall not be observed leaks.

Exception: The 100 pounds per square inch (689 kPa) threshold is not required when the duration of the test is extended to not less than 24 hours.

M2103.4 *Testing.* Pipe or tubing to be embedded shall be tested by applying a hydrostatic pressure of not less than 100 psi (690 kPa). The pressure shall be maintained for 30 minutes, during which, the joints shall be visually inspected for leaks.

Exception: A test pressure of one and one-half times the maximum system pressure may be used when the duration of the test is extended to not less than 24 hours.

M2105 *Ground-Source Heat-Pump System Loop Piping.* - Delete the entire section as written in the 2015 International Residential Code and replace as follows.

Section M2105
Ground-Source Heat-Pump System Loop Piping

M2105.1 *General.* Ground-source heat-pumps system looping piping shall comply with Section 1210 of the Mechanical Code, SLCRO 1974, Title XI, Chapter 1108, as amended.

1116.124 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 24 Fuel Gas.

—The following provisions amend Chapter 24 Fuel Gas in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

G2408.4 *Clearances from grade.* Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending not less than 2 inches (50.8 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such supports shall be installed in accordance with the manufacturer's installation instructions.

G2412.9 (401.9) *Identification.* Delete.

G2412.10 (401.10) *Third-party testing and certification.* Delete.

G2427.8 (503.8) *Venting system termination location.* The location of the venting system terminations shall comply with the following (see Appendix C):

1. A mechanical draft venting system shall terminate not less than 3 feet (914 mm) above any forced-air inlet located within 10 feet (3048 mm).

Exceptions:

1. This provision shall not apply to the combustion air intake of a direct-vent appliance.
2. This provision shall not apply to the separation of the integral outdoor air inlet and flue gas discharge of listed outdoor appliances.

2. A mechanical draft venting system, excluding direct vent appliances, shall terminate not less than 4 feet (1219 mm) below, 4 feet (1219 mm) horizontally from, or 1 foot (305 mm) above any door, operable window or gravity air inlet into any building. The bottom of the vent terminal shall be located not less than 12 inches (305mm) above the finished ground level.
3. The vent terminal of a direct-vent appliance with an input of 10,000 Btu per hour (3kW) or less shall be located not less than 6 inches (152 mm)

from any air opening into a building. Such an appliance with an input over 10,000 Btu per hour (3 kW) but not over 50,000 Btu per hour (14.7 kW) shall be installed with a 9-inch (230 mm) vent termination clearance, and an appliance with an input over 50,000 Btu per hour (14.7 kW) shall have not less than a 12-inch (305 mm) vent termination clearance. The bottom of the vent terminal and the air intake shall be located not less than 12 inches (305 mm) above grade finished ground level.

4. Through-the-wall vents for Category II and IV appliances and noncategorized condensing appliances shall not terminate over public walkways or over an area where condensate or vapor could create a nuisance or hazard or could be detrimental to the operation of regulators, relief valves or other equipment. Where local experience indicates that condensate is a problem with Category I and III appliances, this provision shall also apply. Drains for condensate shall be installed in accordance with the appliance and vent manufacturer's installation instructions.

5. Vent systems for Category IV appliances that terminate through an outside wall of a building and discharge flue gases perpendicular to the adjacent wall shall be located not less than 10 feet (3048 mm) horizontally from an operable opening in an adjacent building. This requirement shall not apply to vent terminals that are 3 feet (911 mm) or more above or 25 feet (7620 mm) or more below openings.

G2439.7.4.1 (614.8.4) *Specified length.* The maximum length of the exhaust duct shall be 35 feet (10688 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are used, the maximum length of the exhaust duct shall be reduced in accordance with Table G2439.7.4.1. The maximum length of the exhaust duct does not include the transition duct.

Exception: The total developed length of dryer exhaust ducts may be up to a maximum of 55 feet (16764 mm) when access panels for cleanouts and signage are provided. The access panels for cleanouts shall be provided for every 15 feet (4572 mm) of length, within 12 inches (305 mm) of the second elbow and at every elbow thereafter. Permanent signage shall be provided to identify each access panel for cleanout location. Permanent signage shall also be provided at the dryer exhaust connection to inform occupants of the periodic inspection and cleaning requirements.

G2442.4 (618.4) *Prohibited sources.* Outdoor or return air for forced-air heating and cooling systems shall not be taken from the following locations:

1. Closer than 10 feet (3048 mm) from an appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 3 feet (914 mm) above the outside air inlet.

2. Where there is the presence of objectionable odors, fumes or flammable vapors; or where located less than 10 feet (3048 mm) above the surface of any abutting public way or driveway; or where located at grade level by a sidewalk, street, alley or driveway.

3. A hazardous or insanitary location or a refrigeration machinery room as identified in the International Mechanical Code.

4. A room or space, the volume of which is less than 25 percent of the entire volume served by such system. Where connected by a permanent opening having an area sized in accordance with Section G2442.2, adjoining rooms or spaces shall be considered as a single room or space for the purpose of determining the volume of such rooms or spaces.

   Exception: The minimum volume requirement shall not apply where the amount of return air taken from a room or space is less than or equal to the amount of supply air delivered to such room or space.

5. A room or space containing an appliance where such a room or space serves as the sole source of return air.

   Exception: This shall not apply where:

   1. The appliance is a direct-vent appliance or an appliance not requiring a vent in accordance with Section G2425.8.

   2. The room or space complies with the following requirements:

      2.1. The return air shall be taken from a room or space having a volume exceeding 1 cubic foot for each 10 Btu/h (9.6L/W) of combined input rating of all fuel-burning appliances therein.

      2.2. The volume of supply air discharged back into the same space shall be approximately equal to the volume of return air taken from the space.

      2.3. Return-air inlets shall not be located within 10 feet (3048 mm) of a draft hood in the same room or space or the combustion chamber of any atmospheric burner appliance in the same room or space.

   3. Rooms or spaces containing solid fuel-burning appliances, provided that return-air inlets are located not less than 10 feet (3048 mm) from the firebox of such appliances.

6. A closet, bathroom, toilet room, kitchen, garage, boiler room, furnace room or unconditioned attic.

   Exceptions:

   1. Where return air intakes are located not less than 10 feet (3048 mm) from cooking appliances and serve only the kitchen area, taking return air from a kitchen area shall not be prohibited.

2. Dedicated forced air systems serving only a garage shall not be prohibited from obtaining return air from the garage.

3. Where a closet is provided with a supply register, taking return air from the closet shall not be prohibited.

7. A crawl space by means of direct connection to the return side of a forced-air system. Transfer openings in the crawl space enclosure shall not be prohibited.

1116.125 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 25 Plumbing Administration.

—The following provisions amend Chapter 25 Plumbing Administration in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2501.1 *Scope.* The International Plumbing Code regulates plumbing administration.

All other sections of Chapter 25 - Plumbing Administration in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.126 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 26 General Plumbing Requirements.

—The following provisions amend Chapter 26 General Plumbing Requirements in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2601.1 *Scope.* The International Plumbing Code regulates general plumbing requirements.

All other sections of Chapter 26 - General Plumbing Requirements in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.127 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 27 Plumbing Fixtures.

—The following provisions amend Chapter 27 Plumbing Fixtures in the International Residential Code for One-and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2701.1 *Scope.* The International Plumbing Code regulates plumbing fixtures.

All other sections of Chapter 27 - Plumbing Fixtures in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted and not adopted as part of this code.

1116.128 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 28 Water Heaters.

—The following provisions amend Chapter 28 Water Heaters in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2801.1 *Scope.* The International Plumbing Code regulates water heaters.

All other sections of Chapter 28 - Water Heaters in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not made a part of this code.

1116.129 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 29 Water Supply and Distribution.

—The following provisions amend Chapter 29 Water Supply and Distribution in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P2901.1 *Scope.* The International Plumbing Code regulates water supply and distribution.

All other sections of Chapter 29 - Water Supply and Distribution in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not made a part of this code.

1116.130 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 30 Sanitary Drainage.

—The following provisions amend Chapter 30 Sanitary Drainage in the International Residential Code for One-and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P3001.1 *Scope.* The International Plumbing Code regulates sanitary drainage.

All other sections of Chapter 30 - Sanitary Drainage in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.131 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 31 Vents.

—The following provisions amend Chapter 31 Vents in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P3101.1 *Scope.* The International Plumbing Code regulates plumbing vents.

All other sections of Chapter 31 - Vents in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.132 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 32 Traps.

—The following provisions amend Chapter 32 Traps in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P3201.1 *Scope.* The International Plumbing Code regulates plumbing traps.

All other sections of Chapter 32 - Traps in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.133 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 33 Storm Drainage.

—The following provisions amend Chapter 33 Storm Drainage in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

P3301.1 *Scope.* The International Plumbing Code regulates storm drainage.

All other sections of Chapter 33 - Storm Drainage in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.134 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 34 General Requirements (Electrical).

—The following provisions amend Chapter 34 General Requirements (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E3401.1 *Scope.* NFPA 70 regulates general requirements for electrical work.

All other sections of Chapter 34 - General Requirements (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.135 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 35 Electrical Definitions.

—The following provisions amend Chapter 35 Electrical Definitions in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E3501.1 *Scope.* NFPA 70 regulates definitions applicable to electrical systems and inspection requirements.

All other sections of Chapter 35 - Electrical Definitions in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.136 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 36 Services (Electrical).

—The following provisions amend Chapter 36 Services (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E3601.1 *Scope.* NFPA 70 regulates electrical services.

All other sections of Chapter 36 - Services (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.137 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 37 Branch Circuit and Feeder Requirements (Electrical).

—The following provisions amend Chapter 37 Branch Circuit and Feeder Requirements (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E3701.1 *Scope.* NFPA 70 regulates electrical branch circuit and feeder requirements.

All other sections of Chapter 37 - Branch Circuit and Feeder Requirements (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.138 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 38 Wiring Methods (Electrical).

—The following provisions amend Chapter 38 Wiring Methods (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E3801.1 *Scope.* NFPA 70 regulates electrical wiring methods.

All other sections of Chapter 38 - Wiring Methods (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.139 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 39 Power and Lighting Distribution (Electrical).

—The following provisions amend Chapter 39 Power and Lighting Distribution (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E3901.1 *Scope.* NFPA 70 electrical regulates power and lighting distribution.

All other sections of Chapter 39 - Power and Lighting Distribution (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.140 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 40 Devices and Luminaires (Electrical).

—The following provisions amend Chapter 40 Devices and Luminaires (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E4001.1 *Scope.* NFPA 70 regulates electrical devices and luminaries.

All other sections of Chapter 40 - Devices and Luminaries (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.141 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 41 Appliance Installation (Electrical).

—The following provisions amend Chapter 41 Appliance Installation (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E4101.1 *Scope.* NFPA 70 regulates electrical appliance installation.

All other sections of Chapter 41 - Appliance Installation (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.142 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 42 Swimming Pools (Electrical).

—The following provisions amend Chapter 42 Swimming Pools (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E4201.1 *Scope.* NFPA 70 regulates electrical requirements for swimming pools.

All other sections of Chapter 42 - Swimming Pools (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition are deleted in their entirety and not adopted as part of this code.

1116.143 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition—Chapter 43 Class 2 Remote-Control, Signaling and Power-Limited Circuits (Electrical).

—The following provisions amend Chapter 43 Class 2 Remote-Control, Signaling and Power-Limited Circuits Pools (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

E4301.1 *Scope.* NFPA 70 regulates electrical class 2 remote-control, signaling and power-limited circuits.

All other sections of Chapter 43 - Class 2 Remote-Control, Signaling and Power-Limited Circuits (Electrical) in the International Residential Code for One- and Two-Family Dwellings, 2009 edition are deleted in their entirety and not adopted as part of this code.

1116.144 - Amendments to the International Residential Code for One- and Two-Family Dwellings, 2015 edition.

—The following provisions amend Chapter 44 Referenced Standards in the International Residential Code for One- and Two-Family Dwellings, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Amend Chapter 44 - Referenced Standards - Sections not shown herein as being modified are adopted without amendments.

ACCA - Air Conditioning Contractors of American. Delete Referenced Standards as shown below (standards not deleted by this amendment and shown in the code as published are adopted without amendments).

ACCA	Air Conditioning Contractors of America 2800 Shirlington Road, Suite 300 Arlington, VA 22206	
Standard reference number	Title	Referenced in code section number
Manual J - 2011	Residential Load Calculation - Eighth Edition	M1401.3
Manual S - 13	Residential Equipment Selection	M1401.3

ANSI - American National Standards Institute. Delete Referenced Standards as shown below (standards not deleted by this amendment and shown in the code as published are adopted without amendments).

ANSI	American National Standards Institute 25 West 43rd Street, Fourth Floor New York, NY 10036	
Standard reference number	Title	Referenced in code section number

ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. Amend Referenced Standards:

ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329	
Standard reference number	Title	Referenced in code section number
ASHRAE - 2013	ASHRAE Handbook of Fundamentals	N1102.1.5, Table N1105.5.2(1)
ASHRAE 193 - 2010	Method of Test for Determining Air Tightness of HVAC Equipment	N1103.3.2.1
34 - 2013	Designation and Safety Classification of Refrigerants	M1411.1

ASME - American Society of Mechanical Engineers. Delete all Referenced Standards except the following:

ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990

Standard reference number	Title	Referenced in code section number
ASME/A17.1/CSA B44-2013	Safety Code for Elevators and Escalators	R321.1
A18.1-2008	Safety Standard for Platforms and Stairway Chair Lifts	R321.2
B1.20.1-1983 (R2006)	Pipe Threads, General Purpose (Inch)	G2414.9
B16.33-2012	Manually Operated Metallic Gas Valves for Use in Gas Piping Systems up to 125 pslg (Sizes 1/2 through 2)	Table G2420.1.1
B16.44-2002 (Reaffirmed 2007)	Manually Operated Metallic Gas Valves For Use in Above-ground Piping Systems up to 5 psi	Table G2420.1.1
B36.10M-2004	Welded and Seamless Wrought-steel Pipe	G2414.4.2
BPVC-2010/2011 addenda	ASME Boiler and Pressure Vessel Code (2007 edition)	M2001.1.1, G2452.1
CSD-1-2011	Controls and Safety Devices for Automatically Fired Boilers	M2001.1.1, G2452.1

ASSE American Society of Sanitary Engineering
901 Canterbury, Suite A
Westlake, OH 44145

Delete all Referenced Standards.

ASTM - ASTM International. Amend Referenced Standards (Standards not amended by this code amendment and shown in the code as published are adopted without amendments).

ASTM	ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428	
Standard reference number	Title	Referenced in code section number
A53/A53M - 12	Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless	R407.3, Table M2101.1, G2414.4.2
B 42 - 10	Specification for Seamless Copper Pipe, Standard Sizes	Table M2101.1
B 43 - 09	Specification for Seamless Red Brass Pipe, Standard Sizes	Table M2101.1
B 75 - 11	Specification for Seamless Copper Tube	Table M2101.1
B 88 - 09	Specification for Seamless Copper Water Tube	Table M2101.1, G2414.5.2
B 251 - 10	Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube	Table M2101.1
B 302 - 12	Specification for Threadless Copper Pipe, Standard Sizes	Table M2101.1
B 306 - 09	Specification for Copper Drainage Tube (DWV)	Table M2101.1
B 370 - 12	Specification for Copper Sheet and Strip for Building Construction	Table R905.2.8.2,

		Table R905.10.3(1)
B 813 - 10	Specification for Liquid and Paste Fluxes for Soldering Applications of Copper and Copper Alloy Tube	Table M2101.1, M2103.3
D 226/D 226M - 09	Specification for Asphalt-saturated (Organic Felt) Used in Roofing and Waterproofing	R703.2, R905.1.1, Table R905.1.1(1), R905.2.8.2, R905.8.4, Table 905.9.2
D 2657 - 07	Standard Practice for Heat Fusion-joining of Polyolefin Pipe Fittings	M2105.11.1
D 2683 - 2010e1	Specification for Socket-type Polyethylene Fittings for Outside Diameter-controlled Polyethylene Pipe and Tubing	Table M2105.5, M2105.11.1
D 2846/D 2846M - 09BEI	Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot- and Cold-water Distribution Systems	Table M2101.1
D 4869/D 4869M - 05 (2011)e01	Specification for Asphalt-saturated (Organic Felt) Underlayment Used in Steep Slope Roofing	R905.1.1, Table R905.1.1(1), R905.2.8.2, R905.16.3, R905.16.4.2
D 6757-07	Standard Specification for Inorganic Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing	R905.2.8.2
F 876 - 13	Specification for Cross-linked Polyethylene (PEX) Tubing	Table M2101.1

F 877 - 11A	Specification for Cross-linked Polyethylene (PEX) Plastic Hot- and Cold-water Distribution Systems	Table M2101.1
F 1281 - 11	Specification for Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PEX-AL-PEX) Pressure Pipe	Table M2101.1
F 1282 - 10	Specification for Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe	Table M2101.1
F 1807 - 13	Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing	Table M2101.1
F 1960 - 12	Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing	Table M2101.1
F 1970 - 12	Standard Specification for Special Engineered Fittings, Appurtenances or Valves for Use in Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Systems	M2105.5
F 2098 - 08	Standard Specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene PEX Tubing to Metal Insert and Plastic Insert Fittings	Table M2101.1
F 2389 - 10	Standard for Pressure-rated Polypropylene (PP) Piping Systems	Table M2105.12.1
F 2735 - 09	Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing	Table M2101.1

F 2769 - 10	Polyethylene or Raised Temperature (PE-RT) Plastic Hot and Cold-Water Tubing and Distribution Systems	Table M2101.1

AWS - American Welding Society Amend Referenced Standards:

AWS	American Welding Society 8669 NW 36 Street, #130 Doral, FL 33166	
Standard reference number	Title	Referenced in code section number
A5.31M/A5.31 - 2012	Specification for Fluxes for Brazing and Braze Welding Edition: 2nd	M2103.3, M2202.2

AWWA - American Water Works Association. Delete all Referenced Standards except the following:

AWWA	American Water Works Association 6666 West Quincey Avenue Denver, CO 80235	
Standard reference number	Title	Referenced in code section number
C903 - 05	Polyethylene-aluminum-polyethylene & Crosslinked Polyethylene Composite Pressure Pipe, ½ in. (12 mm) through 2 in. (50 mm), for Water Service	Table M2101

CISPI Cast Iron Soil Pipe Institute
5959 Shallowford Road, Suite 419
Chattanooga, TN 37421

Delete all Referenced Standards.

CSA - CSA Group. Delete all Referenced Standards except the following:

CSA	CSA Group 8501 East Pleasant Valley Road Cleveland, OH 44131-5516	
Standard reference number	Title	Referenced in code section number
AAMA/WDMA/CSA 101/I.S.2/A440 - 11	North American Fenestration Standard/Specification for Windows, Doors and Unit Skylights	R308.6.9, R609.3, N1102.4.3
ANSI/CSA America FCI - 2012	Stationary Fuel Cell Power Systems	M1903.1
ASME A17.1/CSA B44 - 2013	Safety Code for Elevators and Escalators	R321.1
CSA 8 - 93	Requirements for Gas Fired Log Lighters for Wood Burning Fireplaces - with revisions through January 1999	G2433.1
B137.9 - 13	Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe Systems	Table M2101.1
B137.10 - 13	Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene (PE-AL-PE) Composite Pressure Pipe System	Table M2101.1

CAN/CSA - 2002	Design and Installation of Earth Energy Systems - First Edition; Update 2: October 2009; Consolidated Reprint 10/2009	Table M2105.4, Table M2105.5
O325 - 07	Construction Sheathing	R503.2.1, R602.1.8, R604.1, R803.2.1
O437 - Series - 93	Standards on OSB and Waferboard (Reaffirmed 2006)	R503.2.1, R602.1.8, R604.1, R803.2.1
UL/CSA/ANCE 60335-2-40 - 2012	Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Motor-compressors	M1403.1, M1412.1, M1413.1

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI. Add the following St. Louis County Codes, Ordinances and Standards:

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI	St. Louis County Department of Transportation and Public Works 41 S. Central Ave. St. Louis, MO 63105	
Standard reference number	Title	Referenced in code section number
Building Code - Title XI, Chapter 1115 SLCRO 1974, as amended	Building Code	R117, R118, R119, R202
Electrical Code - Title XI, Chapter 1102 SLCRO 1974, as amended	Electrical Code	R102.2.1, R202

Floodplain Management Regulations - Title X, Chapter 1008 SLCRO 1974 as amended	Floodplain Management Regulations	R101.4, Table R301.2(1), R301.2.4, R309.3, R322.1
Mechanical Code - Title XI, Chapter 1108 SLCRO 1974, as amended	Mechanical Code	R102.2.1, R202
Plumbing Code - Title XI, Chapter 1103 SLCRO 1974, as amended	Plumbing Code	R102.2.1, R202
	Private Sewage Disposal Code See Plumbing Code	
Zoning Ordinance - Title X, Chapter 1003 SLCRO 1974 as amended	Zoning Ordinance	R101.4, R102.2.2, R202, R301.2.4, R309.3, R322.1

IAPMO IAPMO
4755 E. Philadelphia Street
Ontario, CA 91761

Delete all Referenced Standards.

ICC - International Code Council. Amend Referenced Standards. (Standards not amended by this code amendment and shown in the code as published are adopted without amendments)

ICC	International Code Council, Inc. 500 New Jersey Avenue, NW 6th Floor Washington, DC 20001	
Standard reference number	Title	Referenced in code section number

IBC - 15	International Building Code	R101.2, R101.4, R102.7, R103.1, R104.1, R105.1, R107.1, R108.1, R109.1, R110.1, R111.1, R112.1, R113.1, R114.1, R115.1, R116.1, R201.3, R202, R301.1, R301.1.3, R301.2.2.1.1, R301.2.2.1.2, R301.2.2.4, R301.3, R308.5, R320.1, R320.1.1, R403.1.8, R602.13.5, Table R602.10.3(3), Table R606.12.2.1, R609.2, R802.1.5.4, R905.10.3, N1107.4, G2402.3
IMC - 15	International Mechanical Code	R101.4, R201.3, R202, Table R301.2(1), N1103.3.2, G2402.3
IPC - 15	International Plumbing Code	R101.4, R201.3, R202, R306.6, R306.7, R307.1, R322.1.7, R903.4.1, G2402.3, P2501.1, P2601.1, P2701.1, P2801.1, P2901.1, P3001.1, P3101.1, P3201.1, P3301.1
IPMC - 15	International Property Maintenance Code	R101.4, R102.7, R201.3

MSS - Manufacturers Standardization Society of the Valve and Fittings Industry. Delete all Referenced Standards except the following:

MSS	Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park Street, Northeast Vienna, VA 22180	
Standard reference number	Title	Referenced in code section number

SP-58 - 09	Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application and Installation	G2418.2

NFPA - National Fire Protection Association. Delete Referenced Standards as shown below. (Standards not deleted by this amendment and shown in the code as published are adopted without amendments)

NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269	
Standard reference number	Title	Referenced in code section number
13D - 13	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	R302.1, Table R302.1(2), R302.2, R302.13, R309.5, R313.1.1, R313.2.1, R325.5
70 - 14	National Electrical Code	R101.4, R201.3, R302.2, R324.3, E3401.1, E3501.1, E3601.1, E3701.1, E3801.1, E3901.1, E4001.1, E4101.1, E4201.1, E4301.1

NSF - NSF International. Delete all Referenced Standards except the following:

NSF	NSF International 789 N Dixboro Ann Arbor, MI 48105

Standard reference number	Title	Referenced in code section number
14 - 2011	Plastics Piping System Components and Related Materials	M1301.4
358-1 - 2011	Polyethylene Pipe and Fittings for Water-based Ground Source "Geothermal" Heat Pump Systems	M2105.4, M2105.5
358-2 - 2012	Polypropylene Pipe and Fittings for Water-based Ground Source "Geothermal" Heat Pump Systems	M2105.5

Attachment 'C'

1117.101 - Amendments to the International Existing Building Code, 2015 Edition

Chapter 1 Scope and Administration.

—The following provisions amend Chapter 1 Scope and Administration in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

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

101.2 *Scope.* The provisions of the International Existing Building Code shall apply to the repair, alteration, change of occupancy, addition, and relocation of existing buildings. A building or portion of a building that has not been previously occupied or used for its intended purpose shall comply with the provisions of the International Building Code for new construction. Repairs, alterations, change of occupancy, existing buildings to which additions are made, historic buildings, and relocated buildings complying with the provisions of the International Building Code, International Mechanical Code, International Plumbing Code and NFPA 70 as applicable shall be considered in compliance with the provisions of this code. The registered design professional shall declare on the construction documents the codes used in the design.

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height, shall comply with the International Residential Code.

101.6 *Appendices.* The building official is authorized to require rehabilitation and retrofit of buildings, structures, or individual structural members in accordance with the appendices of this code as adopted by Chesterfield. When any of such appendices is specifically referenced in the text of this code, it shall be a part of this code.

102.2.1 *Licensing.* Applicable licensing provisions of the Mechanical Code, the Electrical Code and the Plumbing Code shall apply to work regulated under this code.

102.2.2 *Compliance Zoning and other applicable codes and ordinances.* Subject to the provisions of this code, neither the granting of a permit, nor the approval of construction documents, nor inspections made by the building

official, or the building official's authorized representative, during the erection, movement or demolition of a building or structure, or any alteration or addition thereto, shall in any way relieve the owner or tenant of such building, structure or property from complying with the requirements of this code, the Zoning Ordinance, or other applicable laws.

102.4.3 *Applicability of Chesterfield, Missouri codes and ordinances.* Throughout this code, whenever the terms NFPA 70, International Plumbing Code, International Mechanical Code, International Property Maintenance Code, International Building Code, International Residential Code, International Existing Building Code, Zoning Ordinance or Floodplain Management Regulations Ordinance appears it shall be deemed to mean the codes adopted by Chesterfield as listed in Chapter 14 Referenced Standards, of this code and as identified in Title XI, Chapters 1102, 1103, 1108, 1110, 1115, 1116, 1117, and Title X, Chapters 1003 and 1008 SLCRO 1974, as amended, respectively.

102.4.4 *Standards and guidelines for structural evaluation.* The building official shall allow structural evaluation, condition assessment, and rehabilitation of buildings, structures, or individual structural members based on this code's appendix chapters, referenced standards, guidelines, or other approved standards and procedures.

102.5.1 *Additions, alterations or repairs.* Additions, alterations or repairs to any structure shall conform to that required for a new structure without requiring the existing structure to comply with all of the requirements of this code, unless otherwise stated. Additions, alterations or repairs shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

SECTION 103
DEPARTMENT OF BUILDING SAFETY

103.1 *Creation of enforcement agency.* SECTION 103 DEPARTMENT OF BUILDING SAFETY (Sections 103.1 through 103.3) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 103 DEPARTMENT OF BUILDING SAFETY in the International Building Code.

SECTION 104
DUTIES AND POWERS OF BUILDING OFFICIAL

104.1 *General.* SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL (Sections 104.1 through 104.11.1) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL in the International Building Code.

SECTION 105
PERMITS

105.1 *Required.* SECTION 105 PERMITS (Sections 105.1 through 105.7) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 105 PERMITS in the International Building Code.

SECTION 106
Reserved for future use.

SECTION 107
CONSTRUCTION DOCUMENTS

107.1 *General.* SECTION 106 CONSTRUCTION DOCUMENTS (Sections 106.1 through 106.6) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 107 CONSTRUCTION DOCUMENTS in the International Building Code.

SECTION 108
TEMPORARY STRUCTURES AND USES

108.1 *General.* SECTION 107 TEMPORARY STRUCTURES AND USES (Sections 107.1 through 107.4) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 108 TEMPORARY STRUCTURES AND USES in the International Building Code.

SECTION 109
FEES

109.1 *Payment of Fees.* SECTION 108 FEES (Sections 108.1 through 108.6) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 109 FEES in the International Building Code.

SECTION 110
INSPECTIONS

110.1 *General.* SECTION 109 INSPECTIONS (Sections 109.1 through 109.6) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 110 INSPECTIONS in the International Building Code.

SECTION 111
CERTIFICATE OF OCCUPANCY

111.1 *Use and occupancy.* SECTION 110 CERTIFICATE OF OCCUPANCY (Sections 110.1 through 110.4) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 111 CERTIFICATE OF OCCUPANCY in the International Building Code.

SECTION 112
SERVICE UTILITIES

112.1 *Connection of service utilities.* SECTION 111 SERVICE UTILITIES (Sections 111.1 through 111.3) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 112 SERVICE UTILITIES in the International Building Code.

SECTION 113
BOARD OF APPEALS

113.1 *General.* SECTION 112 BOARD OF APPEALS (Sections 112.1 through 112.3) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 113 BOARD OF APPEALS in the International Building Code.

SECTION 114
VIOLATIONS

114.1 *Unlawful acts.* SECTION 113 VIOLATIONS (Sections 113.1 through 113.4) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 114 VIOLATIONS in the International Building Code.

SECTION 115
STOP WORK ORDER

115.1 *Authority.* SECTION 114 STOP WORK ORDER (Sections 114.1 through 114.3) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 115 STOP WORK ORDER in the International Building Code.

SECTION 116
UNSAFE STRUCTURES AND EQUIPMENT

116.1 *Conditions.* SECTION 115 UNSAFE BUILDINGS AND EQUIPMENT (Sections 115.1 through 115.5) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 116 UNSAFE STRUCTURES AND EQUIPMENT in the International Building Code.

SECTION 117
EMERGENCY MEASURES

117.1 *Imminent danger.* SECTION 116 EMERGENCY MEASURES (Sections 116.1 through 116.6) in the International Existing Building Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 117 EMERGENCY MEASURES in the Building Code.

SECTION 118
UNFIT BUILDINGS AND STRUCTURES

118.1 *General.* SECTION 117 DEMOLITION (Sections 117.1 through 117.4) in the International Existing Building Code, 2015 edition is deleted in its

entirety and adopted in lieu thereof is SECTION 118 UNFIT BUILDINGS AND STRUCTURES in the Building Code.

SECTION 119
DEMOLITION OF STRUCTURES

119.1 *Demolition of structures.* SECTION 119 DEMOLITION OF STRUCTURES (Sections 119.1 through 119.3) of the Building Code is adopted as part of this code.

1117.102 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 2 Definitions.

—The following provisions amend Chapter 2 Definitions in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

201.3 *Terms defined in other codes.* Where terms are not defined in this code and are defined in the International Building Code, International Residential Code, International Property Maintenance Code, International Mechanical Code, NFPA 70 International Plumbing Code, the International Energy Conservation Code or the International Fire Code, such terms shall have the meanings ascribed to them as in those codes.

SECTION 202
GENERAL 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. Where a word or term is not defined in this code, it shall have such definition as may be prescribed for it in The International Building Code, 2015 edition.

Board of Appeals. The St. Louis County Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Code Official. The Code Official as defined herein.

Building Code Review Committee. The Committee established by, and acting in accordance with the Building Code, SLCRO 1974, Title XI, Chapter 1115, as amended.

Building Commission. The St. Louis County Building Commission established in Article IV, Section 4.330 of the St. Louis County Charter.

Building Official. The Code Official as defined herein.

Code Official. The Director of the Department of Transportation and Public Works or the Director's duly authorized representative.

Dangerous. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.
3. The building or structure or any portion thereof is likely to collapse partially or completely because:
   - 3.1. Of dilapidation, deterioration or decay;
   - 3.2. Of construction in violation of this code;
   - 3.3. The soil supporting the foundation is unstable, moved or removed;
   - 3.4. The foundation is inadequate, decayed or deteriorated; or
   - 3.5. It is damaged due to fire, earthquake, wind or flood; or any other similar cause.
4. The exterior walls or other vertical structural member list, lean, or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.
5. Any building or structure with substantial structural damage.

Disaster. A disaster shall include but not necessarily be limited to flood, windstorm, tornado, severe storm, earthquake, bomb blast, explosion or similar natural or man-made type event. The building official shall make the determination whether an event shall be declared a disaster.

Electrical Code Review Committee. The Committee established by, and acting in accordance with the Electrical Code, SLCRO 1974, Title XI, Chapter 1102, as amended.

Flood Hazard Area. An area that has been determined to be prone to flooding in accordance with Section 1612 of the International Building Code or Section R322 of International Residential Code as applicable.

Mechanical Code Review Committee. The Committee established by, and acting in accordance with the Mechanical Code, SLCRO 1974, Title XI, Chapter 1108, as amended.

Plumbing Code Review Committee. The Committee established by, and acting in accordance with the Plumbing Code, SLCRO 1974, Title XI, Chapter 1103, as amended.

Repair. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance or to correct damage. Repair work shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or

change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any fire suppression standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

Zoning Ordinance. Chesterfield Unified Development Code, Chapter 31.

1117.106 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 6 Repairs.

—The following provisions amend Chapter 6 Repairs in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

608.2 *Mechanical draft systems for manually fired appliances and fireplaces.* A mechanical draft system shall be permitted to be used with manually fired appliances and fireplaces where such a system complies with all of the following requirements:

1. The mechanical draft device shall be listed and installed in accordance with the manufacturer's installation instructions.
2. A device shall be installed that produces visible and audible warning upon failure of the mechanical draft device or loss of electrical power at any time that the mechanical draft device is turned on. This device shall be equipped with a battery backup if it receives power from the building wiring.
3. A smoke detector shall be installed in the room with the appliance or fireplace. This device shall be equipped with a battery backup if it receives power from the building wiring.
4. Mechanical draft systems shall be installed in accordance with the International Mechanical Code.

1117.107 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 7 Alterations—Level 1.

—The following provisions amend Chapter 7 Alterations - Level 1 in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

701.1.1 *Elevators and escalators.* Existing elevators and escalators not otherwise being altered shall conform to ASME A17.3.

702.6 *Materials and methods.* All new work shall comply with materials and methods requirements in the NFPA 70, International Building Code, International Residential Code, International Energy Conservation Code, International Mechanical Code, and International Plumbing Code, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

SECTION 709
MECHANICAL

709.1 *Mechanical requirements.* If mechanical equipment is being replaced with a like piece of equipment of the same capacity, load calculations are not required to be submitted with the permit application. If the equipment to be replaced has a reduced capacity or a greater capacity, load calculations must be submitted with the permit application.

709.2 *Mechanical equipment isolation.* The requirements of the International Mechanical Code shall apply to equipment within the scope of Alterations Level 1, including the installation of shutoff valves, stop valves, relief valves, safety valves, unions and/or other devices as required for the specific equipment being installed.

709.3 *Mechanical scope.* In cases where the work area is less than 50 percent of the aggregate area of the building, Level 3 alterations shall apply to only the mechanical systems whenever the mechanical work exceeds 50 percent of the effected HVAC system's distributed capacity.

1117.108 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 8 Alterations—Level 2.

—The following provisions amend Chapter 8 Alterations - Level 2 in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

805.2 *General.* The means of egress shall comply with the requirements of this section.

Exception: Means of egress conforming to the requirements of the building code under which the building was constructed shall be considered compliant means of egress if, in the opinion of the building official, they do not constitute a distinct hazard to life.

805.5.5 *Existing non-rated corridor walls in occupancy classification B.* New non-rated openings in corridors in existing buildings may be protected with a water curtain in lieu of an approved protective device where the following features are provided:

1. The corridor walls and ceiling of the tenant space are constructed to limit the transfer of smoke into the corridor.
2. Corridor doors shall provide an effective barrier to limit the transfer of smoke.
3. Sprinkler heads shall be placed within 18 inches (457 mm) of the corridor wall at a spacing of not more than 6 feet (1829 mm) on-center on the tenant side of the wall.

SECTION 809
MECHANICAL

809.1 *Reconfigured or converted spaces.* All reconfigured spaces intended for occupancy and all spaces converted to habitable or occupiable space in any work area shall be provided with natural or mechanical ventilation in accordance with the International Mechanical Code. The physical limits of the reconfigured or converted space are defined by the perimeter walls, the floor slab, and the roof/floor deck above. This definition applies to issues of ventilation, unsafe conditions, minor alterations to mechanical equipment and/or systems, and new mechanical equipment and systems.

809.1.1 *Ventilation requirements.* If the occupant load of the reconfigured or converted space is similar to the occupant load of the original design and there is no change in occupant classification, then the existing ventilation systems may be utilized. If there is a change in occupant classification or occupant load, the ventilation of the reconfigured or converted space shall comply with the International Mechanical Code.

809.1.2 *New mechanical equipment and/or systems.* New mechanical systems and/or equipment, which will be incorporated into the reconfigured or converted space, shall comply with the International Mechanical Code.

809.1.3 *Unsafe conditions.* If the building official determines there are unsafe conditions or code violations, these must be abated and the condition brought into compliance with the International Mechanical Code.

809.1.4 *Minor alterations/system extensions.* If the scope of the mechanical work is limited to minor alterations and/or extensions of the existing systems within the reconfigured or converted space, then that work need only conform to the International Mechanical Code under which the original work was installed. If the mechanical system is extended into areas not previously served by that system then system load calculations shall be provided.

809.2 *Altered existing systems. - Delete* and replace as follows:

809.2 *Local exhaust.* All newly introduced devices, equipment, or operations that produce airborne particulate matter, odors, fumes, vapor, combustion products, gaseous contaminants, pathogenic and allergenic organisms, and microbial contaminants in such quantities as to affect adversely or impair health or cause discomfort to occupants shall be provided with local exhaust.

1117.109 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 9 Alterations—Level 3.

—The following provisions amend Chapter 9 Alterations - Level 3 in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

SECTION 909
MECHANICAL

909.1 *Mechanical requirements.* If the existing ventilation system(s) conform to the ventilation requirements of the International Mechanical Code, they may be re-utilized for the alteration. If not, the mechanical equipment and systems shall be modified, upgraded or replaced by equipment and systems that conform to the requirements of the International Mechanical Code.

1117.110 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 10 Change of Occupancy.

—The following provisions amend Chapter 10 Change of Occupancy in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1004.1 *General.* Fire protection requirements of Section 1012 shall apply where:

1. A building or portions thereof undergo a change of occupancy classification; or
2. Where there is a change of occupancy within a space where there is a different fire protection system threshold requirement in Chapter 9 of the International Building Code; or
3. Is converted to a nightclub.

SECTION 1009
MECHANICAL

1009.1 *Mechanical requirements.* Where the occupancy of an existing building or part of an existing building is changed, the new occupancy shall be subject to the applicable requirements of the International Mechanical Code.

1009.1.1 *Ventilation requirements.* If the existing mechanical equipment and systems conform to the requirements of the International Mechanical Code for the new occupancy classification and occupant load, the existing mechanical equipment and systems may be re-used.

1009.1.2 *New mechanical equipment and/or systems.* New mechanical systems and/or equipment, which will be incorporated into the areas and/or building effected by the change in occupancy, shall comply with the International Mechanical Code.

1009.1.3 *Unsafe conditions.* If the building official determines there are unsafe conditions or code violations these unsafe conditions or violations must be abated and the condition brought into compliance with the International Mechanical Code.

1117.114 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 14 Performance Compliance Methods.

—The following provisions amend Chapter 14 Performance Compliance Methods in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1401.2 *Applicability.* Structures existing prior to December 19, 1951, in which there is work involving additions, alterations, or changes of occupancy shall be made to conform to the requirements of this chapter or the provisions of Chapters 5 through 13. The provisions of Sections 1401.2.1 through 1401.2.5 shall apply to existing occupancies that will continue to be, or are proposed to be, in Groups A, B, E, F, I-2, M, R, and S. These provisions shall not apply to buildings with occupancies in Group H or I-1, I-3 or I-4.

1401.3.1 *Hazards.* Where the building official determines that an unsafe condition exists as provided for in Section 116, such unsafe condition shall be abated in accordance with Section 116.

1117.115 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 15 Construction Safeguards.

—The following provisions amend Chapter 15 Construction Safeguards in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1502.1 *Protection required.* Adjoining public and private property shall be protected from damage during construction and demolition work. The adjoining buildings and properties must be protected by the person causing the work to be done. Protection must be provided for footings, foundations, party walls, chimneys, skylights and roofs. Provisions shall be made to control water run-off and erosion during construction or demolition activities. The person making or causing an excavation to be made shall provide written notice to the owners of adjoining buildings and properties advising them that the excavation is to be made. Said notification shall be delivered not less than 30 days prior to the scheduled starting date of the excavation.

1117.116 - Amendments to the International Existing Building Code, 2015 Edition—Chapter 16 Referenced Standards.

—The following provisions amend Chapter 16 Referenced Standards in the International Existing Building Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

Amend Chapter 16 - Referenced Standards - Sections not shown herein as being modified are adopted without amendments.

ASME - American Society of Mechanical Engineers. Amend Referenced Standards (Standards not amended by this code amendment and shown in the code as published are adopted without amendments.):

ASME	American Society of Mechanical Engineers Three Park Avenue New York, NY 10016-5990	
Standard reference number	Title	Referenced in code section number
A17.3-2008	Safety Code for existing Elevators and Escalators	701.1.1, 902.1.2

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI. Add the following St. Louis County Codes, Ordinances and Standards.

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI	St. Louis County Department of Transportation and Public Works 41 S. Central Ave. St. Louis, MO 63105	
Standard reference number	Title	Referenced in code section number
Building Code - Title XI, Chapter 1115 SLCRO 1974, as amended	Building Code	117, 118, 119, 202, 805.2
Electrical Code - Title XI, Chapter 1102 SLCRO 1974, as amended	Electrical Code	102.2.1, 202
Floodplain Management Regulations - Title X, Chapter 1008 SLCRO 1974 as amended	Floodplain Management Regulations	102.4.3
Mechanical Code - Title XI, Chapter 1108 SLCRO 1974, as amended	Mechanical Code	102.2.1, 202
Plumbing Code - Title XI, Chapter 1103 SLCRO 1974, as amended	Plumbing Code	102.2.1, 202
Zoning Ordinance - Title X, Chapter 1003 SLCRO 1974 as amended	Zoning Ordinance	102.2.2, 102.4.3, 202

ICC - International Code Council. Amend Referenced Standards. (Standards not amended by this code amendment and shown in the code as published are adopted without amendments.):

ICC	International Code Council, Inc. 500 New Jersey Avenue, NW 6th Floor Washington, DC 20001	
Standard reference number	Title	Referenced in code section number
IBC - 15	International Building Code®	101.2, 101.4.1, 102.4.3, 103.1, 104.1, 105.1, 107.1, 108.1, 109.1, 110.1, 111.1, 112.1, 113.1, 114.1, 115.1, 116.1, 117.1, 118.1, 119.1, 201.3, 202, 301.1, 301.1.4, 301.1.4.1, 301.1.4.2, 401.2.3, 402.1, 402.2, 402.3, 402.3.1, 402.4, 403.1, 403.2, 403.3, 403.3.1, 403.4, 403.4.1, 403.8, 403.9, 404.2.1, 404.2.3, 404.3, 404.4, 404.5, 406.3, 407.1, 407.3, 407.4, 408.3, 410.4, 410.4.2, 410.6, 410.8.1, 410.8.4, 410.8.5, 410.8.6, 410.8.7, 410.8.8, 410.8.10, 410.8.14, 410.9, 410.9.3, 410.9.4, 501.3, 601.3, 602.3, 606.1, 606.2.2.1, 606.2.2.3, 606.2.3, 606.2.4, 701.2, 701.3, 702.1, 702.2, 702.3, 702.4, 702.5, 702.6, 705.1, 705.1.1, 705.1.4, 705.1.7, 705.1.8, 705.1.9, 706.1, 706.3, 706.3.2, 707.2, 707.3.1, 707.3.2, 801.3, 802.1, 803.2.1, 803.2.3, 803.3, 803.4, 803.5.2, 803.6, 804.1.1, 804.2, 804.2.2, 804.2.3, 804.2.4, 804.3, 805.3.1, 805.3.1.2.1, 805.4.3, 805.5, 805.6, 805.7.1, 805.8.1, 805.9.2, 805.10.1.1, 805.10.1.2, 805.10.1.3, 805.10.2, 805.11.2, 806.2, 806.3, 806.4, 806.5, 807.2, 807.4, 807.5, 807.6, 904.1.2, 904.1.3, 904.2, 904.2.1, 904.2.2, 905.2, 905.3, 906.2, 907.4, 907.4.2, 1001.3, 1002.1, 1002.2, 1004.1, 1007.1, 1007.2, 1007.3.1, 1011.1, 1012.1.1.1, 1012.1.1.2, 1012.2.1, 1012.2.2, 1012.3, 1012.4.1, 1012.4.2, 1012.4.3, 1012.5.1, 1012.5.1.1, 1012.5.3, 1012.6.1, 1012.6.3, 1012.7.1, 1012.7.2, 1012.7.3,

		1012.7.5, 1012.8, 1012.8.2, 1102.1, 1102.2, 1102.3, 1103.1, 1103.2, 1103.3, 1103.3.1, 1103.3.2, 1103.4, 1103.5, 1201.4, 1202.3, 1202.4, 1203.12, 1204.1, 1204.1.4, 1205.2, 1205.9, 1205.15, 1301.2, 1302.1, 1302.2, 1302.2.1, 1302.3, 1302.4, 1302.5, 1302.6, 1401.2.2, 1401.2.3, 1401.2.4, 1401.3.3, 1401.4.1, 1401.6.1, 1401.6.1.1, 1401.6.2, 1401.6.2.1, 1401.6.3.1, 1401.6.3.2, 1401.6.4.1, 1401.6.5, 1401.6.5.1, 1401.6.6, 1401.6.7.1, 1401.6.8, 1401.6.9, 1401.6.9.1, 1401.6.10, 1401.6.10.1, 1401.6.11, 1406.11.1, 1401.6.12.1, 1401.6.13, 1401.6.15.1, 1401.6.16.1, 1401.6.17, 1401.6.17.1, 1401.6.18, 1401.6.18.1, 1401.6.19, Table 1401.6.19, 1501.5, 1501.6.1, 1501.6.4.1, 1501.6.7, 1506.1, 1506.3
IMC - 15	International Mechanical Code®	101.2, 102.4.3, 201.3, 301.2, 608.2, 702.6, 809.1, 809.1.1, 809.1.2, 809.1.3, 902.1.1, 902.2.1, 1009.1, 1401.6.7.1, 1401.6.8, 1401.6.8.1
IPC - 15	International Plumbing Code®	101.2, 102.4.3, 201.3, 301.2, 609.1, 702.6, 810.1, 1010.1, 1010.2, 1010.3, 1010.5, 1501.7
IPMC - 15	International Property Maintenance Code®	101.4.2, 102.4.3, 201.3, 301.2, 1301.2, 1401.3.2
IRC - 15	International Residential Code®	101.2, 101.4.1, 102.4.3, 201.3, 202, 301.2, 402.2, 403.2, 404.5, 408.3, 602.3, 701.3, 702.5, 702.6, 706.2, 707.2, 707.4, 707.5, 708.1, 807.4, 808.3, 811.1, 907.4, 908.1, 1103.2, 1103.3, 1103.4, 1104.1, 1106.1, 1201.4, 1301.2, 1302.1, 1302.2, 1302.2.1,

		1302.3, 1302.4, 1302.5, 1302.6, 1401.2.2, 1401.2.3, 1401.3.3

NFPA - National Fire Protection Association. Amend Referenced Standards:

NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02269	
Standard reference number	Title	Referenced in code section number
NFPA 13R - 13	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	804.2.5
NFPA 70 - 14	National Electric Code	101.2, 102.4.3, 107.3, 201.3, 301.2, 607.1.1, 607.1.2, 607.1.3, 607.1.4, 607.1.5, 702.6, 808.1, 808.3.4. 808.3.7, 1008.1, 1008.2, 1008.3, 1008.4
NFPA 72 - 13	National Fire Alarm Code	804.2.5, 804.4
NFPA 99 - 15	Health Care Facilities	607.1.4

Attachment 'D'

1108.100 - Amendments to International Mechanical Code

Chapter 1—Administration.

—Chapter 1 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

101.1 *Title:* These regulations shall be known as the Mechanical Code of Chesterfield, Missouri hereinafter referred to as "this code."

101.2 *Scope.* This code shall regulate 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 shall also regulate 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 shall be regulated by the *International Fuel Gas Code.*

Exception: For requirements other than those specified in Chapter 1 of this code, 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 shall comply with the *International Residential Code.*

101.5 *Committee of Mechanical Code Review.* There is hereby created and established a Committee of Mechanical Code Review. The committee shall consist of the Code Official and five (5) members appointed by the County Executive. The Code Official shall act as executive secretary and shall keep full and complete minutes of the acts and proceedings of said committee. The appointed members shall be residents of St. Louis County and have the following qualifications: an architect registered in the State of Missouri; a mechanical engineer registered in the State of Missouri; a mechanical contractor engaged in HVAC contracting; an industrial mechanical contractor and a member of the fire service. Three (3) members shall be appointed for terms of three (3) years and two (2) members shall be appointed for an initial term of two (2) years after which all terms shall be for three (3) years, or until their successors shall be qualified and appointed by the County Executive. At no time shall there be two (2) members of the committee who work for or are members of the same company, entity or international union organization or affiliate, thereof. The Committee shall meet at least annually in order to

consider any proposed changes to this code, and make recommendations to the Building Commission. The committee members shall elect one of their members to serve as chairman and one to serve as vice chairman.

101.5.1 *Compensation.* The members of the Mechanical Code Review Committee with the exception of the Code Official shall be compensated in accordance with Chapter 201, SLCRO 1974 as amended.

101.6 *Application of References.* Unless otherwise specifically provided for in this code, all references to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

SECTION 101A
LICENSING OF PERSONS OR ENTITIES PERFORMING WORK UNDER THIS SECTION

101A.1 *License Required.* Except as otherwise provided in this Section 101A, hereinafter referred to as "this Section", no individual or business entity shall engage in or perform HVAC Residential Service-Installer Work, HVAC Servicer-Installer Work, Process Piping System Work, HVAC Duct System Work, or Fire Suppression System Work, unless licensed under this Section to perform such work. In addition, no person shall hold herself/himself out as being available to perform any work that requires a license under this Section unless she/he shall be licensed as aforesaid, and no partnership, corporation or other legal entity, or person conducting business under a fictitious name shall hold out such entity as being available to perform any work that requires a license under this Section in any advertising medium or publication unless a principal or employee of such entity shall be licensed as aforesaid. No person having obtained any license under this Section shall allow his/her name or license to be used by another person either for the purpose of obtaining permits, doing business or performing work that requires a license under this Section.

101A.1.1 *Definitions.*

1. The Board is the Board of Examiners for Mechanical Licensing of St. Louis County, Missouri.
2. A Contractor is an individual or Entity who is licensed under this Section to perform work on any or all of the following: Process Piping Systems, HVAC Duct Systems, Fire Suppression Systems, HVAC Piping Systems or HVAC systems.
    A) A Mechanical Contractor is an individual or Entity licensed to perform work under this Section who employs at least one Pipefitter Journeyman.
    B) A Sheet Metal Contractor is an individual or Entity licensed to perform work under this Section who employs at least one Sheet Metal Journeyman.

C) A Sprinkler Fitter Contractor is an individual or Entity licensed to perform work under this Section who employs at least one Sprinkler fitter Journeyman.

D) An HVAC Servicer-Installer Contractor is an individual or Entity licensed to perform work under this Section who employs at least one HVAC Servicer-Installer Journeyman.

A Contractor licensed under this Section who performs work under any of the foregoing categories may take out permits for and perform work that falls under one of the other categories provided such Contractor uses a Journeyman (or an Apprentice under the required supervision and inspection of such Journeyman) who is licensed to perform the specific work involved pursuant to the applicable provisions of this Section.

3. An Entity is any company, corporation, partnership, joint venture or other business establishment, which performs work that requires a license under this Section.

4. A Journeyman is anyone who is licensed under this Section to perform work under one of the following categories. For the Journeyman referred to in Section 101A.3.3, Sections 1.(A), 1.(B) and 1.(C) as well as Section 101A.3.5, this definition will include an individual who has provided an application with accompanying proof as specified in 101A.3.2, but the training and/or experience may have occurred outside of St. Louis County.

(A) A Pipefitter Journeyman is anyone who has been licensed under subsection 101A.3.2 below to perform Process Piping System Work.

(B) A Sheet Metal Journeyman is anyone who has been licensed under subsection 101A.3.2 below to perform HVAC Duct System Work.

(C) A Sprinkler Fitter Journeyman is anyone who has been licensed under subsection 101A.3.2 below to perform Fire Suppression System Work.

(D) An HVAC Servicer-Installer Journeyman is anyone who has been licensed under subsection 101A.3.2 below to perform HVAC Servicer-Installer Work.

(E) An HVAC Residential Servicer-Installer Journeyman is anyone who has been licensed under subsection 101A.3.2 below to perform HVAC Residential Servicer-Installer Work.

5. An Apprentice is anyone who has been licensed under subsection 101A.3.1 below to perform work that requires a license under this Section under the supervision and inspection of a Journeyman in the employ of a Contractor in one of the following categories:

(A) A Pipefitter Apprentice is anyone who has been licensed under subsection 101A.3.1 below to perform Process Piping System Work under the supervision and inspection of a Pipefitter Journeyman.

(B) A Sheet Metal Apprentice is anyone who has been licensed under subsection 101A.3.1 below to perform HVAC Duct System Work under the supervision and inspection of a Sheet Metal Journeyman.

(C) A Sprinkler Fitter Apprentice is anyone who has been licensed under subsection 101A.3.1 below to perform Fire Suppression System Work under the supervision and inspection of a Sprinkler fitter Journeyman.

(D) An HVAC Servicer-Installer Apprentice is anyone who has been licensed under subsection 101A.3.1 below to perform HVAC Servicer-Installer Work under the supervision and inspection of an HVAC Servicer-Installer Journeyman, Pipefitter Journeyman or Sheet Metal Journeyman; or who has been formerly licensed as a Service Apprentice under this code.

6. A Fire Suppression System is all or any part of a system, which utilizes water, gasses or chemicals for the control, or suppression of fires.

   Fire Suppression System Work is all work related to the installation, alteration, reconstruction, repair, replacement and other servicing of fire suppression systems.

7. An HVAC Duct System is all or any part of the duct system for a heating, ventilation, or air conditioning system regardless of the materials used and includes ducts, duct fittings, risers, stacks, dampers, casings, recess boxes, radiator enclosures, exhausts, ventilators, frames, grilles, louvers, registers, cabinets, plenums, air filters, fans, motors and accessory air handling equipment and appliances.

   HVAC Duct System Work is all work related to the installation, alteration, reconstruction, repair, replacement and other servicing of an HVAC Duct System as well as HVAC Servicer-Installer work as defined herein.

8. An HVAC Piping System is all or any part of the piping system for a heating, ventilation, or air conditioning system and includes pipes, valves, pipe fittings, pumps, and distribution lines and accessory equipment, including boilers and compressor assemblies.

   HVAC Piping System Work is all work related to the installation, alteration, reconstruction, repair, replacement and other servicing of HVAC Piping Systems as well as HVAC Servicer-Installer work as defined herein.

9. An HVAC System is a heating, ventilation, or air conditioning system or any part thereof, including an HVAC Piping System and/or HVAC Duct System, specifically addressed and regulated in this code.

Note: If an HVAC System consists of multiple individual units or split systems, each such individual unit or split system shall be considered a separate system for purposes of this Section.

10. A Process Piping System is all or any part of a piping system (excluding Fire Suppression Systems), which falls within one of the following categories:

(A) A medical gas system

(B) An HVAC Piping System

(C) A pneumatic system

(D) A pressurized or vacuum piping system

(E) A fuel gas system

(F) An oxygen system

(G) A gasoline system not for public sale

Process Piping System Work is all work related to the installation, alteration, reconstruction, repair, replacement and other servicing of Process Piping systems as well as HVAC Servicer-Installer work as defined herein.

NOTE: A St. Louis County licensed installer shall install fuel gas systems. A licensed installer is defined as a licensed HVAC Servicer Installer, a licensed Sheetmetal worker, or licensed Pipefitter working for a contractor licensed under this Code. The licensed installer shall install fuel gas systems, including Liquid Petroleum Gas, from the tank regulator to and throughout the building under the limitations of Section 101A.1.1 paragraphs 11 and 13. A licensed installer or a St. Louis County licensed plumber shall install fuel gas systems, including Liquid Petroleum Gas, from the tank regulator to and throughout dwellings regulated by the Residential Code of Chesterfield.

11. HVAC Servicer-Installer Work is all work related to: The installation, alteration, reconstruction, repair, replacement and servicing of HVAC Systems

(1) That provide no more than 25 tons of air conditioning or no more than 1,000,000 (One Million) BTU's of heating and

(2) Do not contain chillers, fire-tube type boilers, or boilers that operate at a pressure of more than 15 psi of steam;

Note: In those cases where an HVAC System is composed of individual units or split systems that are no more than 25 tons of air conditioning or 1 M BTU's of heat which are connected by a common fuel line, that is more than 2 inches in diameter, or which is under more than 2 psi pressure, the fuel line shall be installed by a licensed Journeyman Pipefitter and/or licensed Apprentice Pipefitter under the supervision and inspection of a licensed Journeyman Pipefitter. The individual units may be installed by licensed HVAC Servicer-Installers.

Exceptions:

1. HVAC Servicer-Installer Work does not include replacement of an HVAC System that provides 25 tons or less of air conditioning or 1 M BTU's or less of heating with a system that is over 25 tons of air conditioning or 1 M BTU's of heating, or contains chillers, fire-tube type boilers or heating boilers that operate at a pressure of more than 15 psi of steam. This work must be performed by applicable Pipefitter and Sheet Metal Journeyman and Apprentices under the supervision and inspection of appropriately licensed Journeymen.
2. HVAC Servicer-Installer Work does not include the total replacement or reconstruction of an HVAC System that provides more than 25 tons of air conditioning or 1 M BTU's of heating, or contains chillers, fire-tube type boilers or boilers that operate at a pressure of more than 15 psi of steam. This work must be performed by applicable Pipefitter and Sheet Metal Journeyman and Apprentices under the supervision and inspection of appropriately licensed Journeymen.
3. HVAC Servicer-Installer Work does not include replacement of gas fuel lines that are more than 2 inches in diameter, or which are under pressure of more than 2 psi. These lines must be replaced by a licensed Journeyman Pipefitter and/or licensed Apprentice Pipefitter under the supervision and inspection of a licensed Journeyman Pipefitter.

12. HVAC System Service Work is the reconstruction, repair or replacement of any part of an existing HVAC System, which does not alter the capacity, or capability of the original system.

13. HVAC Residential Service Installer Work is work related to single family residences, duplexes, and condominiums and apartments that do not exceed 3 stories in the front with a walk-out basement in the back, and containing no more than 14 dwelling units including townhouses, garden apartments and multiple family dwelling units, (but excluding boarding houses and dormitories), and where heating and cooling units do not exceed six tons of cooling capacity or 150,000 BTU's of heating capacity.

101A.1.2 *Board of Examiners for Mechanical Licensing.*

1. There is hereby created and established a Board of Examiners for Mechanical Licensing. The Board shall consist of the Code Official and four (4) members appointed by the County Executive, within the categories and with the qualifications set forth in paragraph 2 of this subsection below.

2. The appointed members of the Board shall be residents of St. Louis County. The respective appointed members shall be comprised as follows and shall have the following qualifications:

   (A) One (1) registered professional engineer with at least a bachelor's degree in mechanical engineering actively engaged in the design of mechanical systems;

   (B) One (1) representative from owners actively engaged in the purchase of mechanical systems or services for the design, construction, installation or repair of mechanical systems;

   (C) One (1) licensed contractor who employs at least one Journeyman;

   (D) One (1) licensed Journeyman, as defined herein.

   Four (4) members shall be appointed as follows two (2) for a term of three (3) years, one (1) member shall be appointed for an initial term of two (2) years and one (1) member shall be appointed for an initial term of one (1) year after which all terms shall be for three (3) years or until their successors shall be qualified and appointed by the County Executive. At no time shall there be two members of the Board who work for or are members of the same company, Entity or international union organization or an affiliate thereof. With respect to the Contractor and Journeyman representatives, if the Contractor representative employs primarily pipefitting or sprinkler fitter employees, then the Journeyman representative shall be a Sheet Metal Journeyman or HVAC Servicer-Installer Journeyman. If the Contractor representative employs primarily Sheet Metal or HVAC System Servicer-Installer Journeymen, then the Journeyman representative shall be either a Pipefitter Journeyman or a Sprinkler Fitter Journeyman. The Board shall elect one of their members to serve as chairman and one to serve as vice chairman.

3. The Code Official shall be the fifth voting board member, shall act as Secretary, shall keep full and complete minutes of all acts and proceedings of said Board, and shall provide all applicants for a license under this Section with proper application forms. The Secretary shall maintain and secure all examinations, examination documents and materials as directed by the Board, review all applications for licenses to determine their completeness within fifteen (15) days of their filing, keep a file of the name and address of every person or firm licensed by the Board and the name and address of every person or firm whose

application for a license has been denied, give all applicants approved for examination a written notice of the date and place of examination and an informational letter on examination procedures with an outline of suggested study for the examination applied for, and return all incomplete applications to applicants within fifteen (15) days of determination of incompleteness, specifying the respects in which the application is incomplete. The Secretary shall file with the County Clerk a copy of all rules and regulations adopted by the Board and make such rules and regulations available to all license holders and current applicants.

4. The Board shall meet at least once every month and more often if the Board deems it necessary for the performance of its duties. Except for the Code Official, Board members shall receive compensation as provided in Chapter 201, SLCRO 1974 as amended. A majority of the members of the Board shall constitute a quorum.

5. The Board shall, pursuant to the regulations and standards herein set forth, determine the qualification of and provide for the examining and licensing of applicants who meet the qualifications and successfully pass the appropriate examination, if required, under this Section.

6. The Board shall select an independent testing firm to design and administer any examinations provided for under this Section.

7. At every Board meeting, the Board shall consider and take action to grant or reject all open and properly completed license applications that have been filed at least fifteen (15) days prior to the Board meeting. For any application that is rejected, the Code Official shall notify the applicant in writing of the reasons for rejection, within five (5) days after the Board's action. Notice of the date, time and place of each Board meeting, together with an agenda of the meeting, shall be made publicly available at least seven (7) days prior to the Board meeting.

8. The Board shall have the power to suspend and revoke any license issued pursuant to this Section for cause as set forth in subsection 101A.4.1 below. The Chairman or acting Chairman, with the approval of the Board, shall have power to administer oaths, subpoena witnesses and compel the production of books, papers and tangible things and the inspection of premises pertinent to any investigation or hearing authorized by this Section.

9. The Board shall have the authority, after providing reasonable opportunity for public participation and comment, to adopt reasonable rules and regulations to interpret and implement the provisions of this Section with respect to licensing, continuing education, and any other matters within the general authority of the Board. A copy of any rules or regulations proposed for adoption by the Board shall be made available for public inspection at least forty-five (45) days prior to the Board

meeting at which the adoption is to be considered and notice of such availability shall be included in the notice for at least two Board meetings before the Board may take action on the proposed rule or regulations. During any Board meeting at which a rule or regulation is considered for adoption, the Board shall allow reasonable opportunity for public comment. Such rules and regulations shall become effective upon the majority vote of the Board, and shall be on file in the office of the Code Official and the office of the County Clerk, and shall be open to public inspection and copying. Notification of all changes in the Ordinance or in the Rules or Regulations promulgated by the License Board shall be posted on the St. Louis County website.

10. The Board shall consider and approve any apprentice training program provided that any such apprentice training program requires a minimum of 7,500 hours of combined on-the-job and classroom training, if it provides an equivalent training program to those certified by the Bureau of Apprenticeship and Training of the U.S. Department of Labor "BAT" (now known as the Office of Apprenticeship Training, Employer and Labor Services ("ATELS") or to those approved, accredited or certified, as applicable, by any of the other organizations listed in subsection 101A.3.1.1 below. In addition, the Board shall consider and approve any educational or training program or class covering any work that requires a license under this Section, if such program or class is equivalent to one that is offered by a school or organization that is approved, accredited or certified, as applicable, by one of the organizations listed in subsection 101A.3.1 below.

11. Unlicensed Work: The Board of Examiners for Mechanical Licensing shall have the power to assess a fine, not to exceed $1,000.00, against any person, firm, corporation, limited liability company or other business entity who performs mechanical work without possessing a valid license issued under this code, after a hearing is convened by the Board. A fine imposed by the Board shall be paid within thirty (30) days. Failure to pay an assessed fine shall result in referral to the St. Louis County Counselor's Office for further legal action.

101A.2 *License Exemptions.*

101A.2.1 The following work shall not require a license under this Section:

1. Work performed on an owner's own facility by personnel directly in the employment of the owner of the facility, or a business affiliate of such owner. For purposes of this exemption, a "business affiliate" shall mean any parent, subsidiary or sister corporation of the owner and any other corporation, partnership, limited liability company or joint venture in which the owner or its parent, subsidiary or sister company has an ownership interest.

2. Installation, repair and replacement of portable heating, cooling and refrigeration equipment. Portable equipment is not permanently installed into or onto a structure or premises, it is not directly wired or piped, it is not connected to duct work, and it does not require the venting of combustion products.

3. Installation, repair and replacement of domestic stoves, ranges, dryers and other domestic appliances.

4. Installation, repair and replacement of fireplaces and fireplace lighters.

5. Work for a public utility regulated by the Missouri Public Service Commission.

6. Installation, testing or repair of backflow devices, if the person performing such work is licensed pursuant to the Plumbing Code of Chesterfield, to perform such work.

7. Work related to an addition or repair, replacement, modification or reconstruction of an existing mechanical system or component thereof, on the premises of a detached single-family dwelling, including accessory structures, performed by the owner or a member of the owner's immediate family residing with the owner under the following conditions:

   (A) The dwelling shall be designed and used solely for living purposes.

   (B) The dwelling shall be occupied by or vacant and intended for immediate occupancy by the owner and the owner's family and no other persons.

   (C) A permit shall be obtained for work not exempted by Section 101A.2.1.11 below and the permittee shall personally perform all required work. Prior to issuance of a permit under this Section, the Code Official may require an affidavit or other reasonable proof that the request for permit complies with the foregoing provisions and that the applicant has the necessary knowledge and ability to perform the proposed work. This Section does not authorize a waiver or modification of any provision of this code relating to the materials, design, installation, or practice of mechanical work or the preparation and approval of construction documents or fees for permits or inspections.

8. System installation, start-up, warranty service or warranty repair work that is performed by a technician trained and certified by the manufacturer of that system to perform such work.

9. Work historically and traditionally performed by boiler makers, except for repair and alteration of boilers, steam generators and pressure vessels with respect to which the provisions of Section 101A.3.3.1 below shall apply.

10. Installation, repair and replacement of elevators, escalators, dumbwaiters, moving walks, hoists, automotive lifts, conveyors, freight lifts, and manlifts.

11. Work which does not require a permit under the provisions of Section 106 of this code, including, but not limited to, ordinary repairs for the purpose of maintenance and service items such as the repair or replacement of any minor part of a piece of equipment that does not alter the approval of the equipment, the replacement of piping within heating or cooling equipment, replacement of leaking or defective valves, fittings or connections of system components, changing of belts, parts, filters and lubrication of equipment, testing and balancing of equipment and similar service work.

12. The reconstruction, repair or replacement of mechanical equipment and/or any part of a mechanical system when performed on a facility by personnel in the direct employment of the lessee of the facility, or in the direct employment of a property manager, provided that such property manager has filed with the Department of Public Works evidence of an agreement with the owner or lessee to provide property management services for the facility or to provide regular service work on the mechanical equipment and systems of the facility.

13. Receiving, unloading, moving, storing, hoisting, setting, aligning and leveling of machinery and related equipment.

14. Fabrication and installation of process ducts and process sheet metal blow pipe systems.

15. Any refrigeration work involving less than 7 1/2 tons of refrigeration including but not limited to such work on reach-in coolers, walk-in coolers, water coolers, beverage and beer dispensing machines and related equipment, beverage coolers, soda carbonated systems, reach-in freezers and walk-in freezers. In those cases where any refrigeration system is composed of several individual but connected units or split systems, each such individual unit or split system shall be considered a separate unit or system for purposes of this exemption.

16. Work that does not fall within the definitions of Fire Suppression System Work, HVAC Duct System Work, HVAC Piping System Work, Process Piping System Work or HVAC Servicer-Installer Work as set forth herein.

101A.3 *Qualifications for Application, Examination, License.* An individual or Entity applying for a license shall be licensed as follows:

101A.3.1 *Apprenticeship License.* Applicants shall be issued an apprenticeship license promptly upon submission to the Board of a complete application together with

1. Proof of enrollment in:

(A) An applicable apprenticeship program certified by the Bureau of Apprenticeship and Training of the United States Department of Labor (BAT/ATELS); or

(B) A Board approved, equivalent apprenticeship program that includes classroom/laboratory training by Ranken Technical College, Vatterott Educational Center, Jefferson College or Southwestern Illinois College or by any school or organization approved, accredited or certified, as applicable, by:

(1) The Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools;

(2) The Accrediting Commission of Career Schools and Colleges of Technology; or

(3) The National Center for Construction Education and Research; or

(C) An applicable, integrated 7,500-hour combined classroom and field training apprenticeship program that is conducted by any school or organization approved, accredited or certified, as applicable, by:

(1) The Higher Learning Commission, a Commission of the North Central Association of Colleges and Schools; or

(2) The Accrediting Commission of Career Schools and Colleges of Technology; or

(3) The National Center for Construction Education and Research;

Note: As used in this Section an HVAC Servicer-Installer Apprenticeship Program includes but is not limited to any program certified by BAT/ATELS as a Mechanical Servicer-Installer Apprenticeship Program.

OR

2. Presentation by the applicant or any Entity or organization of a written, individual training program providing a total of 7,500 combined hours of educational training or classes and field work or on-the-job training obtained as follows:

(A) At least 540 classroom hours of educational training or classes covering work that requires a license under this Section (and/or certain exempt work as allowed by the Note to this subsection below) that is conducted by any combination of schools or other organizations approved, accredited, or certified as applicable by:

(1) The Higher Learning Commission, a commission of the North Central Association of colleges and Schools; or

(2) The Accrediting Commission of Career Schools and Colleges of Technology;

(3) The National Center for Construction Education and Research; or

(4) the Board pursuant to subsection 101A 1.2.10 above; and

(B) The balance of the required hours needed to equal 7,500 through field work and/or on-the-job training under the supervision and inspection of a Journeyman licensed under this Section to perform the work involved.

Note: Within the total 540 classroom hours presented as part of any individualized training program pursuant to subsection 101A.3.1.2 above, the individual program must contain a minimum of 480 hours technical instruction in the installation, alteration, reconstruction, repair, replacement and/or servicing of HVAC Systems, HVAC Duct Systems, HVAC Piping Systems, Fire Suppression Systems and/or Process Piping Systems, as applicable based on the Apprentice license sought by the applicant, and within these 480 hours:

(1) No more than 75 hours may be introductory level courses and

(2) With respect to individuals seeking a Pipefitter, Sheet Metal or Sprinkler fitter license, no more than 75 hours may relate to technical training on work that is exempt from licensure under subsections 101A.2.1.2 through 101A.2.1.13 and 101A.2.1.15 through 101A.2.1.18 above. All technical training on work that is exempt from licensure under subsections 101A.2.1.1 and 101A.2.1.14 above shall be counted, without limitation, to the full extent required by subsection 101A.3.2.1 below. Individuals seeking an HVAC Servicer-Installer license shall have no limitation on the number of course hours that relate to work that is exempt from licensure under any or all of subsection 101A.2.1 above, and

(3) $10.00 registration fee,

The Secretary shall present the complete application to the Board for action in accordance with the provisions of subsection 101A.1.2.7 above. However, if the applicant is (or is to be) employed by a contractor who has held a Contractor's License in St. Louis County for three years or more, then the applicant shall be issued an Apprenticeship License immediately and will not be required to wait until the next meeting of the St. Louis County Board of Examiners for Mechanical Licensing. If for whatever reason the License cannot be issued immediately, then the Applicant will receive a letter which will serve as his License until the actual License is issued.

Upon determination by the Board that the applicant has satisfied the requirements of this subsection, the Secretary shall issue an apprenticeship license to the applicant with "Pipefitting Apprentice, Sheet Metal Apprentice, Sprinkler Fitter Apprentice, or HVAC Servicer-

Installer Apprentice" plainly marked on it (which determination shall be based on the nature of the program or class in which the applicant has enrolled or has completed), and the apprentice's name and date of issue.

An individual may hold an Apprentice License for no more than seven (7) years. Upon an individual's application for an Apprentice License, the Board shall consider the individual's application and may grant the application, whereupon the individual will receive an Apprentice License which shall be valid for the first two (2) years of his apprenticeship. Following the first two (2) years of his apprenticeship, the apprentice may apply to the Board for an extension of his Apprentice License which, if granted, shall make the license valid for an additional three (3) years. In order to receive the extension, the apprentice or his sponsoring organization must provide verification that the apprentice is still active in the Apprentice Program. Following the first five (5) years of his apprenticeship, the apprentice may apply to the Board for an extension which, if granted, shall make the license valid for an additional two (2) years, which shall be the final two (2) years of his apprenticeship. In order to receive the extension, the apprentice or his sponsoring organization must provide verification that the apprentice is still active in the Apprentice Program. Notwithstanding any provisions of this Section, any Apprentice License may be extended by the Board for a term beyond the seven (7) years allowed by this Section when good cause is shown or in cases involving hardship or extenuating circumstances.

Apprentices are authorized to perform work described in this Section under the supervision and inspection of a licensed Journeyman in the employ of a Mechanical Contractor, Sheet Metal Contractor, Sprinkler Fitter Contractor, or HVAC Servicer-Installer Contractor. During the first two years of his Licensed Apprenticeship, an Apprentice shall work under the close and direct supervision of a licensed Journeyman. In the event that an Apprentice is not being closely and directly supervised by a Journeyman, then it shall be the responsibility of the Journeyman and the Contractor, upon request by the Board, to provide documentation and reasoning as to why the Apprentice was not working under the close and direct supervision of a Journeyman. Following the first two years of the apprenticeship, the Journeyman is not required to directly and closely supervise the Apprentice, but the Journeyman shall be available to be contacted at all times that the Apprentice is performing work and shall supervise the Apprentice's work as appropriate. It shall be the responsibility of the Contractor to ensure that the Apprentice receives appropriate supervision at all times. Regardless of the experience of the Apprentice, the ratio of Apprentice to Journeyman shall be one Apprentice assigned to one Journeyman.

101A.3.2 *Journeyman License.* Applicants shall be issued a Journeyman license promptly upon submission of a complete application and a $45.00 registration fee to the Board together with:

1. Proof of:

(A) A total of 7,500 hours of training and/or experience obtained through:

(1) The successful completion of a pipefitting, sheet metal, sprinkler fitter, or HVAC Servicer-Installer apprenticeship program conducted by any school or organization approved, accredited or certified, as applicable, as required by subsection 101A.3.1.1 above; or

(2) Completion of at least 540 (Five Hundred Forty) hours of education or training classes, plus field work and/or on-the-job training under the supervision and inspection of a Journeyman licensed under this Section to perform the work involved, pursuant to an individual training program as allowed by subsection 101A.31.2 above; or

(B) 7,500 hours of:

(1) HVAC Residential Servicer-Installer Work for an HVAC Residential Servicer-Installer Journeyman License, or

(2) HVAC Servicer-Installer Work, which may include all work on HVAC Systems that are exempt from licensure under Subsection 101A.2.1 above for an HVAC Servicer-Installer Journeyman license, or

(3) Process Piping System Work for a Pipefitter Journeyman license, or

(4) HVAC Duct System Work for a Sheet Metal Journeyman license, or

(5) Fire Suppression System Work for a Sprinkler fitter Journeyman license during the preceding twelve (12) years.

Notes:

(A) In determining whether an applicant has acquired sufficient experience to qualify for a Pipefitter, Sheet Metal, Sprinkler Fitter or HVAC Servicer-Installer Journeyman's license, the Board shall include all of the applicant's experience, as applicable based on the type of Journeyman license sought by the applicant, obtained while installing, constructing, altering, repairing, replacing or servicing Process Piping Systems, HVAC Duct Systems, fire Suppression Systems, HVAC Piping Systems or HVAC Systems (as applicable), except for work that is exempt from licensure under subsections

101A.2.1.2 through 101A.2.1.11 and 101A.2.1.13 through 101A2.1.16 above. All work that is exempt from licensure under subsection 101A.2.1.1 and 101A.2.1.12 above shall be counted without limitation, provided the work is of a similar nature and technical requirements as work that requires a license under this Section. All experience will be considered by the Board regardless of where the work was performed, in St. Louis County or elsewhere. For HVAC Residential Servicer-Installer applicants, all Residential HVAC System Work will be considered regardless of whether or not the work was performed under the supervision of a licensed contractor or by a sole proprietor of a company that maintained a Registered Financial Responsibility Certificate or exempt from licensure under Subsections 101A.2.1.1 and 101A.2.1.12.

(B) For the purposes of determining whether an applicant for a Journeyman license has completed 540 or more hours of educational or training classes pursuant to an individual training program as described in subsection 101A.3.1.2 above, each applicant shall submit for each class successfully completed by the applicant, pursuant to the grading system used by the school or organization conducting the class, the total number of hours indicated by the school or organization as applying to the work for which the applicant seeks a license (a syllabus, or a transcript or grade sheet or a letter from any Dean or equivalent administrator at the school or organization will satisfy this requirement).

2. The Secretary shall present the complete application to the Board for action in accordance with the provisions of subsection 101A.1.2.7 above.

Upon determination by the Board that the applicant has satisfied the above requirements and falls within one of the exceptions set forth in Section 101A.3.4, the Secretary shall issue the Journeyman license. Upon determination by the Board that the applicant has satisfied the above requirements and does not fall within one of the exceptions set forth in Section 101A.3.4, the Secretary shall give the applicant a written notice of the date and place of the examination. The cost of the examination(s) shall be paid by the applicant. The applicant will have one year to successfully pass the examination. Within that one year, the applicant may take the examination as many times as he/she desires. Failure to pass the examination within one year will require the applicant to re-apply for the desired license. If the applicant passes the examination, a Journeyman license shall be issued.

3. The Journeyman license shall be valid for three (3) years from the date of issue. The Secretary of the Board shall send a notice of renewal to the last known address of each licensed Journeyman and a thirty (30) day grace period after the expiration shall be given in which renewal shall be given without re-qualification or re-examination. Failure of the Secretary

to provide the renewal notice shall not excuse the licensee from filing for the renewal license prior to the expiration of the grace period.

All licensed Journeymen seeking renewal shall furnish proof of twelve (12) Professional Education Units (24 hours) received within the last three (3) years on the then current Mechanical Code or accepted practices in the performance of work covered by the then current Mechanical Code or equivalent proof of maintaining and improving Journeyman work skills as determined and approved by the Board. Said proof shall be provided at the time of renewal. There may be a carryover of four (4) Professional Education Units (8 hours) in excess of the required hours to the next license cycle.

4. There shall be no limitation as to the type or number of Journeymen licenses that can be obtained by an individual.

5. Any person who possesses a valid Journeyman license under this Section for a minimum of one year shall be allowed to test for another Journeyman's license under this Section.

   Exception: An HVAC Service-Installer Journeyman or an HVAC Residential Service-Installer Journeyman shall not take the Sprinkler Fitter Journeyman's license test unless the applicant has received the necessary sprinkler training and/or experience per Section 101A.3.2.1.

   Upon submission to the Board of a completed application by a person licensed under this Section as a Journeyman (which application shall not require any proof of the applicant's experience or training except the applicant must provide proof of possessing a Journeyman's license for a minimum of one year) and a $45.00 registration fee, such person shall be permitted to take the examination for an additional Journeyman's license and, upon passage of such examination, shall promptly be issued a Journeyman's license in the trade covered by the examination so passed.

101A.3.2.A *Manufacturer and Manufacturer's Representative Restricted License.* A restricted license shall be issued under this Section to any manufacturer or manufacturer's representative and their employees engaged in the supply of equipment and appliances covered by this Section and/or in the supply of parts and/or the performance of service work, repairs, maintenance, start-up, testing or tuning of such equipment and appliances. Such license shall be issued by the Board upon submission by the applicant of evidence that the applicant is a manufacturer of, or has a representative relationship with one or more manufacturers of, equipment and/or appliances covered by this Section and payment of a $45.00 license fee. Upon such submission, the Secretary shall issue a license in the name of the applicant, identifying the equipment and/or appliance manufacturers with respect to which the license is issued. Such license shall authorize the licensee and its employees to supply

parts and perform service work, repairs, maintenance, start-up, testing and/or tuning of any equipment and/or appliances which are supplied by the manufacturers listed on the license. There shall be no restriction on the number of such licenses that are issued to any one person or entity. Each such license shall be valid for as long as the licensee remains a manufacturer or a manufacturer's representative of the equipment and/or appliance manufacturers listed in the license. Notwithstanding the foregoing, however, no license shall be required for any manufacturer, manufacturer's representative or their employees to perform work covered by subsection 101A.2.1.10 above or to perform emergency repair work on any equipment or appliance supplied or represented by the manufacturer or manufacturer's representative.

101A.3.3 *Mechanical Contractor, Sheet Metal Contractor, Sprinkler Fitter Contractor; HVAC Service-Installer Contractor.*

1. Any entity, which has in its employ one or more individuals having any of the following qualifications, may submit an application for a Contractor's License:

   (A) a minimum of three (3) years verifiable training and/or experience directing and supervising at least one (1) Journeyman; or

   (B) a degree in civil or mechanical engineering from an accredited college and a minimum of one (1) year verifiable training or experience directing and supervising at least one (1) Journeyman; or

   (C) a license for at least three (3) years under the Plumbing Code of St. Louis County as a Master Plumber or Master Pipefitter and a minimum of one (1) year verifiable training or experience directing and supervising at least one (1) Journeyman; or

   (D) an individual having a minimum of three (3) years verifiable experience who performed or who was the owner, operator or supervisor of a company, that performed residential HVAC Servicer-Installer work exempted from licensing by previous ordinances, may submit an application for a HVAC Servicer-Installer Contractor's License.

2. The application shall be accompanied by proof of the qualifications of the individual or individuals with the foregoing training or experience and proof of the Journeyman's license, proof of bond and insurance as specified in subsection 101A.3.3.2 and $100.00 registration fee.

3. The Secretary will present the complete Contractor's application to the Board for action in accordance with the provisions of subsection 101A.1.2.7 above. Upon determination that the applicant has satisfied the requirements of this subsection, a license shall be issued.

4. The Contractor's License shall be valid for three (3) years from the date of issue. The Secretary of the Board shall send a notice of renewal to the last-known address of the Contractor, and a thirty (30) day grace period

after the expiration shall be given in which renewal shall be given without re-qualification. Failure of the Secretary to provide renewal notice shall not excuse the licensee from filing for the renewal license prior to the expiration of the grace period.

5. The contractor shall provide the Department of Public Works with current proof of bond and insurance in order to maintain the license. The Secretary shall inform the Board of any Contractor who has failed to provide such proof of bond and insurance.

6. The Contractor shall notify the Department of Public Works within ten (10) days if it no longer employs a supervisor who possesses the qualifications set forth herein.

7. There shall be no limitation as to the type or number of Contractor's licenses that an individual or entity can obtain, so long as the applicant satisfied the requirements for each license.

101A.3.3.1 *Holder of Certificate of Authority from A.S.M.E. or National Board of Boiler and Pressure Vessel Inspectors.* Any entity which holds an appropriate A.S.M.E. Certificate of Authority with extension to field work or an "R" Certificate of Authority issued by the National Board of Boiler and Pressure Vessel Inspectors shall be authorized to engage in the repair and alteration of boilers, steam generators and pressure vessels which are covered by this code. Any such entity holding such Certificate of Authority shall be authorized to perform the aforesaid work and shall be issued a license hereunder as a Contractor, provided that such entity shall pay a registration fee of $45.00, file with the Secretary of the Board a copy of its Certificate or Certificates of Authority and proof of bond and insurance as specified in subsection

101A.3.3.2 Upon receipt of such Certificate or Certificates of Authority and proof of bond and insurance, the entity shall be Contractor's license.

101A.3.3.3 *Bond and Insurance Required.* Notwithstanding any provisions of Section 101B to the contrary, no permit shall be issued for installing, constructing, replacing, altering or repairing any HVAC System, Process Piping System, HVAC Duct System, Fire Suppression System, or any other work requiring a license under this Section, until the permit applicant shall have on file in the Department of Public Works, a current approved Surety Bond & Certificate of Insurance as specified in Section 101B. Permit applicants who have paid the license or registration fees specified in this Section shall not be required to pay the registration fee specified in Section 101B.

101A.3.4 *Examination and Re-Examination.*

1. All individuals desiring to be licensed as a Journeyman under this Section must successfully pass an examination in order to qualify as same.

Exception:

(A) Every person who is licensed under the Plumbing Code of St. Louis County as a Journeyman Pipefitter or Journeyman Sprinkler fitter shall not be required to pass an examination to be licensed as a Pipefitter Journeyman or Sprinkler fitter Journeyman under this Section. However, any individual may use this exemption only once. After the Mechanical License has been obtained, the individual must obtain required PEU's and any other obligations of the Mechanical License in order to avoid re-applying and testing.

101A.3.5 *Temporary Licenses.* A temporary license shall be issued to journeymen for up to six (6) months upon submittal to the Secretary of the Board of the name and location of the project and the name of the licensed Mechanical Contractor, Sheet Metal Contractor, Sprinkler Fitter Contractor, or HVAC Servicer-Installer Contractor for such project, provided the Board first finds that issuance of said temporary license will not compromise the public safety of Chesterfield residents. The temporary license may be renewed upon application and proof of employment by a licensed contractor.

101A.4 *Suspension or Revocation of License.*

1. The Board of Examiners shall have the power to suspend or revoke any license issued pursuant to this Section on any of the following grounds:

   (A) Said license was obtained by fraud or misrepresentation.

   (B) Violation of any of the provisions of this code.

   (C) The licensee employed an unlicensed individual or business entity to perform work for which a license is required under this Section.

   (D) The licensee permitted Apprentices to work without the supervision and inspection of a Journeyman required by this Section or falsified the documentation of any Apprentice's training and experience.

   (E) Procurement of permits for individuals who are not in the licensee's employ.

   (F) Failure to protect the health, safety and welfare of the public by violating the expressed intent of this code through irresponsibility, incompetence, neglect or wrongful intent.

   (G) Performance of work requiring a license under this Section without the required license.

   (H) Failure to provide the information required of an Apprentice and/or sponsor as described in 101A.3.1 above.

2. No license shall be suspended or revoked until the licensee has been afforded an opportunity for a hearing before the Board after notice of at least fifteen (15) days.

3. Notice shall be served either personally or by Certified Mail to the licensee's address of record and shall state the date, time and place of

hearing and set forth the charges against the licensee. In the event service cannot be made by certified mail, personal service shall be accomplished in such manner as is reasonably calculated to achieve actual service upon the licensee.

4. A licensee shall have the opportunity to present evidence and/or witnesses before the Board in person or by counsel. A record of the hearing shall be made. The Board shall issue a decision in writing denying or compelling suspension or revocation within thirty (30) days of the conclusion of the hearing. The suspension period shall not commence until at least 30 days after the mailing or delivery of the written decision, unless the licensee requests an earlier commencement date and there are no outstanding permits.

5. The duration of suspension of any license suspended pursuant to this section shall be as follows:

   (A) First Offense shall result in a warning or a suspension period of not more than ninety (90) days and shall continue until reinstated by order of the Board pursuant to paragraph 6 of this subsection.

   (B) Second Offense shall result in a suspension period of not more than one hundred and eighty (180) days and shall continue until reinstated by order of the Board pursuant to paragraph 6 of this subsection.

   (C) Subsequent Offenses shall result in revocation of the license, certificate or registration for a period of not less than one (1) year.

   Note: If the Board determines the particular violation charged is of such a major or aggravated nature that a license should be revoked, nothing in this subsection shall limit the Board's authority to do so regardless of whether there be any prior offenses or suspensions.

6. A suspended license shall be reinstated by order of the Board upon written request of the holder provided that said request is submitted to the Code Official not more than 30 days prior to or 180 days after the expiration of the suspension period and provided that the suspended license holder has complied with all requirements of the suspension.

7. A revoked license may be reinstated by order of the Board only upon application and examination, if required, and in the same manner as provided for new applicants.

SECTION 101B
REGISTERED FINANCIAL RESPONSIBILITY

101B.1 *When Registration Required.* Any company, corporation, partnership, joint venture, individual, or other business entity that performs work which requires a permit under this code, including those licensed and

exempted from licensing as specified in Section 101A.2.1, shall register proof of financial responsibility with the Code Official prior to issuance of a permit.

101B.2 *Registration not Required.* Registered financial responsibility shall not be required for the following work:

(A) Work exempted from licensure by Section 101A.2.1.7 above.

(B) Work exempted from licensure by Section 101A.2.1.1 above.

(C) Work exempted from licensure by Section 101A.2.1.12 above.

(D) Work exempted from licensure by Sections 101A.2.1.8 and 101A.3.2.A above.

101B.3 *Registration.* Proof of financial responsibility shall be demonstrated by filing and maintaining in the Department of Public Works an approved surety bond in the amount of $10,000.00 and a Certificate of Insurance for combined $500,000.00 minimum limits liability insurance for bodily injury and property damage. Owners or operators of amusement devices shall carry a minimum of $1,000,000.00 per occurrence general liability insurance as specified in Section 2201.6. The bonds and insurance required herein shall be approved by the City Attorney and shall be given for the faithful observance of this Code and all orders, rules and regulations adopted hereunder for the protection of the public health and safety and shall indemnify Chesterfield, Missouri or any other governmental agency, or any person, firm or corporation for any damage or injury sustained through the negligence or malfeasance of such applicant, their servants, agents or employees in performing work or for any damages or injury sustained due to such applicant's failure to perform work in a careful and workmanlike manner, in conformity with this Code and the orders, rules and regulations adopted hereunder or for the use of Chesterfield, Missouri due to non- payment of fees thirty (30) days from the due date, or for the use of any person, firm or corporation with whom said applicant contracts to do work to indemnify any such person, firm or corporation for damages sustained due to failure of applicant to do work so contracted.

101B.4 *Issuance, Expiration and Renewal of Registration.*

1. Registration of Licensed Entities: The Registration of a licensed entity shall run concurrently with the issuance, expiration and renewal of the license. The bond and insurance shall be maintained in place without interruption during the full period of the license.

2. The registration of unlicensed entities that hold a Financial Responsibility Registration Certificate must be renewed every three (3) years. The fee for such renewal shall be $75.00 and the Registration will remain effective for the three year period so long as the entity maintains the bond and insurance in place without interruption and the Registration is not suspended or revoked as identified in Section 101B.5.

3. The Registration of unlicensed entities that do not hold a Financial Responsibility Registration Certificate on the effective date of this Ordinance shall be issued for a three (3) year period. The fee for such registration and subsequent renewals (if any) shall be $75.00 and the Registration will remain effective for the three year period so long as the entity maintains the bond and insurance without interruption, and the Registration is not suspended or revoked as identified in Section 101B.5.

101B.5 *Suspension or Revocation of Registration.*

1. The Board of Examiners shall have the power to suspend or revoke the Registration of any entity pursuant to this Section on any of the following grounds:

   (A) Said Registration was obtained by fraud or misrepresentation.

   (B) Violation of any of the provisions of this code including working without required permits.

   (C) Procurement of permits for individuals who are not in the Registrant's employ or entities that are not registered.

   (D) Failure to protect the health, safety and welfare of the public by violating the expressed intent of this Code through irresponsibility, incompetence, neglect or wrongful intent.

   (E) Performance of work requiring a license under this Code without the required license.

2. No Registration shall be suspended or revoked until the licensee has been afforded an opportunity for a hearing before the Board after notice of at least fifteen (15) days.

3. Notice shall be served either personally or by certified mail, to the registrant's address of record and shall state the date, time and place of hearing and set forth the charges against the registrant. If notice cannot be served by certified mail, notice shall be served by such other manner as is reasonably calculated to achieve personal service upon the registrant.

4. A registrant shall have the opportunity to present evidence and/or witnesses before the Board in person or by counsel. A record of the hearing shall be made. The Board shall issue a decision in writing denying or compelling suspension or revocation within thirty (30) days of the conclusion of the hearing. The suspension period shall not commence until at least 30 days after the mailing or delivery of the written decision, unless the registrant requests an earlier commencement date and there are no outstanding permits.

5. The duration of suspension of any Registration suspended pursuant to this section shall be as follows:

(A) A first Offense shall result in a warning or a suspension period of not more than ninety (90) days and shall continue until reinstated by order of the Board pursuant to paragraph 6 of this subsection.

(B) A second Offense shall result in a suspension period of not more than one hundred and eighty (180) days and shall continue until reinstated by order of the Board pursuant to paragraph 6 of this subsection.

(C) Subsequent Offenses shall result in revocation of the Certificate of Registration for a period of not less than one (1) year.

Note: If the Board determines the particular violation charged is of such major or aggravated nature that a Registration should be revoked, nothing in this subsection shall limit the Board's authority to do so regardless of whether there be any prior offenses or suspensions.

6. A suspended Registration shall be reinstated by order of the Board upon written request of the holder provided that said request is submitted to the Code Official not more than 30 days prior to or 180 days after the expiration of the suspension period and provided that the suspended Registration holder has complied with all requirements of the suspension.

7. A revoked Registration may be reinstated by order of the Board only.

8. The holder shall surrender the Registered Financial Responsibility Certificate to the Code Official during the period of any suspension or revocation of the Registration.

9. Decisions of the Board are subject to judicial review pursuant to Chapter 536 R.S. Mo.

103.1 *Code Official.* The Code Official shall be the Director of Planning of Chesterfield, Missouri or the Director's duly authorized representative who is vested with executive and administrative authority to enforce all laws, ordinances and codes regulating construction, alteration, addition, repair, removal, demolition, use, location, occupancy and maintenance of all buildings and structures, electrical, plumbing, drain laying and mechanical systems pursuant to Chapter 07.

103.2 *Appointment.* - Deleted.

104.1.1 *Rule-making authority.* The Code Official shall have authority, as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code, to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules, copies of which shall be retained in the office of the Code Official, shall not have the effect of waiving structural or fire performance requirements

specifically provided for in this code or of violating accepted engineering practices involving public safety.

104.5 *Authority to Enter.* Upon presentation of proper credentials, the Code Official shall have the authority to enter at reasonable times any building, structure or premises to perform any duty imposed upon him by this code, subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the Code Official is authorized to pursue recourse as provided by law and the person who failed to provide entry will be subject to the penalties provided in this code.

104.5.1 *Interference with Code Official.* No person shall hinder, obstruct, resist, fail to provide entry at reasonable times or otherwise interfere with the Code Official in the performance of his official duties.

104.8 *Code Interpretations.* When the Code Official deems it appropriate, or at the request of the Building Commission, the Code Official shall be permitted to issue formal interpretations of the provisions of this code. A written record of all such code interpretations shall be maintained and subject to review and appeal in accordance with Section 109.

105.1.1 *Records of Modifications.* The application for modification and the final decision of the Code Official shall be in writing and shall be officially recorded with the application for the permit in the permanent records of the Department of Public Works. A copy of the application and the final decision shall be distributed to the Mechanical Code Review Committee and the Building Commission.

106.1.1 *Authorization to Proceed.* The Code Official shall be permitted to authorize the commencement of construction prior to issuance of a building or mechanical permit when it can be shown that (a) the project is in compliance with the applicable regulations of Chesterfield for that portion of the work to be performed, and (b) the applicant agrees to proceed at his own risk. All necessary inspections shall be performed as required by this code.

106.1.2 *Annual permit records.* - Deleted

106.3.1 *Construction Documents.* The application for permit shall be accompanied by four or more complete sets of construction documents prepared in accordance with Section 111 of this code. The Code Official is permitted to waive the requirements for filing construction documents when the scope of the work is of a minor nature. When the quality of the materials is essential for conformity to this code, specific information shall be given to establish such quality, and this code shall not be cited, or the term "Legal" or its equivalent used as a substitute for specific information.

106.3.3 *Time Limitation of Application.* An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been diligently pursued or a permit has been issued. However, the Code Official may grant one or more extensions

of time for additional periods not exceeding ninety (90) days each. A permit application extension fee in the amount specified in Chapter 1100 shall be paid for each additional extension period of 90 days beyond the initial 180 days allowed after the date of filing. An additional inspection fee may be charged for an inspection to verify that work has not been started prior to granting the extension. The extension shall be requested in writing and justifiable cause demonstrated. The Code Official shall notify those delinquent applicants in writing and give them fourteen (14) days notice prior to abandonment of the application and destruction of the plans.

106.3.4 *Transfers Prohibited.* The transfer of an application for mechanical permits from one location to another shall be prohibited. When relocation is necessary, the original application shall be canceled and a new application submitted.

106.4 *Permit Issuance.* The Code Official shall examine or cause to be examined all applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of all pertinent laws, the Code Official shall notify the applicant in writing of all such deficiencies. If the Code Official is satisfied that the proposed work conforms to the requirements of this code and all laws and Ordinances applicable thereto, the Code Official shall issue a permit therefor as soon as practicable.

106.4.1.1 *Compliance with construction documents.* Work shall be installed in accordance with the approved construction documents. Any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

106.4.3 *Expiration.* Every permit issued shall become invalid unless the work commences within 180 days after permit issuance or if the work on the site authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The Code Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. Each extension shall be requested in writing and justifiable cause demonstrated.

106.4.4 *Extensions.* Mechanical Permits may be extended at any time up to thirty days prior to the expiration date of the specific permit.

106.4.9 *Separate Permits.* Permit applicants shall be permitted to submit separate applications for building, mechanical, electrical, or plumbing permits. As a condition of approval the owner or owner's agent shall agree to assume full responsibility for the coordination of all applicable code requirements relating to these permits.

106.4.10 *Additional Approval Requirements.* Prior to issuing any permit, approvals shall be obtained from the following departments when applicable: The St. Louis County Department of Public Health and the Metropolitan St.

Louis Sewer District. Missouri Department of Transportation approval must be submitted when property developed fronts on right-of-way controlled by the State of Missouri.

106.4.11 *Addendums to Permits.* Once a permit is issued all addendums submitted as an amendment to the approved construction documents shall be charged an additional review fee as specified in Chapter 1100, SLCRO 1974 as amended and in accordance with this code.

106.4.12 *Integrated Permits.* The Code Official shall be permitted to issue integrated building, plumbing, electrical and/or mechanical permits on a single permit application.

106.4.12.1 *Applicant Responsibility.* The integrated permit applicant shall be responsible for the return to the Department of Public Works copies of the plumbing, electrical and/or mechanical permit form with the name, signature and license number of the appropriate sub-contractor. Any change in the identity of the named sub-contractor after issuance of the permit shall result in the assessment of a transfer fee in the amount specified in Chapter 1100, SLCRO 1974 as amended.

106.4.13 *Approval of Part.* The Code Official is authorized to issue a permit for a portion of the mechanical work to be performed for a particular project, provided that adequate information and detailed statements have been filed complying with all of the pertinent requirements of this code. The holder of such permit for a portion of the mechanical work shall proceed, at the holder's own risk, with the building operation and without assurance that a permit for the entire mechanical project will be granted.

106.4.14 *Existing Violations.* If the Code Official determines that an applicant for a permit governed by this code has failed to pay any permit fees or related charges, the Code Official shall not issue such permit until the applicant pays such fees and related charges. If the Code Official determines that an applicant has failed to correct violations of this code, the Code Official shall not issue permits related to this code to such applicant except to correct such violations.

106.4.15 *Federal, State or other public entities.* The Code Official may withhold issuance of a permit for any facility or site if any Federal, State or other public entity determines that such facility or site is in violation of any code or regulation of such entity.

106.4.16 *Emergency and Disaster Work.* In the event of emergency, as defined in this code, work may begin by securing permission from the Code Official upon condition that written application be filed with the Code Official the next working day. The application shall describe in detail the nature of such work and shall state the location thereof. In the event of a disaster, as defined in this code, no work shall begin on a mechanical system unless the Code Official issues the appropriate permit.

106.5 *Fees.* The fees for plan examinations, filing fee, permits and inspection pursuant to this code shall be charged at the rate specified in Chapter 1100, SLCRO 1974 as amended, and shall be paid to the Treasurer of St. Louis County.

106.5.1 *Fees for Amending Permits.* After a permit has been issued and an amendment or supplemental revision is applied for, the fee or service charge shall be as follows:

(A) All amendments, which involve additional work not originally applied for to complete the project, shall be charged the appropriate fee for the additional work calculated in the normal manner plus the partial permit fee. The minimum fee shall be as established in Chapter 1100, SLCRO 1974 as amended.

(B) All amendments or supplements not involving additional work shall be charged a minimum fee or service charge even though the scope of the work may be reduced. See Chapter 1100, SLCRO 1974 as amended for the amount of the service charge.

106.5.2 *Partial Permit Fee.* The fee for a partial permit as described in this code shall be charged in addition to the permit fee as normally computed for that part of the work involved. See Chapter 1100, SLCRO 1974 as amended for amount of fees.

106.5.3 *Permit Extension Fee.* Permits that are extended in accordance with this code are charged an extension fee at the rate prescribed in Chapter 1100, SLCRO 1974 as amended.

106.5.4 *Board of Appeals Filing Fee.* All appeals filed for review by the Board of Appeals under the procedures described in this code are to be accompanied by a filing fee as prescribed in Chapter 1100, SLCRO 1974 as amended.

106.5.5 *Subcontractor Transfer Fee.* A transfer fee shall be charged whenever a subcontractor is replaced by another subcontractor. The amount of the transfer fee shall be at the rate prescribed in Chapter 1100, SLCRO 1974 as amended.

106.5.6 *Extra Inspection Fee.* An extra inspection fee shall apply for each preliminary inspection required and for each re-inspection that the Code Official must perform due to noncompliance with the approved development or site plans, construction documents or the applicable requirements of this code or work not ready or accessible for inspection when requested. The amount of such extra inspection fee shall be as prescribed in Chapter 1100, SLCRO 1974 as amended.

(A) *Work Not Commenced, Suspended or Abandoned:* An extra inspection fee may be charged for each inspection made to determine the status of a project when work is not commenced, or is suspended or abandoned, for more than six months.

106.5.7 *Refunds.* In the case of revocation of a permit no refund shall be permitted. Any excess fee for the incomplete work on abandoned or discontinued projects shall be returned to the permit holder upon written request received not later than twelve (12) months after the date the permit was issued. All plan examination and permit processing fees and all penalties that have been imposed upon the permit holder under the requirements of this code shall be deducted from the refund or paid by the permit holder prior to any refund being issued.

106.5.8 *Disaster Damage Repair Permit Fees.* The Code Official may reduce or waive mechanical permit fees for repairs related to a disaster as defined in this code if the permit is issued within 90 days after the end of a disaster, as determined by the Code Official, and authorizes the work indicated therein to be completed within one year of the date of issuance. The Code Official may extend the 90 day period if the Code Official determines that just cause exists.

107.1 *General.* Work for which a permit is required shall be subject to inspection by the Code Official and such work shall remain accessible and exposed for inspection purposes until approved. Neither the Code Official nor the City or any other jurisdiction shall be liable for any expenses entailed in the removal or replacement of any material required to allow full inspection. All work shall be installed in accordance with the approved construction documents. Any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid.

107.2.2 *Inspection requests.* It shall be the duty of the holder of the permit or their duly authorized agent to notify the Code Official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code. Failure of the permit holder to request and obtain required inspections shall constitute a violation of this code.

107.7 *Periodic Inspections.* Periodic inspections shall be made by the Code Official of all equipment and devices listed in Table 107.7 at the frequency specified in Table 107.7, or at such other times as the Code Official shall deem appropriate. Fees for inspections shall be paid by the owner of such equipment or devices in accordance with Chapter 1100, SLCRO 1974 as amended.

Table 107.7 Periodic Mechanical Inspection Frequencies

Item	Frequency	Remarks

Air filtration systems required to maintain indoor air quality	Annually	Engineered systems specifically approved to allow reduced outdoor air quantities
Amusement Devices, Kiddie Rides and concessions		
Permanent Location	Twice during season	
Not Permanent	Whenever relocated	
Auto Lifts	Annually	
Boilers	Annually	R-2 and R-3 residential heating boilers are exempted
Conveyors, Power Operated	Annually	
Crematories	Annually	
Dumbwaiters Power Operated over 100 lb. capacity	Annually	
Elevators - Freight and Passenger, Man lifts, Moving Stairways and Chairlifts	Not less than annually, up to three times per year, at the discretion of the Code Official	An elevator mechanic is required to perform tests witnessed by a qualified County Inspector during a Comprehensive Annual Elevator Inspection that meets both County and State obligations.
Emergency Generator	Annually	
Hoists	Annually	

Incinerators	Annually	Class IA and domestic are exempted
Kitchen Exhaust Systems	Semi-Annually	Domestic systems within individual dwelling units are exempted.
Miscellaneous Equipment	Annually	
Moving Walks	Annually	
Paint Spray Booth Exhaust Systems	Annually	
Pressure Vessels with Manhole	Annually	
Unfired Pressure Vessels (Air Compressors)	Annually	
Water Heaters and/or Storage Tanks of 120 Gallons or More	Annually	

107.8 *Additional Inspections.* In addition to the required inspections specified above, the Code Official may make other inspections, which in his judgment are reasonably necessary to enforce this code. The Code Official shall have the authority to inspect any construction work to verify compliance with this code and to properly enforce the rules promulgated pursuant to this code. Fees for additional inspections shall be as specified in Chapter 1100, SLCRO 1974 as amended.

107.9 *Extra Inspections.* In addition to the inspections otherwise required the Code Official is authorized to perform extra inspections or re-inspections which in his judgment are reasonably necessary due to non-compliance with Mechanical Code requirements, or work not ready or accessible for inspection

when requested. Fees for extra inspections shall be as specified in Chapter 1100, SLCRO 1974 as amended.

107.10 *Special or Qualified Inspectors.* Whenever a special or qualified inspection has been made by an insurance company or special inspector, the owner or user of equipment shall pay a certification fee as prescribed in Chapter 1100, SLCRO 1974 as amended, in lieu of the prescribed fees set forth in this code. A copy of the special or qualified inspection report dated not more than 90 days prior to the scheduled certificate month shall be transmitted to the Code Official not less than 60 days before the first day of the scheduled certificate month. Upon receipt of payment of the proper fees, the Code Official shall issue a certificate evidencing that said equipment has been inspected in accordance with the provisions of this code.

107.10.1 *Special Inspectors.* Insurance inspectors or special inspectors of mechanical equipment, such as air conditioning and cooling towers, boilers, unfired pressure vessels, hot water heaters, elevators and escalators, shall apply for a Certificate of Competency issued by the Department of Transportation and Public Works. Upon receipt of the proper application, a photostatic copy of their National Board Certificate, and a fee as prescribed in Chapter 1100, SLCRO 1974 as amended, the applicant shall be issued a Certificate of Competency, valid for one year from date of issue, and renewable annually prior to the anniversary date. If the holder of the Certificate of Competency should change his employment, a new certificate shall be issued without charge upon receipt of a request by letter, stating the change of employment, and his proper certificate. The inspection certificate shall be current for the year in which inspections are made.

107.11 *Duty to Request Final Inspection.* Upon completion of the work described in the permit application, the permit holder shall request and obtain a final inspection before any occupancy of the structure except as provided in Section 111 of the Building Code, Chapter 1115 SLCRO 1974 as amended. Failure of the permit holder to request and obtain a final inspection before occupancy will constitute a violation of this code.

108.2 *Notices of Violation.* When the Code Official determines that a violation of this code exists, the Code Official shall notify the violator as soon as practicable. The notification shall be in writing and shall be hand-delivered to the violator or his legally authorized representative or mailed to his last known address via certified mail, or served in such manner as is reasonably calculated to achieve personal service upon the violator. Any person having been notified that a violation exists by means other than a stop work order and who fails to promptly abate the violation after notification shall be subject to the penalties enumerated in this code. If a permit has been issued, the permit holder shall be notified of any violations of the approved construction documents or permit and the notice shall set forth the discrepancies.

108.4 *Violations and Penalties.* A person, firm or corporation is in violation of this code if they:

1. Fail to comply with any of the requirements thereof; or
2. Erect, construct, alter, occupy, or repair a structure in violation of the approved construction documents, a directive of the Code Official or a permit or certificate issued under the provisions of this code; or
3. Start any work requiring a permit without first obtaining such permit; or
4. Continue any work in or about a structure after having been served a stop work order, except for such work which that person, firm or corporation has been directed to perform to remove a violation or unsafe condition; or
5. Maintain any structure or premises in which a violation exists; or
6. Fail to request a required inspection after a permit is issued.

A violation of this code may be punishable by a fine of not more than $1,000 or by imprisonment not exceeding 90 days or by both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

108.4.1 *No-permit and no-inspection request penalties.* In addition to the penalties set out above, the following procedure shall be followed where the Code Official determines that work has been started prior to the acquisition of a permit required by this code or when the permit holder failed perform due diligence as per Code Official's Policy in attempting to schedule the required inspection:

1. The Code Official shall issue a stop work order when work requiring a permit was started prior to the acquisition of that permit. The Code Official shall issue a Notice of Violation when a required inspection was not requested.
2. The Code Official shall notify the violator of the penalty amount to be assessed against the violator. A no-permit penalty shall not exceed the greater of $500 or 1 percent of the cost of construction of the work involved up to a maximum of $1,000. A no-inspection request penalty shall not exceed $500.

   In making the assessment, the Code Official shall consider whether the violator has previously violated this code and whether the occupation or experience of the violator indicates that the violator knew or should have known that a permit or inspection was required. In no case will a penalty be assessed against a property owner unless the property owner actually performed the work involved.

If 180 days has transpired since the last inspection on record or if the permit has automatically expired, a permit extension fee shall be added to a no-inspection request penalty amount.

3. The stop work order for failure to obtain a permit or the violation for failure to request an inspection shall remain in full force and effect until such time as the penalty amount is paid and the violator has complied with all other regulations pertaining to the issuance of the required permit, or requested the required inspection.

   At the violator's option, the violator may place the assessed penalty amount in escrow (by certified check or cash only) with the Department of Transportation and Public Works and the violator's right to an appeal is preserved.

4. No-permit and no-inspection request penalties are appealable to the Board of Appeals in the same manner as other decisions of the Code Official. The Code Official may revise the assessment upon notice to both the Board of Appeals and the alleged violator at any time prior to the hearing. At any time prior to the hearing, the violator may accept and pay the assessed penalty amount and the hearing will be canceled.

   At the hearing before the Board of Appeals, said board shall afford both the Code Official and the alleged violator an opportunity to present any evidence or make any statements they wish to have considered.

   Following the hearing, the Board of Appeals shall determine whether a permit or inspection was required:

4.1. If the Board of Appeals determines that a permit or inspection was required, an appropriate penalty amount shall be assessed, taking into account the same considerations as noted in 108.4.1. The stop work order for failure to obtain a permit or the violation for failure to request an inspection shall remain in full force and effect until such time as the penalty amount is paid and the violator has complied with all other regulations pertaining to the issuance of the required permit, or requesting the required inspection.

4.2. If the Board of Appeals determines that a permit or inspection was not required, the Code Official shall immediately cancel the stop work order for failure to obtain a permit or abate the no-inspection request violation. Any associated penalty assessment amount held in escrow shall be released.

108.4.2 *No-Certificate Penalty.* In addition to the penalties set out under 108.4.1, the following procedure shall be followed where the Code Official determines that no certificate has been issued for equipment requiring periodic inspection as noted in Section 107.7, a re-inspection failure, or for failure to pay a Mechanical Invoice for a periodic inspection.

1. The owner of equipment shall submit to the Code Official in writing, within 30 days of re-inspection failure, the reason the equipment is in a failed status and a plan to remedy the failure. No penalty will be assessed if the plan is approved by the Code Official. If the failure is not remedied in accordance with the approved plan a penalty will be assessed.

   The Code Official shall notify the violator of his decision regarding the appropriate penalty amount to be assessed against the violator, which shall not exceed $250.00. If equipment continues to remain in a failed status after 30 days from the official notification of penalty, the equipment will be deemed unsafe for use and shall be removed from service.

108.5 *Stop Work Orders.* Upon notice from the Code Official that mechanical work is being done contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Code Official shall not be required to give a written notice prior to stopping the work.

108.5.1 *Unlawful Continuance.* Any person who fails to obtain permits when required, fails to request a required inspection, or continues any work in or about the structure or premises after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as specified in this code.

108.7.4 *Temporary Safeguards.* When, in the opinion of the Code Official, there is imminent danger due to an unsafe condition, the Code Official shall cause the necessary work to be done to render such structure temporarily safe, whether or not the legal procedure herein described has been instituted.

108.8 *Closing Streets.* When necessary for the public safety, the Code Official shall temporarily close structures and close, or order the authority having jurisdiction to close, sidewalks, streets, public ways and places adjacent to unsafe structures, and prohibit the same from being used.

108.9 *Emergency Repairs.* For the purposes of this section, the Code Official shall employ the necessary labor and materials to perform the required work as expeditiously as possible.

108.10 *Costs of Emergency Repairs.* Costs incurred in the performance of emergency work shall be paid from the treasury of the jurisdiction on approval of the Code Official. The legal counsel of the jurisdiction shall institute appropriate action against the owner of the premises where the unsafe structure is or was located.

108.11 *Unsafe Equipment.* Equipment deemed unsafe by the Code Official shall not be operated after the date stated in the notice unless the required repairs or changes have been made and the equipment has been approved, or unless an extension of time has been secured from the Code Official in writing.

108.11.1 *Authority to Seal Equipment.* In the case of an emergency, the Code Official shall have the authority to seal out of service immediately any unsafe device or equipment regulated by this code.

108.11.2 *Unlawful to Remove Seal.* Any device or equipment sealed out of service by the Code Official shall be plainly marked with a sign or tag indicating the reason for such sealing. The sign or tag shall not be tampered with, defaced or removed except by the Code Official.

109.1 *Application for Appeal.* Any person aggrieved by any decision, ruling or order of the Code Official or the Board of Examiners may appeal to the Board of Appeals pursuant to the procedures set out in Chapter 1115, SLCRO, 1974 as amended. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent form of construction is to be used.

109.1.1 *Limitation of Authority.* - Deleted

109.2 *Membership of Board.* The Board of Appeals shall consist of the five members of the St. Louis County Building Commission as set forth in the St. Louis County Charter.

109.2.1 *Qualifications.* - Deleted

109.2.2 *Alternate Members.* - Deleted

109.2.3 *Chairman, Vice Chairman and Secretary.* The Board shall select one of its members to serve as chairman, one to serve as vice-chairman, and the Code Official shall designate a representative of the Department to serve as Secretary to the Board, who shall keep a detailed record of all proceedings on file in the Department.

109.2.5 *Secretary.* - Deleted

109.3 *Notice of Hearing on Appeal.* The Board shall meet and shall give notice of all appeals in accordance with the procedures set forth in Chapter 1115, SLCRO 1974 as amended.

109.4.1 *Procedure.* Hearings shall be conducted in accordance with the procedures set forth in Chapter 1115, SLCRO 1974 as amended.

109.5 *Postponed Hearing.* When a quorum is not present to hear an appeal, the hearing shall be postponed in accordance with the procedures set forth in Chapter 1115 SLCRO 1974 as amended.

109.6 *Board Decision.* The Board shall render a decision in accordance with the procedures set forth in Chapter 1115, SLCRO 1974 as amended.

109.6.1 *Notification of Decision.* The Secretary of the Board shall notify the appellant of the decision of the Board in writing in a timely manner.

109.7 *Judicial Review.* Decisions of the Board of Appeals are subject to judicial review pursuant to Chapter 536 RSMo.

SECTION 111
PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

111.1 *General.* The construction documents for new construction, alteration, repairs, expansion, addition or modification of mechanical systems shall be prepared by a registered design professional. All construction documents shall be prepared by the appropriate registered design professional consistent with the professional registration laws of the State of Missouri. The construction documents shall include the name and address of the registered design professional and shall be signed, sealed and dated by the registered design professional in accordance with this code.

Exceptions:

1. Construction documents for mechanical systems in single-family dwellings that are designed by and signed by the owner of the proposed building. Such buildings shall be built for the exclusive occupancy by the owner for a period of at least one year. The Code Official may request that a registered design professional participate in the design and/or preparation of construction documents when the owner prepared documents are not comprehensive and complete or when engineering expertise is necessary to verify compliance with this code.
2. Miscellaneous structures related to buildings of the R-3 and R-4 Use Groups, such as room additions, carports, garages, sheds and other similar structures.
3. Work of a minor nature approved by the Code Official.
4. Construction documents for pre-engineered wet and dry chemical fire suppression systems.
5. Construction documents for the installation of aboveground or in-ground hydraulic auto lifts that bear the label of an approved agency.
6. Construction documents for the relocation of less than 5 automatic sprinkler heads.
7. Relocation of ceiling supply and return air diffusers without a change of occupancy.
8. Replacement of commercial rooftop units, if unit has similar design capacities and no additional structural load is applied to the roof.
9. Walk-in cooler or freezer units.

111.2 *Application of Seals.* All construction documents submitted with an application for a permit shall bear an original embossed or wet ink seal, the date and original signature of the registered design professional for each discipline on the front sheet of each discipline within each set of construction documents or on the cover sheet of each set of construction documents.

In addition, all other sheets of the construction documents other than specifications or calculations shall bear the original embossed, wet ink, or mechanically reproduced seals of the registered design professional. Any addenda or modifications submitted for changes to the construction documents shall also bear an original seal and signature of the registered design professional. Such changes shall be clearly indicated.

1108.200 - Amendment to International Mechanical Code—Chapter 2 Definitions.

—Chapter 2 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

SECTION 202.0
GENERAL DEFINITIONS

Additional Inspection : An inspection which is not otherwise required by this code, but which in the judgment of the Code Official is reasonably necessary to enforce this code.

Board of Appeals: The St. Louis County Building Commission created in the St. Louis County Charter.

Building Commission: The St. Louis County Building Commission created in the St. Louis County Charter.

Code Official: The Director of Planning or the Director's duly authorized representative.

Department: The Department of Planning.

Disaster: A disaster shall include but not necessarily be limited to flood, windstorm, tornado, severe storm, earthquake, bomb blast, explosion or similar natural or man-made type event. The Code Official shall make the determination whether an event shall be declared a disaster.

Emergency: An event or occasion that requires immediate action in order to preserve or restore the public peace, health, safety or welfare.

Extra Inspection: An inspection, which is required as a result of unusual or complicated construction and/or is defined as an inspection, which is made as a result of non-compliance, not ready, or lockout.

Owner: Any person, agent, firm or corporation having a legal or equitable interest in the property.

Public Health Department: The St. Louis County Department of Public Health.

Transportation: The St. Louis County Department of Transportation and Public Works.

1108.300 - Amendment to International Mechanical Code—Chapter 3 General Regulations.

—Chapter 3 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

301.3 *Identification.* - Delete.

301.4 *Plastic pipe, fittings and components.* - Delete.

301.5 *Third-party testing and certification.* - Delete.

305.3 *Structural Attachment.* Hangers and anchors shall be attached to the building construction in a manner approved by a registered design professional.

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. Condensate shall not discharge into a street, alley or other area so as to cause a nuisance. Condensate from roof mounted equipment shall be discharged as follows:

1. Condensate shall be piped directly to the roof surface and shall be discharged a minimum of 15 feet away from the fresh air inlet to the unit, any operable window or any other fresh air intake to the building.
2. Condensate shall be piped to a section of roof that slopes to the roof drain, gutter or scupper and does not pool. At no time shall the open condensate drainage across the roof come within 15 feet of any operable window or any fresh air intake to the building.
3. Condensate may be piped directly to a roof drain or roof gutter.
4. Condensate piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth inch per foot.

307.2.3.1 Deleted

307.2.4.1 *Ductless mini-split system traps.* Ductless mini-split equipment that produces condensate and is equipped with a pump, shall be provided with an inline check valve located in the drain line, or a trap.

312.1.1 *Design Conditions.* Calculations for sizing HVAC equipment shall use the following minimum design parameters for Chesterfield:

	Outdoor temperature	Indoor temperature
WINTER	DB 2 F	DB 72 F
SUMMER	DB 95 F	DB 75 F
	WB 76 F	

312.1.2 *Air Conditioning Design Conditions.* Where air conditioning is provided in the following occupancies, it shall be designed in accordance with the specified design conditions listed in Section 312.1.1.

1. private dwellings, single or multiple, and hotel rooms
2. offices and conference rooms
3. customer areas in food and beverage service
4. customer areas in retail stores and specialty shops

1108.400 - Amendment to International Mechanical Code—Chapter 4 Ventilation.

—Chapter 4 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

401.2 *Ventilation Required.* Every occupied space shall be ventilated by mechanical means in accordance with Section 403 except where ventilation by natural means in accordance with Section 402 is otherwise allowed by Sections 401.2.1 through 401.2.5. Operable windows are not prohibited where

ventilation by mechanical means is required, but cannot be used to satisfy the ventilation requirements.

Exception: Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407.

401.2.1 *General Requirements for Group R Occupancies.*

1. Rooms or spaces containing water closets, showers, hot tubs or spas shall be equipped with a means of mechanical exhaust which discharges to the outside.
2. Kitchens shall be equipped with a means of mechanical exhaust directly over or adjacent to a range or cook top. The mechanical exhaust system may be of the recirculating type or may exhaust directly to the outside. Recirculating systems shall be equipped with the appropriate filtration for grease removal and odor control, and must be capable of operating in a moist environment. Either type of system shall be a listed exhaust system. With either type, the mechanical exhaust systems shall be allowed to run on an intermittent basis. Provisions for makeup air shall be in accordance with Section 505.2.
3. Enclosed common core areas of all multi-family dwellings shall be provided with continuous mechanical ventilation. Any areas within the common core that require exhaust shall be provided with continuous mechanical exhaust. The mechanical ventilation must offset the mechanical exhaust requirements.
4. Where either natural or mechanical ventilation is allowed, the required ventilation shall be provided entirely by one or the other method.

401.2.2 *Occupancy Group R1.* The required ventilation for all Occupancy Group R1 buildings shall be provided with continuous mechanical ventilation and continuous mechanical exhaust. Mechanical ventilation and exhaust systems shall conform to the ventilation and exhaust requirements of this code.

Exception: Occupancy Group R1 buildings where each guest room unit has at least one door opening directly to an exterior exit access which leads directly to the exit, may have the required ventilation provided by natural ventilation with operable windows, or by mechanical ventilation. Each guest room's toilet/bath/shower/spa areas shall be provided with mechanical exhaust. The operation of the exhaust system may be on an intermittent basis. Natural ventilation in accordance with Section 402 is not permissible in a dwelling unit where the air infiltration rate is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) in accordance with Section R402.4.1.2 of the International Energy Conservation Code.

401.2.3 *Occupancy Group R2.* The required ventilation for all Occupancy Group R2 buildings may be provided by natural ventilation with operable windows or by means of mechanical ventilation. Each toilet, bath, shower, spa, or similar area shall be provided with mechanical exhaust. The operation of the exhaust system may be on an intermittent basis. Natural ventilation in accordance with Section 402 is not permissible in a dwelling unit where the air infiltration rate is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) in accordance with Section R402.4.1.2 of the International Energy Conservation Code.

401.2.4 *Occupancy Group R3.* The required ventilation for all Occupancy Group R3 buildings may be provided by natural ventilation with operable windows or by means of mechanical ventilation. Each toilet, bath, shower, spa, or similar area shall be provided with mechanical exhaust. The operation of the exhaust system may be on an intermittent basis. Natural ventilation in accordance with Section 402 is not permissible in a dwelling unit where the air infiltration rate is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) in accordance with Section R402.4.1.2 of the International Energy Conservation Code.

401.2.5 *Occupancy Group R4.* The required ventilation for all Occupancy Group R4 buildings may be provided by natural ventilation with operable windows, or by means of mechanical ventilation. Each toilet, bath, shower, spa, or similar area shall be provided with mechanical exhaust. The operation of the exhaust system may be on an intermittent basis. Natural ventilation in accordance with Section 402 is not permissible in a dwelling unit where the air infiltration rate is less than 5 air changes per hour when tested with a blower door at a pressure of 0.2-inch water column (50 Pa) in accordance with Section R402.4.1.2 of the International Energy Conservation Code.

401.8 *Moisture sources.* Rooms containing bathtubs, showers, spas and similar bathing fixtures or other sources of excessive moisture shall be mechanically ventilated in accordance with Section 403.

1108.500 - Amendment to International Mechanical Code—Chapter 5 Exhaust Systems.

—Chapter 5 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

502.1.1 *Exhaust Location.* The inlet to an exhaust system shall be located in the area of heaviest concentration of contaminants. It shall be the responsibility of the registered design professional to determine the location, number, and manner that exhaust is collected.

504.8.7 *Multiple Dryers.* Multiple domestic dryers shall not be connected to a single exhaust system unless designed by a registered design professional.

504.10 *Common Exhaust Systems for Clothes Dryers Located in Multistory Structures.* Where a common multistory duct system is designed and installed to convey exhaust from multiple clothes dryers, 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 International Building Code.
2. Dampers shall be prohibited in the exhaust duct. 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. An approved means for cleanout shall be provided at each offset in ductwork installed in shafts.
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.
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. Makeup air shall be provided for the exhaust system.
10. A cleanout opening shall be located at the base of the shaft to provide *access* to the duct to allow for cleaning and inspection. The finished opening 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 multistory duct system shall serve only clothes dryers and shall be independent of other exhaust systems.

505.2 *Makeup Air Required.* Exhaust hood systems capable of exhausting in excess of 600 cfm shall be provided with makeup air at a rate approximately equal to the exhaust air rate. 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.

505.3 *Common exhaust systems for domestic kitchens located in multistory structures.* Where a common multistory duct system is designed and installed to convey exhaust from multiple domestic kitchen exhaust systems, 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 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 600 cfm (0.29 m^3/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 multistory duct system shall serve only kitchen exhaust and shall be independent of other exhaust systems.

506.1 *General.* Commercial kitchen hood ventilation ducts and exhaust equipment shall comply with the requirements of this section. Commercial kitchen grease ducts shall be designed for the type of cooking appliance and hood served. All kitchen exhaust equipment shall be installed in accordance with NFPA 96 listed in Chapter 15.

506.2 *Corrosion protection.* Ducts exposed to the outside atmosphere or subject to a corrosive environment shall be protected against corrosion in a manner compatible with the material of duct construction to protect against premature failure.

507.3.7.2 *Cleaning Schedule.* The owner or occupant shall maintain a cleaning schedule on the premises for each commercial kitchen exhaust system. The schedule shall be available to the inspector and shall indicate methods of cleaning and time intervals between cleanings.

506.3.8.1 *Personnel Entry.* Where ductwork is 22 inches by 20 inches or greater, not less than one approved or listed opening having dimensions not less than 22 inches by 20 inches (559 mm by 508 mm) shall be provided in the horizontal sections, and in the top of vertical risers. Where such entry is provided, the duct and its supports shall be capable of supporting the additional load, and the cleanouts specified in Section 506.3.8 are not required.

507.1 *General.* Commercial kitchen exhaust hoods shall comply with the requirements of this section. Hoods shall be Type I or Type II and shall be designed to capture and confine cooking vapors and residues. A Type I or Type II hood shall be installed at or above all commercial cooking appliances in accordance with Sections 507.2 and 507.3. Where any cooking appliance under a single hood requires a Type I hood, a Type I hood shall be installed. Where a Type II hood is required, a Type I or Type II hood shall be installed. Where a Type I hood is installed, the installation of the entire system, including the hoods, ducts, exhaust equipment and makeup air system shall comply with the requirements of Sections 506, 507, 508, and 509. All kitchen exhaust hoods and cooking equipment shall be installed in accordance with NFPA 96 listed in Chapter 15.

Exceptions:

1. Factory-built commercial exhaust hoods which are listed and labeled in accordance with UL 710, and installed in accordance with Section 304.1 shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8,507.3.1, 507.3.3, 507.4, and 507.5.
2. Factory-built commercial cooking recirculating systems which are tested in accordance with UL 710B, and installed in accordance with Section 304.1 shall not be required to comply with Sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4, and 507.5. Spaces in which such systems are located shall be considered to be kitchens and shall be ventilated in accordance with Table 403.3.1.1. For the purpose of determining the floor area required to be ventilated, each individual *appliance* shall be considered as occupying not less than 100 square feet (9.3 m^2).
3. Where cooking appliances are equipped with integral down-draft exhaust systems and such appliances and exhaust systems are listed and labeled for the application with NFPA 96, a hood shall not be required at or above them.

507.2 *Type I hoods.* Type I hoods shall be installed where cooking appliances produce grease or smoke as a result of the cooking process. Type I hoods shall be installed over medium-duty, heavy-duty, and extra-heavy-duty cooking appliances.

Exceptions:

1. A Type I hood shall not be required for an electric cooking appliance where an approved testing agency provides documentation that the appliance effluent contains 5 mg/m ^{3} or less of grease when tested at an exhaust flow rate of 500 cfm (0.236 m ^{3} /s) in accordance with UL 710B.

2. The installation of a domestic cooking appliances in a commercial building such as a residential range, that is capable of producing grease or smoke, primarily intended for warming and the code official believes the frequency of use to be minimal must comply with Section 505 and be protected by a listed automatic range top fire suppression system or comply with Section 509. This exception does not apply to Use Group or Occupancy Types A, E, and I for their primary cooking operations.

507.3 *Type II Hoods.* Type II hoods shall be installed above dishwashers and appliances that produce heat or moisture and do not produce grease or smoke as a result of the cooking process, except where the heat and moisture loads from such appliances are incorporated into the HVAC system design or into the design of a separate removal system. Type II hoods shall be installed above all appliances that produce products of combustion and do not produce grease or smoke as a result of the cooking process. Spaces containing cooking appliances that do not require Type II hoods shall be provided with exhaust at a rate of 0.70 cfm per square foot (0.00033 m ^{3} /s). For the purpose of determining the floor area required to be exhausted, each individual appliance that is not required to be installed under a Type II hood shall be considered as occupying not less than 100 square feet (9.3 m ^{2}). Such additional square footage shall be provided with exhaust at a rate of 0.70 cfm per square foot (0.00356 m ^{3} /(s x m ^{2})).

Exceptions:

1. Under-counter-type commercial dishwashing machines.

507.4.1 *Canopy Size and Location.* The inside lower edge of canopy-type Type I and II commercial cooking hoods shall overhang or extend a horizontal distance of not less than 6 inches (152 mm) beyond the edge of the top horizontal surface of the appliance on all open sides. Hoods over enclosed cooking appliances and dishwashers shall overhang horizontally a minimum of 6 inches on all sides which have openable doors. The vertical distance between the front lower lip of the hood and the cooking surface shall not exceed 4 feet (1219 mm).

Exception: The hood shall be permitted to be flush with the outer edge of the cooking surface where the hood is closed to the appliance side by a noncombustible wall or panel.

508.1.3 *Separate Makeup Air Unit.* A separate makeup air unit shall be provided when the volumetric rate of exhaust exceeds 1000 cfm or when the air balance within the kitchen area cannot be achieved by using existing equipment.

Exception: Makeup air that is part of the air conditioning system and dedicated to the kitchen area.

508.2 *Compensating Hoods.* Manufacturers of compensating hoods shall provide a label indicating minimum exhaust flow and/or maximum makeup airflow that provides capture and containment of the exhaust effluent.

Exception: Compensating hoods with *makeup air* supplied only from the front face discharge and side face discharge openings shall not be required to be labeled with the maximum makeup airflow.

509.1 *Where Required.* Commercial cooking appliances required by Section 507.2.1 to have a Type I hood shall be provided with an approved automatic fire suppression system complying with the International Building Code, the International Fire Code, and Sections 509.2 through 509.2.6.

509.1.1 Existing commercial food heat processing appliances that produce grease laden vapors or smoke, such as occurs with griddles, fryers, broilers, open and conveyor type ovens, ranges and wok ranges shall be provided with an approved automatic fire suppression system complying with the International Building Code, the International Fire Code, and Sections 509.2 through 509.2.6.

(F) 509.2 *Commercial Cooking Systems.* The automatic fire-extinguishing system for commercial cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems of the type and arrangement protected. Preengineered automatic dry- and wet-chemical extinguishing systems shall be tested in accordance with UL 300 and listed and labeled for the intended application. Other types of automatic fire-extinguishing systems shall be listed and labeled for specific use as protection for commercial cooking operations. The system shall be installed in accordance with this code, its listing and the manufacturer's installation instructions. Automatic fire-extinguishing systems of the following types shall be installed in accordance with the referenced standard indicated, as follows:

1. Carbon dioxide extinguishing systems, NFPA 12.
2. Automatic sprinkler systems, NFPA 13.
3. Foam-water sprinkler system or foam-water spray systems, NFPA 16.
4. Dry-chemical extinguishing systems, NFPA 17.
5. Wet-chemical extinguishing systems, NFPA 17A.

Exception: Factory-built commercial cooking recirculating systems that are tested in accordance with UL710B, and listed, labeled and installed in accordance with Section 304.1 of the International Mechanical Code.

(F) 509.2.1 *Manual System Operation.* A manual actuation device shall be located at or near a means of egress from the cooking area a minimum of 10 feet (3048 mm) and a maximum of 20 feet (6096 mm) from the kitchen exhaust

system. The manual actuation device shall be installed not more than 48 inches (1200 mm) nor less than 42 inches (1067 mm) above the floor and shall clearly identify the hazard protected. The manual actuation shall require a maximum force of 40 pounds (178 N) and a maximum movement of 14 inches (356 mm) to actuate the fire suppression system.

Exception: Automatic sprinkler systems shall not be required to be equipped with manual actuation means.

(F) 509.2.2 *System Interconnection.* The actuation of the fire extinguishing system shall automatically shut down the fuel or electrical power supply to the cooking equipment. The fuel and electrical supply reset shall be manual.

509.2.2.1 *System Interlock.* Dedicated makeup air units shall be electrically interlocked with the automatic fire suppression system and shall shut down upon activation of the automatic fire suppression system. The exhaust fan(s) shall remain in operation during fire conditions unless the listing of the hood requires the fan(s) to shut down.

(F) 509.2.3 *Carbon Dioxide Systems.* When carbon dioxide systems are used, there shall be a nozzle at the top of the ventilating duct. Additional nozzles that are symmetrically arranged to give uniform distribution shall be installed within vertical ducts exceeding 20 feet (6096 mm) and horizontal ducts exceeding 50 feet (15 240 mm). Dampers shall be installed at either the top or the bottom of the duct and shall be arranged to operate automatically upon activation of the fire-extinguishing system. Where the damper is installed at the top of the duct, the top nozzle shall be immediately below the damper. Automatic carbon dioxide fire-extinguishing systems shall be sufficiently sized to protect against all hazards venting through a common duct simultaneously.

(F) 509.2.3.1 *Ventilation System.* Commercial-type cooking equipment protected by an automatic carbon dioxide-extinguishing system shall be arranged to shut off the ventilation system upon activation.

(F) 509.2.4 *Special Provisions for Automatic Sprinkler Systems.* Automatic sprinkler systems protecting commercial-type cooking equipment shall be supplied from a separate, readily accessible, indicating-type control valve that is identified.

(F) 509.2.4.1 *Listed Sprinklers.* Sprinklers used for the protection of fryers shall be tested in accordance with UL 199E, listed for that application and installed in accordance with their listing.

509.2.5 *Nozzles.* Access shall be provided to all nozzles or sprinklers in the automatic fire suppression system for the purposes of inspection and maintenance.

509.2.6 *System Test and Inspection.* The automatic fire suppression system shall be acceptance-tested in accordance with the fire prevention code and

installation standard listed in Section 509.2, and with the manufacturer's instructions.

510.1 *General.* This section shall govern the design and construction of duct systems for hazardous exhaust and shall determine where such systems are required. Hazardous exhaust systems are systems designed to capture and control hazardous emissions generated from product handling or processes, and convey those emissions to the outdoors. Hazardous emissions include flammable vapors, gases, fumes, mists or dusts, and volatile or airborne materials posing a health hazard, such as toxic or corrosive materials. For the purposes of this section, the health-hazard rating of materials shall be as specified in NFPA 704. Laboratory ventilation systems and hoods shall be designed and installed in accordance with NFPA 45 Chapter 8.

514.3 *Access.* A means of access shall be provided to the heat exchanger and other components of the system as required for service, maintenance, repair or replacement. Access shall be provided in accordance with Section 306.

1108.600 - Amendment to International Mechanical Code—Chapter 6 Duct Systems.

—Chapter 6 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

601.2 *Air Movement in egress elements.* Corridors shall not serve as supply, return, exhaust, relief or ventilation air ducts.

Exception:

1. Use of a corridor as a source of makeup air for exhaust systems in rooms that open directly onto such corridors, including toilet rooms, bath rooms, dressing rooms, locker rooms, smoking lounges and janitors closets, shall be permitted provided that each such corridor is directly supplied with outdoor air at a rate greater than the rate of makeup air taken from the corridor. A dwelling unit or guest room with an enclosed bathroom that opens directly into the dwelling unit is not considered to open directly to the corridor. Outside air for ventilation for these types of spaces must be ducted directly into the dwelling unit or guest room and may not be transferred from the corridor. The outside air must be introduced in such a manner that the outside air is allowed to traverse the entire distance of the living space before being exhausted into the bathroom. Corridors may be used as supply plenums in all types of occupancies only if the direction of airflow is from the corridor to the

space for transfer of makeup air to spaces that open directly onto the corridor. This shall be permitted for rated and nonfire rated corridors, and sprinklered and unsprinklered buildings up to a maximum of 200 cfm per space.

A. For 100 cfm or less the air may be transferred by natural leakage at the door, or by undercutting of the door to allow the air to be transferred. Undercutting of doors shall comply with NFPA 80 Fire Doors and Fire Windows as required by the building code.

B. For an amount greater than 100 cfm but less than 201 cfm the air shall be transferred by means of grilles and associated ducts, or by utilizing a door louver. If the corridor is rated, either for fire or smoke, the transfer shall be accomplished with grilles, associated ducts and dampers in the ducts in compliance with the building code.

2. Where located within a dwelling unit, the use of corridors for conveying return air shall not be prohibited.

3. Where located within tenant spaces of 1,000 square feet (93 m^2) or less in area, use of corridors for conveying return air is permitted.

4. Incidental air movement from pressurized rooms within health care facilities, provided that the corridor is not the primary source of supply or return to the room.

601.5 *Return air openings.* Return air openings for heating, ventilation and air-conditioning systems shall comply with all of the following:

1. Openings shall not be located less than 10 feet (3048 mm) measured in any direction from an open combustion chamber or draft hood of another appliance located in the same room or space.

2. Return air shall not be taken from a hazardous or insanitary location or a refrigeration room as defined in this code.

3. The amount of return air taken from any room or space shall be not greater than the flow rate of supply air delivered to such room or space.

4. Return and transfer openings shall be sized in accordance with the appliance or equipment manufacturer's installation instructions, ACCA Manual D or the design of the registered design professional.

5. Return air taken from one dwelling unit shall not be discharged into another dwelling unit.

6. Taking return air from a crawl space shall not be accomplished through a direct connection to the return side of a forced air furnace. Transfer openings in the crawl space enclosure shall not be prohibited.

7. Return air shall not be taken from a closet, bathroom, toilet room, kitchen, garage, boiler room, furnace room, or unconditioned attic.

Exceptions:

1. Taking return air from a kitchen is not prohibited where such return air openings serve the kitchen and are located not less than 10 feet (3048 mm) from the cooking appliance.

2. Dedicated forced air systems serving only the garage shall not be prohibited from obtaining return air from garage.

8. Separate return air is required from each floor in multi-story dwelling units regulated by this code. Open stairways shall not be used as a means to convey return air.

602.2 *Construction.* Plenum enclosure construction materials that are exposed to the airflow shall comply with the requirements of Section 703.5 of the International Building Code or such materials shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM E 84 or 723.

The use of gypsum boards to form plenums shall be limited to systems where the air temperatures do not exceed 125° F (52°C) and the building and mechanical system design conditions are such that the gypsum board surface temperature will be maintained above the airstream dew-point temperature. Air plenums formed by gypsum boards shall not be incorporate in air-handling systems utilizing evaporative coolers.

Exception: Interstitial space between adjacent combustible studs or joists, allowed by the building code, complying with Section 602.3.

602.2.1 *Materials within plenums.* Except as required by Sections 602.2.1.1 through 602.2.1.7, materials within plenums shall be noncombustible or shall be listed and labeled as having a flame spread index of not more than 25 and a smoke-developed index of not more than 50 when tested in accordance with ASTM 84 or UL 723.

Exceptions:

1. Rigid and flexible ducts and connectors shall conform to Section 603.

2. Duct coverings, linings, tape and connectors shall conform to Sections 603 and 604.

3. This section shall not apply to materials exposed within plenums in one- and two-family dwellings.

4. This section shall not apply to smoke detectors.

5. Combustible materials fully enclosed within one of the following:

   5.1. Continuous noncombustible raceways or enclosures.

   5.2. Approved gypsum board assemblies.

   5.3. Materials listed and labeled for the specific protection application within a plenum.

6. Materials in Group H, Division 5 fabrication area and the areas above and below the fabrication area that share a common air recirculation path with the fabrication area.

603.10.1 *Structural Attachment.* Hangers and anchors shall be attached to the building construction in a manner approved by the Registered Design Professional.

603.16 *Weather Protection.* All ducts including linings, coverings and vibration isolation connectors installed on the exterior of the building shall be protected against the elements. Where galvanizing is used as the method of weather protection, the galvanizing shall be applied to a minimum level of G90 in accordance with ASTM A653.

604.8 *Lining Installation.* Linings shall be interrupted at the area of operation of a fire damper and at a minimum of 6 inches (152mm) upstream of and 6 inches (152mm) downstream of electric-resistance and fuel burning heaters in a duct system. Exposed duct liner edges that face opposite the direction of air flow shall be constructed in accordance with the appropriate SMACNA standard referenced in Chapter 15.

604.9 *Thermal Continuity.* - Delete.

607.2 *Installation.* Fire dampers, smoke dampers, combination fire/smoke dampers and ceiling dampers located within air distribution and smoke control systems shall be installed in accordance with the requirements of this section, and the manufacturer's installation instructions and listing. Ductwork shall be connected to damper sleeves or assemblies in such a way that collapse of the ductwork will not dislodge the damper or impair its proper operation.

1108.900 - Amendment to International Mechanical Code—Chapter 9 Specific Appliances, Fireplaces and Solid Fuel-Burning Equipment.

—Chapter 9 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

918.3 *Dampers.* Volume dampers shall not be placed in the return air inlet to a furnace in a manner that will reduce the required air to the furnace.

Exception: This provision shall not apply to engineered non-residential applications.

1108.1000 - Amendment to International Mechanical Code—Chapter 10 Boilers, Water Heaters and Pressure Vessels.

—Chapter 10 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1001.1 *Scope.* This chapter shall govern the installation, alteration and repair of boilers, water heaters and pressure vessels.

Exceptions:

1. Vessels with a nominal water containing capacity of one hundred twenty gallons or less for containing potable water under pressure, including those containing air, the compression of which serves only as a cushion.
2. Portable unfired pressure vessels and Interstate Commerce Commission containers.
3. Containers for bulk oxygen and medical gas.
4. Unfired pressure vessels that do not exceed fifteen cubic feet (122.2 gallons) in volume and two hundred fifty psig when not located in a place of public assembly.
5. Unfired pressure vessels that do not exceed five cubic feet (37.4 gallons) volume and two hundred fifty psig when located in a place of public assembly.
6. Unfired pressure vessels that do not exceed one and one-half cubic feet (11.7 gallons) in volume or an inside diameter of six inches with no limitation on pressure.
7. Pressure vessels used in refrigeration systems that are regulated by Chapter 11 of this code.
8. Pressure tanks used in conjunction with coaxial cables, telephone cables, power cables and other similar humidity control systems.
9. Any boiler or pressure vessel subject to inspection by federal or state inspectors.
10. Pressure vessels installed on the right-of-way of railroads and used directly in the operation of trains.
11. Pressure vessels designed for and operating at a working pressure not exceeding fifteen psig.
12. Any boiler constructed, reconstructed or maintained as a personal hobby or for other recreation purposes.
13. Vessels containing water and operating as water softeners, water filters, dealkalizers, demineralizers and cold water storage tanks when:

13.1 The temperature of the water in the vessel does not exceed one hundred twenty degrees Fahrenheit.

13.2 Heat is not applied to the water prior to entering the vessel or to the vessel itself.

13.3 The pressure of the water in the vessel does not exceed one hundred fifty psig.

13.4 The vessel does not contain any hazardous, toxic or explosive material.

14. Potable water heaters where none of the following limitations are exceeded which are governed by the Chesterfield Plumbing Code:

14.1 Heat input of one hundred ninety nine thousand nine hundred ninety nine (199,999) British thermal units per hour (BTU/hr) (57.1kw).

14.2 Water temperature of two hundred ten degrees Fahrenheit (210 F).

14.3 Nominal water capacity of one hundred nineteen gallons (119 gallons) and which are provided with one or more safety relief valves.

14.4 An operating pressure of 150 psig.

15. Tankless Water heaters serving potable water distribution systems

1003.1 *General.* All pressure vessels, unless otherwise approved, shall be constructed and certified in accordance with ASME Boiler and Pressure Vessel Code or similar approved standard, and shall be installed in accordance with the manufacturer's installation instructions and nationally recognized standards. Direct fired pressure vessels shall meet the requirements of Section 1004.

1003.3 *Welding.* Welding on pressure vessels shall be performed by an R-Stamp—holder in accordance with the National Board Inspection Code, Part 3 or in accordance with an approved standard.

1004.1 *Standards.* Boilers and water heaters shall be designed, constructed, and certified in accordance with the ASME Boiler and Pressure Vessel Code, Sections I or IV as applicable. Controls and safety devices for Boilers with fuel input ratings of 12,500,000 Btu/hr(3,662,500W) or less shall meet the requirements of ASME CSD-1. Controls and safety devices for boilers with inputs greater than 12,500,000 Btu/hr (3,662,500 w) shall meet the requirements of NFPA 85. Packaged Oil-fired boilers shall be listed and labeled in accordance with UL 726. Packaged Electric boilers shall be listed and labeled in accordance with UL 834. Solid-fuel boilers shall be listed and labeled in accordance with UL 2523.

Exceptions. The following shall be exempt from the ASME Code construction requirements of 1004.1:

1. Water heaters where none of the following limitations are exceeded:

   1.1 Heat input of less than two hundred thousand (200,000) British thermal units per hour (BTU/hr) (57.1kw).

   1.2 Water temperature of two hundred ten degrees Fahrenheit (210 F).

   1.3 Nominal water capacity of less than one hundred twenty gallons (120 gallons) and which are provided with one or more safety relief valves.

2. Coil-type hot water boilers used only for steam vapor cleaning when none of the following limitations are exceeded:

   2.1 One inch diameter tubing or three-fourths inch nominal pipe size with no steam drums or headers attached.

   2.2 Nominal water containing capacity does not exceed six gallons.

   2.3 Water temperature does not exceed three hundred fifty degrees Fahrenheit.

   2.4 Steam is not generated within the coil.

   2.5 One or more safety relief valves must be installed and adequate controls provided.

1006.5 *Installation.* Safety or relief valves shall be installed directly into the safety or relief valve opening on the boiler or pressure vessel. Valves shall not be located on either side of a safety or relief valve connection. The relief valve shall discharge by gravity.

Exception: Shutoff valves on either side of a safety or relief valve connection appropriate for the unfired system type and allowed by ASME Boiler and Pressure Vessel Code.

SECTION 1012\CONDENSATE RETURN

1012.1 Condensate when discharging into a sanitary sewer system shall not be in excess of 140F and shall discharge into an open floor drain, a special drain connection or an approved receptor. If the floor drain or drain connection to the sewer is above the level of the return piping so that it cannot flow by gravity, an automatic sump pump shall be installed to pump the condensate from the sump to the sewer drain.

1108.1100 - Amendment to International Mechanical Code—Chapter 11 Refrigeration.

—Chapter 11 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision

set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1105.3 *Refrigerant Detector.* Machinery rooms shall contain a refrigerant detector with an audible and visual alarm. The detector, or a sampling tube that draws air into the detector, shall be located in an area where refrigerant from a leak will concentrate. The alarm shall be actuated at a value not greater than the corresponding TLV-TWA values shown in Table 1103.1 OEL column for the refrigerant classification. Detectors and alarms shall be placed in approved locations. The detector shall transmit a signal to an approved location.

Exception: Detectors shall not be required for ammonia systems where the machinery room complies with Section 1106.3.

1107.2 *Piping Location.* Refrigerant piping that crosses an open space that affords passageway in any building shall be not less than 7 feet 3 inches (2210 mm) above the floor unless the piping is located against the ceiling of such space. Refrigerant piping shall not be placed in any elevator, dumbwaiter or other shaft containing a moving object or in any shaft that has openings to living quarters. Refrigerant piping shall not be installed in an exit enclosure.

1108.1200 - Amendment to International Mechanical Code—Chapter 12 Hydronic Piping.

—Chapter 12 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

1201.1 *Scope.* The provisions of this chapter shall govern the construction, installation, alteration, and repair of hydronic piping systems. This chapter shall apply to hydronic piping systems that are part of heating, ventilation, and air-conditioning systems. Such piping systems shall include, but are not limited to, steam, hot water, chilled water, steam condensate and ground source heat pump loop systems. Potable cold and hot water distribution systems shall be installed in accordance with the plumbing code.

1202.2 *Used Materials.* Reused pipe, fittings, valves or other materials shall be clean and free of foreign materials and shall be approved by the registered design professional for reuse.

1202.5 *Pipe Fittings.* Hydronic pipe fittings shall be rated for the temperatures and pressures of the systems in which they are installed and shall be constructed of materials compatible with the piping materials and

fluids in the system and shall conform to the respective pipe standards or to the standards listed in Table 1202.5.

1202.7 *Flexible Connectors, Expansion and Vibration Compensators.* Flexible connectors, expansion, and vibration control devices and fittings shall be rated for the temperatures and pressures of the systems in which they are installed and shall be constructed of materials compatible with the piping materials and fluids in the system.

1205.1.5 *Equipment and Appliances.* Shutoff valves shall be installed on connections to mechanical equipment and appliances. This requirement does not apply to components of a hydronic system such as air separators, metering devices and similar equipment.

1205.1.6 *Expansion Tanks.* - Deleted

1206.1 *General.* Piping, valves, fittings, and connections shall be installed in accordance with this code.

1206.10 *Pipe Support.* Pipe shall be supported in accordance with Section 305 or as determined by the registered design professional.

1208.1 *General.* Hydronic piping systems other than ground-source heat pump loop systems shall be tested hydrostatically at one and one-half times the maximum system design pressure. The duration of each test shall not be less than one hour. Ground-source heat pump loop systems shall be tested in accordance with section 1210.10.

1210.3 *Material rating.* Pipe and tubing shall be rated for the operating temperature and pressure of the ground-source heat pump loop system. Fitting shall be suitable for the pressure applications and recommended by the manufacturer for installation with the pipe and tubing installed. All underground piping and tubing shall be High-Density Polyethylene (HDPE). All above ground piping and tubing shall be either High-Density Polyethylene (HDPE) or Schedule 80 Polyvinyl Chloride (PVC).

1210.4 *Piping and tubing materials standards.* Ground-source heat pump ground-loop pipe and tubing shall conform to the following standards:

HDPE: ASTM D2737; ASTM D3035; ASTM F714; AWWA C901; CSA B137.1; CSA C448; NSF 358-1

PVC Schedule 80: ASTM D1785; ASTM D2241

Table 1210.4. *Ground-Source Loop Pipe.* - Deleted

1210.5 *Fittings.* Ground-source heat pump fittings shall be approved for installation with the piping materials to be installed and shall conform to the following standards:

HDPE: ASTM D2683; ASTM D3261; ASTM F1055; CSA B137.1; CSA C448; NSF 358-1

PVC Schedule 80: ASTM D2464; ASTN D2466; ASM D2467; CSA B137.2; CSA B137.3

Table 1210.5. *Ground-Source Loop Pipe Fittings.* - Delete.

1210.6.1.1 *Plastic to metal connections.* Soldering on the metal portion of the system shall be performed not less than 18 inches (457 mm) from a plastic-to-metal adapter in the same water line.

1210.6.2 *Preparation of pipe ends.* Pipe shall be cut square, be reamed, and be free of burrs and obstructions. PVC pipe shall be chamfered. Pipe ends shall have full bore openings and shall not be undercut.

1210.6.4 *CPVC plastic pipe.* - Deleted

1210.6.5 *Cross-linked polyethylene (PEX) plastic tubing.* - Deleted

1210.6.5.1 *Compression-type fittings.* - Deleted

1210.6.5.2 *Plastic-to-metal connections.* - Deleted

1210.6.6 *Polyethylene plastic pipe and tubing for ground-source heat pump loop systems.* Joints between polyethylene plastic pipe and tubing or fittings for ground-source heat pump loop systems shall be heat fusion joints complying with Section 1210.6.6.1 or electrofusion joints complying with Section 1210.6.6.2.

1210.6.6.3 *Stab-type insert fittings.* - Deleted

1210.6.7 *Polypropylene (PP) Plastic.* - Deleted

1210.6.7.1. *Heat-fusion joints.* - Deleted

1210.6.7.2. *Mechanical and compression sleeve joints.* - Deleted

1210.6.8. *Raised temperature polyethylene (PE-RT) plastic tubing.* - Deleted

1210.6.8.1. *Compression-type fittings.* - Deleted

1210.6.8.2. *PE-RT-to metal connections.* - Deleted

1210.6.9. *PVC plastic pipe.* Joints between PVC plastic pipe and fittings shall be solvent-cemented or threaded joints complying with Section 1230.3.

1210.7.6 *Expansion tanks.* Deleted

1210.8 *Installation.* Piping, valves, fittings, and connections shall be installed in accordance with the conditions of approval. Vertically drilled loops shall be fully grouted with a bentonite based grout.

1210.10 *Tests.* Before connection header trenches are back-filled, the assembled loop system shall be pressure tested with water or air in accordance with one of the following methods:

1. 100 psi (689 kPa) for 15 minutes.
2. One and one-half (1.5) times the normal operating pressure for 24 hours.

There shall be no leaks during the test. Flow and pressure loss testing shall be performed and the actual flow rates and pressure drops shall be compared to the calculated design values. If actual flow rate or pressure drop values differ from the calculated design values by more than 10 percent, the cause shall be identified and corrective action taken.

1210.11 *Embedded piping.* - Deleted

1210.12 *Sizing of Ground-source heat pump loop.* The sizing of the ground-source heat pump loop shall be done per the manufacturer's installation instructions but at a minimum, the following criteria shall be met:

A load calculation on the building served by the ground-source heat pump loop shall be completed and the data entered into a ground loop analysis program. The maximum returning ground loop temperature shall not exceed 90° F (32° C) and the minimum returning ground loop temperature shall not be less than 35° F (2° C).

1108.1300 - Amendment to International Mechanical Code—Chapter 13 Fuel Oil Piping and Storage.

—Chapter 13 of the 2015 International Mechanical Code is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

CHAPTER 13
FLAMMABLE AND COMBUSTIBLE LIQUID AND FUEL OIL PIPING AND STORAGE

1301.1 *Scope.* This chapter shall govern the design, installation, construction and repair of flammable and combustible liquid and fuel-oil storage and piping systems. The storage of fuel oil and flammable and combustible liquids shall be in accordance with the International Fire Code.

1301.3 *Fuel Type.* An appliance shall be designed for use with the type of fuel to which it will be connected. Such appliance shall not be converted from the fuel specified on the rating plate for use with a different fuel without securing reapproval from the appliance manufacturer and the registered design professional.

1301.4 *Flammable and Combustible Liquid Tanks, Piping and Valves.* The tank, piping and valves for appliances burning oil shall be installed in accordance with the requirements of this chapter and NFPA 31. When an oil burner is served by a tank, any part of which is above the level of the burner inlet connection and where the fuel supply line is taken from the top of the

tank, an approved antisiphon valve or other siphon-breaking device shall be installed in lieu of the shutoff valve. Flammable and combustible liquid tanks, piping and valves shall be in accordance with the International Fire Code.

1302.3 *Pipe Standards.* Flammable and combustible liquids and fuel oil piping shall comply with one of the standards listed in Table 1302.3.

Table 1302.3 FLAMMABLE AND COMBUSTIBLE LIQUID and FUEL OIL PIPING

MATERIAL	STANDARD (see Chapter 15)
Copper or copper-alloy pipe	ASTM B 42; ASTM B 43; ASTM B 302
Copper or copper-alloy tubing (Type K, L, or M)	ASTM B 75; ASTM B 88; ASTM B 280
Labeled pipe	(See Section 1302.4)
Nonmetallic pipe	ASTM D 2996
Steel pipe	ASTM A 53L ASTM A 106
Steel tubing	ASTM A 254; ASTM A 539

1302.5 *Fittings and Valves.* Fittings and valves shall be listed by the manufacturer as suitable for the piping systems, and shall be compatible with, or shall be of the same material as, the pipe or tubing.

1302.7 *Pumps.* Pumps that are not part of an appliance shall be of a positive-displacement type. The pump shall automatically shut off the supply when not in operation. Fuel oil pumps shall be listed and labeled in accordance with UL 343. Flammable and combustible liquid pumps shall be listed and labeled by an approved agency.

1303.1 *Approval.* Joints and connections shall be approved and of a type approved for the liquid in the piping systems. All threaded joints and connections shall be made tight with suitable lubricant or pipe compound. Unions requiring gaskets or packings, right or left couplings, and sweat fittings employing solder having a melting point of less than 1,000 E F (538 E C) shall not be used in oil lines. Cast-iron fittings shall not be used. Joints and connections shall be tight for the pressure required by test.

1305.2 *Protection of Pipe, Equipment and Appliances.* All fuel oil pipe, tanks, equipment and appliances shall be protected from physical damage.

1305.2.1 *Flood Hazard.* All fuel oil pipe, tanks, equipment and appliances located in flood hazard areas shall be located above the elevation required by Section 1612 of the International Building Code for utilities and attendant equipment or shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to such elevation. Underground tanks shall be installed in accordance with Section 1309.

1305.6 *Fill Piping.* A fill pipe shall terminate outside of a building at a point at least 5 feet (1524 mm) from any building opening at the same or lower level. A fill pipe shall terminate in a manner designed to minimize spilling when the filling hose is disconnected. Fill opening shall be equipped with a tight metal cover designed to discourage tampering.

1305.7 *Vent Piping.* Liquid fuel vent pipes shall terminate outside of buildings at a point not less than 2 feet (610 mm) higher measured vertically or 10 feet measured horizontally from any building opening. Outer ends of vent pipes shall terminate in a weatherproof vent cap or fitting or be provided with a weatherproof hood. All vent caps shall have a minimum free open area equal to the cross-sectional area of the vent pipe and shall not employ screens finer than No. 4 mesh. Vent pipes shall terminate a minimum of 24 inches above the ground to avoid being obstructed with snow or ice. Vent pipes from tanks containing heaters shall be extended to a location where oil vapors discharging from the vent will be readily diffused. If the static head with a vent pipe filled with oil exceeds 10 pounds per square inch (psi) (69 kPa), the tank shall be designed for the maximum static head that will be imposed.

Liquid fuel vent pipes shall not be cross connected with fill pipes, lines from burners or overflow lines from auxiliary tanks.

1307.2 *Appliance Shutoff.* A shutoff valve shall be installed at the connection to each appliance. The shutoff valve shall be in the same room and within 6 feet of the appliance served. Access shall be provided to the shutoff valve.

1308.1 *Testing Required.* Fuel oil piping shall be tested in accordance with NFPA 31. Flammable and combustible liquid piping shall be tested in accordance with the International Fire Code.

SECTION 1309
UNDERGROUND STORAGE TANK INSTALLATION

1309.1 *General.* Flammable and combustible liquid and fuel oil storage tanks shall be installed in accordance with the International Fire Code.

1309.2 *Anchoring Required.* All underground tanks shall be anchored to resist the effects of buoyancy because of a rise in the water table, flooding or

accumulation of water from fire suppression operations. Uplift protection shall be provided in accordance with NFPA 30.

SECTION 1310\FUEL-DISPENSING SYSTEMS

1310.1 *General.* All fuel-dispensing systems shall be installed in accordance with the International Fire Code.

1108.1500 - Amendments to International Mechanical Code—Chapter 15 Referenced Standards.

—Chapter 15 of the 2015 International Mechanical Code is amended by the following provisions. Each reference standard of the code that corresponds to one of the following numbered standards is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding standard in the code is hereby enacted and added thereto. Standards appearing in the published edition of this code which are not set forth below remain a part of this code.

ASHRAE American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.
1791 Tullie Circle, NE; Atlanta, GA 30329-2305

Standard Reference Number	Title	Referenced in Code Section Number
ASHRAE Handbook - 2014	HVAC Systems & Equipment	1009.2

ASME American Society of Mechanical Engineers
345 East 47th Street, New York, NY 10017

Standard Reference Number	Title	Referenced in Code Section Number
BPVC-2007 w/2010 and 2011 addenda	Boiler & Pressure Vessel Code-07 edition	1003.1, 1004.1, 1006.5, 1011.1

ASTM ASTM International
100 Barr Harbor Dr.
West Conshohocken, PA 19428

Standard Reference Number	Title	Referenced in Code Section Number
A653/A653M-13	Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process	603.16
F853-05	Standard Practice for Maintenance Procedures for Amusement Rides and Devices	2201.5.1

CAGI Compressed Air & Gas Institute
1300 Sumner Ave
Cleveland, OH 44115-2851

Standard Reference Number	Title	Referenced in Code Section Number
B19.1-2011	Safety standard for air compressor systems	2216.1

GOVERNMENT OF ST LOUIS COUNTY MISSOURI 41 S. Central Ave.,
Clayton, MO 63105

Standard Reference Number	Title	Referenced in Code Section Number
Building Code	Chapter 1115 SLCRO 1974, as amended	107.11, 109.1, 109.3, 109.4.1, 109.5, 109.6, 201.3, 202, 301.15, 301.16, 301.17, 301.18, 302.1, 302.2, 304.8, 304.11, 308.4.2.2, 308.4.2.4, 401.4, 401.5, 406.1, 501.3.1, 501.10.2, 502.10, 502.10.1, 504.2, 504.10, 505.3, 506.3.3, 506.3.10, 506.3.12.2, 506.4.1, 509.1, 509.1.1, 510.6, 510.6.2, 510.6.3, 510.7, 510.7.1.1, 510.7.2, 510.7.3, 510.8, 511.1.5, 513.1, 513.2, 513.3, 513.4.3, 513.5, 513.5.2, 513.5.2.1, 513.5.3, 513.5.3.2, 513.6.2, 513.10.5, 513.11.1, 513.12, 513.12.2, 513.20, 601.3, 602.2, 602.2.1.5.1, 602.2.1.5.2, 602.2.1.6.1, 602.2.1.6.2, 602.3, 602.4,603.1, 603.10, 603.13, 603.18.2, 604.5.4, 607.1.1, 607.1.2, 607.3.2.1, 607.5.1, 607.5.2, 607.5.3, 607.5.4, 607.5.4.1, 607.5.5, 607.5.5.1, 607.5.6, 607.6, 607.6.1, 607.6.2, 607.6.2.1, 607.6.3, 701.2, 701.4.1, 701.4.2, 801.3, 801.16.1, 801.18.4, 801.18.4.1, 902.1, 908.3, 908.4, 910.3, 924.1, 925.1, 926.1, 927.2, 928.1, 1105.1, 1206.4, 1210.8.2, 1305.2.1, 1402.4, 1402.4.1, 1601.1, 1901.1, 2001.1, 2217.4.1, 2217.5
Electrical Code	Chapter 1102 SLCRO 1974, as amended	201.3, 301.7, 306.3.1, 306.4.1, 513.11, 513.12.1, 602.2.1.1, 2100.40, 2218.1
Existing Building Code	Chapter 1117 SLCRO 1974, as amended	101.2

Plumbing Code	Chapter 1103 SLCRO 1974, as amended	101A.2.1, 101A.3.4, 201.3, 301.8, 512.2, 908.5, 1001.1, 1002.1, 1002.2, 1002.3, 1005.2, 1006.6, 1008.2, 1009.3, 1101.4, 1201.1, 1206.2, 1206.3, 1401.2, 2100.40
Residential Code	Chapter 1116 SLCRO 1974, as amended	101.2, 1601.1

ICC International Code Council, Inc.
500 New Jersey Avenue N.W., 6th floor
Washington, D.C. 20001

Standard Reference Number	Title	Referenced in Code Section Number
IFC-15	International Fire Code	201.3, 310.1, 311.1, 502.4, 502.5, 502.7.2, 502.8.1, 502.9.5, 502.9.5.2, 502.9.5.3, 502.9.8.2, 502.9.8.3, 502.9.8.5, 502.9.8.6, 502.10, 502.10.3, 502.16.2, 509.1, 509.1.1, 510.2.1, 510.2.2, 510.4, 511.1.1 513.12.3, 513.15, 513.16, 513.17, 513.18, 513.19, 513.20.2, 513.20.3, 606.2.1, 908.7, 1101.9, 1105.3, 1105.9, 1106.5, 1106.6, 1301.1, 1301.2, 1301.4, 1308.1, 1309.1, 1310.1, 2217.6
IFGC-15	International Fuel Gas Code	101.2, 201.3, 301.3, 701.1, 801.1, 901.1, 906.1, 1101.5, 2100.020, 2100.040

State of Missouri State of Missouri, Department of Health
Jefferson City, MO

Standard Reference Number	Title	Referenced in Code Section Number
Chapter 20-Hospitals	Missouri Rules of the Dept. of Health and Senior Services Division 30 Division of Regulations and Licensure Chapter 20 Hospitals	1701.2

NFPA National Fire Protection Association
Batterymarch Park, Quincy, MA 02269

Standard Reference Number	Title	Referenced in Code Section Number
10-13	STANDARD FOR PORTABLE FIRE EXTINGUISHERS	2217.6
12-11	STANDARD ON CARBON DIOXIDE EXTINGUISHING SYSTEMS	509.2
13-13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS	509.2
16-11	STANDARD FOR THE INSTALLATION OF FOAM-WATER SPRINKLER AND FOAM-WATER SPRAY SYSTEMS	509.2
17-13	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS	509.2
17A-13	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS	509.2

30-15	Flammable and Combustible Liquids Code	1309.2
31-11	Installation of Oil-burning Equipment	801.2.1, 801.18.1, 801.18.2, 920.2, 922.1, 1301.4, 1308.1
45-11	Fire Protection for Laboratories using Chemicals	510.1
54-15	National Fuel Gas Code	Chapter 21-301.3 (IFGC)
80-13	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES	601.2
85-11	Boiler and Combustion Systems Hazards Code	1004.1
96-14	Ventilation Control and Fire Protection of Commercial Cooking Operations	506.1, 507.1
99-15	Standard for Health Care Facilities	1701.2
701-2010	Standard Methods of Fire Tests for Flame Propagation of textiles and films	2217.2

SMACNA Sheet Metal & Air Conditioning Contractors National Assoc., Inc.
4021 Lafayette Center Road, Chantilly, VA 22021

Standard Reference Number	Title	Referenced in Code Section Number
ANSI/SMACNA 006-2006	HVAC Duct Construction Standards-Metal and Flexible	504.8, 603.2, 603.4, 603.9, 604.8

UL Underwriters Laboratories, Inc.
333 Pfingsten Road, Northbrook, IL 60062-2096

Standard Reference Number	Title	Referenced in Code Section Number
197-10	Commercial Electric Cooking Appliances	507.1
199E-04	FIRE TESTING OF SPRINKLERS AND WATER SPRAY NOZZLES FOR PROTECTION OF DEEP FAT FRYERS	509.2.4.1
300-05	Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment	509.2, 2213.1
710B-11	Recirculating Systems	507.1, 509.2

1108.1600 - Amendments to International Mechanical Code—Chapter 16 Residential Mechanical Systems.

—The 2015 International Mechanical Code is hereby amended by enacting and adding thereto Chapter 16, Residential Mechanical Systems to read as follows:

1601.1 *General.* Mechanical Systems for detached one and two family dwellings and townhouses, as defined by the Chesterfield Building Code, shall be designed and installed in accordance with the applicable provisions of the Chesterfield Residential Code, Title XI, Chapter 1116, SLCRO 1974, as amended and referenced standards listed therein.

1108.1700 - Amendment to International Mechanical Code—Chapter 17 Medical Gas Systems.

—The 2015 International Mechanical Code is hereby amended by enacting and adding thereto Chapter 17, Medical Gas Systems to read as follows:

1701.1 *Scope.* The provisions of this chapter shall govern the design, construction, installation, and repair of medical gas piping systems. This chapter shall apply to all medical gas piping systems including, but not limited to Oxygen, Surgical Air, Nitrous Oxide, Nitrogen, Carbon Dioxide, and Clinical Suction.

1701.2 *Requirements.* The medical gas systems, components, appurtenances and piping shall conform to the requirements of NFPA 99 and the "Missouri Rules of the Department of Health and Senior Services Division 30-Division of Regulations and Licensure Chapter 20 - Hospitals."

1108.1900 - Amendments to International Mechanical Code—Chapter 19 Mechanical Fire Protection Systems.

—The 2015 International Mechanical Code is hereby amended by enacting and adding thereto Chapter 19, Mechanical Fire Protection Systems to read as follows:

1901.1 *General.* Mechanical Fire Protection Systems including automatic fire suppression systems, automatic fire sprinkler systems, standpipe systems, and smoke control systems shall be designed and installed in accordance with the applicable provisions of the Chesterfield Building Code, Title XI, Chapter 1115, SLCRO 1974, as amended and referenced standards listed therein.

1108.2000 - Amendments to International Mechanical Code—Chapter 20 Elevators and Conveying Systems.

—The 2015 International Mechanical Code is hereby amended by enacting and adding thereto Chapter 20, Elevators and Conveying Systems to read as follows:

2001.1 *General.* Elevators, escalators, dumbwaiters, moving walks, hoists, automotive lifts, conveyors, freight lifts, and manlifts shall be designed and installed in accordance with the applicable provisions of the Chesterfield Building Code, as amended and referenced standards listed therein.

1108.2100 - Amendment to International Mechanical Code—Chapter 21 Fuel Gas Code.

—The 2015 International Mechanical Code is hereby amended by enacting and adding thereto Chapter 21, Fuel Gas Code which shall read as follows:

2100.020 *Fuel Gas Code Adopted.* The International Fuel Gas Code 2015 edition is hereby adopted as the Fuel Gas Code of Chesterfield.

2100.40 *References to Other Chesterfield Adopted Codes.* Throughout the International Fuel Gas Code 2015 Edition, wherever a reference appears to the "International Plumbing Code" or "plumbing code" it shall mean "The Plumbing

Code" as adopted by Chesterfield ordinance with the additions, deletions and changes prescribed by that ordinance. Wherever a reference appears to the "International Electrical Code" or "electrical code" it shall mean "The Electrical Code" as adopted by Chesterfield ordinance with the additions, deletions and changes prescribed by that ordinance.

2100.100 *Amendments to International Fuel Gas Code 2015 Edition.* The 2015 International Fuel Gas Code is amended by the following provisions. Each section, subsection or clause of the International Fuel Gas Code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the International Fuel Gas Code is hereby enacted and added thereto.

102 (IFGC) *Applicability.* - Deleted.

103 (IFGC) *Department of Inspection.* - Deleted.

104 (IFGC) *Duties and Powers of Code Official.* - Deleted.

105 (IFGC) *Approval.* - Deleted.

106 (IFGC) *Permits.* - Deleted.

107 (IFGC) *Inspections and Testing.* - Deleted.

108 (IFGC) *Violations.* - Deleted.

109 (IFGC) *Means of Appeal.* - Deleted.

110 (IFGC) *Temporary Equipment, Systems and Uses.* - Deleted.

301.3 (IFGC) *Listed and Labeled.* Appliances regulated by this code shall be listed and labeled for the application in which they are used unless otherwise approved in accordance with Section 105. The approval of unlisted appliances in accordance with Section 105 shall be based upon approved engineering evaluation and the NFPA 54.

403.10.5 (IFGC) *Joints Between Different Piping Materials.* Joints between different piping materials shall be made with approved adapter fittings. Joints between different metallic piping materials at the point of delivery, and at other locations where necessary, shall be made with approved dielectric fittings to isolate electrically above-ground piping from underground piping or to isolate electrically different metallic piping materials joined underground. Dielectric fittings shall not be required in joints located within the interior of the building.

404.21 (IFGC) *Piping into Masonry Fireboxes.* Above ground gas piping serving an appliance installed in a masonry firebox shall be installed as required by this Chapter. Piping shall enter the firebox through the firebox wall a minimum of 3 inches above the firebox floor. A high temperature seal is required on the inside of the firebox and a weatherproof seal is required on the outside if exposed to weather. Fuel-gas piping serving decorative gas-fired appliances shall be allowed to be installed through an existing ash dump.

409.5.4 (IFGC) *Gas Barbeque Shutoff Valve.* Shutoff valves for gas barbeques installed outdoors shall not be required to be within 6 feet of the appliance. Such valves shall not be prohibited from being installed indoors provided they are readily accessible, permanently identified and serve no other equipment.

411.1 (IFGC) *Connecting Appliances.* Except as required by Section 411.1.1, *appliances* shall be connected to the *piping* system by one of the following:

1. Rigid metallic pipe and fittings.
2. Corrugated stainless steel tubing (CSST) where installed in accordance with the manufacturer's instructions.
3. Semirigid metallic tubing and metallic fittings. Lengths shall not exceed 6 feet (1829 mm) and shall be located entirely in the same room as the *appliance.* Semirigid metallic tubing shall not enter a motor-operated *appliance* through an unprotected knockout opening.
4. *Listed* and *labeled appliance* connectors in compliance with ANSI Z21.24 and installed in accordance with the manufacturer's installation instructions and located entirely in the same room as the *appliance.*
5. *Listed* and *labeled* quick-disconnect devices used in conjunction with *listed* and *labeled appliance* connectors.
6. *Listed* and *labeled* convenience outlets used in conjunction with *listed* and *labeled appliance* connectors.
7. Listed and *labeled* outdoor *appliance* connectors in compliance with ANSI Z21.75/CSA 6.27 and installed in accordance with the manufacturer's installation instructions.
8. Listed outdoor gas hose connectors in compliance with ANSI Z21.54 used to connect portable outdoor appliances. The gas hose connection shall be made only in the outdoor area where the appliance is used, and shall be to the gas piping supply at an appliance shutoff valve, a listed quick-disconnect device or listed gas convenience outlet.
9. A union shall be installed between the appliance and the appliance shutoff valve.

501.16 (IFGC). *Outdoor Design Temperature.* The outdoor winter design temperature for Chesterfield shall be 2F.

504.2.9 (IFGC) *Chimney and vent locations.* Tables 504.2(1), 504.2(2), 504.2(3), 504.2(4), and 504.2(5) shall be used for chimneys and vents not exposed to the outdoors below the roof line. A Type B vent or listed chimney lining system passing through an unused masonry chimney flue shall not be considered to be exposed to the outdoors. Where vents extend outdoors above the roof more than 5 feet (1524 mm) higher than required by Figure 503.6.4, and where vents terminate in accordance with Section 503.6.4, Item 2, the

outdoor portion of the vent shall be enclosed as required by this section for vents not considered to be exposed to the outdoors or such venting system shall be engineered. A Type B vent shall not be considered to be exposed to the outdoors where it passes through an unventilated enclosure or chase insulated to a value of not less than R8.

Table 504.2(3) in combination with Table 504.2(6) shall be used for clay-tile-lined exterior masonry chimneys, provided that all of the following are met:

1. Vent connector is a Type B double wall.
2. Vent connector length is limited to 1 ½ feet for each inch (18 mm per mm) of vent diameter.
3. The appliance is draft hood equipped.
4. The input rating is less than the maximum capacity given by Table 504.2(3).
5. For a water heater, the outdoor design temperature is not less than 2° F (-17° C).

603.2 (IFGC) *Shutoff Valves.* Shutoff valves required by Section 409.5 and serving gas-fired log lighters shall be located outside of the fireplace firebox, adjacent to within 6 feet and in the same room as the fireplace.

614.8.7 (IFGC) *Multiple Dryers.* Multiple domestic dryers shall not be connected to a single exhaust system.

Exception: Multiple domestic clothes dryers may be connected to a single exhaust system designed by a registered design professional.

614.10 (IFGC) *Common Exhaust Systems for Clothes Dryers Located in Multistory Structures.* Where a common multistory duct system is designed and installed to convey exhaust from multiple clothes dryers, the construction of such system shall be in accordance with all of the following:

1. The shaft in which the duct is installed shall be constructed and fire-resistant rated as required by the *International Building Code.*
2. Dampers shall be prohibited in the exhaust duct. Penetrations of the shaft and ductwork shall be protected in accordance with Section 607.5.5, Exception 2, of the *International Mechanical Code.*
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 (0.471 mm) (No. 26 gage) and in accordance with SMACNA *Duct Construction Standards.*
4. An approved means for cleanout shall be provided at each offset in ductwork installed in shafts.
5. The exhaust fan motor design shall be in accordance with Section 503.2 of the *International Mechanical Code.*

6. The exhaust fan motor shall be located outside of the airstream.

7. The exhaust fan shall run continuously.

8. The 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. Makeup air shall be provided for the exhaust system.

10. A cleanout opening shall be located at the base of the shaft to provide *access* to the duct to allow for cleaning and inspection. The finished opening shall be not less than 12 inches by 12 inches (305 mm by 305 mm).

11. Screens shall not be installed at the termination.

618.3 (IFGC) *Dampers.* Volume dampers shall not be placed in the return air inlet to a furnace in a manner that will reduce the required air to the furnace.

Exception: This provision shall not apply to engineered non-residential applications.

629.1 (IFGC) *General.* Ceramic kilns with a maximum interior volume of 20 cubic feet (0.566 m^3) and used for hobby and non-commercial purposes shall be installed in accordance with the manufacturer's installation instructions and the provisions of this code. Kilns shall comply with Section 301.3.

IFGC Chapter 8 Referenced Standards

ICC International Code Council, Inc.
500 New Jersey Avenue N.W., 6th floor
Washington, D.C. 20001

Standard Reference Number	Title	Referenced in Code Section Number
IMC-15	International Mechanical Code	101.2.5, 201.3, 301.1.1, 301.13, 304.11, 501.1, 614.2, 614.10, 618.5, 621.1, 624.1, 631.2, 632.1, 703.1.2

1108.2200 - Amendments to International Mechanical Code—Chapter 22 Amusement Devices.

—The 2015 International Mechanical Code is hereby amended by enacting and adding thereto Chapter 22, Amusement Devices to read as follows:

CHAPTER 22
AMUSEMENT DEVICES

SECTION 2201 GENERAL

2201.1 *Scope:* The provisions of this chapter shall govern the installation, repair, alteration, maintenance, operation, and inspection of every amusement ride or device and any accessories connected *or attached to such rides or devices.*

Exceptions:

1. Non-powered playground equipment
2. Inflatable device setup for private residential event.

2201.2 *Requirements Not Covered.* Any requirement necessary for the strength or stability of an amusement ride or device or for the protection of the health or safety of the occupants or general public, which is not specifically covered by this chapter shall be determined by the Code Official.

2201.3 Identification. Every amusement ride or device shall be identified by a descriptive name, manufacturer and identification number. There shall be permanently attached to every ride or device, in a readily visible location, the name of the manufacturer, name of the ride or device, the year of manufacture, and the unique identification number. The Code Official may request additional information and reports of tests and analysis, as necessary.

2201.4 *Permit-Required.* No person shall install, erect, set up or operate any amusement ride or device unless the required permit therefore has been issued. Application for such permit shall be made not less than fourteen (14) days prior to date of installation or operation. Special circumstances will be reviewed by the Code Official.

2201.4.1 *Permit Status.* A Chesterfield issued permit shall be construed to be a license to proceed with installation and erection. The operation after inspection and approval shall not be construed as authority to set aside, neglect, cancel or violate any provisions of this code nor shall issuance of such permit prevent the Code Official thereafter from requiring correction of errors or provision of additional needed safeguards. No amusement ride shall operate without a current Missouri state operating permit.

Exception: Inflatable bounce houses do not require a state permit.

2201.4.2 *Application.* The permit application procedure for permanent amusement rides or devices shall be as required by Section 106 of the mechanical code.

2201.4.3 The application for a Temporary amusement ride or device permit shall be accompanied by the following:

1. A copy of the site plan identifying the location of each amusement ride or device and the required separation distances showing buildings and overhead electrical wiring.
2. Copy of the general liability insurance certificate required by Section 2201.6.
3. A copy of the current certificate of compliance required by Section 2204.2.

2201.5 *Inspections.* No person shall operate or permit the operation of an amusement ride or device unless it is certified for operation pursuant to a currently valid inspection and approval as provided by this chapter and other applicable provisions of this code.

2201.5.1 Owners and operators shall comply with ASTM F-24 Standard Practice for Maintenance Procedures for Amusement Rides and Devices.

2201.6 *Insurance.* All owners or operators of amusement devices shall carry general liability insurance through a carrier licensed and operating in the State of Missouri. The minimum amount of such coverage shall be: $1,000,000.00 per occurrence to include Bodily Injury and Property Damage. No permits shall be issued until proof of such insurance coverage is provided in the form of an insurance certificate.

2201.6.1 *Insurance Certificates.* The limits of liability specified in Section 2201.6 are minimum requirements and shall be carried by the amusement operator or owner covering all operations in Chesterfield, Missouri and said City shall be named as an additional insured. Insurance certificates shall be filed with the Code Official.

2201.7 *Fees.* Permit and inspection fees shall be as specified in Chapter 1100, SLCRO 1974 as amended.

SECTION 2202 DEFINITIONS

2202.1 *Definitions.* For the purposes of this chapter, words and phrases listed below shall have the meanings indicated.

Amusement Rides or Devices: Any device or combination of devices, which carries passengers or expects persons to walk or crawl along, around or over a fixed or restricted course for the purpose of amusement.

Inflatable devices/rides - Structures made of flexible outer membrane or fabric that is filled with air to give shape and strength to the structure while individuals climb, jump or slide within the structure.

Mechanical device/ride - Any device that is propelled by actuation of either motors, hydraulics or by manual operation.

Major attraction device/ride - Any permanent device that has a passenger height requirement of 42 inches or greater.

Owner: Any person, agent, firm or corporation having a legal or equitable interest in the equipment.

Private residential event: Inflatable devices(s) setup on a parcel serving a single family dwelling, two family dwelling, or a townhouse for the exclusive use of the occupants of the dwelling(s) and their invited guests. This does not include inflatable devices setup for block/subdivision parties.

Restraining Device: A safety belt, harness, chain, bar or other physical support, retention, or restraint to the passenger of a ride or device.

Special Amusement Buildings: Any temporary or permanent building or portion thereof that is occupied for amusement and entertainment and the means of egress path is not readily apparent due to visual or audio distractions or is not readily available because of the nature of the attraction or mode of conveyance though the building or structure.

SECTION 2203 OPERATORS

2203.1 *Operators.* An amusement ride or device shall be operated by a ride operator certified by the owner or his designated agent. A ride or device operator shall have knowledge of the use and function of all normal operating controls, signal systems and safety devices applicable to the ride or device and of the proper use, function, capacity and speed of the particular ride or device which is operating. When the ride or device is shut down, provision shall be made to prevent operations by the public. No person other than a certified ride operator shall be permitted to handle the controls of a ride or device during normal operation except where such ride or device is designed to be controlled by the passenger.

2203.2 All devices shall have the proper number of ride operators in accordance with the manufacturer's requirements.

SECTION 2204 NON-DESTRUCTIVE TESTING

2204.1 *Non-Destructive Testing (NDT).* A non-destructive test as required by the manufacturer of amusement ride or device shall be performed on an annual basis, or at the frequency specified by the manufacturer. This examination shall be performed in accordance with the manufacturer's written inspection procedure by a certified testing agency. NDT is not required on inflatable bounce houses.

2204.2 *Certificate of Compliance.* A current certificate of compliance must be submitted annually by the owner certifying that each amusement device has been tested in accordance with the manufacturers' written test procedures.

SECTION 2205 MODIFIED OR REBUILT EQUIPMENT

2205.1 *Modified and Rebuilt Rides and Devices.* An amusement ride or device which has been rebuilt or modified other than repaired and restored to its original condition shall be re-identified by a new name and identification number and shall be re-certified as a completely new piece of equipment.

SECTION 2206 ASSEMBLY AND DISASSEMBLY

2206.1 *Assembly and Disassembly.* Assembly and disassembly of amusement rides or devices shall be by competent personnel trained and experienced in assembly and erection of such equipment.

2206.2 *Supervision.* The assembly and disassembly of an amusement ride or device shall be done by or under the immediate supervision of a person experienced in the proper performance of such work in respect to the device or structure.

2206.3 *Assembly.* Parts shall be properly aligned, and shall not be bent, distorted, cut or otherwise modified to force a fit. Parts requiring lubrication shall be lubricated in course of assembly and as required by the manufacturer. Fastening and locking devices, such as bolts, cap screws, cotter pins and lock washers shall be installed where required for dependable operation. Nuts shall be drawn tight, cotter pins shall be spread and lock nuts firmly set. Welding shall be done by welders certified in accordance with the requirements of the American Welding Society (AWS).

2206.4 *Replacement of Parts.* Parts which are excessively worn or which have been materially damaged shall be replaced or repaired.

2206.5 *Tools and Equipment.* Persons engaged in the assembly or disassembly of amusement rides or devices or temporary structures shall use tools of proper size and design to enable the work to be done safely.

2206.6 *Supports Required.* A portable amusement ride or device shall be placed on stable supports to prevent shifting, tipping, swaying or erratic motion. Use of shim blocks shall be kept to a minimum. Adequate means of drainage shall be provided to prevent water from collecting and softening supporting areas. The area surrounding the amusement ride or device shall be clear and kept free from trash and tripping hazards.

2206.7 *Permanent Foundations.* A non-portable amusement ride or device permanently erected shall be set on properly designed and constructed foundations or footings and secured to these footings in a manner to prevent shifting, tipping, swaying or erratic motion.

Exception: The provisions pertinent to erratic motion or sway does not apply to an amusement ride or device designed to permit flotation characteristics or flexibility.

2206.8 *Leveling and Alignment.* Corner posts, central columns or support structures of an amusement ride or device designed to operate on a vertical axis shall be plumbed and secured so that the path of the sweeps or platforms shall be level and operate on a true horizontal plane at right angles to the axis of the pivot. An amusement ride or device whose carriers are designed to operate on a horizontal axis shall be leveled so that the carriers all orbit in a true vertical plane.

2206.8.1 The base of an amusement ride or device employing a combination of orbiting planes or a ride whose carriers operate normally in a plane other than true horizontal or vertical shall be leveled, plumbed and secured so that they will not tip or shift and will be stable under the most adverse operating conditions, except for an amusement ride or device designed to permit flotation characteristics or flexibility or designed to operate properly regardless of whether the base is plumb or level.

SECTION 2207 SAFEGUARDS

2207.1 *Guarding of Machinery.* Machinery used in or with an amusement ride or device shall be enclosed, barricaded or otherwise effectively guarded against contact. Guards removed for maintenance purposes shall be replaced before normal operation is resumed. All amusement rides or devices containing or having a mounting or mountings that would catch, wind up or entangle long hair shall have adequate guards.

2207.2 *Public Protection.* An amusement ride or device shall not be used or operated while any person is to be endangered by it. Areas in which persons may be so endangered shall be fenced, barricaded or otherwise guarded against public intrusion.

2207.3 *Signage.* Signage describing any limitations of usage or the safety of riders or operators shall be placed in a prominent location at the entry to the ride where the patrons cannot obstruct it. The signage shall include number of riders, minimum or maximum rider height, weight, age or any other restrictions imposed by the ride manufacturer.

SECTION 2208 DESIGN LOAD AND SPEED

2208.1 *Design Load and Speed Shall Not be Exceeded.* An amusement ride or device shall not be overcrowded or loaded in excess of its safe carrying capacity, nor shall it be operated at an unsafe speed or at any speed beyond that recommended by the manufacturer. See Section 2201.3.

SECTION 2209 INSPECTIONS

2209.1 *Daily Inspection.* Prior to carrying passengers, the owner/operator shall conduct or cause to be conducted a daily documented and signed pre-opening inspection, based on the manufacturer provided instructions, to ensure the proper operation of the ride or device. The inspection program shall include, but not be limited to the following:

1. Inspection of all passenger-carrying devices, including restraint devices and latches.
2. Visual inspection of entrances, exits, stairways, and ramps.
3. Functional test of all communication equipment necessary for the operation of the ride.
4. Inspection or test of all automatic and manual safety devices.

5. Inspection or test of the brakes, including service brakes, emergency brakes, parking brakes, and backstops.

6. Visual, inspection of all fencing, guarding, and barricades.

7. Visual inspection of the ride structure.

8. The ride or device shall be operated for a minimum of one complete operating cycle.

9. Hydraulic systems shall be checked for leaks, damaged pipes and worn or deteriorated hoses. Only manufacturer approved hydraulic fluid shall be used.

10. A record of each inspection shall be maintained and shall be readily available to the Code Official at the time of inspection.

2209.2 *Unscheduled Cessation.* An amusement ride or device, or the specifically affected element, shall be appropriately inspected and operated, without passengers, to determine that it is functioning properly following an unscheduled cessation of operation caused by:

1. Malfunction or significant adjustment, or

2. Mechanical, electrical, or operational modification, or

3. Environmental conditions that affected the operation, or any combination of the three.

4. A record of each inspection shall be maintained and shall be readily available to the Code Official at the time of inspection.

2209.3 *Documentation.* Device setup, maintenance and inspection manuals from the manufacture, along with an operator training record signed by the trainer and trainee, shall be presented to the Code Official at the time of inspection.

SECTION 2210 WEATHER HAZARDS

2210.1 *Wind and Storm Hazards.* An amusement ride or device shall not be operated above wind limits established by the manufacturer or when storm warnings have been posted by the weather service, except as may be necessary to release or discharge passengers.

SECTION 2211 LIGHTING

2211.1 *Lighting.* Amusement rides or devices, temporary structures, access thereto and exits there from shall, while in operation or occupied, be provided with illumination by natural or artificial means sufficient to guard against personal injuries.

SECTION 2212 ACCESS AND EGRESS

2212.1 *Access and Egress.* Safe and adequate means of access to and egress from amusement rides, devices and temporary structures shall be provided. Such means of access and egress shall have:

1. Protection provided from hazards or falling by the use of rails, enclosures, barriers or similar means.
2. All passageways shall be kept free from debris, obstructions, projections and other hazards. All surfaces shall be maintained to prevent slipping and tripping.
3. Width of passageways shall not be less than the width of exit doors or stairs to which they lead. Headroom clearance shall not be less than 6' 8".
4. Stairways or ramps and the necessary connecting landings or platforms shall be provided whenever the entrance to or exit from such amusement device, ride, or temporary structure is above or below grade or floor level.

2212.2 *Design.* Stairways, landings and ramps shall provide the following:

1. Stairways, landings and ramps shall be designed, constructed and maintained to sustain safely a live load of at least 100 pounds per square foot.
2. Stairways, landing and ramps leading to or from an amusement ride or device intended for the public shall not be less than 36 inches wide for single lane passage. Landings shall have at least dimensions equal to the ramp width. Stair treads shall not be less than 11 inches (measured from riser to riser) and the rise shall not be greater than 7 inches (measured from tread to tread). Between any two connected levels, the treads shall be of uniform depth and the risers shall be of uniform height. The slope of ramps shall not exceed one-foot rise in 12 feet of run.
3. Guard rails shall be a minimum of 42 inches in height, non-climbable with no opening greater than 4 inches.
4. Handrails for stairs shall be a minimum of 34 inches in height and a maximum of 38 inches. The intermediate rail shall be 30 inches in height. These measurements are from nose of tread.

SECTION 2213 BOOTHS

2213.1 *General.* Temporary booths utilized for cooking food shall be located such that at least ten (10) feet of clearance exists on two sides for the use of fire equipment or other emergency vehicles, and shall not be located within ten (10) feet of amusement rides or devices. Each booth used for cooking shall be provided with at least one 2A10BC fire extinguisher. When cooking produces grease the cooking appliance shall be under a Type 1 hood with a UL300 fire suppression system with a current service inspection tag and a Type K fire extinguisher shall also be provided.

Exception: Type I hoods are not required for cooking equipment in tents.

SECTION 2214 SIGNAL SYSTEMS

2214.1 *Signal Systems.* Signal systems for the starting and stopping of amusement rides or devices shall be provided where the operator of the device does not have a clear view of the point at which passengers are loaded or unloaded. Any code of signals adopted shall be printed and kept posted at both operator's and signalman's stations. All persons who may use these signals shall be carefully instructed in their use. Signals for the movement or operation of an amusement device shall not be given until all passengers, operators, and other persons who may be endangered are in a position of safety.

SECTION 2215 DESIGN AND CONSTRUCTION

2215.1 *Allowable Loads.* Amusement rides or devices subject to the provisions of this code shall be so designed and constructed that the maximum allowable loads will not stress any part beyond allowable limits.

2215.2 *Anchors.* Amusement rides or devices shall be anchored, guyed, stayed or otherwise supported to provide proper stability and to restrict any adverse change in stability.

2215.3 *Brakes.* If tubs or other components of an amusement ride or device may collide upon failure of normal controls, emergency brakes sufficient to prevent such collisions shall be provided. On rides or devices which make use of inclined tracks, automatic anti-rollback devices shall be installed to prevent backward movement of the tubs in case of failure of the propelling mechanism.

2215.4 *Speed Limiting Devices.* An amusement ride or device capable of exceeding its maximum safe operating speed shall be provided with a speed-limiting device.

2215.5 *Passenger Protections.* The interior and exterior parts of all passenger-carrying amusement rides or devices with which a passenger may come in contact shall be smooth and rounded, free from sharp, rough or splintered edges and corners, with no protruding studs, bolts, screws or other projections that could cause injury. Interior parts upon which or against which a passenger may be forcibly thrown by the action of the ride shall be adequately padded.

2215.5.1 *Guards.* Devices that are self-powered and that are operated by passengers shall have the driving mechanism so guarded and the guards so locked in place as to prevent passengers from gaining access to the mechanism.

2215.5.2 *Restraining Devices.* Restraining devices, such as belts, bars, foot rests and other equipment as may be necessary for safe entrance and exit and for support while the device is in operation shall be provided. Such equipment and the fastenings shall be of sufficient strength to retain the passengers. The fastenings shall be of a type, which cannot be inadvertently released.

2215.6 *Fences.* All amusement devices shall be enclosed with a fence with entrance and exit gates. Fences shall be a minimum of 42 inches high with no opening or space over 4 inches, non-climbable, and shall be self-supporting. The exit gate shall swing away from the device.

SECTION 2216 ANCILLARY EQUIPMENT

2216.1 *Air Compressors.* Air compressors, air compressor tanks and equipment used in connection therewith, shall be constructed, equipped and maintained in accordance with ANSI/CAGI B19.1 listed in Chapter 15. The equipment shall be inspected and tested at least once a year. A record of each inspection shall be kept by the owner and/or manager on the premises where the equipment is located and shall be made available on request by the Code Official. Compressor relief valves shall be piped so as to direct the relieved air away from passengers and operators.

2216.2 *Engine Driven Power Sources.* Internal combustion power sources shall be of adequate type, design and capacity to handle the design load.

2216.2.1 *Fuel Supply.* Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Where it is impossible to provide tanks of proper capacity for a complete day, the ride or device shall be shut down and unloaded or evacuated during the refueling procedure. Under no circumstances shall the fuel supply be replenished while the engines are running.

2216.2.2 *Ventilation.* An enclosed area in which an internal combustion engine is operated shall be ventilated. Exhaust fumes from the engine shall be discharged outside the area.

2216.2.3 *Location.* Internal combustion power sources shall be located in a manner permitting proper maintenance and shall be protected either by guards, fencing or enclosure.

2216.3 *Mechanical Power Transmission.* All power transmission parts shall be shielded, enclosed or barricaded to protect the public.

SECTION 2217 FIRE PROTECTION

2217.1 *Accessibility.* Provisions shall be made for fire and emergency vehicle access to all portions of any site on which amusement devices or rides, as defined herein, are located whether permanent or temporary installations.

2217.2 *Fire Resistance of Fabrics.* Fabrics constituting part of an amusement ride or device or enclosure therefore shall be flame resistant and shall be capable of passing a flame resistant field test in accordance with Chapter 6 of NFPA 701 listed in Chapter 15.

2217.3 *Flammable Waste.* Flammable waste such as oily rags and other flammable materials shall be placed in covered metal containers. Such containers shall not be kept at or near site.

2217.4 *Flammable Liquids and Gases.* Gasoline and other volatile liquids and flammable gases shall be stored in cool and ventilated places. Smoking and the carrying of lighted cigars, cigarettes or pipes is prohibited in any area where such liquids or gases are stored or are transferred from one container to another.

2217.4.1 *Storage.* Storage and use of flammable liquids and gases shall comply with the requirements of the building code as listed in Chapter 15.

2217.5 *Special Amusement Buildings.* Temporary amusement buildings shall be equipped with an automatic fire detection system and an automatic sprinkler system throughout. Actuation of any fire detection device shall immediately sound an alarm at a constantly attended location at the building. Permanent amusement building shall comply with the building code.

2217.6 *Fire Extinguishers.* Each ride shall have at least one serviceable and tagged type ABC fire extinguisher provided by the ride operator and shall be sized in accordance with NFPA 10 and the requirements of the IFC. Extinguishers shall be within an easy reach of operator.

SECTION 2218 ELECTRICAL INSTALLATIONS

2218.1 *Electrical Installation.* Electrical permits shall be required for permanent installations including wiring, equipment and appliances. All electrical installations shall be in accordance with the Chesterfield Electrical Code. All electrical disconnects, connection boxes, connectors, raceways and wiring shall be UL listed. The Code Official shall be permitted to require additional safety measures such as extra grounding, ground fault interrupters, etc. if in his opinion conditions at the site or the type or condition of equipment justify such additional protection. The Code Official may issue supplemental rules and regulations to further interpret the electrical requirements as provided for in paragraph 104.1.1 of this code.

2218.2 *Junction Boxes and Components.* All junction boxes and electrical components for operation of amusement rides or devices shall be segregated from passageways by fencing. All fencing shall be constructed such that it prohibits unauthorized entry, and shall be maintained for the duration of the event.

SECTION 2219 INFLATABLE DEVICES

2219.1 *Stakes.* Inflatable devices shall be staked in accordance with the manufacturer's and Consumer Product Safety Commission requirements, whichever is more restrictive. Stakes shall be a minimum of 30 inches in length, 7/8 in diameter and driven a minimum of 24 inched into the ground. Sandbags shall not be used outdoors unless specifically approved by the manufacturer. Sandbags shall have documentation of their weight or a scale shall be provided to verify the weight.

2219.2 *Tethers.* All tethers shall be in good condition, of the proper length and size with no knots and shall not be frayed. Connections at each end shall

be made in accordance with the manufacturer's directions. The connection points at the inflatable shall be in good condition and not modified.

2219.3 *Repairs.* The inflatable shall be clean and in good condition. All repairs shall be approved by the manufacturer.

2219.4 *Blower and Fans.* Inflation devices shall be of proper CFM required by the manufacturer, UL listed and in good condition. All air supply tubes shall be utilized unless manufacturer states a different requirement.

2219.5 *Electrical Connection.* Extension cords shall be a minimum of 12 gauge wire size, listed for rough service and not over 100 feet in length. If building power is utilized to power the blower only one extension cord may be plugged into a branch circuit. GFIC protection is required.

Attachment 'E'

1102.100 - Amendment to National Electrical Code

Chapter 1—Article 100—Definitions.

Chapter 1 - Article 100 of the 2014 National Electrical Code is hereby amended by the addition of the following provisions. When used in this code and in standards, rules and regulations promulgated under authority of this code, the following words or phrases shall have the meanings ascribed to them in this section unless the context clearly requires otherwise.

Interchangeability: Words stated in the present tense include the future; gender based words are intended as neutral; the singular number includes the plural and the plural the singular.

Terms Defined in Other Codes: Where terms are not defined in this code and are defined in the building, mechanical, or plumbing codes adopted by Chesterfield in Chapter 07 of the City Code as amended, such terms shall have the meanings ascribed to them as in those codes.

Article 100. Definitions

(A) GENERAL

Aid or Abet: To help, assist, advance, facilitate or promote the acquisition of an electrical permit for work performed by an unlicensed individual not working as an employee under the direct supervision of a license holder in St. Louis County.

Board of Appeals: The five member panel created in Chapter 1115 SLCRO 1974 as amended which has authority to hear and decide appeals from decisions of the Code Official or the Board of Electrical Examiners pursuant to the provisions of this code.

Building Commission : The five member panel set forth in Article IV, Section 4.330 of the St. Louis County Charter.

Code: These regulations, subsequent amendments thereto, or any emergency rule or regulation which the administrative authority having jurisdiction has lawfully adopted.

Code Official: The Director of Transportation and Public Works or the Director's duly authorized representative who is vested with executive and administrative authority to enforce all laws ordinances and codes regulating construction, alteration, addition, repair, removal, demolition, use, location, occupancy and maintenance of all buildings and structures, electrical, plumbing, drainlaying and mechanical systems pursuant to Chapters 1100, 1115, 1102, 1103, 1104 and 1108 SLCRO 1974, as amended.

Construction Documents: All of the written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of the project necessary for obtaining an electrical permit.

Disaster: A disaster shall include but not necessarily be limited to flood, windstorm, tornado, severe storm, earthquake, bomb blast, explosion or similar natural or man-made type event. The Code Official shall make the determination whether an event shall be declared a disaster.

Emergency: An event or occasion that requires immediate action in order to preserve or restore the public peace, health, safety or welfare.

Employee: A person who has been hired by a business entity licensed under this code, to perform work regulated by this code. The licensed business entity shall keep true and accurate payroll and other related records that are required by law for a period of at least three years after such record was made. A person is an "employee" if the person:

- Performs services for wages or salary for a business entity that submits IRS forms W-2, W-4 and 1-9 for that person.
- May be disciplined or discharged by the business entity.
- Is directed by the business entity on what work to do, when to do it and in what sequence the work will occur.
- Performs services that are incorporated into the business entity's operation and significantly affect the success of the business.
- Is required to undergo company-provided training.
- Uses the business entity's tools, equipment, materials and work facilities.

All determinations with respect to whether a person is an "employee" or "full time employee" will be decided by the Code Official.

Full time employee: An employee of a business entity licensed under this code who performs tasks solely for this business entity during normal hours of operation of the business entity.

Existing Work: Any electrical system regulated by this code which was legally installed prior to the effective date of this code, or for which a permit to install has been issued.

Grandfathering: Approval of the continued use of an existing system or part of an electrical system that complies with the code requirements under which the system or part was installed including the requirements for licensure and permits contained within this code.

Registered Design Professional: An architect or engineer, registered or licensed to practice professional architecture or engineering pursuant to the professional registration laws of the state of Missouri.

Structure : That which is built or constructed or a portion thereof.

Workmanlike Manner: An electrical installation which complies with the published American National Standard "Good workmanship in Electrical Construction."

1102.105 - Technical amendments to the requirements of the 2014 National Electrical Code.

—The following sections of the 2014 National Electrical Code, adopted by Chesterfield, are amended as herein identified and shall be part of the Electrical Code of Chesterfield or deleted therefrom as indicated.

Article 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel. Ground-fault circuit-interrupter protection for personnel shall be provided as required in 210.8(A) through (C). The ground-fault circuit-interrupter shall be installed in a readily accessible location.

Informational Note: See 215.9 for ground-fault circuit-interrupter protection for personnel on feeders.

(A) **Dwelling Units.** All 125 volt, single phase, 15- and 20- ampere receptacles installed in the locations specified in 210.8(A)(1) through (10) shall have ground-fault circuit-interrupter protection for personnel.

(1) Bathrooms.

(2) Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use.

(3) Outdoors.

Exception to (3): Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 421.22, as applicable.

(4) Crawl spaces- at or below grade level.

(5) Unfinished basements- for the purpose of this section, unfinished basements are defined as portions or areas of the basement not intended to be habitable rooms and limited to storage areas, work areas, and the like.

Exception No. 1 to (2) and (5): A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord-and plug-connected in accordance with 400.7(A)(6), (A)(7) or (A)(8).

Exception No. 2 to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.

Receptacles installed under the exception No. 2 to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).

(6) Kitchens-where the receptacles are installed to serve the counter top surfaces.

(7) Sinks-where receptacles are installed within 1.8 m (6 ft.) of the outside edge of the sink.

(8) Boathouses.

(9) Bathtubs or shower stalls-where receptacles are installed within 1.8 m (6 ft.) of the outside edge of the bathtub or shower stall.

(10) Laundry areas with a sink.

210.12 Arc-Fault Circuit-Interrupter Protection. Arc-fault circuit-interrupter protection shall be provided as required in 210.12(A),(B) and (C). The arc-fault circuit-interrupter shall be installed in a readily accessible location.

(A) **Dwelling Units.** All 120 volt, single phase, 15- and 20-ampere branch circuits supplying outlets or devices installed in bedrooms shall be protected by any of the means described in 210.12(A)(1) through (6):

(1) A listed combination-type arc-fault circuit- interrupter, installed to provide protection of the entire branch circuit.

(2) A listed branch/feeder-type arc-fault circuit- interrupter installed at the origin of the branch circuit in combination with a listed outlet branch circuit type arc-fault circuit-interrupter installed at the first outlet box on the branch circuit. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.

(3) A listed supplemental arc protection circuit breaker installed at the origin of the branch circuit in combination with a listed outlet branch circuit type arc- fault circuit-interrupter installed at the first outlet box on the branch circuit where all of the following conditions are met:

a. The branch circuit wiring shall be continuous from the branch circuit overcurrent device to the outlet branch circuit arc-fault circuit-interrupter.

b. The maximum length of the branch circuit wiring from the branch circuit overcurrent device to the first outlet shall not exceed 15.2 m (50 ft.) for a 14 AWG conductor or 21.3 m (70 ft.) for a 12 AWG conductor.

c. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.

(4) A listed outlet branch circuit type arc-fault circuit- interrupter installed at the first outlet on the branch circuit in combination with a listed branch circuit overcurrent protective device where all of the following conditions are met:

a. The branch circuit wiring shall be continuous from the branch circuit overcurrent device to the outlet branch circuit arc-fault circuit-interrupter.

b. The maximum length of the branch circuit wiring from the branch circuit overcurrent device to the first outlet shall not exceed 15.2 m (50 ft.) for a 14 AWG conductor or 21.3 m (70 ft.) for a 12 AWG conductor.

c. The first outlet box in the branch circuit shall be marked to indicate that it is the first outlet of the circuit.

d. The combination of the branch circuit overcurrent device and outlet branch circuit arc-fault circuit- interrupter shall be identified as meeting the requirements for a system combination-type arc-fault circuit-interrupter and shall be listed as such.

(5) If RMC, IMC, EMT, type MC, or steel-armored type AC cables meeting the requirements of 250.118, metal wireways, metal auxiliary gutters, and metal outlet and junction boxes are installed for the portion of the branch circuit between the branch circuit overcurrent device and the first outlet, it shall be permitted to install a listed outlet branch circuit type AFCI at the first outlet to provide protection for the remaining portion of the branch circuit.

(6) Where a listed metal or non-metallic conduit or tubing or type MC cable is encased in not less than 50 mm (2 in.) of concrete for the portion of the branch circuit between the branch circuit overcurrent device and the first outlet, it shall be permitted to install a listed outlet branch circuit type AFCI at the first outlet to provide protection for the remaining portion of the branch circuit.

Exception: Where an individual branch circuit to a fire alarm system installed in accordance with 760.41(B) or 760.121(B) is installed in RMC, IMC, EMT, or steel sheathed cable, type AC or type MC, meeting the requirements of 250.118, with metal outlet and junction boxes, AFCI protection shall be permitted to be omitted.

Informational Note No. 1: For information on combination- type and branch/feeder-type arc-fault circuit-interrupters, see UL 1699-2011, *Standard for Arc-Fault Circuit-Interrupters.* For information on outlet branch circuit type arc-fault circuit-interrupters, see *UL Subject 1699A, Outline of Investigation for Outlet Branch Circuit Arc- Fault Circuit-Interrupters* . For information on system combination AFCIs, see *UL Subject 1699C, Outline of Investigation for System Combination Arc-Fault Circuit-Interrupters.*

Informational Note No. 2: See 29.6.3(5) of *NFPA 72-2013 National Fire Alarm and Signaling Code,* for information related to secondary power-supply requirements for smoke alarms in dwelling units.

Informational Note No. 3: See 760.41(B) and 760.121(B) for power-supply requirements for fire alarm systems.

210.12(B) Branch Circuit: Extensions or Modifications-Dwelling Units. In any of the areas specified in 210.12(A), where branch circuit wiring is modified, replaced or extended, the branch circuit shall be protected by one of the following:

(1) A listed combination-type AFCI located at the origin of the branch circuit.

(2) A listed outlet branch circuit type AFCI located at the first receptacle outlet of the existing branch circuit.

Exception: AFCI protection shall not be required where the extension of the existing conductors is not more than 9.5 m (30 ft.) and does not include any additional outlets or devices.

210.12(C) Dormitory Units. All 120-volt, sing-phase, 15- and 20-ampere branch circuits supplying outlets installed in dormitory unit bedrooms, living rooms, hallways, closets, and similar rooms shall be protected by a listed arc-fault circuit interrupter meeting the requirements of 210.12(A)(1) through (6) as appropriate.

406.12 Tamper Resistant Receptacles. Tamper resistant receptacles shall be installed as specified in 406.12(A) and (B).

(A) **Guest Rooms and Guest Suites of Hotels and Motels.** All nonlocking-type 125 volt, 15- and 20-ampere receptacles located in guest rooms and guest suites of hotels and motels shall be listed tamper-resistant receptacles.

(B) **Child Care Facilities.** In all child care facilities, all nonlocking-type 125 volt 15- and 20- ampere receptacles shall be listed tamper resistant receptacles.

Exception to (A) and (B): Receptacles in the following locations shall not be required to be tamper resistant:

(1) Receptacles that are more than 1.7 m (5½ ft.) above the floor.

(2) Receptacles that are part of a luminaire or appliance.

(3) A single receptacle or a duplex receptacle for two appliances located within dedicated space for each appliance that, in normal use, is not easily moved from one place to another and that is cord and plug-connected in accordance with 400.7(A)(6), (A)(7), or (A)(8).

(4) Nongrounding receptacles used for replacements as permitted in 406.4(D)(2)(a).

Attachment 'F'

1103.401 - Amendments to the Uniform Plumbing Code™

Chapter 1—Administration.

Chapter 1 is not adopted and not included in the Plumbing Code adopted by the City of Chesterfield pursuant to Section 1103.020.

1103.402 - Amendments to the Uniform Plumbing Code™—Chapter 2—Definitions.

Chapter 2 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

201.1 Terms Defined in Other Codes: Where terms are not defined in this Code and are defined in Chapters 1003, 1008, 1100, 1115, 1116, 1117, 1102, 1105, 1107, 1108, 1109, or 1110 SLCRO 1974 as amended, such terms shall have the meanings ascribed to them in those Codes.

Addition. An increase in building area, aggregate floor area, height or number of stories of a structure.

Additional Inspection. An inspection which is not a required inspection as defined in this Code but which in the judgment of the Code Official is reasonably necessary to enforce this Code or as an inspection which is required as a result of unusual or complicated construction and/or is defined as an inspection which is made as a result of non-compliance, not ready, lockout etc. See Extra Inspection. Fees for additional inspections shall be as specified in Chapter 1100 SLCRO 1974 as amended.

Alteration. Any construction or renovation to an existing structure other than repair or addition.

Authority Having Jurisdiction. City of Chesterfield.

Bedroom. A room furnished with a bed and intended primarily for sleeping.

Board. The Board of Plumbing Examiners.

Board of Appeals. The St. Louis County Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Board of Registration. The Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Landscape Architects.

Boiler. See Water Heater Boiler.

Building Commission. The St. Louis County Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Code. The City of Chesterfield Building Code.

Building Drain. That part of the lowest piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning five (5) feet (1525 nun) outside the building wall, or five (5) feet (1525 mm) beyond plumbing appliances, appurtenances or equipment installed outside the walls of the building such as but not limited to grease, oil, and sand interceptors.

Building Classification . The arrangement adopted by the Authority Having Jurisdiction for the designation of buildings in classes according to occupancy.

Building Trap. A device, fitting, or assembly of fittings installed in the building drain to prevent circulation of air between the drainage system of the building and the building sewer.

Central Use Facility(s). A restroom facility or facilities designed and sized to accommodate the total occupant load of the building, located within the distance required by the Code for maximum access and meeting the requirements of the Code within its use category.

Certified Backflow Assembly Tester. A person who is certified by the Missouri Department of Natural Resources as a backflow prevention device tester and possesses a backflow prevention device tester certificate issued pursuant to this code for the particular application involved.

Certified in Plumbing Design (CPD). A person who has successfully completed the CPD examination as a part of the international certification program for engineers and designers of plumbing systems and so designated by the American Society of Plumbing Engineers.

Code Authority/Code Official. The Director of Planning of Chesterfield, Missouri or his duly authorized representative.

Committee. The Committee of Plumbing Code Review as created herein.

Containment. (Cross-connection) Protection of the public water system is obtained by installation of an approved backflow prevention assembly or air-gap separation at the user connection from the main service line(s).

Cross-Connection. Any actual or potential connection or structural arrangement, between a public or private potable water supply system and any other source or system through which it is possible to introduce into any part of the private or public water system any used water, industrial fluid, gas or substance other than the intended potable water with which the system is supplied. By-pass arrangements, jumper connections, removable sections, swivel or change-over devices through which or because of which, backflow can or may occur are considered to be cross-connections.

Cross-Connection, Direct. A continuous, enclosed interconnection or cross-connection to allow the flow of fluid from one system to the other.

Cross-Connection, Indirect. A potential cross-connection such that the interconnection is not continuously enclosed and the completion of the cross-connection depends on the occurrence of one or more abnormal conditions.

Cross-Connection, Isolation. Protection of the user water system by installation of an approved backflow prevention device or assembly at the point of connection between the users water system and any device, equipment, appliance, appurtenance assembly or area which might constitute a real or potential cross-connection.

Customer . Any person who receives water from a public water system, except those persons receiving water for resale.

Customer Service Line. The pipeline from the public water system to the first tap, fixture, receptacle or other point of customer water use or to the first auxiliary water system or pipeline branch in a building.

Customer Water System. All piping, fixtures and appurtenances, including auxiliary water systems, used by a customer to convey water on his/her premises.

Dead End. That part or branch of a drainage piping system, which is without a free circulation of air.

Direct Cross-Connection. A continuous, enclosed interconnection or cross-connection to allow the flow of fluid from one system to the other.

Disaster. A disaster shall include but not necessarily be limited to flood, tornado, severe storm, earthquake or similar type event. The Code Official shall make the determination whether an event shall be declared a disaster.

Downspout. The rain leader from the roof to the building storm drain, combined building sewer, or other means of disposal located outside of the building.

DWV. An acronym for "drain-waste-vent" referring to the combined sanitary drainage and venting systems and the storm water drainage system. This term is technically equivalent to "soil-waste-vent" (SWV).

Emergency. An event or occasion that requires immediate action in order to preserve or restore the public peace, health, safety or welfare.

Employee. A person, who produces a product or service, employed by another usually for wages or salary in a position below the executive level.

Engineer. An engineer registered or licensed to practice professional engineering in Missouri in accordance with the professional registration laws of the state of Missouri.

Extra Inspection, is defined as an inspection, which is required as a result of unusual or complicated construction and/or is defined as an inspection,

which is made as a result of noncompliance, not ready, lockout etc. An inspection, which is not a required inspection as defined in this Code but which in the judgment of the Code Official, is reasonably necessary due to non-compliance with Code requirements, or work not ready or accessible for inspection when requested. Fees for extra inspections shall be as specified in Chapter 1100 SLCRO 1974 as amended.

Facility. A single tract or contiguous tracts of land and any improvements on them, upon which one (1) or more service connections are located, and which, except for easements and public right-of-way, are wholly owned, leased or otherwise subject to the control of the customer.

Fixture Group. A set of fixtures within a room or rooms serving an individual or group of individuals at a unique single time.

Floor Area, Net. The actual occupied area not including unoccupied accessory areas such as corridors, stairways, toilet rooms, mechanical rooms and closets.

Health Department. The St. Louis County Department of Public Health.

HDPE. High Density Polyethylene.

Transportation. The City of Chesterfield Department of Public Works.

Irrigation Backflow Assembly. An assembly consisting of a Reduced Pressure Zone Backflow Device and a properly sized Shock Arrestor located downstream and within 12 inches of the backflow device.

Isolation - (Cross-Connection). Protection of the user water system by installation of an approved backflow prevention device or assembly at the point of connection between the users water system and any device, equipment, appliance, appurtenance assembly or area which might constitute a real or potential cross-connection.

Main & Branch System. The conventional method of water distribution. This system utilizes a main to service several branches, which in turn service individual fixtures.

Manifold System.

(1) The "home run" system utilizes a centrally located manifold to individually distribute supply lines to each fixture.

(2) The "remote manifold" system utilizes a trunk or main, which services several small manifolds that in turn service individual fixtures.

Master License Disabled. Master licensee who is unable to obtain permits and receive inspections because an approved bond or the required insurance certificate, current phone and address on file is not correct, or the Master licensee is in arrears on any fees or charges owed the City of Chesterfield or St. Louis County.

Master License Enabled. Master licensee who is able to obtain permits, receive inspections and who has on file with approved bond and insurance certificate, current phone and address is on file with St. Louis County. The Master licensee shall not be in arrears on any fees and charges owed the City of Chesterfield or St. Louis County.

Master License Inactive. A Master licensee who has chosen to put his Master license inactive.

Mechanical Code. The City of Chesterfield Mechanical Code.

Minor Repairs. The term "minor repairs" shall be construed to mean repairs within the interior of any building to leaks in drains, pipes, traps and valves, opening waste or supply pipes, and traps or drains. It shall not be construed to include any work involving connections to or replacement or rearrangement of soil pipes, supply pipes, waste pipes, vent pipes or inside rain leader pipes, or the replacing or setting of any fixture, or replacement or repairs to Backflow Prevention Devices, pressure reducing or regulating valves, or any other installation, repair or alteration which in the judgment of the Chief Plumbing Inspector is of such a nature which if improperly installed, repaired or altered would endanger the public health. Exemption from the permit requirements of this Code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this Code or any other laws or ordinances of this jurisdiction.

MSD. The Metropolitan St. Louis Sewer District.

Multiple Single-Family Dwelling. Wherever the term multiple single-family dwelling is used in this Code, it shall be construed to include two-family dwellings.

Multipurpose Residential Fire Protection Piping Systems. A piping system intended to serve all plumbing fixtures and fire protection needs.

Net Floor Area. The actual occupied area not including unoccupied accessory areas such as corridors, stairways, toilet rooms, mechanical rooms, and closets.

Office. The Office of the Chief Plumbing Inspector. (Plumbing and Sewer Inspection).

Other Establishment. Any public or private structure other than a dwelling, which generates sewage.

Parallel Water Distribution System. A Parallel Water Distribution System usually refers to plastic pipe systems, usually PEX or PEX-AL-PEX systems, that use a manifold in the system.

Plumbing System. Includes all potable water building supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipe(s), and all building drains and building sewers, including their respective joints and connection, devices, receptors, and appurtenances within the

property lines of the premises, and shall include potable water piping, potable water treating or using equipment, and water heaters and water heating boilers for potable water.

Exclusion: The receiving, unloading, moving, storing, hoisting, setting, aligning and leveling of casework housing plumbing components, such as laboratory fume hoods and hospital headwall units, shall not be considered to be components of plumbing systems and shall not be subject to the licensing provisions of this code.

Exclusion: Lawn Irrigation Systems, when connected to potable water supply and protected by a reduced principle backflow preventer assembly shall be considered to be irrigation equipment and not subject to specific Plumbing Code requirements. The lawn irrigation system is considered to be all piping, components, sprinklers, valves, etc., beyond the discharge side of the Irrigation Backflow Assembly.

Exclusion: Residential Fire Protection Systems, separate and independent from the water distribution system and protected by a backflow prevention assembly shall be considered to be a Stand Alone Fire Sprinkler System. The Residential Fire Protection System is considered to be all piping, components, sprinklers, valves, etc. beyond the discharge side of the Potable Water Service and Potable Water Distribution System Valve as installed and permitted under the Mechanical Code.

Public Water System. A system for the provision to the public of piped water for human consumption, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days per calendar year. Such system includes any collection, treatment, and storage or distribution facilities used in connection with such system.

Quick Closing Valve. A fast-action solenoid valve, spring loaded self-closing faucet, push-pull type valves and faucets, or any other device capable of instantaneously closing.

Rainwater Harvesting. A technology used to collect, convey, and store rain from relatively clean surfaces such as a roof, land surface or rock catchment for later use.

Re-inspection. See Extra Inspection.

Required Inspection. An inspection which falls within the minimum number of inspections required by this Code and Chapter 1115, 1116, 1117, SLCRO 1974 as amended.

Roof Drain. A drain installed to receive water collecting on the surface of a roof and to discharge it into a leader, down spout, or conductor. Roof drain includes sump receivers, clamps, grates, sumps, extensions, hangers, supports and all other appurtenances necessary for its function, security and stability.

Roughing-In. The installation of all parts of the plumbing system, which can be completed prior to the installation of fixtures. This includes drainage, water supply, gas piping, and vent piping and the necessary fixture supports.

1. *Ground Rough In.* All underground piping, which shall include waste, vent, and distribution piping.
2. *Stack Rough In.* All waste, vent and distribution water supply lines above ground.

Sanitary Sewer. A sewer, which carries sewage and excludes storm, surface, and ground water.

Service Connection. Any water line or pipe connected to a water distribution main or pipe for the purpose of conveying water to a point of use.

Sewer District. The Metropolitan St. Louis Sewer District (MSD) or private sewer company having jurisdiction in the location where work is to be performed.

Soil Characteristics, Limiting. Those soil characteristics which preclude the installation of a standard private sewage system including but not limited to evidence of water table or bedrock closer than four (4) feet to the ground surface and percolation rates slower than forty-five (45) minutes per inch. Also the amount of rock fragments in areas of significant potential for groundwater contamination.

Standpipe. A vertical pipe generally used for the storage and distribution of water for fire extinguishing.

Strapped Plumbing . A plumbing scheme where drain piping from upper floors is supported just below floor joists of lowest floor providing gravity flow to public or private sewer, and exits the building through a wall penetration.

Water Customer . Any person who receives water from a public water system.

Water Distribution System. All piping, conduits, valves, hydrant, storage facilities, pumps and other appurtenances, excluding service connections, which serve to deliver water from a water treatment plant or water supply source to the public.

Water Service Pipe/Building Supply. The pipe from the water main or other source of potable water supply, including the corporation, and meter (if installed), to the water distributing system of the building served.

Water System. All sources from which water is derived for drinking or domestic use by the public, also all structures, conduits and appurtenances by means of which water for use is treated, stored or delivered to consumers, except service connections from water distribution systems to buildings and plumbing within or in connection with buildings served.

Water Supply Source. All sources of water supply including wells, infiltration galleries, springs, reservoirs, lakes, streams or rivers from which water is derived for public water systems, including the structures, conduits, pumps and appurtenances used to withdraw water from the source or to store or transport water to the water treatment facility or water distribution system.

Welded Joint or Seam. Any joint or seam obtained by the joining of metal or plastic parts in the plastic molten state.

Welder, Pipe. A person who specializes in the welding of pipes and holds a valid certificate of competency from a recognized testing laboratory, based on the requirements of the ASME Boiler and Pressure vessels code, Section IX for metal pipe and/or based on the requirements of the AWS B2.4 Specification and/or Plastics-Pipe-Institute (PPI), Generic Butt Fusion Joining Procedure for Field Joining of Polyethylene Pipe for Welding Procedure and Performance Qualification for Thermoplastics.

Workmanlike. Executed in a skilled manner; i.e., generally plumb, level, square, in line, undamaged and without marring adjacent work.

CHAPTER 3 - GENERAL REGULATIONS

1103.403 - Amendments to the Uniform Plumbing Code™—Chapter 3—General Regulations.

—Chapter 3 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

301.1.4 Deleted.

301.2.5 Existing Buildings. In existing buildings or premises in which plumbing installations are to be altered, repaired, or renovated, the Authority Having Jurisdiction may permit deviation from the requirements of this Code, provided that such proposal to deviate is first submitted for proper determination in order that health and safety requirements, as they pertain to plumbing, shall be observed.

1. *Reuse of Water Service.*

   (A) Existing water service may be used in connection with new buildings or new plumbing and drainage work only when they are found on examination and test to conform in all respects to the requirements governing new work and the proper authority having jurisdiction shall notify the owner to make any changes necessary to conform to this Code. No building or part thereof shall be erected or placed over any part of a water service, which is constructed of materials other than

those approved elsewhere in this Code for use under or within a building.

(B) For alterations and additions to a building with an existing 3/4" size water service:

(1) For the installation of an additional 9 WSFUs which then results in an existing residential or commercial building to total no more than 2½ baths and a maximum total of 31 WSFUs the 3/4" size water service shall be allowed to remain with no change.

(2) For the installation adding more than 9 WSFUs or totaling more than 31 WSFUs, the 3/4" size water service shall be replaced and sized in accordance with the provisions of Chapter 6 of this Code.

301.4 Deleted.

301.5.3 Design Documents. The registered professional engineer shall provide four (4) complete sets of signed and sealed documents for the alternative engineered design for submittal to the Authority Having Jurisdiction. The design documents shall include at a minimum, a floor plan and a riser diagram of the work. Where appropriate, the design documents shall indicate the direction of flow, all pipe sizes, grade of horizontal piping, loading and location of fixtures and appliances.

305.0 Sewers Required.

305.2 Deleted.

310.5 Obstruction of Flow. No fitting, fixture and piping connection, appliance, device, or method of installation that obstructs or retards the flow of water, wastes, sewage, or air in the drainage or venting systems, in an amount greater than the normal frictional resistance to flow, shall be used unless it is indicated as acceptable in this code or is approved per Section 301.2 of this code. The use of an automatic air vent type fitting is prohibited. The enlargement of a three (3) inch (80 mm) closet bend or a stub to four (4) inches (100 mm) shall not be considered an obstruction.

311.0 Deleted.

311.2 Deleted.

311.0 Independent Systems.

311.1 General. The drainage system of each new building and of new work installed in an existing building shall be separate and independent from that of any other building, and, where available, every building shall have an independent connection with a public or private sewer.

Exception: Where one building stands in the rear of another building on an interior lot, and no private sewer is available or can be constructed to the rear building through an adjoining court, yard, or driveway, the building drain from the front building shall be permitted to be extended to the rear building.

The General requirements for building drains and building sewers serving single service Fats, Oil, or Grease (FOG) generating facilities. (See drawing # 19 in appendix M)

1. Commercial Units.

   (A) Separation of sanitary, and FOG building drains exiting the building.

      (1) All sanitary, and FOG building drains shall exit the building separately and shall be combined in a sampling manhole prior to leaving the property. Storm Drains shall exit the property separately where conditions allow.

Exception: Where the footprint of the building on the property does not provide adequate clearance for this installation it shall be installed inside the building. Access from the outside shall be provided for this installation.

2. One, Two & Four Family Residential

   (A) Separate FOG building drain not required

311.2 General requirements for building drains and building sewers serving multi-tenant one and two story buildings (also called strip stores). (See drawing #20 in appendix M).

1. There shall not be installed within the building structure a common drain to all tenant units. Each tenant will have installed an independent connection with a private sewer through a sampling tee. The private sewer will be located a minimum of five feet (5') from the building and a minimum of five feet (5') from the property line.

2. If the tenant is a FOG generating facilities there shall be a separate FOG building drain.

   (A) All grease generating appliances and all fixtures collecting FOG laden waste shall pass through a hydromechanical grease interceptor (HGI) before connection to the separate FOG building drain.

Exception: Strip stores and/or commercial plumbing installations as shown in Drawing 20, containing a maximum of 75 gpm (maximum 4 inch diameter outlet) discharge from the hydromechanical interceptor may be routed to the common sanitary drain within three (3) feet of the exterior foundation wall and prior to exiting the building.

Waste drain lines from garbage disposals, dishwashers and pre-rinse sinks, before entering a grease interceptor, shall first flow through a solids interceptor.

312.3 Building Sewer and Drainage Piping. No building drain or other drainage piping or part thereof, constructed of materials other than those approved for use under or within a building, shall be installed, or less than one (1) foot (305 mm) below the surface of the ground.

No building sewer or drainage piping or part thereof, shall be installed under or within five (5) feet (1524 mm) of any building or structure nor less than thirty (30) inches (760 mm) below the surface of the ground.

Exception: Transition from all drainage thirty (30) inches (760 mm) below the surface of the ground to the building sewer at a maximum of forty-five (45°) degrees.

312.13 Exposed ABS Piping. ABS piping shall not be exposed to direct sunlight.

Exception:

(1) ABS piping exposed to sunlight that is protected by water based synthetic latex paints

(2) ABS piping exposed as vent termination pipe through roof.

312.14 Exposed PVC Piping. PVC piping shall not be exposed to direct sunlight.

Exceptions:

(1) PVC piping exposed to sunlight that is protected by water based synthetic latex paints.

(2) PVC piping wrapped with not less than 0.04 inch (1.02 mm) thick tape or otherwise protected from UV degradation.

(3) PVC piping exposed as vent termination pipe through roof.

313.0 Protection of Piping , Materials and Structures.

313.3 Deleted.

313.9 Deleted.

313.10 Deleted.

313.10.1 Deleted.

316.0 Deleted.

316.1 Deleted.

314.4.2 Welding Thermoplastic Pipe and Fittings. Plastic pipe and fittings designed to be joined by thermoplastic welding processes used for owner and/or operator installed gas transmission mains and for other applications such as Gas Service Lines and Gas Mains, Domestic Water Mains and Potable Water Service Lines shall comply with AWS B2.4 Specification and/or Plastic-Pipe-Institute (PPI), Generic Butt Fusion Joining Procedure for Field Joining of Polyethylene Pipe, for Welding Procedure and Performance Qualification for Thermoplastics. Welding shall be performed by certified or qualified installers meeting the requirements of AWS B2.4, Individual Manufacturer Qualifications under the regulations of PPI, qualifications given by material distributor or manufacturer, or certification or qualification issued by owner. Qualification by

Manufacturers will last for the duration of one (1) year from time qualified unless installer has used the proceeded within the time allotted (determined by individual manufacturer.) The one (1) year qualification for a refresher course will commence from the date of the refresher course.

316.1.11.1 Deleted.

316.2.2 Deleted.

320.0 Deleted.

321.0 Parking Garages.

321.1 Parking Structures Drainage. Drainage systems for parking structures shall be designed and installed in the following manner:

1. Drainage systems for roofs and all uncovered areas shall discharge into the storm sewer in a manner prescribed by this code (See "6").
2. Drainage systems for intermediate floor areas and all other covered areas shall discharge into the sanitary sewer in a manner prescribed by this code (See "5" & "6").
3. Floor drains for parking structures, in parking areas, need not be trapped.
4. Sanitary drains shall discharge through sand and oil interceptors. The oil interceptor shall be located on the outside of the building.
5. All storm and sanitary piping that connect to sanitary or combination sewers shall be trapped prior to connection to the sewer.
6. Drainage and vent systems installed in parking structures shall not be interconnected with internal sanitary systems.
7. All drainage lines, sanitary and storm, shall be routed through inspection manhole prior to connection to sewer main or other approved discharge.

322.0 Hospitals and Ambulatory Care Facilities and Nursing Homes. All plumbing facilities shall comply with the Missouri Licensing Law Regulations and Codes for Hospitals and Ambulatory Care Facilities and Nursing homes.

322.2 Water Heating Equipment.

1. The water heating equipment shall have sufficient capacity to supply six and one-half (6-1/2) gallons of water at one hundred ten (110) degrees Fahrenheit per hour per bed for fixtures; four (4) gallons of water at one hundred and twenty (120) degrees Fahrenheit per hour per bed for kitchens, and four and one half (4-1/2) gallons of water at one hundred and sixty (160) degrees Fahrenheit per hour per bed for laundry. The rinse water temperature of automatic ware washing equipment shall be one hundred and eighty (180) degrees Fahrenheit.

2. Such water heating equipment may be of the instantaneous, semi-instantaneous, flash or storage type. Where direct fired water heaters are used, they shall be of an approved high pressure type. Submerged steam heating coil shall be of copper.

All water heating equipment shall be fabricated of non-corrosive metal or lined with non-corrosive material.

CHAPTER 4 - PLUMBING FIXTURES

1103.404 - Amendments to the Uniform Plumbing Code™—Chapter 4—Plumbing Fixtures.

—Chapter 4 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so note or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

402.3.1 Nonwater Urinals approved by Authority Having Jurisdiction.

405.2 Deleted.

405.4 Deleted.

406.0 Special Fixtures and Specialties.

406.1 Water and Waste Connections. Baptisteries, ornamental and lily ponds, aquaria, ornamental fountain basins, and similar fixtures and specialties requiring water and/or waste connections shall have adequate backflow and back-siphonage protection and shall be submitted for approval to the Authority Having Jurisdiction prior to installation.

406.2 Restaurant kitchen and other special use sinks may be made of approved type bonderized and galvanized sheet metal of not less than No. 16 U.S. Grade (0.0625) (1.6 mm) and stainless steel of approved quality and grade. All sheet metal plumbing fixtures shall be adequately designed, constructed, and braced in an approved manner to satisfactorily accomplish their intended purpose.

406.3 Deleted.

411.2 Deleted.

411.2.1 Deleted.

418.0 Floor Drains.

418.2 Strainer. Floor drains and floor sinks shall be considered plumbing fixtures, and each such drain or sink shall be provided with an approved-type strainer having a waterway equivalent to the area of the tailpiece. Floor drains and floor sinks shall be of an approved type and shall provide a watertight joint in the floor.

418.3 Location of Floor Drains. Floor drains shall be installed in the following areas:

(1) All toilet rooms designated as handicapped, and toilet rooms containing two or more water closets or a combination of one water closet and one urinal, except in a dwelling unit.

(2) Commercial kitchens and in accordance with Section 704.3.

(3) Laundry rooms in commercial and institutional buildings and common laundry facilities in multi-family dwelling buildings.

(4) Boiler rooms.

(5) Commercial and Institutional Kitchens.

(6) Toilet rooms designated for Public Use.

(7) Within fifteen (15') feet and in the same room as a hot water heater or water heater boiler.

(8) Within fifteen (15') feet and in the same room as backflow devices which have received approval from the Missouri Department of Natural Resources, which have in their design the capability of a discharge.

(9) All wheel chair accessible roll-in showers shall be supplied, in addition to the shower drain, with a threshold drain outside the shower within 5 feet of the shower drain, whenever a threshold or obstacle to natural drainage to the shower drain exists. Where the drain is required, the waste line of the threshold drain shall be connected to the shower drain waste pipe above the trap.

(10) When required by owner or designer, a floor drain shall be installed within five feet of the mop basin drain, and the waste line of that drain shall be connected to the mop basin drain waste pipe above the trap.

(11) All basements with or without fixtures shall require a floor drain.

411.2.14 Deleted.

411.2.15 Floor drains and floor sinks shall be installed in accordance with the provisions set forth in this Code and in the manner set forth hereunder:

A. A connection for a floor drain at the automatic clothes washer above ground may be discharged directly into the riser-pipe (stand pipe) above the trap of the automatic clothes washer drain and the floor drain need not be trapped.

B. Underground traps three inches (3") in diameter and larger for floor drains, hub drains or stand pipe receptors need not be vented if sufficient stack vents or vent stack are connected to the underground system to ensure adequate ventilation and protection of the trap seals.

C. Traps two inches (2") in diameter installed for floor drains, hub drains and standpipe receptors shall be individually vented.

D. The connection of a floor drain, three (3") or four (4") inches in size when installed underground shall be connected into the horizontal building drain not less than five (5') feet downstream from the soil or waste stack.

E. Floor sinks being used as indirect waste receptors for plumbing fixtures or appliances shall be individually wasted and vented in accordance with the provisions established in this Code.

F. Floor sinks, three (3") inch trap size and larger, being used as indirect waste receptors for drip drainage and other similar discharges may be either individually vented or line vented in accordance with the provisions established in this Code.

411.8 Deleted.

412.3 Deleted.

413.0 Deleted.

422.6 Food Service Establishments. Food service establishments with an occupant load of one hundred (100) or more shall be provided with separate facilities for employees and customers. Customer and employee facilities may be combined for occupant loads less than one hundred (100). Customer occupant load shall be determined as one (1) occupant per each fifteen (15) square foot or part thereof, of dining and waiting area. Where outdoor seating is provided for a restaurant, the actual outdoor seating area shall be included in the total occupant load area for the restaurant. When separate facilities are required for employees and customers and the total number of employees exceeds forty (40) at any time, a second toilet room shall be provided for employees and such toilet rooms shall be uni-sex. Employee toilet rooms do not require physically disabled accessibility if other facilities in this establishment are available which meet physically disabled accessibility requirements.

TABLE 4-1
Minimum Plumbing Facilities

Deleted.

TABLE 422.1 MINIMUM PLUMBING FACILITIES

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Authority Having Jurisdiction. Table 422.1 applies to new buildings, additions to a building, and changes of occupancy or type in an existing building resulting in increased occupant load.

Exception: New cafeterias used only by employees. For requirements for the physically disabled, ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities, may be used. Access to public toilet facilities shall not be areas used by employees preparing food or areas used for the repair or assembly of products obtained or consumed by customers, or storage rooms, or mechanical equipment rooms.

Exceptions:

1. Where outdoor seating is provided for a restaurant, the actual outdoor seating area shall be included in the total occupant load for the restaurant.

2. Re-occupancy with no change of use may require a change in the number of fixtures due to increase in occupant load or re-configuration of the space.

1. The figures shown are based upon one (1) fixture being the minimum required for the number of persons indicated or any fraction thereof.

2. Building categories not shown on this table shall be considered separately by the Authority Having Jurisdiction.

3. Drinking fountains shall not be installed in toilet rooms.

4. Laundry trays. One (1) laundry tray or one (1) automatic washer standpipe for each dwelling unit or one (1) laundry tray or one (1) automatic washer standpipe, or combination thereof, for each twelve (12) apartments. Kitchen sinks, one (1) for each dwelling or apartment unit.

5. For each urinal added in excess of the minimum required, one (1) water closet may be deducted. The number of water closets shall not be reduced to less than two-thirds (2/3) of the minimum requirement.

6. As required by PSAI Z4.1, Sanitation in Places of Employment.

7. Where there is exposure to skin contamination with poisonous, infectious, or irritating materials, provide one (1) lavatory for each five (5) persons.

8. Twenty-four (24) lineal inches (610 mm) of wash sink or eighteen (18") inches (457 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one (1) lavatory.

9. Laundry trays, one (1) for each fifty (50) persons. Service sinks, one (1) for each hundred (100) persons.

10. General. In applying this schedule of facilities, consideration shall be given to the accessibility of fixtures. Conformity purely on a numerical basis may not result in an installation suited to the need of the individual establishment. For example schools shall be provided with toilet facilities on each floor having classrooms, for students and for teachers.

    (A) Surrounding materials, wall and floor space to a point two (2) feet (610 mm) in front of urinal lip and four (4') feet (1,219 mm) above the floor, and at least two (2) feet (610 mm) to each side of the urinal shall be lined with non-absorbent materials.

    (B) Trough urinals are prohibited.

    (C) Waterless urinals are prohibited.

11. A restaurant is defined as a business which sells food to be consumed on the premises.

(A) The number of occupants for a drive-in restaurant shall be considered as equal to the number of parking stalls.

(B) Employee toilet facilities are not to be included in the above restaurant requirements. Hand washing facilities shall be available in the kitchen for employees.

(C) For a drive-thru or take-out restaurant with seating, not to exceed twenty (20) customers, toilet facilities shall be provided available to customers and employees. A minimum of one (1) toilet room consisting of one (1) water closet, one (1) lavatory, and one (1) floor drain shall be available to customers.

(D) For a drive-thru restaurant or take-out with no seating, toilet facilities are required for employees only.

(E) For a facility defined as a restaurant dispensing fuel to the public which offers food and drink in a structure larger than seven hundred fifty (750) square feet, separate toilet facilities for male and female shall be provided available to customers and to employees.

(1) Where there are more than twelve (12) but fewer than twenty-three (23) fuel dispensing stations available, there shall be provided for the male toilet room two (2) water closets, one (1) urinal, one (1) lavatory, and one (1) floor drain and there shall be provided for the female toilet room three (3) water closets, one (1) lavatory, and one (1) floor drain.

(2) For each additional ten (10) fuel dispensing stations there shall be provided for the male toilet room an additional one (1) water closet or urinal, and one (1) lavatory, and there shall be provided for the female toilet room an additional one (1) water closet, and one (1) lavatory.

12. For a facility dispensing fuel to the public which offers food and drink in a structure larger than seven hundred fifty (750) square feet, separate toilet facilities for male and female shall be provided available to customers and to employees.

(1) Where there are more than twelve (12) but fewer than twenty-three (23) fuel dispensing stations available, there shall be provided for the male toilet room two (2) water closets, one (1) urinal, one (1) lavatory, and one (1) floor drain and there shall be provided for the female toilet room three (3) water closets, one (1) lavatory, and one (1) floor drain.

(2) For each additional ten (10) fuel dispensing stations there shall be provided for the male toilet room an additional one (1) water closet or

urinal, and one (1) lavatory, and there shall be provided for the female toilet room an additional one (1) water closet, and one (1) lavatory.

13. Where food is consumed indoors, water stations may be substituted for drinking fountains. Offices or public buildings for use by more than six (6) persons shall have one (1) drinking fountain for the first one hundred fifty (150) persons and one (1) additional fountain for each three hundred (300) persons thereafter. At least one (1) drinking fountain of those required shall be located within twenty-five (25) feet of the entrance to the primary toilet room on any floor.

14. There shall be a minimum of one (1) drinking fountain per occupied floor in schools, theaters, auditoriums, dormitories, offices or public building.

15. The total number of water closets for females shall be at least equal to the total number of water closets and urinals provided for men. This requirement does not apply to retail or wholesale stores. For any facility which undergoes major renovation as a place of assembly for public amusement including, but not limited to, sports stadiums, arenas, auditoriums and assembly halls, there should be provided, at a minimum, the number of water closets for women as there are provided the total number of water closers and urinals for men. The term "major renovation" means any reconstruction, rehabilitation, addition or other improvement which increases the occupant load of the building by more than 20%.

16. For smaller-type Public and Professional Offices such as banks, dental offices, law offices, real estate offices, architectural offices engineering offices and similar uses. A public area in these offices shall use the requirements for Retail or Wholesale Stores.

17. Recreation or community room in multiple dwellings or apartment buildings, regardless of their occupant load, shall be permitted to have single-accommodation facilities in common-use areas within tracts or multi-family residential occupancies where the use of these areas is limited exclusively to owners, residents and their guests. Examples are community recreation or multi-purpose areas in apartments, condos, townhouses or tracts.

18. A drinking fountain shall not be required in occupancies of 30 or less. When a drinking fountain is not required, then footnotes 3, 12 and 13 are not required.

19. Provide one service sink per floor.

20. Provide one (1) service sink per structure or per wing.

21. Provide one (1) service sink per floor in facilities over Five Thousand Five Hundred (5500) square feet.

22. Provide a minimum of one (1) exterior hose bibb on all buildings.

CHAPTER 5 - WATER HEATERS

1103.405 - Amendments to The Uniform Plumbing Code™—Chapter 5—Water Heaters.

—Chapter 5 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

501.0 Deleted.

501.1 Deleted.

501.2 Any system with a new or a replacement water heating apparatus shall be provided with an approved, listed and adequately sized thermal expansion device (expansion tank), installed within ten (10) feet of, and on the cold water supply to the water heater, between the water heater shut-off valve and the water heater, at least 18 inches away from the cold water inlet fitting on the water heater. The tank may be installed in a vertical up, vertical down, or horizontal position in accordance with the manufacturer's recommendation. If the expansion tank is installed horizontally it must be adequately supported. No support shall be provided from the water heater. This expansion tank meets the requirements in 608.2 regarding protection from thermal expansion and maintenance of pressure setting of the regulator.

The measured static building pressure, and the pressure at which the expansion tank has been set shall be written in ink on a permanent durable type label (equal to an Avery #AVE6578 2" × 2 5/8; " Label) attached to the expansion tank in a visible location.

Shut-off valves for water heaters shall be installed in view of, within 10 feet of, within easy reach from the ground, and shall be readily accessible. No shutoff shall be installed on the branch to the expansion tank.

The expansion tank shall be installed in such a manner that the removal or replacement of the water heater is not impaired.

Exceptions:

1. Engineered systems that provide equivalent protection may be approved by the Authority Having Jurisdiction or his/her representative.
2. Listed non-storage instantaneous heaters having an inside diameter of not more than three (3") inches (76 mm).

3. Water heaters, 30 gallon or less, installed under counter or in confined spaces in multi-family units, where space does not permit the installation of an expansion tank, adequately sized mechanical water hammer arrestors may be used to provide for thermal expansion with the approval of the Authority Having Jurisdiction or his/her representative.

502.0 Deleted.

502.1 through *502.14* Deleted.

502.15 Deleted.

505.0 Deleted.

505.1 Deleted.

505.3 Deleted.

506.1 Deleted.

507.5 Drainage Pan. Where a water heater is located in an attic, in or on an attic-ceiling assembly, floor-ceiling assembly, or floor-subfloor assembly where damage results from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater with not less than ¾ of an inch (20 mm) diameter drain to an approved location. Such pan shall be not less than 1½ inches (38 mm) in depth.

508.0 Other Water Heater Installation Requirements.

508.4 When a water heater is located in an attic, attic-ceiling assemble, floor-ceiling assemble, or floor-subfloor assembly, or furred space, or above the ground or basement level and does not have a floor drain available, where damage may result from a leaking water heater, a watertight safe pan of corrosion-resistant materials shall be installed beneath the water heater and shall be laid on or be supported by a structurally sound base to ensure proper drainage. The drain from the pan shall discharge to a non-concealed point of disposal to alert occupants in the event of a leak.

The pan shall have a minimum depth of 2 inches (51 mm) and shall be of such shape and capacity as to prevent splashing or flooding, and shall be made water-tight. The pan shall not be less than 3 inches (76 mm) larger than the unit in width and length. Metallic pans shall have a minimum thickness of not less than 0.0276-inch (0.7 mm) galvanized sheet metal. Non-metallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm). Non-metallic safe pans shall be permitted to be used only with electric water heaters. Pan shall have a 1 inch (25.4 mm) minimum tapping and increase to a 1-1/4 inch (31.8 mm) diameter drain made of galvanized steel, copper, brass, solid core PVC or CPVC which terminates and discharges through an air gap or air break into a properly trapped and vented, receptor, hub drain, floor drain or floor drain with a funnel grate, or to an approved location. 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). Every

passageway to an attic water heater shall have an unobstructed solid continuous flooring not less than twenty-four (24") inches (610 mm) wide from the trap door or opening to the water heater. If the trap door or opening is more than eleven (11') feet (3352 mm) above the floor, a stairway or ladder permanently fastened to the building shall be provided. Such stairway or ladder shall lead directly to the edge of the trap door or opening and shall comply with the provisions of this section.

Exception: A portable ladder may be used for access for water heaters in attics on the single-story portion of a Group U, Division 1 or R occupancy.

508.5 Relief Valve Discharge. Discharge from a relief valve into a water heater pan is permitted.

508.6 through *512.0* Deleted.

510.8.4 Deleted.

510.8.5 Deleted.

510.9 Deleted.

510.9.1 Deleted.

510.9.2 Deleted.

Chapter 5 Part II - Deleted.

CHAPTER 6 - WATER SUPPLY AND DISTRIBUTION

1103.406 - Amendments to the Uniform Plumbing Code™—Chapter 6—Water Supply and Distribution.

—Chapter 6 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

601.1 Deleted.

601.1.1 Deleted.

601.2.1 Temperature Maintenance. Where Required - Heated water distribution systems in buildings, where developed length of heated water piping from the source of the heated water to the farthest fixture exceeds hundred (100') feet, shall maintain heated water temperature in all supply piping to within twenty-five (25') feet of any heated water outlet.

602.5 Deleted.

603.2 Approval of Devices or Assemblies . Before a device or an assembly is installed for the prevention of backflow, it shall have first been approved by the Missouri Department of Natural Resources. Devices or assemblies shall be

tested in accordance with recognized standards or other standards acceptable to the Authority Having Jurisdiction. Backflow prevention devices and assemblies shall comply with Table 603.2, except for specific applications and provisions as stated in Section 603.5.1 through Section 603.5.20.

Devices or assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working condition by the person or persons having control of such devices or assemblies. Such devices or assemblies shall be tested at the time of installation, repair, or relocation and not less than on an annual schedule thereafter, or more often when required by the Authority Having Jurisdiction. When found to be defective or inoperative, the device or assembly shall be repaired or replaced.

No device or assembly shall be removed from use or relocated or other device or assembly substituted, without obtaining an approved permit.

Testing or maintenance shall be performed by a certified backflow assembly tester or repairer in accordance with ASSE Series 5000 or otherwise approved by the Authority Having Jurisdiction.

603.3 Deleted.

603.4 General Requirements. All assemblies shall conform to listed standards and be acceptable to the Authority Having Jurisdiction over the selection and installation of backflow prevention assemblies. In addition to the standards for approval established elsewhere in this Code all Reduced Pressure Principle Backflow Prevention Assemblies and Double Check Valve Backflow Prevention Assemblies of any nature shall have the approval of the University of Southern California Foundation for Cross Connection Control and Hydraulic Research, and the Missouri Department of Natural Resources.

TABLE 6-2 Deleted.

603.4.6 Deleted.

603.4.6.1 Deleted.

603.4.6.3 Deleted.

603.4.3 Access and Clearance. Access and clearance shall be provided for the required testing, maintenance, and repair. Access and clearance shall be in accordance with the manufacturer's instructions, and not less than 12 inches (305 mm)or not more than 60" (1524 mm) between the lowest portion of the assembly and grade, floor, or platform. Installations elevated that exceed 5 feet (1524 mm) above the floor or grade shall be provided with a permanent platform within five (5) feet (1524 mm) below the device capable of supporting a tester or maintenance person.

603.4.6 Integral Backflow Preventers Fixtures, appliances or appurtenances with integral backflow preventers or integral airgaps manufactured as a unit shall be installed in accordance with their listing requirements, the

manufacturers' instructions and as acceptable by the Authority Having Jurisdiction.

603.4.8 Deleted.

603.4.8 Drain Lines. Drain lines serving backflow devices or assemblies shall be sized in accordance with the discharge rates of the manufacturer's flow charts of such devices or assemblies and a floor drain shall be installed within fifteen (15') feet and in the same room as backflow devices or assemblies which have received approval from the Missouri Department of Natural Resources, which have in their design the capability of a discharge.

603.5.6 Protection from Lawn Sprinklers and Irrigation Systems. Potable water supplies to systems having no pumps or connections for pumping equipment, and no chemical injection or provisions for chemical injection, shall be protected from backflow by a reduced-pressure principle backflow prevention assembly (RP).

603.5.6.2 Systems with Backflow Devices. Where systems have a backflow device installed downstream from a potable water supply pump or a potable water supply pump connection, the device shall be a reduced-pressure principle backflow prevention assembly (RP).

603.5.8 Water-Cooled Equipment. Water-cooled compressors, degreasers, or other water-cooled equipment shall be protected by a listed Reduced Pressure Zone backflow preventer installed in accordance with the requirements of this chapter.

603.5.9 Aspirators. Water inlets to water-supplied aspirators shall be equipped with a vacuum breaker or equipped with a listed Reduced Pressure Zone Backflow Preventer installed in accordance with its listing requirements and this chapter. The discharge shall drain through an air gap. When the tailpiece of a fixture to receive the discharge of an aspirator is used, the air gap shall be located above the flood-level rim of the fixture.

603.5.10 Steam or Hot Water Boilers. Potable water connections to steam or hot water boilers shall be protected from backflow by a reduced pressure principle backflow prevention assembly in accordance with Table 603.2. When chemicals are introduced into the system, a reduced pressure principle backflow prevention assembly shall be provided in accordance with Table 603.2.

603.5.16 Special Equipment. Portable cleaning equipment, dental vacuum pumps and chemical dispensers shall be protected from backflow by an air gap or a reduced pressure principle backflow preventer.

603.5.18 Pure Water Process Systems. The water supply to a pure water process system, such as dialysis water systems, semiconductor washing systems, and similar process piping systems, shall be protected from backpressure and backsiphonage by installation of a reduced-pressure principle backflow preventer.

Exception: Portable dialysis equipment meant for use in a private residence. The equipment shall be protected by using a 316 stainless steel, corrosion resistant, double check with an atmospheric port, ASSE 1022, NSF Standard 18, (vented backflow preventer), or air gap as a means of backflow prevention in lieu of a Reduced Pressure Zone Backflow Preventer.

603.5.21 Installation of Backflow Preventers.

1. No person except those qualified, licensed and/or registered and bonded under this Code shall install a Backflow Prevention Device.
2. A permit is required for the installation of all Reduced Pressure Principle Backflow Prevention Devices and Double Check Valve Assembly Backflow Prevention Devices. Permits shall be issued and inspections performed by the plumbing section of the Department of Public Works. Permits shall be issued only to those contractors who are licensed and/or registered and bonded under this Code.
3. All backflow prevention devices shall be accessible. Backflow prevention devices shall not be installed in pits or similar potentially submerged locations or in fume, chemical or fuel hoods, or in any area containing fumes that are toxic, poisonous or corrosive.
4. Pressure type vacuum breakers shall be installed at a height of at least twelve (12) inches above the flood level rim of the fixture, tank, or similar device or assembly.
5. Double check valves and reduced pressure principle valves such devices or assemblies shall be installed at not less than twelve (12) inches above the grade, floor or platform with the maximum of sixty (60) inches above floor. They shall not be installed within access panels, over any machinery or equipment, or in any location, which might create a safety, hazard to those employed in testing and maintenance of these devices or assemblies.
6. Installation shall meet current Missouri Department of Natural Resources Regulations and City of Chesterfield Current Plumbing Code Ordinance. Where a conflict occurs between this Chapter and Missouri Department of Natural Resources the more stringent requirement shall apply.

603.5.22 Backflow devices shall be installed on the water supply from a community water system to a building, when the use of the building changes to a use that requires containment under this regulation, and/or when any potable or non-potable water is provided within the new or existing building.

604.3 Copper or Copper Alloy Tube. Copper or copper alloy tube for water piping shall have a weight of not less than Type L. Exception: Type M copper or copper alloy tubing shall be permitted to be used for water piping where piping is above ground in or on a building.

TABLE 6-4-A					
MATERIAL	Underground		WaterDistribution Pipe and Fittings (Inside Building)		Building Supply Pipe and Fittings Water Service (Outside Building)
	Inside	Outside	Hot	Cold	Cold
Asbestos - Cement					
Brass	X	X	X	X	X
Copper	X	X	X	X	X
Cast Iron	X	X	X	X	X
CPVC (Schedule 40 and above)	X [1]	X [1]	X	X	
Galvanized Malleable Iron	X	X	X	X	X
Galvanized Wrought Iron	X	X	X	X	X
Galvanized Steel	X	X	X	X	X
HDPE	X	X		X	X
PE					
PE-AL-PE			X [1]	X [1]	
PEX	X [1]		X [1]	X [1]	X [1]
PEX-AL-PEX			X [1]	X [1]	

PVC ASTM 2241-Class 160-SDR 26)		X			X
PVC ASTM 2241—Class 200-SDR 21		X			X
PVC ASTM 1785-Schedule 40	X	X		X	X
PVC ASTM 1785-Schedule 80	X	X		X	X
PVC AWWA C900 (C905) DR14 Class 200 Pressure Pipe		X			X

Note: [1] Downstream from Pressure Reducing Valve

604.10 Plastic Materials. Approved plastic materials shall be permitted to be used in water service piping, provided that where metal water service piping is used for electrical grounding purposes, replacement piping therefore shall be of like materials.

Exception 1: When a grounding system acceptable to the Authority Having Jurisdiction is installed, inspected, and approved, metallic pipe shall be permitted to be replaced with nonmetallic pipe.

Exception 2: When plastic pipe is being installed in construction of water service pipe, the plastic pipe shall terminate ten (10') feet outside the building foundation wall. The metallic pipe allowed by this section shall be installed from ten (10') feet outside the foundation to and within the building to the outlet of the house valve or the outlet of the PRV whichever is further from the entrance to the building. Protection from electrolysis (corrosion) shall be provided.

Where metal water service piping is used for electrical grounding purposes, replacement piping therefore shall be of like materials.

604.13 Water Heater Connectors. Flexible metallic (copper and stainless steel) water heater connectors, reinforced flexible water heater connectors, or braided stainless steel or polymer braided with EPDM cores water heater connectors that connect a water heater to the piping system shall be installed in accordance with ASME A112.18.6/CSA B125.6. Copper, copper alloy, or stainless steel flexible connectors shall not exceed 24 inches (610 mm). PEX, PEX-AL-PEX, PE-AL-PE, PE-RT tubing or CPVC tubing shall not be installed within the first 18 inches (457 mm) of piping connected to a water heater.

605.12.2 Solvent Cement Joints. Solvent cement joints for PVC pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square and pipe shall be deburred. When surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, primer purple in color shall be applied in accordance with ASTM F656. Primer shall be applied until the surface of the pipe and fitting is softened. Primer shall not be purple. Solvent cements in accordance with ASTM D2564 shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of the pipe are wet with solvent cement. Joint shall be held in place and undisturbed for one (1) minute after assembly.

606.2 Fullway Valve. A fullway stop and waste valve controlling outlets shall be installed on the service entrance. Water piping supplying more than one building on one premises shall be equipped with a separate fullway stop and waste valve to each building, so arranged that the water supply can be turned on or off to an individual or separate building provided; however, that supply piping to a single-family residence and building accessory thereto shall be permitted to be controlled on one valve. Such shutoff valves shall be accessible. A fullway valve shall be installed on the discharge piping from water supply tanks at or near the tank. A fullway valve shall be installed on the cold water supply pipe to each water heater at or near the water heater.

606.5 Control Valve. A control valve shall be installed immediately ahead of each water-supplied fixture, appurtenance, or appliance and immediately ahead of each slip joint or appliance supply. A control valve shall be installed for sill cocks, wall hydrants, yard hydrants, street washers, and lawn irrigation systems in addition to all required backflow assemblies.

Parallel water distribution systems shall provide a control valve either immediately ahead of each fixture being supplied or installed at the manifold, and shall be identified with the fixture being supplied. Where parallel water distribution system manifolds are located in attics, crawl spaces, or other locations not readily accessible, a separate shutoff valve shall be required immediately ahead of each individual fixture or appliance served.

a. In each dwelling unit, one or two bathrooms back to back or one over the other may be considered a group. However, in each dwelling unit with two or more bathroom groups not adjacent to each other, one or more

control valves or individual fixture valves shall be provided so that each group may be isolated from the others.

b. In multi-dwelling units, one or more control valves shall be provided so that the water to any plumbing fixture or group of fixtures in any one dwelling unit may be shut-off without stopping flow of water to fixtures in other dwelling units.

608.2 Excessive Water Pressure. An approved type pressure regulator preceded by an adequate strainer shall be installed in all water service pipes near its entrance to the building and the static pressure reduced to eighty (80) pounds per square inch (552 kPa) or less. Such regulator (s) shall control the pressure to all water outlets in the building unless otherwise approved by the Authority Having Jurisdiction. Pressure at any fixture shall be limited to no more than eighty (80) psi under no-flow conditions. Sill cocks and outside hydrants may be left on full main pressure at the option of the owner. For potable water services up to and including one and one-half (1-1/2) inch (40 mm) regulators, provision shall be made to prevent pressure on the building side of the regulator from exceeding main supply pressure. Approved regulators with integral bypasses are acceptable.

Exception: Where the water service pipe supplies water directly to a water pressure booster system, an elevated water gravity tank, or to pumps provided in connection with a hydro-pneumatic or elevated water supply tank system a pressure-reducing valve is not required.

Each such regulator and strainer shall be accessibly located above ground or in a vault equipped with a properly sized and sloped bore-sighted drain to daylight, shall be protected from freezing, and shall have the strainer readily accessible for cleaning without removing the regulator or strainer body or disconnecting the supply piping. All pipe size determinations shall be based on eighty (80%) percent of the reduced pressure when using Table 610.4.

608.5 Discharge Piping. The discharge piping serving a temperature relief valve, pressure relief valve, or combination of both shall have no valves, obstructions, or means of isolation and meet the following requirements:

(1) The discharge piping shall be equal to the size of the valve outlet and shall discharge full size to the flood level of the area receiving the discharge and pointing down.

(2) Materials shall be rated at not less than the operating temperature of the system and approved for such use.

(3) Discharge pipe shall discharge independently by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) and not less than 6 inches (152 mm) above the ground and pointing downwards.

(4) The discharge piping shall discharge in such a manner that does not cause personal injury or structural damage.

(5) No part of such discharge pipe shall be trapped or subject to freezing.

(6) The terminal end of the pipe shall not be threaded.

609.0 Installation, Testing, Unions, and Location.

609.1 Installation. Water piping shall be adequately supported in compliance with Table 313.3. Burred ends shall be reamed to the full bore of the pipe or tube. Changes in direction shall be made by the appropriate use of fittings, except that changes in direction in copper or copper alloy tubing shall be permitted to be made with bends, provided that such bends are made with bending equipment that does not deform or create a loss in the cross-sectional area of the tubing. Changes in direction are allowed with flexible pipe and tubing without fittings in accordance with the manufacturer's instructions. Provisions shall be made for expansion in hot-water piping. Piping, equipment, appurtenances, and devices shall be installed in a workmanlike manner in accordance with the provisions and intent of the code. Building supply yard piping shall be not less than 42 inches below finish grade.

609.2 Deleted.

609.2.1 Deleted.

609.2.2 Deleted.

609.4 Deleted.

609.5 Deleted.

609.10 Deleted.

609.10.1 Mechanical Devices. Where listed mechanical devices are used, the manufacturer's specifications as to location and method of installation shall be followed.

Exception: For one (1) family, and two (2) families attached residential units, in order to absorb water hammer a mechanical water hammer arrester shall be installed as follows:

1. Bathroom groups:

   (A) Single bathrooms, minimum size "A" or single bathrooms back to back on a branch, minimum size "B", an approved mechanical device on both the hot and cold water branches serving the bathroom group.

   (B) For more than one (1) bathroom group served by a vertical riser an approved, minimum size "B", mechanical device on both the hot and cold water at the top of the riser.

   (C) For each appliance with quick-closing valves a properly sized approved mechanical device on both the hot and cold water shall be installed as close as possible to the quick-closing valves. Appliances that include quick-closing valves are washing machines, dishwashers and ice makers. Other appliances that are not listed here may be

determined to have quick-closing valves, and shall be properly protected.

2. Lawn Irrigation Systems:

(A) Where a lawn irrigation system is installed, an Irrigation Backflow Assembly consisting of a Reduced Pressure Zone Backflow Device and within twelve (12") inches a properly sized mechanical water hammer arrestor shall be installed on the supply line to the backflow device or assembly for the irrigation system.

(1) The size of the water hammer arrestor shall be a minimum of size "C". It shall be sized based on the following Table 609.10-1.

Table 609.10-1	
Pipe Size	Arrestor Size
¾"	"C"
1"	"D"
1¼—1½"	"F"
2"	"C" + "F"

Based on PDI Reference Standards

610.0 Size of Potable Water Piping.

610.1 The size of each water meter shall be as determined by the water purveyor. Each potable water supply pipe from the meter or other source of supply to the fixture supply branches, risers, fixtures, connections, outlets, or other uses shall be based on the total demand and shall be determined according to the methods and procedures outlined in this section. Other than systems sized by the use of Table 610.4, the system shall be designed to ensure that the maximum velocities allowed by the Code and the applicable standard are not exceeded.

610.7 Conditions for Using Table 610.4. On any proposed water piping installation sized using Table 610.4, the following conditions shall be determined:

1. Developed length of supply pipe from the Property line to most remote outlet.

2. Difference in elevation between the property line or other source of supply and the highest fixture or outlet.

610.8 Size of Meter and Building Pipe Using Table 610.4. The size of the building supply pipe and the building branch piping in areas served by Missouri American Water Co. or its successor shall be determined as follows:

(*Note:* The water purveyor will determine the size of the meter installed.)

Table 610.4 In the title line delete "and Meter Sizes."

The column in Table 610.4 titled "Meter and Street Service, Inches" is deleted.

1. Determine the available pressure at the source of supply.
2. Subtract one-half (1/2) pound per square inch pressure (3.4 kPa) for each foot (305 mm) of difference in elevation between such source of supply and the highest water supply outlet in the building or on the premises;
3. Use the "pressure range" group within which this pressure will fall using Table 610.4;
4. Select the "length" column which is equal to or longer than the required length;
5. Follow down the column to a fixture unit value equal to or greater than the total number of fixtures units required by the installation;
6. Having located the proper fixture unit value for the required length, size of building supply pipe and the building branch piping as found in the left hand columns titled "Building Supply and Branches, Inches" shall be applied.

No building supply pipe shall be less than one (1) inch (25.4 mm) in diameter. For light commercial strip centers, when the water service serves more than one tenant space, a one and one-half (1-½) inch minimum size water service shall be provided to the most remote tenant space.

610.8.1 Size of Meter and Building Pipe Using Table 610.4. The size of the meter and the building supply pipe and the building branch piping, in areas not served by Missouri American Water Co. or its successor shall be determined as follows:

Column in Table 610.4 titled "Meter and Street Service, Inches" is not deleted and may be used to determine the size of the building supply pipe as determined by the water purveyor.

Use the procedure in 610.8 with the following exceptions:

1. Having located the proper fixture unit value for the required length, size of meter and building supply pipe and the building branch piping as found in the two left hand columns shall be applied. No building supply

pipe shall be less than one (1) inch (25.4 mm) in diameter. For light commercial strip centers, when the water service serves more than one tenant space, a one and one-half (1-½) inch minimum size water service shall be provided to the most remote tenant space.

610.9 Size of Branches. When Table 610.4 is used, the minimum size of each branch shall be determined by the number of fixture units to be served by that branch, the total developed length of the system, and the street service size, minimum one (1) inch (26.7 mm) in diameter as per Section 610.8. No branch piping is required to be larger in size than that required by Table 610.4 for the building supply pipe.

612.3.2.1 Installer Qualifications.

1. For a multipurpose fire sprinkler system

   (A) Licensed as a Plumber and certified by the Board of Plumbing Examiners. Technical and experience qualifications and examination criteria shall be determined by the Board of Plumbing Examiners

2. For a stand-alone sprinkler system

   (A) Licensed as a sprinkler fitter under the St. Louis County Mechanical Code.

CHAPTER 7 - SANITARY DRAINAGE

1103.407 - Amendments to the Uniform Plumbing Code™—Chapter 7—Sanitary Drainage.

—Chapter 7 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

If any conflict of interpretations or requirements of parts or sections of this Chapter disagree with other similar Code provisions or other City of Chesterfield Ordinance requirements, the more stringent shall apply.

NOTE Table 7-4 Deleted.

703.0 Size of Drainage Piping.

703.1.1 Exceptions.

1. Any portion of the building drain which is underground and which receives the discharge from a water closet shall be a minimum size of four inches (4") and the four inch (4") pipe size shall terminate at the clean-out thirty-six inches (36") above the finish floor. The minimum size of any

other portion of the drainage system, which receives the discharge from a water closet, shall be a minimum size of three inches (3").

(A) Approval may be given by the Authority Having Jurisdiction or his representative to approve the use of a minimum size of three (3") inches for the discharge of a single water closet when there is no four (4") inches or larger underground drain readily available. This approval may be given, if such approval does not exceed the capacity of the drain, and, that it would be an undue hardship, or interrupt ongoing business activity, or require extensive demolition of a finished living area, or damage or destroy existing architectural or decorative furnishings.

2. Minimum size of the building sewer shall be six inches (6") in diameter and shall have the minimum of a two (2%) percent slope.

3. No soil or waste stack shall be smaller than the largest horizontal branch connected thereto. A 3 × 4 inch water closet bend shall not be considered a reduction in pipe size.

4. Any structure in which a building drain is installed shall have at least one stack vent or vent stack sized in accordance with section 904.1, not less than three inches (3") in diameter, or the size of the building drain. If the building drain is less than three inches (3") in diameter the vent shall be carried full size through the roof.

5. Any vent pipe extending through the roof shall be not less than two (2") inches in diameter and shall extend from its terminus at least eighteen (18") inches below the interior side of the roof deck.

6. No portion of the drainage system installed underground or below a basement or cellar shall be less than two (2") inches in diameter with the exception of vent piping which shall be a minimum of one and one-half (1-1/2") inches and condensate waste discharge lines which shall not be less than one and one-quarter (1-1/4") inches in diameter.

7. The maximum length of two (2") inch underground kitchen sink waste piping shall not exceed fifteen (15') feet from the point of connection to a horizontal branch drain or building drain to the point where the kitchen sink waste piping extends above the floor. The clean out above the floor shall be the same size as the underground kitchen sink waste piping and shall be thirty-six (36") inches above the finished floor level.

705.2 Deleted.

705.2.5 Deleted.

705.5.2 Solvent Cement Joints. Solvent cement joints for PVC pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square and pipe shall be deburred. Where surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, primer shall be applied in compliance

with ASTM F656. Primer shall be applied until the surface of the pipe and fitting are softened. Primer shall not be purple. Solvent cements in accordance with ASTM D2564 shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of pipe are wet with solvent cement and joint shall be held in place and undisturbed for 1 minute after assembly.

706.0 Deleted.

706.4 Deleted.

707.4 Location. Each horizontal drainage pipe shall be provided with a cleanout at its upper terminal and each run of piping, that is more than one hundred (100') feet (30480 mm) in total developed length, shall be provided with a cleanout for each one hundred (100') feet (30480 mm), or fraction thereof, in length of such piping. An additional cleanout shall be provided in a drainage line for each aggregate horizontal change of direction exceeding 135 degrees (2.36 rad). A cleanout shall be installed above the fixture connection fitting, serving each urinal, regardless of the location of the urinal in the building.

Exceptions:

1. Cleanouts may be omitted on a horizontal drain line less than five (5') feet (1524 mm) in length unless such line is serving sinks or urinals.
2. Cleanouts may be omitted on any horizontal drainage pipe installed on a slope of seventy-two (72°) degrees (1.26 rad) or less from the vertical angle (angle of one-fifth (1/5) bend).
3. Excepting the building drain and its horizontal branches, a cleanout shall be required on any pipe or piping, which is above the floor level a minimum of three feet (3')above the lowest floor of the building.

   (A) In residential buildings of slab floor construction or where a stack cleanout is not accessible, the cleanout shall be installed in the building drain and shall terminate not more than five feet (5') outside the building wall.
4. An approved type of two-way cleanout fitting, installed inside the building wall near the connection between the building drain and building sewer or installed outside of a building at the lower end of a building drain and extended to grade, shall be substituted for an upper terminal cleanout.

707.4.1 Deleted.

709.0 Deleted.

710.0 Deleted.

710.1 Backflow Protection. Where a fixture is installed on a basement level or floor level that is lower than the next upstream manhole cover of the public

or private sewer serving such drainage piping, shall be protected from backflow of sewage by at a minimum installing an approved type of backwater valve or installing, when required by The Authority Having Jurisdiction, a plumbing line supported from floor joists by approved hangers serving that basement level or floor level (strapped plumbing) receiving the discharge from an approved watertight sump or receiving tank, (see strapped plumbing drawings, Figure 17 and Figure 18 in Appendix "M"). Fixtures on floor levels above the upstream manhole cover such elevation shall not discharge through the backwater valve or into the lower level, approved watertight sump or receiving tank, but instead shall drain by gravity to the public sewer.

Cleanouts for drains that pass through a backwater valve shall be clearly identified with a permanent label stating "Backwater Valve Downstream".

710.2 Sewage Drainage. Drainage piping serving fixtures that are located below the crown level of the main sewer shall discharge into an approved watertight sump or receiving tank, so located as to receive the sewage or wastes by gravity. From such sump or receiving tank, the sewage or other liquid waste shall be lifted and discharged into the building drain or building sewer by approved ejectors, pumps, or other equally efficient approved mechanical devices.

Note: For clarification

1. Fixtures above the upstream manhole cover drain by gravity
2. Fixtures below the upstream manhole cover and above the crown of the sewer, drain by gravity through a backwater valve, or as directed by the Authority Having Jurisdiction shall drain as indicated in item 3 below.
3. Fixtures below the upstream manhole and below the crown of the sewer shall be lifted and discharged into the building drain or building sewer by means of an approved pumping system (strapped plumbing).

710.3 Deleted.

710.3.1 Deleted.

710.3.2 Deleted.

710.6 Backwater valves. Backwater valves, gate valves, unions, full-way ball valves, motors, compressors, air tanks, and other mechanical devices required by this section shall be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be watertight, enclosed in a masonry pit, or a pit of Concrete, metal, or other approved material, construction, and manufacture, fitted with an adequately sized removable cover.

Backwater valves shall comply with ASME A112.14.1, have bodies of cast iron, plastic, copper alloy, or other approved materials, shall have non-corrosive bearings, seats and self-aligning discs, and shall be so constructed as to ensure a positive mechanical seal. Such valves shall remain sufficiently open

during periods of low flows to avoid screening of solids and shall not restrict capacities or cause excessive turbulence during peak loads. Unless otherwise listed, valve access covers shall be bolted type with gasket and each valve shall bear the manufacturer's name cast into body and cover.

Alternate design of Backwater Valves that may be adequately serviced without installation in a pit may be used with the approval of the Authority Having Jurisdiction.

710.14 At stream and channel crossings, a minimum depth of two (2') feet shall be allowed only where greater depths cannot be achieved. Where this minimum cover cannot be achieved, Schedule 50 ductile iron pipe with restrained joints must be used unless otherwise directed by the Authority Having Jurisdiction. Stream and channel crossings must be protected with rock blanket.

711.1 Deleted.

711.1.1 Deleted.

Table 711.1 Deleted.

Table 711.2 Deleted.

712.3 Air Test. The air test shall be made by attaching an air compressor testing apparatus to any suitable opening, and, after closing all other inlets and outlets to the system, forcing air into the system until there is a uniform gauge pressure of five (5) pounds per square inch (34.5 kPa) or sufficient to balance a column of mercury ten (10") inches (254 mm) in height. The pressure shall be held without introduction of additional air for a period of at least fifteen (15) minutes. Plastic pipe and fittings, may be tested under this paragraph with the approval of the Authority Having Jurisdiction, and must conform to requirements of the manufacturer.

Part II - Building Sewers

713.0 Deleted.

713.1.1 Building/House traps maybe installed.

Exception: Building/House traps shall be installed on individual and combined, sanitary and storm house/building laterals connected to combined sewers, and where required by the Authority Having Jurisdiction. Each building trap when installed shall be provided with a cleanout and with a relieving vent or fresh air intake on the inlet side of the trap which need not be larger than one-half (1/2) the diameter of the drain to which it connects. Such relieving vent or fresh air intake shall be carried to finish grade and terminate in a screened outlet located outside the building.

713.2 When a public sewer is not available for use within two hundred (200) feet of any legal boundary of the property to be connected to the sewer,

drainage from buildings and premises may be connected to an approved private sewage disposal system, upon approval by MSP.

715.1 Materials. The building sewer, beginning five (5') feet (1525 mm) from any building or structure, shall be of such materials as may be approved by the Authority Having Jurisdiction under the approval procedures set forth in Chapter 3 of this Code. Sewer laterals exceeding one hundred (100') feet shall include a full size cleanout, maximum size shall be eight (8") inches, to surface within ten (10') feet of anticipated location of the building foundation wall or the first (1st) story exterior wall of a slab on grade building.

717.0 Size of Building Sewers. The minimum size of any building sewer shall be determined on the basis of the total number of fixture units drained by such sewer, in accordance with Table 717.1. No building sewer shall be smaller than the building drain, but in no case less than six (6") inches (152 mm) and at a uniform minimum slope of 2 percent (2%). For alternate methods of sizing building sewers, see Appendix C.

718.3 No building sewer or other drainage piping or part thereof, which is constructed of materials other than those approved for use under or within a building, shall be installed under or within five (5') feet (1525 mm) of any building or structure, or part thereof, nor less than thirty (30") inches below the surface of the ground.

1. *Exception:* Transition from building drain to building sewer at a maximum of 45°.

2. *Exception:* Where necessary to connect to a drainage line above ground.

The provisions of this subsection include structures such as porches and steps, whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures or appurtenances.

719.0 Cleanouts.

719.6 Approved manholes shall be permitted to be installed in lieu of cleanouts when first approved by the Authority Having Jurisdiction. The maximum distance between manholes shall not exceed four hundred (400') feet (121.9 m). Connections to manholes shall be by approved method.

720.0 Sewers and Water Pipes. Building sewers or drainage piping of clay or materials, which are not approved for use within a building, shall not be run or laid in the same trench as the water pipes.

Exception: The underground water service pipe and the building sewer shall not be less than ten feet (10') apart horizontally and shall be separated by undisturbed or compacted earth.

The water service pipe may be placed in the same trench with the outside building sewer and water piping may be placed in the same trench with the

inside building drain provided approval is given by the Authority Having Jurisdiction and both the following requirements are met:

1. The bottom of the water pipe, at all points, shall be at least twelve (12") inches (305 mm) above the top of the sewer or drain line.
2. The water pipe shall be placed on a solid shelf excavated at one side of the common trench with a minimum clear horizontal distance of at least twelve (12") inches (305 mm) from the sewer or drain line.

Water pipes crossing sewer or drainage piping constructed of clay or materials, which are not approved for use within a building, shall be laid a minimum of twelve (12") inches (305 mm) above the sewer or drainpipe.

Note: For the purpose of this section, "within the building" shall mean within the fixed limits of the building foundation.

722.0 Abandoned Sewers and Sewage Disposal Facilities.

722.1 Every abandoned building (house) sewer, or part thereof, shall be plugged or capped in an approved manner at the connection to the sewer main or at a location acceptable to the Authority Having Jurisdiction.

722.2 Every cesspool, septic tank, and seepage pit which has been abandoned or has been discontinued otherwise from further use or to which no waste or soil pipe from a plumbing fixture is connected, shall have the sewage removed there from and disposed of in a manner required by law, the bottom broken out and be completely filled with compacted earth, sand, gravel, concrete, or other approved material.

723.0 Deleted.

Table 721.1
Minimum Horizontal Distance Required From Building Sewer (feet)

Buildings or Structures [1]	2 feet (610 mm)
Property line adjoining private property	Clear [2]
Water Supply Wells	100 feet [3] (30,480 mm)
Streams	50 feet (15,240 mm)
On-site domestic water line	10 feet [4] (3048 mm)
Public Water Main	10 feet [5, 6] (3048 mm)

Notes:

1. Including porches and steps, whether covered or uncovered, breezeways, roofed porte-cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures and appurtenances.
2. See also Section 313.3.
3. All drainage piping shall clear domestic water supply wells by at least one hundred (100') feet (30480 mm) (15240).
4. See Section 609.2.
5. For parallel construction.
6. For crossings, approval by the Health Department or Authority Having Jurisdiction shall be required.

CHAPTER 8 - INDIRECT WASTE

1103.408 - Amendments to the Uniform Plumbing Code™—Chapter 8—Indirect Wastes.

—Chapter 8 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

801.3.3 Food-Handling Fixtures. Food-preparation sinks; steam kettles, potato peelers, ice cream dipper wells, dishwashing machines, silverware washing machines, and similar equipment shall be indirectly connected to the drainage system by means of an air gap or air break. Bins, sinks, and other equipment having drainage connections and used for the storage of unpackaged ice used for human ingestion, or used in direct contact with ready-to-eat food, shall be indirectly connected to the drainage by means of an airgap. Each indirect waste pipe from food handling fixtures or equipment shall be separately piped to the indirect waste receptor and shall not combine with other indirect waste. The piping from the equipment to the receptor shall not be less than the drain on the unit, but it shall not be smaller than one (1") inch (25.4 mm).

803.3 Pipe Size and Length Except as hereinafter provided, the size and construction of indirect waste piping shall be in accordance with other sections of this Code applicable to drainage and vent piping. No vent from indirect waste piping shall combine with any sewer-connected vent, but shall extend separately to the outside air.

Indirect waste pipes exceeding five (5') feet (1524 mm), but less than fifteen (15') feet (4572 mm) in length shall be directly trapped, but such traps need not be vented.

Indirect waste pipes less than fifteen (15') feet (4572 mm) in length shall not be less than the diameter of the drain outlet or tailpiece of the fixture, appliance, or equipment served, and in no case less than one (1") inch (25.4 mm) in size. Angles and changes of direction in indirect waste pipes of more than fifteen (15') feet shall be provided with cleanouts so as to permit flushing and cleaning.

1. A direct connection for a floor drain at the automatic clothes washer above ground may be discharged into the riser-pipe (standpipe) above the trap of the automatic clothes washer drain and the floor drain shall not be trapped.
2. A laundry sink on ground floor may discharge, un-trapped, directly into the washer standpipe above the trap with no vent required.

804.1 Standpipe Receptors. Plumbing fixtures or other receptors receiving the discharge of indirect waste pipes shall be approved for the use proposed, shall be of such shape and capacity as to prevent splashing or flooding, and shall be located where they are readily accessible for inspection and cleaning. No standpipe receptor for a clothes washer shall extend more than 30 inches (762 mm), or not less than 18 inches (457 mm) above its trap. No indirect waste receptor shall be installed in a toilet room, closet, cupboard, or storeroom, nor in a portion of a building not in general use by the occupants thereof; except standpipes for clothes washers shall be permitted to be installed in toilet and bathroom areas where the clothes washer is installed in the same room.

807.0 Appliances.

807.3 Domestic Dishwashing Machine. The discharge from a sink, dishwasher, and garbage disposal (food-waste-grinder) may discharge through a single one and one-half (IV) trap. The discharge from the dishwasher shall be a full-sized opening, which shall be a minimum of five-eighths inch (5/8") inside diameter in size, looped up and firmly secured to the highest point under the counter and be connected with a wye fitting between the discharge of the garbage disposal (food-waste-grinder) and the trap inlet, or to the head of the garbage disposal (food-waste-grinder). An approved dishwasher air gap fitting on the discharge side of the dishwashing machine may be used. Listed air gaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drain board, whichever is higher. In the installation of a double bowl kitchen sink (residential) with a garbage disposal (food-waste-grinder), the fixture trap shall be installed on the same side of the sink in which the garbage disposal is installed.

809.0 Deleted.

811.0 Deleted.

Table 8-2 Deleted.

CHAPTER 9 - VENTS

1103.409 - Amendments to the Uniform Plumbing Code™—Chapter 9—Vents.

—Chapter 9 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

904.0 Deleted.

904.3 Minimum Size of Stack Vent or Vent Stack. Any structure in which a building drain is installed shall have at least one stack vent or vent stack sized in accordance with Table 7-5 not less than four inches (4") in diameter, not less than three inches (3") in diameter for one (1) and two (2) family residential, if the building drain is less than three inches (3") in diameter the vent shall be the size of the building drain carried full size through the roof. In no case shall the aggregate cross-sectional area of all vents, in the system, be less than the cross-sectional area of the largest required common building drain serving that system.

905.7 Vent Pipe Fittings Allowed. All vent piping subject to back drainage shall use fittings appropriate to the sanitary waste system.

906.0 Deleted.

906.1 Roof Termination. Each vent pipe or stack shall extend through its flashing and shall terminate vertically not less than twelve (12") inches (305 mm) above the roof nor less than one (1') foot (305 mm) from any vertical surface.

906.3 Use of Roof. Vent pipes shall be extended separately or combined, of full required size, not less than twelve (12") inches (305 mm) above the roof or fire wall. Flag-poling of vents shall be prohibited. All vents within ten (10') feet (3048 mm) of any part of the roof that is used for purposes other than weather protection shall extend not less than seven (7') feet (2134 mm) above such roof and shall be securely stayed.

906.7 Frost or Snow Closure. Vent terminals shall be a minimum of two (2) inches (51 mm) in diameter but in no event smaller than the required vent pipe. The change in diameter shall be made inside the building at least eighteen (18") inches below the roof in an insulated space and terminate not less than twelve (12") inches (305 mm) above the roof, or as required by the Authority Having Jurisdiction.

907.0 Deleted.

907.1 Deleted.

907.3 Residential Relief Vent. In a residential structure a relief vent shall be connected to a waste stack a minimum of six (6") inches (152 mm) below the bottom of the joist at the lowest level except when there is a plumbing vent through the roof installed from plumbing fixtures or future rough-ins below the lowest level.

908.0 Deleted.

908.1 Vertical Wet Venting. Except as provided for in other sections of this Code, wet venting is limited to vertical drainage piping receiving the discharge from the trap arm of one (1) and two (2) fixture unit fixtures that also serves as a vent not to exceed four (4) fixtures. All wet vented fixtures shall be within the same story; provided, further, that fixtures with a continuous vent discharging into a wet vent shall be within the same story as the wet vented fixtures. No wet vent shall exceed six (6') feet (1829 mm) in developed length.

908.1.4 See Appendix M.

909.0 Special Venting for Island Fixtures.

909.1 General. Alternate approved installation is described below and depicted in Drawing 7, Appendix M.

Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, and no lower than bottom of sink/fixture it serves and then returning it downward and connecting it to the horizontal sink drain more than five (5') feet (1524 mm) downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting. Drainage fittings shall be used on all parts of the vent and a minimum slope of one-quarter (1/4") inch per foot (20.9 mm/m) back to the drain shall be maintained. Pipe sizing shall be as elsewhere required in this Code with minimum size to be two (2") inch (51 mm). The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the vent.

910.0 Deleted.

910.5 Deleted.

CHAPTER 10 - TRAPS AND INTERCEPTORS

1103.410 - Amendments to the Uniform Plumbing Code™—Chapter 10—Traps and Interceptors.

—Chapter 10 of the 2015 Uniform Plumbing Code™ are amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

1001.0 Deleted.

1001.2 Deleted.

Table 1002.2
Horizontal Distance of Trap Arms
(Except for water closets and similar fixtures)*

TRAP ARM Inches	DI-STANCE TRAP TO VENT Feet - Inches	TRAP ARM mm	DI-STANCE TRAP TO VENT mm
1-1/4	3'-6"	32	1067
1-1/2	5'-0"	38	1524
2	8'-0"	51	2438
3	10'-0"	76	3048
4 & Larger	12'-0"	102 & Larger	3658

Slope one-fourth (1/4") inch per foot (20.9 mm/m)

*The developed length between the trap of a water closet or similar fixture (measured from the top of the closet ring (closet flange) to the inner edge of the vent) and its vent shall not exceed six (6') feet (1829 mm)

1003.0 Deleted.

1003.1 Deleted.

1003.3 Size. The size (nominal diameter) of a trap for a given fixture shall be sufficient to drain the fixture rapidly, a maximum of one pipe size larger than defined in Table 702.1. The trap shall be the same size as the trap arm to which it is connected.

Exception: One (1) and two (2) fixture unit fixtures may have trap arms one size larger than the trap size serving the fixture.

1008.0 Building/House Traps. Building/House traps may be installed.

Exception: Building/House traps shall be installed on individual and combined, sanitary and storm house/building laterals connected to combined sewers, and where required by the Authority Having Jurisdiction.

Each building trap when installed shall be provided with a cleanout and with a relieving vent or fresh air intake on the inlet side of the trap which need not be larger than one-half the diameter of the drain to which it connects. Such relieving vent or fresh air intake shall be carried to finish grade and terminate in a screened outlet located outside the building.

1009.0 Deleted.

1009.1 Deleted.

1009.5 Location. Each interceptor (clarifier) cover shall be readily accessible for servicing and maintaining the interceptor (clarifier) in working and operating condition. Interceptors (clarifiers) shall include means for visual inspection and access from above for both the influent and effluent sides. Manholes (24 inches (24") in diameter, 24 inches (24") maximum in length including a roadway access cover) shall be provided for access to each compartment of an interceptor. Where depth is more than 24 inches (24"), a 36 inch (36") minimum diameter access with steps shall be provided as approved by the authority having jurisdiction. The use of ladders or the removal of bulky equipment in order to service interceptors (clarifiers) shall constitute a violation of accessibility. Location of all interceptors (clarifiers) shall be shown on the approved building plan.

1014.0 Deleted.

1014.1.2 Deleted.

1014.1.3 Food Waste Disposal Units and Dishwashers. Food waste disposal units, rinse sinks and or dishwashers are required to connect into a grease interceptor and they must first flow through a solids trap.

1014.2 Hydromechanical Grease Interceptors.

1014.2.4 Each grease trap required by this section shall have an approved rate of flow which is not less than that as determined by 1014.2.1 for sinks and Table 1014.2.1 for the total number of connected fixtures. The total capacity in gallons (L) of fixtures discharging into any such grease trap shall not exceed two and one-half (2-1/2) times the certified gpm (L/s) flow rate of the grease trap as determined by 1014.2. Any grease trap installed with the inlet more than four (4') feet (1219 mm) lower in elevation than the outlet of any fixture discharging into such grease trap shall have an approved rate of flow which is not less than fifty (50%) percent greater than that given in Table 1014.2.1. For hydromechanical grease interceptors installed inside the building or tenant space, the number of fixtures connected to or discharged into any one (1) hydromechanical grease interceptor shall not exceed the maximum drainage fixture units (DFUs) or operating flow rate of the hydromechanical grease interceptor. Floor drains receiving incidental water are not included as a fixture for the purposes of this paragraph.

1014.3.5 Construction Requirements.

1014.3.5.1 Purpose. Gravity grease interceptors shall be designed to remove grease from effluent and shall be sized in accordance with this section. Gravity grease interceptors shall also be designed to retain grease until accumulations can be removed by pumping the interceptor. Each gravity grease interceptor shall pass through an inspection manhole, prior to any connection to the public sewer.

1014.3.5.1.1 Components and Materials. Gravity grease interceptors shall be constructed of cast iron or steel and protected, inside and out, by an approved corrosion resistant coating. Precast Concrete interceptors shall be constructed with a minimum wall thickness of 4", concrete strength equal to minimum 4000 PSI at 28 days of age, shall have a maximum water to cementitious ratio (w/c) of 0.45, and the entire interior, including all fittings, bolts, and appropriate connections shall be protected by a corrosion resistant coating with a minimum thickness of 18 Mil. Polyethylene prefabricated interceptors shall comply with the requirements set forth in paragraph 4.3 of IAPMO/ANSI Z1001. Fiberglass interceptors shall meet IAPMO/ANSI Z1001 for Grease Interceptors and be constructed with resins that comply with ASTM C-581. Poured concrete interceptors are prohibited. Each interceptor shall be of watertight construction and be provided with a non-perforated cover non-bolted or bolted into place, made gas and watertight.

1014.3.6 Sizing Criteria. Accredited third party systems (IAPMO, PDI) shall be sized using Table 1014.3.6. Where drainage fixture units (DFUs) are not known, the interceptor shall be sized based on the maximum DFUs allowed for the pipe size connected to the inlet of the interceptor and/or the manufacturer's published sizing criteria and recommendations. Refer to Table 703.2, Drainage Piping, Horizontal. Non-Certified systems shall be sized based on calculations in gallons of effective capacity, provided that the total wet volume is not less than 500 gallons and provides a minimum retention time of 30 minutes based on drainage fixture units as determined by Table 1014.3.6.

1016.0 Sand Interceptors.

1016.1 Discharge. When the discharge of a fixture or drain contains solids or semi-solids heavier than water that would be harmful to a drainage system or cause a stoppage within the system, the discharge shall be through a sand interceptor, or combination Sand/Gas/Oil interceptor. Multiple floor drains shall be permitted to discharge into one sand/solids interceptor. Sand interceptors shall be required where a floor drain or multiple floor drains discharge(s) through an oil interceptor, or where the discharge of a floor drain may contain solids or semi-solids that would be harmful to or tend to obstruct the system. A sand interceptor shall be installed in front of a gas/oil interceptor unless the gas/oil interceptor is designed as a combination sand/gas/oil interceptor to handle sediment and solids. Human waste is prohibited from entering an interceptor.

1016.2 Authority Having Jurisdiction. Sand or Solids interceptors are required where the Authority Having Jurisdiction deems it advisable to have a sand interceptor to protect the drainage system.

1016.3 Construction and Size. Sand or Solids interceptors shall be built of prefabricated coated steel, precast concrete where the entire interior including all fittings, bolts and appropriate connections are treated with a corrosion resistant coating, fiberglass, or other watertight material. The interceptor shall have an interior baffle for full separation of the interceptor into two sections. The outlet pipe shall be the same size as the inlet pipe of the sand or solids interceptor, the minimum being 3 inches (80 mm), and baffle shall have at least one opening equal to the diameter of the inlet pipe and at the same invert as the outlet pipe. The opening(s) shall be staggered so that there cannot be a straight line flow between the inlet pipe and the outlet pipe. The invert of the inlet pipe shall be no lower than the invert of the outlet pipe. The sand interceptor shall have a minimum dimension of 2 square feet (0.2 m^2) for the net free opening of the inlet section and a minimum depth under the invert of the outlet pipe of 2 feet (610 mm).

For each 5 gpm (0.3 L/s) flow or fraction thereof over 20 gpm (1.26 L/s), the area of the sand interceptor inlet section is to be increased by 1 square foot (0.09 m^2). The outlet section in two or more compartment systems shall at all times have a minimum area of 50 percent of the inlet section. The outlet section shall be covered by a solid removable cover, set flush with the finished floor, and the inlet section shall have an open grating, set flush with the finished floor and suitable for the traffic in the area in which it is located.

TABLE 10-2 Deleted.

(1) For interceptor sizing by fixture see the example below.

(2) 1/4" (.240) slope per foot based on Manning's formula with friction factor N = .012

(3) One minute drainage period shall be used in design for Chesterfield.

1014.7 Reserved for future use.

1015.0 Deleted.

1017.0 Oil and Flammable Liquids Interceptors.

1017.1 Interceptors Required. All parking structures, repair garages and gasoline stations with grease racks or grease pits, and all factories which have oily, flammable, or both types of wastes as a result of manufacturing, storage, maintenance, repair or testing processes, shall be provided with an oil or flammable liquid interceptor which shall be connected to all necessary floor drains. The separation or vapor compartment shall be independently vented to the outer air. If two (2) or more separation or vapor compartments are used, each shall be vented to the outer air or may connect to a header which is installed at a minimum of six (6") inches (152 mm) above the spill line of the

lowest floor drain and vented independently to the outer air. The minimum size of a flammable vapor vent shall not be less than two (2") inches (51 mm), and when vented through a sidewall, the vent shall not be less than ten (10') feet (3048 mm) above the adjacent level at an approved location. The interceptor shall be vented on the sewer side and shall not connect to a flammable vapor vent. All oil and flammable interceptors shall be provided with gastight cleanout covers, which shall be readily accessible. The waste line shall not be less than three (3") inches (76 mm) in diameter with a full-size cleanout to grade an interceptor which is provided with an overflow, shall be provided with an overflow line (not less than two (2") inches (51 mm) in diameter) to an approved exterior waste oil tank having a minimum capacity of five hundred fifty (550) gallons (2080 L) and meeting the requirements of the Authority Having Jurisdiction. The waste oil from the separator shall flow by gravity or shall be pumped to a higher elevation by an automatic pump. Pumps shall be adequately sized and accessible. Waste oil tanks shall have a two (2") inch (51 mm) minimum pump-out connection at grade and a one and one-half (1-1/2") inch (38 mm) minimum vent to atmosphere at an approved location at least ten (10') feet 3048 mm) above grade.

Non-Certified systems shall be sized based on maximum fixture flow, provided that the total wet volume is not less than 500 gallons and provides a minimum retention time of 30 minutes based on peak flow, where peak flow is greater of the flow rate based on drainage fixture units as determined by Table 1014.3.6.

1017.2.1 Components and Materials. Gas, Oil, and Flammable Liquid interceptors shall be constructed of cast iron or steel when protected, inside and out, by an approved corrosion resistant coating. Precast concrete interceptors shall be constructed with a minimum wall thickness of 4 inches, concrete strength equal to minimum 4000 PSI at 28 days of age, shall have a maximum water to cementitious ratio (w/c) of 0.45, and the entire interior, including all fittings, bolts, and appropriate connections shall be protected by a corrosion resistant coating with a minimum thickness of 18 Mil. Polyethylene prefabricated interceptors shall comply with the requirements set forth in paragraph 4.3 of IAPMO/ANSI Z1001. Fiberglass interceptors must meet IAPMO/ANSI Z1001 for Grease Interceptors and shall be constructed with resins that comply with ASTM C-581. Poured concrete interceptors are prohibited. Each interceptor shall be of watertight construction and be provided with a non-perforated cover non-bolted or bolted into place, made gas and watertight.

1017.3 Combination Oil and Sand Interceptor. A combination oil and sand interceptor may be installed when the Authority Having Jurisdiction approves the design.

CHAPTER 11 - STORM DRAINAGE

1103.411 - Amendments to the Uniform Plumbing Code™—Chapter 11—Storm Drainage.

—Chapter 11 of the 2015 Uniform Plumbing Code™ is amended by the following provisions. Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other Chesterfield Ordinances the more stringent requirement shall apply.

1101.8 Areaway Drains. All open subsurface space adjacent to a building, serving as an entrance to the basement or cellar of a building, shall be provided with a drain or drains. Such areaway drains shall be three (3") inches (76 mm) minimum diameter for areaways not exceeding one hundred (100') square feet (9.3 m^2) in area, and shall be discharged in the manner provided for subsoil drains not serving continuously flowing springs or ground water (see Section 1101.5.2). Areaways in excess of one hundred (100') square feet (9.3 m^2) shall not drain into subsoil. Areaway drains for areaways exceeding one hundred (100') square feet (9.3 m^2) shall be sized according to Table 1101.8.

1101.11 Deleted.

1101.12.1 Primary Roof Drainage. Roof areas of a building shall be drained by roof drains or gutters. The location and sizing of drains and gutters shall be coordinated with the structural design and pitch of the roof. Unless otherwise required by the Authority Having Jurisdiction, roof drains, gutters, vertical conductors or leaders, and horizontal storm drains for primary drainage shall be sized based on a storm rate of six (6") inches per hour of sixty (60) minutes duration and 100-year return period. Refer to Table D-l (in Appendix D) for 100-year, 60 minute storms at various locations.

1101.11.2 Deleted.

1101.12.2.1 Where parapet walls or other construction extend above the roof and create areas where storm water would become trapped if the primary roof drainage system failed to provide sufficient drainage, an independent secondary roof drainage system consisting of scuppers, standpipes, or roof drains shall be provided. Discharge from secondary roof drains onto any area which maybe occupied by persons or vehicles shall not be allowed to fall more than three (3) feet above the ground. Secondary roof drainage systems shall be sized in accordance with Section 1101.12.1 as amended by this Code. Overflow drains shall be the same size as the roof drains with the inlet flow line two (2") inches (51 mm) above the low point of the roof and shall be installed independent from the roof drains.

1101.2.2.1 Separate Piping System. The secondary roof drainage system shall be a separate system of piping, independent of the primary roof drainage system. The discharge shall be above grade, in a location observable by the building occupants or maintenance personnel. Discharge from secondary roof drains onto any area which may be occupied by persons or vehicles shall not be allowed to fall more than three (3) feet above the ground. Secondary roof drain systems shall be sized in accordance with Section 1101.11.1 based on the rainfall rate for which the primary system is sized.

No part of the primary roof drainage system such as drains, scuppers, piping, gutters, or appurtenances, which is a part of the primary roof drainage system, may be used in the design or installation of the secondary roof drainage system.

1101.12.2.2.2 Combined System. Deleted.

1101.12.3 When approved by the Authority Having Jurisdiction, the requirements of Sections 1101.12.1 as amended and 1101.12.2 shall not preclude the installation of an engineered roof drainage system that has sufficient capacity to prevent water from ponding on the roof in excess of that allowed in the roof structural design with a rainfall rate of at least twice a rate of six (6") inches per hour, and with a blockage in any single point in the storm drainage system.

1101.12 Deleted.

1101.13.1 Rain Leaders and Conductors. Rain leaders and conductors connected to a building storm sewer shall have a cleanout installed at the base of the outside leader or outside conductor and a minimum of three (3') feet and a maximum of five (5') feet above the finished floor on all inside conductors and interior downspouts, before it connects to the horizontal drain.

1102.0 Deleted.

1102.1 Deleted.

1101.13.2 Conductors installed above ground in buildings shall be in accordance with the applicable standards reference in Table 701.2 for above ground drain, waste and vent pipe.

1101.16.2 Combining Storm with Sanitary Drainage. The sanitary and storm drainage system of a building shall be entirely separate, except where a combined sewer is used, in which case the building storm drain shall be connected in the same horizontal plane through a single wye fitting to the combined building sewer not less than 10 feet (3048 mm) downstream from a soil stack and outside the building and with a connection beyond the property line.

1106.2.2 Air Test. The air test shall be made by attaching an air compressor testing apparatus to a suitable opening and, after closing all other inlets and outlets to the system, forcing air into the system until there is a uniform gauge

pressure of 5 pounds-force per square inch (psi) (34 kPa) or sufficient to balance a column of mercury 10 inches (34 kPa) in height. The pressure shall be held without introduction of additional air for a period of not less than 15 minutes. Plastic pipe and fittings, may be tested under this paragraph with the approval of the Authority Having Jurisdiction, and must conform to requirements of the manufacturer.

1102.4 Deleted.

1104.3 Deleted.

1109.2.2 Deleted.

1106.2.3 Exceptions: When circumstances exist that make water tests, described in Section 1106.2.1 and Section 1106.2.2, impractical, and for minor maintenance, repairs and installations, the Authority Having Jurisdiction may perform the inspection tested under conditions approved by the Authority Having Jurisdiction to assure that the work has been in accordance with provisions of this Code.

1103.412 - Amendments to the Uniform Plumbing Code™—Chapter 12—Fuel Piping.

—Chapter 12 of the 2015 Uniform Plumbing Code™ is adopted and is included in this Plumbing Code for permitted installations under this chapter. Where differences between the Plumbing Code and The City of Chesterfield Mechanical Code occur, the City of Chesterfield Mechanical Code shall govern the installation of FUEL PIPING.

1103.413 - Amendments to the Uniform Plumbing Code™—Chapter 13—Health Care Facilities and Medical Gas and Medical Vacuum Systems.

—Chapter 13 of the 2015 Uniform Plumbing Code™ is adopted and is included in the Plumbing Code for permitted installations under this chapter. Where conflicts between the Plumbing Code and the City of Chesterfield Mechanical Code occur, the City of Chesterfield Mechanical Code shall govern installation of medical gas systems.

1103.415 - Amendments to the Uniform Plumbing Code™—Chapter 14—Fire-stop Protection.

—Chapter 14 of the 2015 Uniform Plumbing Code™ is adopted. All fire-stop protection shall be done in accordance with the Building Code. Where conflicts between the Plumbing Code and the City of Chesterfield Building Code occur, the City of Chesterfield Building Code shall govern the installation. Reference to these requirements in the Plumbing Code does not establish a code requirement regarding licensing of the person(s) who install fire-stop materials.

CHAPTER 18 POTABLE WATER SUPPLY SYSTEMS

18.0 The installation of potable water systems shall be performed in accordance with the standards and procedures established by the Missouri Department of Natural Resources, and with the following requirements:

18.1 Permits Required.

1. A permit is required for the installation of a well. Permits shall be issued by the Missouri Department of Natural Resources. Failure to secure proper permits by the well driller shall be a violation of this Code.

2. It is unlawful for any person or entity to engage in or perform the work of installing potable water piping from a point two feet (2') beyond the upper well terminal seal to the last potable connection or point of discharge without first registering with St. Louis County, a proper and valid Missouri Department of Natural Resources permit for the well drilling on the premises and the required fee, which will cover the cost of processing and one (1) inspection. The installation shall be installed in accordance with this Code.

18.2 Testing of Water for Potability Required. No water system, which is supplied by a well, shall be filled nor building occupied until the source of water supply is tested and determined to be safe for human consumption. Testing shall be performed at or near the upper well terminal. Potability of the water shall be certified by a laboratory having suitable professional qualifications for the performance of such tests prior to filling of the interior water supply system, final inspection and/or occupancy of any building so supplied.

The Builder, Architect, Engineer, Well Driller, Plumber and property owner shall be held jointly and/or severally responsible for compliance with this section. Failure to comply shall be a violation of this Code.

CHAPTER 22 REGULATIONS GOVERNING INDIVIDUAL SEWAGE DISPOSAL SYSTEMS FOR HOMES AND OTHER ESTABLISHMENTS WHERE PUBLIC SEWAGE SYSTEMS ARE NOT AVAILABLE

22.1 General Provisions.

22.1.1 Where either a public water supply and/or sewer system, are not available, an individual water supply and/or sanitary sewage disposal system shall be provided and constructed on the same lot and the water distribution and drainage systems shall be connected thereto. Such individual systems shall meet the standards for installation of this Chapter 22 and Chapter 25.

22.1.2 All individual sanitary sewage disposal systems shall be constructed added to or altered in accordance with this Chapter 22.

22.1.3 Where a public sanitary sewerage system is legally and economically available to the building to be served, or within two hundred feet (200') of the

property line, the Code Official shall require that sanitary sewage be discharged into that system.

22.1.4 All sanitary sewage shall be disposed of by an approved method of collection, treatment and effluent discharge.

22.1.5 Sanitary sewage or sanitary sewage effluent shall not be disposed of in any manner that will cause pollution of the ground surface, ground water, bathing area, lake, pond, watercourse, or tidewater, or create a nuisance nor shall it be discharged into any abandoned or unused well, or into any crevice, sink hole, or other opening either natural or artificial in a rock formation.

22.1.6 Where water under pressure is not available, all human body wastes shall be disposed of by depositing them in approved privies, chemical toilets, or such other installations acceptable to the Code Official and local Health Department Official.

22.1.7 All water-carried sanitary sewage shall pass through an approved mechanical sanitary sewage treatment plant prior to its discharge into the soil. Special wastes shall meet the standards for installation of chapters 7, 8, 9, & 10 prior to entering the septic system. Where underground disposal is not feasible, consideration will be given to special methods of collection and disposal.

22.1.7.1 All individual sewage disposal systems shall permanently display a serial number chosen by and displayed as directed by the administrative authority.

22.1.7.2 Where percolation rates are less than sixty (60) minutes per inch, fifteen to thirty percent (15 to 30%) grade, a surface water diversion swale shall be added by scraping ground to a depth of six (6") inches and clean fill added and grass planted.

22.1.7.3 Where the grade is over thirty percent (30%) a French drain deeper than the bottom of the closest trench shall be installed and piped to daylight clear of field.

22.1.8 The building contractor, design engineer, owner, plumbing contractor and drainlaying contractor are jointly responsible for compliance with this Chapter 22.

22.1.9 Abandoned individual sanitary sewage disposal systems shall be disconnected from the buildings, pumped out and the contents properly disposed of, the septic tank bottom and/or the sewage treatment tank bottom shall be broken out and the septic tank backfilled with crushed limestone, gravel or clean compacted dirt.

22.1.10 No property shall be improved in excess of its capacity to properly absorb sanitary sewage effluent in the quantities and by the means provided in this chapter.

Note: Nothing contained in this Chapter shall be construed to prevent the Code Official from requiring compliance with higher requirements than those contained herein where such higher requirements are essential to maintain a safe and sanitary condition.

22.1.11 Minimum Standards.

22.1.11.1 The following minimum standards shall apply to piping used in Individual Sewage Disposal Systems the standards of which are not otherwise designated.

Pumped Sewage Lines	ASTM D2241	Gasketed Joint Integral Bell SDR 21 Class 200
Distribution Field Piping	ASTM F810	Smooth wall HOPE No joint material - Thin Wall - 4 inch only
Distribution Field Piping	ASTM F405 ASTM F667	Heavy Duty Tubing & Pipe - Corrugated PE - Straight lengths only, no coiled pipe
Distribution Field Piping	ASTM D2729	Thin Wall PVC Perforated
Sewer Lateral Pipe	ASTM D1785 ASTM D2665	SCHD 4 0 DWV PIPE
Sewer Lateral Pipe	ASTM D3034	SDR 35 DWV PIPE SDR 26 DWV PIPE

22.2 Insufficient Lot Area - Improper Soil Conditions. When the Code Official determines that there is insufficient lot area, improper soil conditions or improper lot grade elevations for adequate sanitary sewage disposal for the building or land use proposed, no building permit shall be issued and no individual sanitary sewage disposal shall be permitted. In areas where soil conditions are critical, no building permit shall be issued until engineering data and test reports are submitted and approved by the Code Official.

22.3 Design of Individual Sewage System.

22.3.1 The design of the individual sewage disposal system must take into consideration location with respect to wells or other sources of water supply, topography, water table, soil characteristics, area available, and maximum occupancy of the building.

22.3.2 The type of system to be installed shall be determined on the basis of location, soil permeability, ground water elevation and ground elevations.

22.3.3 The system shall be designed to receive all sanitary sewage, excluding untreated special waste from the building. Drainage from footings or roofs shall not enter the system. Backwash from water softeners and swimming pool filtration systems shall not enter the system and shall be discharged properly. No storm water run-off flood or surface waters shall be permitted to flow or pond over any part of the sanitary sewage disposal system.

22.3.4 The individual sanitary sewage system shall consist of an approved mechanical sanitary sewage treatment plant, discharging into a sub-surface disposal field found adequate as such and approved by the Code Official.

22.3.5 Backflow. Plumbing fixtures connected to a private sewage disposal system that are subject to backflow, shall be protected by a backwater valve or a sewage ejector.

22.3.6 An approved mechanical sanitary sewage treatment plant must be designed to minimize flood damage, floodwater infiltration into the system and from the system into floodwaters. Any approved mechanical sanitary sewage treatment plant inlets and outlets and waste-disposal trenches should be above the base flood elevation. Ring levees may be needed to protect waste treatment facilities below the base flood elevation.

22.3.7 Design Criteria. Design criteria for sewage flow shall be selected according to type of establishment. See Table 22.3.7. For establishments not covered by Table 22.3.7 use table defining quantities of domestic sewage flows in the current edition 19 CSR 20 - 3.060.

TABLE 22.3.7
SEWERAGE FLOWS ACCORDING TO TYPE ESTABLISHMENT

Type of Establishment	Flow (Gallons per day per unit unless otherwise indicated)
RESIDENTIAL UNITS	
Single Family Dwelling	120/bedroom

Multiple Family Dwelling (with laundry capabilities)	120/bedroom
Multiple Family Dwelling, cottages (without laundry capabilities)	95/bedroom
In excess of two (2) persons per bedroom	Add 50/person
Mobile Home Parks	300/home*
COMMERCIAL FACILITIES	
Service Stations	250/water closet or urinal plus 15/each employee
Transportation terminals (airports, bus stops, railroad stations and the like)	5/passenger
Laundromats	580/machine
CAMPS	
Construction or work camps (with chemical toilets)	60/person 40/person
Summer camps	60/person
Campgrounds with comfort station (without water and sewer hookups)	100/campsite
Travel trailer/recreational vehicle park (with water and sewer hookups)	120/space
ASSEMBLY and MERCANTILE	
Retail stores	120/1000 sq. ft. of retail sales area
Stadium, auditorium, theater, drive-in	5/seat or space

Swimming pools, spas, and bathhouses	10/person
Churches (not including a kitchen, food service facility, day care or camp)	3/seat
Churches (with a kitchen, not including a food service facility, day care or camp)	25/member or 25/15 sq. ft. of dining area whichever is greater
FOOD OR DRINK ESTABLISHMENTS**	
Bar (not serving food)	20/seat
Restaurants	40/seat or 40/15 sq. ft. of dining area whichever is greater
24-hour restaurant	75/seat
Food Stands	
1. Per 100 square foot of food stand floor space	50 gallons
2. Add per food employee	25 gallons
Other food service facilities	5/meal
Meat Markets	
1. Per 100 square foot of market floor space	50 gallons
2. Add per market employee	25 gallons
INSTITUTIONAL**	
Hospitals	300/bed
Day care facilities	15/person

Residential care facilities	60/person
Rest homes and nursing homes with laundry	120/bed
Rest homes and nursing homes without laundry	60/bed
Day workers at schools and office	15/person
Day camps	25/person
Day Schools with cafeteria, gym and showers	35/student
Day Schools with cafeteria only	25/student
Day schools with neither cafeteria nor showers	15/student
Boarding Schools	100/student

* Must consider flow into the soil absorption system from mobile homes where taps are allowed to run to prevent freezing.

** Establishments processing food shall be required to provide grease interceptors in an accessible location prior to the sewage treatment system.

Notes:

3. Establishments with flows greater than three thousand gallons per day (3,000 gpd) shall be regulated under Chapter 644 RSMo administered by the Department of Natural Resources.
4. Gallons per person per unit include normal infiltration for residential systems.

22.3.8 Alternate Design.

22.3.8.1 Where soil conditions are such that the systems mentioned above cannot be expected to operate satisfactorily, approval of an alternate design, by a registered design professional, shall be secured from the Authority Having

Jurisdiction. The minimum lot size on which an alternate disposal system may be installed for new construction shall be adequate for the alternate design as determined by the Authority Having Jurisdiction.

22.3.8.2 All individual mechanical sanitary sewage treatment plants to be installed to serve an individual single family dwelling and other structures within the City of Chesterfield, Missouri area must be tested and approved by the National Sanitation Foundation, Ann Arbor, Michigan, and meet all requirements of the N.S.F. Standard #40 specifications Class I treatment listing.

22.3.8.3 All mechanical sewage treatment plants for individual single-family dwellings and other structures must be supplied with an N.S.F. approval emblem on the equipment for inspection purposes.

22.3.8.4 All companies, manufacturers and distributors must show proof of the availability of repair parts and also the availability of a qualified service company and personnel for necessary treatment plant maintenance.

22.3.8.5 Standards. The design of individual sanitary sewage disposal systems must conform to the Rules and Regulations of this Section, and all other applicable State and Federal Regulations.

22.3.8.6 The individual mechanical sanitary sewage treatment plant effluent quality must conform to regulations as stated in the Rules and Regulations of Missouri Department of Natural Resources.

22.4 Location of Individual Sewage Absorption System.

22.4.1 Where the premises are served by a public water main, the minimum lot size in which an individual sanitary sewage disposal system may be installed is twenty thousand (20,000') square feet; otherwise, the required lot size on which an individual sanitary sewage disposal system may be installed is thirty thousand (30,000') square feet.

22.4.3 Minimum Distances. The minimum distances that shall be observed in locating the various components of the disposal system shall be as given in Table 22.4.3.

TABLE 22.4.3 MINIMUM SET-BACK DISTANCES

Minimum Distance In Feet From	Sewage Tank [1]	Disposal Area [2]
Private water supply well [3]	100	100
Public water supply well	300	300
Cistern	100	100

Spring	100	100
Classified stream, lake or impoundment*	50	50
Stream or open ditch [4]	25	25
Property lines**	10**	25
Building foundation	10	25
Basement	25	25
Swimming pool	20	20
Water line under pressure	10	10
Suction water line	50	100
Upslope interceptor drain	—-	10
Downslope interceptor drain	—-	10
Top of slope of embankments or cuts of two feet (2') or more vertical height	—	20
Edge of surficial sink holes	50	100
Geothermal system or equivalent	50	100
Other soil absorption system except repair area	—	20

*A classified stream is any stream that maintains permanent flow or permanent pools during drought periods and supports aquatic life.

**Recommend twenty-five feet (25') downslope of property line initially but repair may be allowed to ten feet (10') of down slope property line.

1. Includes sewage tanks, intermittent sand filters and dosing chambers.

2. Includes all approved disposal systems.

3. Unplugged abandoned wells or wells with less than eighty feet (<80') of casing depth shall have one-hundred-fifty feet (150') minimum distance from all above.

4. Sewage tanks and soil absorption systems should never be located in the drainage area of a sinkhole.

5. All paved areas, underground utilities, and accessory uses shall have a minimum of ten (10') feet of undisturbed soil between that use and any portion of the sewage disposal system.

22.4.4 General. All sewage disposal systems shall conform with the following general principles regarding site.

22.4.4.1 Location. Sewage disposal system shall be located on the premises consistent with the general layout topography, soil conditions, and surroundings, including abutting lots. Locations at a higher elevation through employment of a forced system may be used with the specific permission of the Authority Having Jurisdiction.

22.4.4.2 Watersheds . Sewage disposal facilities may be located on any watersheds of a public water supply system with the approval of the Code Official subject to the approval of affected suppliers of water.

22.4.4.3 Individual sanitary sewage disposal systems situated less than three thousand (3,000') feet upstream from the public water intake structures shall not be less than two hundred (200') feet, measured horizontally, from the high water level in the public water supply reservoir or the banks of tributary streams.

22.4.4.4 Individual sanitary sewage disposal systems situated beyond three thousand (3,000') feet upstream from public water supply intake structures shall be located no less than one hundred (<100') feet, measured horizontally, from the high water level in the public water supply reservoir or the banks of the tributary streams.

22.4.4.5 Prior to approval, the soil must prove satisfactory by a soil morphology evaluation, or when approved by the authority having jurisdiction, by the standard percolation test for underground disposal, as provided for in this Code or when the percolation rate average is greater than one hundred twenty (120) minutes per inch (mpi), severe geological limitations, potential ground water contamination or other limiting soil characteristics exist, a soil morphology evaluation shall be made by a qualified soil scientist or engineer pursuant to the rules and regulations set forth by the Department of Health and the Department of Natural Resources, State of Missouri.

22.5 Percolation Tests. The following rules and regulations shall apply to the performance of percolation tests.

22.5.1 For the percolation test, four (4) test holes shall be made in separate test locations spaced uniformly over the proposed site. The test holes must be within the area where the absorption field is to be constructed and shall be placed in an appropriate pattern, usually fifty feet (50') apart in a square pattern, with the six foot (6') test bore to be located in the proposed drain field site.

22.5.2 Dig or bore the holes with horizontal dimensions of from four to twelve (4 to 12") inches and vertical sides to the depth of the bottom of the proposed distribution trench.

22.5.3 Roughen or scratch the bottom and sides of the holes to provide a natural surface. Remove all loose material from the hole. Place two (2") inches of coarse sand or fine gravel in the hole to prevent bottom scouring.

22.5.4 Fill the hole with clear water to a minimum depth of ten inches (10") over the gravel. By refilling, if necessary, or by supplying a surplus reservoir of water (automatic siphon) keep water in the hole for at least four hours.

22.5.5 In sandy soils the saturation and swelling procedures need not be required and the test may proceed if one (1) filling of the hole has seeped away in less than ten (10) minutes.) (In sandy soils, the water depth shall be adjusted to eight inches (8") over the soil bottom of the test hole. From a fixed reference point, the drop in water level shall be measured in inches to the nearest one eights inch (1/8") at approximately ten (10) minute intervals. A measurement can also be made by determining the time it takes for the water level to drop one inch (1") from an eight-inch (8") reference point. If eight inches (8") of water seeps away in less than ten (<10) minutes, a shorter interval between measurements shall be used but in no case shall the water depth exceed eight inches (8"). The test shall continue until three (3) consecutive percolation rate measurements vary by a range of no more than ten percent (10%).)

22.5.6 Percolation rate measurements shall be made on the day following the saturation process, except in sandy soils.

22.5.7 In other than sandy soils, the water depth shall be adjusted to eight inches (8") over the soil at the bottom of the test hole. From a fixed reference point, the drop in water level shall be measured in inches to the nearest one-eighth inch (1/8") at approximately thirty (30)-minute intervals over a four (4) hour period, refilling between measurements to maintain an eight-inch (8") starting head.

The drop in percolation rate shall be calculated as follows:

The time interval shall be divided by the drop in water level to obtain the percolation rate in minutes per inch; the slowest percolation rate of the required tests shall be used to determine the final soil treatment system design. When results are greater than one hundred-fifty (>150) min/inch a detailed soils morphology evaluation must be conducted to justify the design;

and for reporting the percolation rate, worksheets showing all calculations and measurements shall be submitted; and depth to bedrock or other restrictive layer shall be determined in areas where it is known that bedrock may exist at depths less than six feet (6').

22.5.8 If no water remains in the hole after overnight saturation, add clear water to a depth of about eight (8") inches over the gravel. From a fixed reference point, measure the height of the water surface at approximately thirty (30) minute intervals over a four (4) hour period, refilling the hole to a depth of eight (8") inches as necessary. The drop, which occurs during the final thirty (30) minute period, is used to calculate the percolation rate.

22.5.9 In sandy soils, or other soils in which the first twelve (12) inches of water seeps away in less than thirty (30) minutes, after the overnight saturation period, the time interval between measurements can be taken as ten (10) minutes and the test run over a period of one hour. The drop, which occurs in the final ten (10) minute period, is used to calculate the percolation rate.

22.5.10 When the percolation test results are above forty five (45) minutes per one (1") fall, the engineer shall, at another suitable field location, perform a minimum of two (2) additional percolation test holes at the building site, even if the test site is at a higher elevation which would require a pressure line to lift the treated sanitary sewage effluent to that location. If the additional percolation test results exceed forty-five (45) minutes per one (1") inch fall, the engineer shall design an alternate system with approval of the plumbing official.

If the additional percolation test results are the responsibility of a registered design professional registered with the State of Missouri Board for Architects, Professional Engineers and Land Surveyors or Landscape Architects. After the test holes have been dug during the percolation and/or the morphology test a representative of the Office of Plumbing and Sewer Inspections, Chesterfield, Missouri shall be informed and requested to be present. The engineer shall contact this office twenty-four (24) hours prior to starting any test for the purpose of arranging for the Inspector's presence.

Percolation and Morphology test site plan. The registered engineer shall submit a site plan with the percolation and/or morphology test results, which must indicate:

1. Lot size, property lines and easements.
2. Test hole locations and elevations.
3. Benchmark locations and elevations.

Note: Benchmark should be a spike in tree, iron pipe or hub set to remain through the construction period.

4. Basement floor elevation.

5. Proposed building and accessory use location.

6. Location of potable water service piping, well or cistern. A complete investigation of all existing potable water wells or cisterns located on all adjacent properties to the proposed new building site. The location of all existing potable water wells or cisterns shall be indicated and shown on the site plan of the proposed building if within seventy-five feet (75') of the property line.

7. Driveway and all paved areas.

8. Results of the six (6') foot test bore.

9. The engineer shall flag the test holes. Test holes shall not be backfilled (covered) until after the field has been installed and approved by the Code Official.

10. Contours, at a minimum of two (2') foot intervals, in area of proposed drain field to include all adjacent areas within twenty-five (25') feet.

11. Locate proposed building sewer vent trap, building treatment unit, disposal field by elevation and distances to property lines.

12. Design of proposed treatment and disposal system.

13. The site plan shall include a statement that the engineer, or his representative, has inspected the site to determine the most suitable location for the proposed house or other establishment treatment unit and disposal field.

14. Percolation test results shall include date of test, test hole soaking period, depth of test holes, depth of water at start of test, average percolation rate for four (4) test holes.

15. Original engineer seal and signature on all documents.

22.6 Minimum Size of Absorption Field.

22.6.1 In no case shall less than four hundred (400') square feet of absorption area be provided.

22.6.2 The minimum required size of the absorption field per bedroom is related to the percolation rate in minutes per inch of fall and shall be in accordance with Table 16.6.2. For soils with percolation rates of less than ten (<10) minutes per inch a soil morphology test shall be required.

TABLE 22.6.2
SQUARE FOOTAGE OF ABSORPTION FIELD REQUIRED*

Minutes per Inch Fall	Square Feet Per Bedroom
Between 2 and 15	200

Between 15 and 30	250
Between 30 and 45	300
Over 45	Alternate system to be considered

*Except as provided in Section 22.10.

22.6.3 For establishments other than a single family residence, subsection 22.3.7. shall be used to estimate the sewage flow rate. (Also, see Paragraph 22.8.)

22.6.4 The thickness of the porous soil below the point of the percolation test must be determined by means of using a soil auger. The effective absorption area shall be calculated only within this porous soil.

22.7 Morphology Tests. The following rules and regulations shall apply to the performance of morphology tests.

22.7.1 Follow the procedure as defined in the most current edition of the Missouri Department of Health Rules Governing On-site Sewage Systems. The minimum size of hole dug for shall be twenty-four (24") inches wide and four (4') feet long at its deepest point, a minimum of five (5') feet deep, or to bedrock if at less than five (5') feet deep. A tube type morphology test may be used with the approval of the authority having jurisdiction.

22.8 Subsoil Investigation. In conjunction with the percolation test, and/or soil morphology test a subsoil investigation shall also be made. If rock, hardpan, or other impermeable stratum is found at a depth less than four (4') feet, or if the ground water table is less than four (4') feet below grade during any prolonged period, the Code Official shall determine whether an absorption field system is appropriate and if so the size of the absorption field required.

22.9 Code Official Field Survey Checklist. Upon receipt of an individual sanitary sewage system application an on-site field survey shall be performed. The property owner or his authorized representative shall be present at the Code Official's field survey and sign the Field Survey Check List. Any authorized representative must have the property owner's notarized authorization in writing to be filed with the Office of Plumbing and Sewer Inspections.

The Field Survey Check List, site plans with sewage treatment design, and all percolation data and/or all soil morphology data shall be approved by the Code Official and on file with the Office of Plumbing and Sewer Inspections prior to the issuing of the building permit.

22.9 Sewage Tank/Mechanical Sanitary Sewage Treatment Plant.

22.9.1 Plans for all mechanical sanitary sewage treatment plants shall be submitted to the Code Official for approval. Such plans shall show all dimensions, reinforcing structural calculations and such other pertinent data as may be required by the Code Official. Such facilities shall have NSF approval for minimum type 1 discharge.

22.9.2 Installation of all mechanical sanitary sewage treatment plants shall comply with the manufacturing specifications and guidelines.

22.9.3 All mechanical sanitary sewage treatment plants shall be sized by an engineer but in no case shall it be less than the manufacturers specifications and guidelines or have less than a minimum treatment capacity of one hundred twenty gallons per bedroom per day (120 gals, pbd), or one thousand gallons (1000 gals) whichever is greater.

22.9.4 Mechanical sanitary sewage treatment plants shall be brought to within the maximum of fourteen (14") inches of the finished grade. Where the Code Official permits a greater depth, the access manhole, minimum inside diameter thirty-six inches, must be extended to the finished grade and the manhole shall have a concrete marker at grade.

22.9.5 The effluent from all mechanical sanitary sewage treatment plants shall be disposed of underground by sub-surface absorption or other methods as approved by the Code Official.

22.9.6 When required by the Authority Having Jurisdiction, a flow meter shall be installed to measure the actual flow leaving the treatment unit and prior to entering the sub-surface absorption field or other method as approved by the Code Official.

22.10 Absorption Trenches.

22.10.1 Absorption trenches shall be designed and constructed on the basis of the required effective absorption rate.

Percolation Rate	Absorption Loading Area	Loading Rate
(min./in.) <10**	(sq.ft./bedroom) 150	(gal./sq. ft.)* 1.0
11—30	200	0.8
31—45	265	0.45
46—60***	300	0.4

61—120***Æ	600	0.2

* Gallons of sewage tank effluent per day per square foot of trench bottom.

** Soils with percolation rates of one to ten minutes per inch (1—10 min./in.) or less shall either be evaluated for severe geological limitations by a registered geologist or a soil morphology examination shall be required.

*** Note: When percolation rate is greater than forty-five minutes per inch (45 min./in.), backfill above infiltration barrier shall be sand, loamy sand or sandy loam, when available. Two to four inches (2—4") of loamy soil shall be used to cap the sandy backfill. This is to keep rainwater from entering the system.

Must be designed and approved by a Missouri registered engineer.

22.10.2 All filter material shall be graveless unless approved by the Code Official. As a reference a type of graveless material that would be acceptable would be E-Z Flow Aggregate System or Enviro Chamber System or Infiltrator System Chambers or 4 inch corrugated plastic pipe meeting ASTM F405 High Density standards, or other system or material deemed equivalent by the Code Official.

If filter material is approved by the Code Official it shall cover the tile and extend the full width of the trench and shall be not be less than twelve (12") inches deep beneath the bottom of the tile, and two (2") inches above the top of the tile. The filter material shall be washed, Class "B" gravel. The filter material shall be covered by untreated building paper or by a minimum of eight (8") inches of straw for a compacted thickness of two (2") inches or other material approved by Authority Having Jurisdiction as the laying of the drain pipe proceeds.

22.10.3 All piping and piping fittings shall be designed for septic tank absorption field construction and shall be approved by the Code Official. When four 4" (inch) diameter corrugated plastic tubing is used it shall not be less than ASTM F405 High Density standards. The corrugated tubing shall have three (3) rows of not less than one-half inch (<½") or greater than three-fourths inch (>¾") diameter holes and spaced longitudinally at four inches (4") on centers. Coiled tubing shall not be used.

22.10.4 Maximum length of lateral absorption lines shall not exceed one hundred (100') feet. The trench bottom shall be uniformly graded to slope from a minimum of two (2") inches to a maximum of four (4") inches per one hundred (100') feet.

22.10.5 Disposal field trenches shall have a bottom width of eighteen to thirty-six (18 to 36") inches; a depth of eighteen to thirty (18 to 30") inches and be spaced not less than ten (>10') feet apart (measured from edge of trenches).

22.10.6 Compaction and/or smearing of soils on the trench sidewalls and trench bottom occurring during excavation shall be avoided. When compaction and/or smearing of soils do occur the soil area shall be roughened and scratched to natural soil condition.

22.10.7 Dosing is required for all systems, except serial distribution systems, and shall be provided when the design flow requires more than 500 lineal feet of distribution line. Dosing shall be required when the distance between the bottom of the trench and a limiting condition is less than two feet (2').

22.11 Evaporation/Irrigation Alternate Design.

22.11.1 When an absorption disposal field cannot be used for effluent disposal due to limiting soil characteristics, an evaporation/irrigation system may be installed. When the percolation tests are greater than one hundred twenty (>120) minutes per inch, (mpi), or soil conditions are limited another alternate disposal design may be considered. The Code Official shall approve all alternate designs.

22.11.2 Evaporation irrigation trenches shall be designed and constructed on the basis of one hundred-fifty (150') lineal feet per bedroom for individual single-family dwellings. All other establishments shall be constructed on the basis of one point five (1.5') lineal feet of drain field per gallon of sewage flow, but in no case less than two hundred (200') lineal feet.

22.11.3 Maximum length of lateral evaporation irrigation lines shall not exceed one hundred (100') feet.

22.11.4 The trench bottom shall be uniformly graded to slope a maximum of two (2") inches per one hundred (100") feet.

22.11.5 Disposal field trenches shall have a bottom width of not less than eighteen (<18") inches nor greater than twenty-four (>24") inches. A maximum depth of eighteen (18") inches and a minimum depth of ten (10") inches and be spaced not less than ten (<10') feet apart (measured from edge of trenches).

22.11.6 Evaporation irrigation lines shall be constructed of four (4) inch corrugated perforated plastic piping not less than ASTM F-405 High Density specifications. The corrugated tubing shall have three (3) holes of not less than one-half inch (<½") or greater than three-fourths (>¾") diameter holes and spaced longitudinally at four inches (4") on centers. All corrugated perforated piping shall be encased with a filter wrap of spun-bonded nylon, spun-bonded polypropylene or other substantially equivalent material approved by the Code Official. The Code Official shall approve all other piping designed for evaporation/irrigation lines. Coiled tubing shall not be used.

22.11.7 The piping and the full width of the trench shall be covered by a minimum of eight (8") inches of straw for a compacted thickness of two (2") inches over pipe or other approved filter material. The trench shall then be backfilled with clean soils consisting of sandy loam, clay loam, or silky clay loam. Backfill shall be free of rocks, hard clay soils, and debris.

22.11.8 All evaporation/irrigation disposal trenches shall be aerated manually after backfilling of the trenches. All trenches shall be seeded and strawed prior to any disturbance of the aerated soil.

22.11.9 Reserved for future use.

22.11.10 Evidence of effluent discharge at the end of the last evaporation irrigation trench shall be interpreted as insufficient drain field footage and require the immediate addition of drain field.

22.12 Sand Filters.

22.12.1 General Specifications for Design and Construction of a Sand Filter with Chlorination.

22.12.1.1 General. A sand filter shall consist of a bed of clean, graded sand on which septic tank effluent is distributed by means of a siphon and pipe, with the effluent percolating through the bed to a series of under drains through which it passes to the point of disposal.

22.12.1.2 Filter Size. The filter size shall be determined on the basis of one point one five (1.15) gallons per square foot per day if covered and two point three (2.3) gallons per square foot per day if an open filter is to be used.

22.12.1.3 Dosing Tank Size. The septic tank effluent shall enter a dosing siphon tank of a size to provide one (1") inch coverage of the sand filter.

22.12.1.4 Siphon. The siphon shall be of a commercial type and shall discharge the effluent to the sand filter intermittently. The siphon shall be omitted if a pump is used to lift septic tank effluent to the sand filter.

22.12.1.5 Surge Tank. A surge tank shall be used to receive the pump discharge prior to dosing on the sand filter.

22.12.1.6 Underdrains. Four-inch diameter vitrified clay pipe in two (2') foot lengths laid with one-half (½) inch open joints or unglazed farm tile in one (1') foot lengths laid with open joints, with the top half of each joint covered with four (4") inch wide strips of tar paper, burlap, or copper screen, or perforated bituminized-fiber pipe or other approved material shall be used for the under drains.

22.12.1.7 Underdrain Bed. The under drain pipes shall be laid at the bottom of fine sand filter, surrounded by washed gravel, crushed stone, slag, or clean bank run gravel ranging in size from one-half (½") inch to two and one-half (2½") inches and free of fines, dust, ashes or clay. The gravel shall extend

from at least two (2") inches below the bottom of the tile to a minimum of two (2") inches above the top of the tile.

22.12.1.8 Underdrain Slope and Spacing. The under drains shall have a slope from two (2") inches to four (4") inches per one hundred (100') feet and shall be placed at eight (8') foot intervals.

22.12.1.9 Underdrain Fill. Above the gravel or other material surrounding the under drain shall be placed two (2') feet of washed and graded sand having an effective size of from 0.35-0.5 mm and a uniformity coefficient of not over three point five (3.5) (the effective size of a sand is that size of which ten percent (10%) by weight is smaller and the uniformity coefficient is the ratio of that size of which sixty percent (60%) by weight is smaller than the effective size).

22.12.1.10 Distribution Pipes. The distribution pipes shall be laid at the surface of the sand, surrounded by gravel as specified for the under drains.

22.12.1.11 Gravel Cover. The gravel should be covered with untreated building paper and the entire area covered.

22.12.1.12 Open Filter. If the filter is an open one, the four (4) sides shall be constructed of wood or concrete to prevent earth erosion from entering the sand filter bed.

22.12.1.13 Chlorine Contact Tank. The chlorine contact tank for disinfections of sand filter effluent and individual mechanical sanitary sewage treatment plants shall provide twenty (20) minute detention at average flow but in no case shall the capacity be less than fifty (<50) gallons. Chlorine control should be provided by the use of hypochlorite or chlorine machines commercially available.

22.13 Protection of Disposal Fields.

22.13.1 All disposal field areas shall be protected from damage caused by, but not limited to pavement, vehicles, animals, tillage or other uses, which might affect the design and/or operation of the system.

22.14 Forced Line Systems.

22.14.1 A holding tank of a minimum of one days flow from the building or five hundred gallon capacity whichever is greater shall be used to receive the building discharge prior to entering the pump and the forced line.

22.14.2 A slow down area shall be established between the forced line and the drain field. The slow down area shall be of sufficient size or length to prevent a surge of effluent through the drain field.

22.15 Bedroom Additions to Existing Single Family Dwellings.

22.15.1 Where an alternation and/or additions are made to an existing single family dwelling resulting in an increase in the number of bedrooms, the existing disposal field shall be enlarged to the minimum of:

ABSORPTION DISPOSAL FIELD	One hundred fifty square feet which is equal to 75 lineal feet of 2 foot wide trench per bedroom. If percolation data is available for existing absorption field the Administrative Authority may adjust footage requirements.
ALTERNATE DESIGN:	100 Lineal feet per bedroom.
EVAPORATION IRRIGATION	

22.16 Building Sewer and Land Block Step Downs.

22.16.1 All piping from building drain to individual sewage disposal systems shall be six (6") inches and a (6") inch vent trap shall be installed at the inlet end of the mechanical sanitary sewage treatment plant.

22.16.2 All land block step-downs for absorption and/or evaporation/irrigation disposal trenches shall be of solid piping not less than scheduled 35 sewer piping.

22.16.3.1 Connections between corrugated pipe and SDR 35 fittings shall be made using approved rubber coupling.

22.17 Scavengers-Sewage and Waste Disposal.

22.17.1 All solid and liquid contents of chemical toilets, septic tanks, seepage pits, and watertight pits for septic tank effluent shall be removed and disposed of in accordance with the Rules and Regulations of the St. Louis County Health Department.

22.18 Commercial Absorption Field Installations.

22.18.1 Design criteria for commercial absorption field installations with guidelines from paragraphs 22.3.7 and 22.5 and 22.8.

1. 35.4 minutes per one-inch (1") fall is utilized in the sample method as illustrated below.
2. When designing a system you must obtain the proper percolation rate of the soil at the construction site before making any calculations.
3. Percolation test results = 35.4 minutes per one inch (1") fall.
4. 35.4 for one-inch (1") fall - 300 sq. ft. of absorption field per bedroom - Table 16.6.2.
5. One (1) bedroom - occupancy for two (2) persons.

6. 300 sq. ft. absorption field per bedroom = 150 sq. ft. absorption field per person.

7. Water usage = 100 G.P.D. per person.

8. 100 G.P.D. per person discharging into 150 sq. ft. area of absorption field = 1.0 gallons discharging into 1.5 sq. ft. area of absorption field.

9. System being designed is a church with kitchen facilities with peak population of 500 persons.

10. Paragraph 22.5 states for this type of building the G.P.D. water usage for each person is 5 G.P.D.

11. 500 persons × 5 G.P.D. = 2500 G.P.D.

12. Multiply 1200 G.P.D. flow by required 1.5 sq. ft. of absorption area per gallon = 3750 sq. ft.

13. Absorption trench not to exceed 24 inches in width.

14. 2 sq. ft. = 1 Lineal ft or 24 inch wide trench.

15. 3750 sq. ft. 2 sq. ft. per lineal ft = 1875 feet.

22.19 Alternate Systems. The following systems meeting the specified criteria are acceptable designs.

22.19.1 Drip Irrigation.

1. Definition: Drip Effluent/Irrigation System

(A) Low volume, time controlled, and site specific engineered method of uniformly distributing NSF Class 1 treated, chlorinated and de-chlorinated effluent over a specific area of soil, at a specified depth, that will allow the soil to absorb the treated effluent at a set rate (gal./day/sq. ft.) as specified in Title 19 - Department of Health, Division 20 - Environmental Health and Epidemiology, Chapter.

(B) General Sanitation guidelines for the State of Missouri, for the morphology of the disposal area to be used.

2. Components of: Drip Effluent/Irrigation Systems

The components of the system shall include the items listed below:

(A) Treatment Tank

Treatment of the domestic wastewater shall be accomplished by the extended aeration process with non-mechanical flow equalization, pretreatment of the influent and filtration, chlorination and de-chlorination of the final effluent.

The use of ultraviolet treatment may be added at the option of the registered design professional. The treatment system shall provide primary, secondary, and tertiary treatment of the wastewater flow and be contained

within a reinforced pre-cast concrete tank meeting ACT standard 318-95, minimum size One thousand (1000) gallon. Systems utilizing fiberglass, steel or plastic tanks are subject to review and individual approval to be considered for this application and shall be provided with protection against corrosion and deterioration. All tanks shall be prevented from flotation when dewatered as required.

(B) Holding Tank

A minimum One Thousand (1000) gallon low inlet pre-cast holding tank, with an access riser, necessary plumbing and electrical connections, all of which are cast into the tank at time of manufacture, will receive the treated effluent. No other openings should exist in order to eliminate possible ground water infiltration. The following components shall be installed in the tank:

(1) Pump: A properly sized, high head, filtered, intake effluent pump rated for continuous duty and designed for use in effluent water conditions shall be installed in the system. Pressure and flow requirements shall be determined by hydraulic calculation of elevation change, pipe friction loss, drip line pressure loss and pressure required to flush drip tubing at the recommended rate of one point five (1.5) ft per sec. Minimum size of pump, sized by the registered engineer responsible for the design, is to be indicated on the drawings submitted for review.

(2) Pump Control: Pump operation shall be controlled by properly set floats connected to a vapor-proof junction box and wired in conjunction with the dosing controller.

(3) Pump Discharge Line: The pump discharge line from the pump to the field discharge manifold will include an adjustable pressure relief valve capable of being set at ninety percent (90%) of the pumps maximum discharge pressure so as to allow the pump to be able to run at a reduced working pressure in case of filter plugging.

(4) Air Vent: A one (1") inch Air Vent shall be installed on the pump discharge line at the highest point available prior to installation of the drip tubing, at the highest points and at the end on both the Distribution and the Return Manifolds.

(5) Filter: A properly sized Disc "T" type Filter of one hundred-twenty (120) mesh, or approved equivalent, shall be installed on the discharge end of the pumping system and be located in a position to be monitored, cleaned and maintained on a regular basis.

(6) Dosing Controller: The dosing controller shall be externally mounted and be capable of twenty-four (24) hour continuous operation with repeatable start and stop times, and be able to be programmed as required to meet the desired application rates. The controller shall have HOA capability, (hand or automatic), and shall have adequate

alarm, both horn and light, and alarm test capability, and be able to actuate twenty-four (24) volt solenoid on the discharge manifold for a specific time after pre-selected number of dosing cycles. The Dosing Controller shall control all zones.

(C) Drip Tubing Field

The following components shall be included in the Drip Tubing Field:

(1) Distribution Manifold: The distribution manifold from the pump to the drip tubing lines shall be of PVC Sch. 40 and shall be properly sized using standard hydraulic principals, this being a pressurized system, for the hydraulic load and pressure loss desired. One end of the drip tubing run, or lateral, will be connected to the distribution manifold at the designed system distance and depth required, by means of a properly sized compression fitting at ninety (90°) degrees to the manifold. A properly sized air and vacuum relief valve shall be installed in this manifold at the highest points and at the end.

(2) Drip Tubing: Tubing is to be seventeen (17) millimeter O.D. with a minimum of fifty (50) mil wall. Emitters shall be pressure compensating and of the same material as the tubing, self-flushing, able to pass particles up to eight hundred (800)microns, shall be factory installed on two (2') foot centers and have a discharge rate of 0.61 gph at a pressure range of seven to sixty (7 to 60). The length allowed for each run shall be determined by performance graphs of the product and the topography of the site using standard hydraulic principles, this being a pressurized system. Inspector is to be given, at time of inspection, a minimum one (1') foot length sample of the installed tubing, which contains an emitter, and the identification tags taken from the coil of the installed tubing.

(3) Return Manifold: The Return Manifold shall be of PVC Sch.40 and shall be properly sized using standard hydraulic principals, this being a pressurized system, for the hydraulic load and pressure loss desired. The discharge end of the drip tubing shall be connected at ninety (90°) degrees to the manifold with a properly sized positive locking fitting to the return manifold. The return manifold shall connect the discharge end of the drip tubing run, or lateral, to the primary treatment tank and shall be laid out in a reverse return configuration so that the drip lateral that is first on the distribution manifold of the system is last on the return manifold in a manner that assures pressure balance in the system and therefore uniform flow. A properly sized air and vacuum relief valve shall be installed in this manifold at the highest points and at the end. A solenoid valve shall be connected in the return manifold in order to depressurize the line for the flushing cycle allowing the maximum flow rate to be generated during flushing. Frequency of flushing and length of flush

time shall be determined by the size of the field and rate of use expected. All manifolds shall have the capability of being individually flushed and drained.

3. City of Chesterfield Requirements

The following shall be provided to the Department of Planning prior to approval for occupancy or as indicated:

(1) Certification by Design Professional: Upon completion of construction of the Drip Effluent/Irrigation Private Sewage System and prior to the occupancy permit being issued, it shall be the responsibility of the registered design professional who submitted the design to provide a signed and sealed letter stating his/her approval of the installation to the Department of Planning.

(2) Initial Maintenance Policy: A two-year (2) maintenance policy shall be obtained for the treatment plant, pumps, filters, related equipment, and other components of the Drip Effluent/Irrigation Private Sewage System. A copy of this maintenance policy shall be provided as soon as possible, but no later than thirty (30) days following issuance of occupancy permit, to the Department of Planning. Maintenance policies obtained after the initial maintenance policy are recommended but not required to be provided. Failure to properly service the system on a regular basis could cause system malfunction requiring extensive repairs and loss of system use. A record of maintenance and a copy of all maintenance policies must be maintained on site.

(3) Annual Inspection: An inspection of the installation of the Drip Effluent/Irrigation Private Sewage System shall be conducted annually with a copy of the inspection report filed with the Department of Planning. A record of inspections including the date of the inspection, the license number and name of the inspector, and the name, address, and phone number of the inspectors employer shall be kept on the premises and shall be prominently posted in a permanent weather proof container in plain view of the sewage system.

a. Owner Instruction: Copies of approved system drawings, and the requirements of these rules and regulations shall be provided to the owner/s prior to, or at the time of occupancy.

b. Subsequent Owner Notification: A copy of all test reports, records of all maintenance, copies of approved system drawings, and the requirements of these rules and regulations shall be provided to subsequent owners at the time of transfer of title.

Note: Typical Drip Effluent/Irrigation Private Sewage System schematic is attached in the Appendix and is a part of the requirements for the installation of this type of sewage system.

22.19.2 Low Pressure Piping (L.P.P.).

1. *L.P.P. GOALS:*

   (A) Uniform distribution of effluent

   (B) Dosing and resting cycles

   (C) Shallow placement of trenches

2. *L.P.P. consist of:*

   (A) Class I waste treatment tank - 1200 gallon minimum

   (B) Pumping tank, flow chamber - 1000 gallon minimum

   (C) Submerged, non-corrosive sump pump and lever control

   (D) High water alarm

   (E) Supply line and manifold

   (F) Distribution laterals

   (G) Suitable site and soil depth

3. *Low Pressure Piping:* The following requirements must be met:

   (A) Use five-thirty two (5/32") inch holes every five (5') feet of pipe. Holes must be drilled in a straight line on one side of the pipe.

   (B) Pea gravel or washed gravel 6 inches in bottom of trench, two to four (2—4") inches over pipe.

   (C) Trenches must be on contour, a transit will be required. Trench width six (6") inches, depth eighteen to twenty-two (18—22") inches.

   (D) Use two (2') foot manifold pipe if pump distance is more than one hundred (>100') feet from dosing chamber.

   (E) Minimum size pump allowed 4/10 H.P. However ½ H.P. is recommended.

   (F) Two chamber dosing tank - 1000 gallon minimum.

   (G) To pressurize this system, stand pipes using 5/32 inch holes must be used. Two psi minimum required.

   (H) Piping can be 160 psi but recommend schedule 40. Use of SDR21 on two (2") inch manifold will help the flow rate.

   (I) Minimum field size - 600 lineal feet for a 3 bedroom house.

   (J) A minimum of 12 inches of soil between the bottom of trench and a restrictive horizon, e.g. bedrock, hardpan, seasonal high water table.

   (K) If lateral lines are lower than the dosing tank, a 1/3" deep hole will be required in the pump line.

   (L) If effluent will run back down from the manifold, a check valve will be required.

(M) The manifold pipe should be trenched one foot below the lateral lines (24—30 inch depth). Manifold pipe must be backfilled with tightly tamped soil.

(N) Ball valves will be required.

(O) Laterals should be longer than 80' due to friction loss.

(P) Pumps:

(1) Must be NEMA approved.

(2) Must have reliable high water alarm system. Alarm must be on separate circuit from the pump and be audible.

(3) A test switch is needed for the alarm.

(4) Mercury float switches are required.

(5) Pump must be non-corrosive and have a double seal.

(6) Pump should be situated on top of two concrete blocks.

(7) Controls should be attached to outlet pipe.

(8) High water float must be mounted 2 feet above upper "Pump On" control.

(9) Pump outlet pipe should be connected to supply manifold with threaded PVC union.

(10) Wiring must be maintained watertight.

(11) Junction boxes** will be required for high water alarm and pump wiring. It is preferable to mount junction box on wood outside dosing tank.

Model #10-0086 "J-pak" 4 hole with 6 liquid tight non-corrosive connections. Each box contains four (4) cable connectors for 16 AWG or 18 AWG 3 conductor SO jacketed cable and one (1) connector for 12 AWG or 14 AWG 3 conductor UF type cable and one (1) connector or 18 AWG 2 conductor S.O. jacketed cable suitable for mercury float switch.

4. *Additional Information on Laterals:*

(A) Lateral lines should be 1-H inch PVC (160 psi) or (Sch.40).

(B) End of each lateral is capped and turned up to provide access. Use 90 degree elbows, bury cap 2 inches below ground.

(C) Laterals should not slope away from manifold.

(D) Each lateral must be 12 inches higher than supply manifold to prevent backflow.

(E) Small earthen dams are placed at the beginning of each trench and at twenty (20") inch intervals.

(F) The first hole should be thirty (30") inches from the manifold, and the last hole should be thirty (30") inches from the end of the lateral pipe.

1103.423 - Amendments to the Uniform Plumbing Code—Chapter 23—Dwelling Unit Fire Sprinkler Systems.

—Chapter 23 is a new addition to the ordinance referencing the 2009 Uniform Plumbing Code™.

APPENDICES CHESTERFIELD ORDINANCE

APPENDIX A

1103.418A - Amendments to the Uniform Plumbing Code—Appendix A Recommended Rules for Sizing the Water Supply System.

—Appendix A of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

APPENDIX B

1103.418B - Amendments to the Uniform Plumbing Code—Appendix B—Explanatory Notes on Combination Waste and Vent.

—Appendix B of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

Amendments to the Uniform Plumbing Code—Appendix C Alternate Plumbing Systems.

Appendix C of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

APPENDIX D

Appendix D Sizing Storm Water Drainage Systems.

Appendix D of the 2015 Uniform Plumbing Code™ is amended by the following provisions.

Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

Appendix D of the 2015 Uniform Plumbing Code™ is amended and included in the Plumbing Code with the following change:

1. In Table D-l the Maximum Rates of Rainfall for St. Louis Missouri shall be 6.0 inches per hour and 0.063 GPM/Square Foot in lieu of the values listed.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

APPENDIX E

Appendix E Manufactured/Mobile Home Parks and Recreation Vehicle Parks.

Appendix E of the 2015 Uniform Plumbing Code™ is amended by the following provisions.

Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

Appendix E is included in the Plumbing Code with the following changes:

The City of Chesterfield Mechanical Code shall govern installation of Part D FUEL SUPPLY.

APPENDIX G

Appendix G Sizing of Venting Systems.

Appendix G of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

APPENDIX H

Deleted.

APPENDIX I

Appendix I Installation Standard for PEX Tubing Systems for Hot- and Cold-Water Distribution.

Appendix I of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this Chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

APPENDIX J

Appendix J Combination of Indoor and Outdoor Combustion and Ventilation Opening Design.

Appendix J of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

APPENDIX K

Appendix K Potable Rainwater Catchment Systems.

Appendix K of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

1103.418L - Amendments to the Uniform Plumbing Code™—Appendix L—Alternate Plumbing Systems.

—Appendix L of the 2015 Uniform Plumbing Code™ is amended by the following provisions.

Each section in the UPC that corresponds to one of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each section set forth below without a corresponding provision in the UPC is added thereto.

Appendix L is accepted by the Plumbing Code as a reference only and may be used as an engineered system if approved by the authority having jurisdiction.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent shall apply.

APPENDIX L

Appendix L Sustainable Practices.

Appendix L of the 2015 Uniform Plumbing Code is included in the Plumbing Code with no changes.

If any conflict of interpretations, requirements, or ordinance sections of this chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent requirement shall apply.

1103.418M - Amendments to the Uniform Plumbing Code™—Appendix M—Code Illustrations.

—Appendix M, a copy of which is maintained on the St. Louis County internet under Public Works, is hereby enacted and added as an additional appendix to the 2015 Uniform Plumbing Code™.

The drawings contained in Appendix M are intended to aid in the clarification of various methods, installation practices and piping configurations, which conform to the requirements of this Code.

If any conflict of interpretations, requirements, or Ordinance sections of this Chapter occur between other similar Code provisions and other City of Chesterfield Ordinances the more stringent shall apply.

Attachment 'G'

1110.100 - Amendments to Chapter 1—ICC International Property Maintenance Code

Chapter 1—Administration and Enforcement.

Chapter 1 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one (1) of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

101.1 *Title.* These regulations shall be known as the Property Maintenance Code of the City of Chesterfield, Missouri, hereinafter referred to as "this code."

102.3 *Application of Other Codes.* The Building, Mechanical, Plumbing and Electrical Codes referenced in this code and listed in Chapter 7 of this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes, the provisions of this code shall apply. Nothing in this code shall be construed to cancel, modify or set aside any provision of the Unified Development Code of Chesterfield, nor the Plumbing Code, Electrical Code, Waste Management Code, Existing Building Code, Building Code, and Residential Code as adopted by the City of Chesterfield.

103.1 *General.* The authority of property maintenance inspection is hereby created and the executive official in charge thereof shall be known as the "Code Official."

103.2 *Appointment.* Delete.

103.5 *Fees.* The fees for activities and services performed by the Department of Transportation and Public Works in carrying out its responsibilities under this code shall be as indicated in sections 1110.050 (municipal contracts) and 1110.1065 of this code. Research fees shall be calculated per Section 114.070 SLCRO 1974 as amended.

106.4 *Violation Penalties.* Any person, who shall violate a provision of this code, or fail to comply therewith, or with any of the requirements thereof, shall be prosecuted within the limits provided by state or local laws. Each day that a violation continues after due notice has been served, shall be deemed a separate offense.

107.2 *Form.* Such notice prescribed in Section 107.1 shall be in accordance with all of the following:

1. Be in writing.

2. Include a description of the real estate sufficient for identification.

3. Include a statement of the violation or violations and why the notice is being issued.

4. Include a correction order allowing a reasonable time to make the repairs and improvements required to bring the dwelling unit or structure into compliance with the provisions of this code; except, however, that the time allowed in any correction order pertaining to the removal of graffiti in compliance with section 302.9 shall not exceed thirty (30) days and said correction order shall further advise that the matter will be referred to the City Attorney for prosecution without further notice at the expiration of the prescribed period if the graffiti violation has not been remedied.

5. Inform the property owner of the right to appeal.

107.3 *Method of Service.* Such notice shall be deemed to be properly served if a copy thereof is:

1. Delivered personally; or

2. A copy thereof shall be posted in a conspicuous place in or about the structure affected by such notice and in or about the premises affected by such notice; or

3. Sent by first-class mail addressed to the last known mailing address in the County real estate record; or

4. If the notice is returned showing that the letter was not delivered and a copy was not already posted on the property, a copy thereof shall be posted in a conspicuous place in or about the structure or on the premises affected by such notice and in or about the premises affected by such notice, or served in such other manner as is reasonably calculated to achieve actual service upon the owner of the structure.

SECTION 110
DEMOLITION

110.1 *General.* The demolition of all structures shall be in accordance with the provisions of the Building Code as adopted by the City of Chesterfield.

110.2 *Notices and orders.* Delete.

110.3 *Failure to comply.* Delete.

110.4 *Salvage materials.* Delete.

SECTION 111\MEANS OF APPEAL

111.1 *Application for Appeal.* Any person directly affected by a decision of the Code Official or a notice or order issued under this code shall have the right to appeal within thirty days to the board of appeals pursuant to the

procedures adopted in Chapter 1115 SLCRO 1974, as amended. An appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent form of compliance will be used.

111.1.1 *Filing fee.* An application for appeal may not be filed without full payment of the filing fee prescribed in Chapter 1100.130 SLCRO 1974 as amended.

111.2 *Membership of board.* Delete.

111.2.1 *Alternate members.* Delete.

111.2.2 *Chairman.* Delete.

111.2.3 *Disqualification of members.* Delete.

111.2.4 *Secretary.* Delete.

111.2.5 *Compensation of members.* Delete.

111.3 *Notice of meeting.* Delete.

111.4 *Open meeting.* Delete.

111.4.1 *Procedures.* Delete.

111.5 *Postponed hearing.* Delete.

111.6 *Board decision.* Delete.

111.6.1 *Records and copies.* Delete.

111.6.2 *Administration.* Delete.

SECTION 112
STOP WORK ORDER

112.4 *Failure to Comply.* Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to a fine of up to $1,000.00, or by imprisonment not exceeding 90 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

1110.200 - Amendments to Chapter 2—ICC International Property Maintenance Code—Chapter 2—Definitions.

—Chapter 2 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, sub-section, definition or clause of the code that corresponds to one of the following provisions is hereby deleted where so noted or amended as set forth below. Each provision set out below without a corresponding section, sub-section, definition or clause in the code is hereby enacted and added thereto.

SECTION 201
GENERAL

201.3 *Terms Defined in Other Codes.* Where terms are not defined in this code and are defined in the City of Chesterfield Building, Plumbing, Mechanical, and Electrical Codes and in the City of Chesterfield Unified Development Code, such terms shall have the meaning ascribed to them therein.

SECTION 202
GENERAL DEFINITIONS

Code Official. The Director of Transportation Public Works or any person(s) or agent(s) employed or designated by the Director to enforce this code.

Vehicle. A device normally required to be licensed and intended to transport persons or property and which is drawn, driven or otherwise transported on land, air or water.

1110.300 - Amendments to Chapter 3—ICC International Property Maintenance Code—Chapter 3—General Requirements.

—Chapter 3 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, sub-section or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, sub-section or clause number in the code is hereby enacted and added thereto.

SECTION 302
EXTERIOR PROPERTY AREAS

302.4 *Weeds.* All premises and exterior property shall be maintained free from weeds or plant growth in excess of eight (8) inches (203 mm). All noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs, provided, however, this term shall not include cultivated flowers and gardens.

Upon failure of the owner or agent having charge of a property to cut and destroy weeds after service of a notice of violation, they shall be subject to prosecution in accordance with Section 106.4 and as prescribed by the authority having jurisdiction. Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut and destroy the weeds growing thereon, and the costs of such removal shall be paid by the owner or agent responsible for the property.

SECTION 304
EXTERIOR STRUCTURE

304.10.1 *Stair Dimension Tolerances.* Treads and risers shall be significantly the same in depth or height so as to not create a trip hazard.

304.12 *Handrails and Guards.* Every flight of stairs which is more than four risers high shall have a handrail on at least one side of the stair, and every open portion of a stair, landing or balcony which is more than 30 inches (762 mm) above the floor or grade below shall have guards. Every handrail and guard shall be firmly fastened and capable of supporting normal imposed loads and shall be maintained in good condition.

304.12.1 *Handrail and Guard Installations.* The replacement or installation of handrails and/or guards shall be in accordance with the Building Code listed in Chapter 8 of this code.

304.14 *Insect Screens.* During the period from April 15 to November 15, every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas, or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored, shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm) and every swinging door shall have a self-closing device in good working condition.

Exception: Screen doors shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

SECTION 305
INTERIOR STRUCTURE

305.4.1 *Stair Dimension Tolerances.* Treads and risers shall be significantly the same in depth or height so as to not create a trip hazard.

305.5 *Handrails and Guards.* Every flight of stairs which is more than four risers high shall have a handrail on at least one side of the stair, and every open portion of a stair, landing or balcony which is more than 30 inches (762 mm) above the floor or grade below shall have guards. Every handrail and guard shall be firmly fastened and capable of supporting normal imposed loads and shall be maintained in good condition.

304.5.1 *Handrail and/or Guard Installations.* The replacement or installation of handrails and/or guards shall be in accordance with the Residential Code as adopted by the City of Chesterfield.

1110.400 - Amendments to Chapter 4—ICC International Property Maintenance Code—Chapter 4—Light, Ventilation and Space Requirements.

—Chapter 4 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one (1) of the following numbered provisions is hereby deleted where so noted or amended to read as set forth

below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

404.4.1 *Area for Sleeping Purposes.* For the purposes of determining occupancy load, every bedroom occupied by one person shall contain at least 70 square feet of floor area, and every bedroom occupied by more than one person shall contain at least 50 square feet of floor area for each occupant thereof.

404.5 *Overcrowding.* Dwelling units shall not be occupied by more occupants than permitted by the minimum area requirements of Table 404.5.

TABLE 404.5
MINIMUM AREA REQUIREMENTS

MINIMUM AREA IN SQUARE FEET			
SPACE	1—2 occupants	3—5 occupants	6 or more occupants
Living room	No requirements	120	150
Dining room	No requirements	80	100
Kitchen	50	50	60
Bedrooms	Shall comply with Section 404.4		

1110.500 - Amendments to Chapter 5—ICC International Property Maintenance Code—Chapter 5—Plumbing Facilities and Fixture Requirements.

—Chapter 5 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one (1) of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

504.1 *General.* All plumbing fixtures shall be properly installed and maintained in working order, and shall be kept free from obstructions, leaks and defects and be capable of performing the function for which such plumbing fixtures are designed. All plumbing fixtures shall be maintained in a safe,

sanitary and functional condition. No accordion type plastic, or other flexible material, is allowable on any drains or traps.

505.3 *Supply.* The water supply system shall be installed and maintained to provide a supply of water to plumbing fixture, devices and appurtenances in sufficient volume and at pressures adequate to enable the fixtures to function properly, safely, and free from defects and leaks. Supply lines to the hot and cold water valves at the sink must be metal, or metal braid composition, not plastic.

507.1 *General.* Drainage of roofs, paved areas, yards and courts, and other open areas on the premises shall not be modified or altered to discharge in a manner that creates a public nuisance.

1110.600 - Amendments to Chapter 6—ICC International Property Maintenance Code—Chapter 6—Mechanical and Electrical Requirements.

—Chapter 6 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one (1) of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, sub-section or clause number in the code is hereby enacted and added thereto.

602.3 *Heat Supply.* Every owner and operator of any building who rents, leases or lets one or more dwelling units, rooming units, dormitory or guestroom on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from October 1 to May 15 to maintain a temperature of not less than 68 degrees F (20 degrees C) in all habitable rooms, bathrooms, and toilet rooms.

Exception: When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in the Residential Code and Mechanical Code as adopted by the City of Chesterfield.

602.4 *Occupiable Work Spaces.* Indoor occupiable work spaces shall be supplied with heat during the period from October 1 to May 15 of each year to maintain a temperature of not less than sixty-five (65) degrees Fahrenheit (eighteen degrees centigrade) during the period the spaces are occupied. Exceptions: 1. Processing, storage and operation areas that require cooling or special temperature conditions; 2. Areas in which persons are primarily engaged in vigorous physical activities.

605.2 Receptacles. Every habitable space in a dwelling shall contain at least two separate and remote receptacle outlets. Every laundry area shall contain at

least one grounded-type receptacle or a receptacle with a ground fault circuit interrupter ("GFCI"). All receptacles in a bathroom shall be GFCI protected. Every bathroom shall have at least one receptacle. All receptacles intended to serve the kitchen countertop shall be GFCI protected. All receptacles installed outdoors shall be GFCI protected.

1110.700 - Amendments to Chapter 7—ICC International Property Maintenance Code—Chapter 7—Fire Safety Requirements.

—Chapter 7 of the International Property Maintenance Code, year 2015 edition, is amended by the following provisions. Each section, subsection or clause of the code that numerically corresponds to one (1) of the following numbered provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

702.2 *Aisles.* The required width of aisles in accordance with the Building Code shall be unobstructed.

702.3 *Locked Doors.* All means of egress doors shall be readily operable from the side from which egress is to be made without the need for keys, special knowledge or effort, except where the door hardware conforms to that permitted by the Building Code as adopted by the City of Chesterfield.

702.4 *Emergency Escape Openings.* Required emergency escape and rescue openings shall be openable from the inside of the room without the use of keys or tools. Bars, grills, grates, or similar devices are permitted to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the Building Code as adopted by the City of Chesterfield and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening. Where such bars, grilles, grates, or similar devices are installed in existing buildings, smoke detectors shall be installed in accordance with Section 704 of this code.

703.2 *Opening Protectives.* Required opening protectives shall be maintained in an operative condition. All fire and smoke stop doors shall be maintained in operable condition. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable. Door closers at individual units at apartment complexes will be required where it is determined that they were a part of the original approved equipment or the door closers were previously installed.

Attachment 'H'

1118.101 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition

Chapter 1 Scope and Administration.

The following provisions amend Chapter 1 Scope and Administration in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

101.1 *Title.* These regulations shall be known as the Swimming Pool and Spa Code of the City of Chesterfield, herein after referred to as "this code."

101.5 *Applicability of Chesterfield, Missouri Codes and Ordinances.* Throughout this code, whenever the terms NFPA 70, International Plumbing Code, International Mechanical Code, International Property Maintenance Code, International Building Code, International Residential Code, International Existing Building Code, Zoning Ordinance or Floodplain Management Regulations Ordinance appears it shall be deemed to mean the codes adopted by the City of Chesterfield.

101.6 *Correction of violations of other codes.* Repairs or alterations mandated by any property, housing, or fire safety maintenance code or mandated by any licensing rule or ordinance adopted pursuant to law shall conform only to the requirements of that code, rule, or ordinance and shall not be required to conform to this code unless the code requiring such repair or alteration so provides.

102.9.1 *Licensing.* Applicable licensing provisions of the Mechanical Code, the Electrical Code and the Plumbing Code shall apply to work regulated under this code.

102.9.2 *Compliance with City and municipal zoning and other applicable codes and ordinances.* Subject to the provisions of this code, neither the granting of a permit, nor the approval of construction documents, nor inspections made by the building official, or the building official's authorized representative, during the erection, movement or demolition of a building or structure, or any alteration or addition thereto, shall in any way relieve the owner or tenant of such building, structure or property from complying with the requirements of this code, the Zoning Ordinance, or the zoning ordinance or other applicable laws. Provided, however, that nothing in this code shall be construed to subject any land or structure owned or controlled by the City of Chesterfield to any municipal zoning or other ordinances.

SECTION 103
DEPARTMENT OF BUILDING SAFETY

103.1 *Creation of enforcement agency.* SECTION 103 DEPARTMENT OF BUILDING SAFETY (Sections 103.1 through 103.4.1) in the International Swimming Pool and Spa Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 103 DEPARTMENT OF BUILDING SAFETY in the International Building Code.

SECTION 104
DUTIES AND POWERS OF BUILDING OFFICIAL

104.1 *General.* SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL (Sections 104.1 through 104.12) in the International Swimming Pool and Spa Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 104 DUTIES AND POWERS OF BUILDING OFFICIAL in the International Building Code.

SECTION 105
PERMITS

105.1 *Required.* SECTION 105 PERMITS (Sections 105.1 through 105.6.3) in the International Swimming Pool and Spa Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 105 PERMITS in the International Building Code.

SECTION 106
Reserved for future use.

SECTION 107
SUBMITTAL DOCUMENTS

107.1 *General.* SECTION 107 SUBMITTAL DOCUMENTS (Sections 107.1 through 107.5) of the International Building Code is adopted as part of this code.

SECTION 108
Reserved for future use.

SECTION 109
FEES

109.1 *Payment of fees.* SECTION 109 FEES (Sections 109.1 through 109.6) of the International Building Code is adopted as part of this code.

SECTION 110
INSPECTIONS

110.1 *General.* SECTION 106 INSPECTIONS (Sections 106.1 through 106.19) in the International Swimming Pool and Spa Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 110 INSPECTIONS in the International Building Code.

SECTION 111
CERTIFICATE OF OCCUPANCY

111.1 *Use and occupancy.* SECTION 111 CERTIFICATE OF OCCUPANCY (Sections 111.1 through 111.4) of the International Building Code is adopted as part of this code.

SECTION 112
SERVICE UTILITIES

112.1 *Connection of service utilities.* SECTION 112 SERVICE UTILITIES (Sections 112.1 through 112.3) of the International Building Code is adopted as part of this code.

SECTION 113
BOARD OF APPEALS

113.1 *General.* SECTION 108 MEANS OF APPEALS (Sections 108.1 through 108.7) in the International Swimming Pool and Spa Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 113 BOARD OF APPEALS in the International Building Code.

SECTION 114
VIOLATIONS

114.1 *Unlawful acts.* SECTION 107 VIOLATIONS (Sections 107.1 through 107.7.3) in the International Swimming Pool and Spa Code, 2015 edition is deleted in its entirety and adopted in lieu thereof is SECTION 114 VIOLATIONS in the International Building Code.

SECTION 115
STOP WORK ORDER

115.1 *Authority.* SECTION 115 STOP WORK ORDER (Sections 115.1 through 115.3) in the International Building Code is adopted as part of this code.

SECTION 116
UNSAFE STRUCTURES AND EQUIPMENT

116.1 *Conditions.* SECTION 116 UNSAFE BUILDINGS AND EQUIPMENT (Sections 116.1 through 116.5) in the International Building Code is adopted as part of this code.

SECTION 117
EMERGENCY MEASURES

117.1 *Imminent danger.* SECTION 117 EMERGENCY MEASURES (Sections 117.1 through 117.6) in the International Building Code is adopted as part of this Code.

SECTION 118
UNFIT BUILDINGS AND STRUCTURES

118.1 *General.* SECTION 118 DEMOLITION (Sections 118.1 through 118.4) in the International Building Code is adopted as part of this code.

SECTION 119
DEMOLITION OF STRUCTURES

119.1 *Demolition of structures.* SECTION 119 DEMOLITION OF STRUCTURES (Sections 119.1 through 119.3) of the International Building Code is adopted as part of this code.

1118.102 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 2 Definitions.

—The following provisions amend Chapter 2 Definitions in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

201.3 *Terms defined in other codes.* Where terms are not defined in this code and are defined in the International Building Code, International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Residential Code, International Existing Building Code, International Property Maintenance Code or NFPA 70, such terms shall have the meanings ascribed to them as in those codes.

SECTION 202
DEFINITIONS

Retain all definitions listed in Section 202 of the International Swimming Pool and Spa Code, 2015 edition and add the following definitions to the section.

Affected Parties. The owner, occupant, lessee, mortgagee, agent and all other persons having an interest in the structure or its premises as shown by the records of the Recorder of Deeds as of the date said structure is declared to be a public nuisance by the building official.

Board of Appeals. The Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Code Official. The Code Official as defined herein.

Building Code Review Committee. The Committee established by, and acting in accordance with, section 1115.060 of the Building Code, SLCRO 1974, Title XI, Chapter 1115, as amended.

Building Commission. The Building Commission created in Article IV, Section 4.330 of the St. Louis County Charter.

Building Official. The Code Official as defined herein.

Code Official. The Director of Planning or the Director's duly authorized representative.

Dangerous. Any building, structure or portion thereof that meets any of the conditions described below shall be deemed dangerous:

1. The building or structure has collapsed, partially collapsed, has moved off its foundation or lacks the necessary support of the ground.
2. There exists a significant risk of collapse, detachment or dislodgment of any portion, member, appurtenance or ornamentation of the building or structure under service loads.
3. The building or structure or any portion thereof is likely to collapse partially or completely because:
   - 3.1. Of dilapidation, deterioration or decay;
   - 3.2. Of construction in violation of the this code;
   - 3.3. The soil supporting the foundation is unstable, moved or removed;
   - 3.4. The foundation is inadequate, decayed or deteriorated; or
   - 3.5. It is damaged due to fire, earthquake, wind or flood; or any other similar cause.
4. The exterior walls or other vertical structural member list, lean, or buckle to such an extent that a plumb line passing through the center of gravity does not fall inside the middle one third of the base.
5. Any building or structure with substantial structural damage.

Disaster. A disaster shall include but not necessarily be limited to flood, windstorm, tornado, severe storm, earthquake, bomb blast, explosion or similar natural or man-made type event. The building official shall make the determination whether an event shall be declared a disaster.

Electrical Code Review Committee. The Committee established by, and acting in accordance with the Electrical Code, SLCRO 1974, Title XI, Chapter 1102, as amended.

Flood Hazard Area. An area that has been determined to be prone to flooding in accordance with section 1612 of the International Building Code or Section R322 of International Residential Code as applicable.

Lowest Floor. The floor of the lowest enclosed area, including a basement. An unfinished or flood-resistant enclosure, usable solely for vehicle parking, building access or limited storage, in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of section 1612 of the International Building Code.

Mechanical Code Review Committee. The Committee established by, and acting in accordance with the Mechanical Code, SLCRO 1974, Title XI, Chapter 1108, as amended.

Plumbing Code Review Committee. The Committee established by, and acting in accordance with the Plumbing Code, SLCRO 1974, Title XI, Chapter 1103, as amended.

Zoning Ordinance. City of Chesterfield Unified Development Code, Article 31.

1118.103 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 3 General Compliance.

—The following provisions amend Chapter 3 General Compliance in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

302.1 *Electrical.* Electrical requirements for aquatic facilities shall be in accordance with NFPA 70.

302.5 *Backflow protection.* Water supplies for pools and spas shall be protected against backflow in accordance with the International Plumbing Code.

302.6 *Waste-water discharge.* Where waste water from pools or spas, backwash from filters and water from deck drains discharge to the building drainage system, such installation shall be in accordance with the International Plumbing Code.

305.2.1 *Barrier height and clearances.* Barrier heights and clearances shall be in accordance with all of the following:

1. The top of the barrier shall be not less than 72 inches (1829 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.

   Exception: For residential swimming pools the top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.

2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the barrier that faces away from the pool or spa.

3. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm) where measured on the side of the required barrier that faces away from the pool or spa.

4. Where the top of the pool or spa structure is above grade, the barrier shall be installed on grade or shall be mounted on top of the pool or spa structure. Where the barrier is mounted on top of the pool or spa, the vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches (102 mm).

305.2.10 *Poolside barrier setbacks.* The pool or spa side of the required barrier shall be not less than 60 inches (1524 mm) from the water's edge.

Exception: For residential swimming pools the pool or spa side of the required barrier shall be not less than 20 inches (508 mm) from the water's edge.

305.5 *Onground residential pool structure as a barrier.* An onground residential pool wall structure or a barrier mounted on top of an onground residential pool wall structure shall serve as a barrier where all of the following conditions are present:

1. Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, the wall complies with the requirements of Section 305.2 and the pool manufacturer allows the wall to serve as a barrier.

2. Where the barrier is mounted on top of the pool wall, the top of the barrier is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the requirements of Section 305.2.

3. Ladders or steps used as a means of access to the pool are surrounded by a barrier that meets the requirements of Section 305.

4. Barriers that are mounted on top of onground residential pool walls are installed in accordance with the pool manufacturer's instructions.

Table 306.5 Minimum Drainages Slopes for Deck Surfaces

Surface	Minimum Drainage Slope (Inch Per Foot)

Exposed aggregate	1/4
Textured, hand-finished concrete	1/8
Travertine/brick-set pavers, public pools or spas	3/8
Travertine/brick-set pavers, residential pools or spas	1/8
Wood, residential pools or spas only	1/8
Wood/plastic composite	1/8

306.9.1 *Hose bibbs.* Hose bibbs shall be provided for rinsing down the entire deck and shall be installed in accordance with the International Plumbing Code.

306.10 *Decking surface.* Materials used for decking surfaces shall only be the materials listed in Table 306.5 or materials approved by the code official.

311.4 *Piping and fittings.* Plastic piping and fittings used in circulation systems shall be provided in accordance with the International Plumbing Code.

311.4.1 *Fittings.* Fittings used in circulation systems shall be provided in accordance with the International Plumbing Code.

311.4.2 *Joints.* Joints shall be provided in accordance with the International Plumbing Code.

311.4.3 *Piping subject to freezing.* Piping subject to freezing shall be installed in accordance with the International Plumbing Code.

311.4.4 *Suction outlet fitting assemblies.* Suction outlet fitting assemblies shall be installed in accordance with the International Plumbing Code.

311.5 *System draining.* Equipment shall be designed and fabricated to drain the water from the equipment, together with exposed face piping, by removal of drain plugs, manipulating valves, or by other methods. Drainage shall be in accordance with the International Plumbing Code.

311.9 *Hydrostatic pressure test.* Circulation piping, other than that integrally included in the manufacture of the pool or spa shall be subject to hydrostatic pressure testing in accordance with the International Plumbing Code.

318.2 *Protection of potable water supply.* Potable water supply systems shall be designed, installed and maintained in accordance with the International Plumbing Code.

320.1 *Backwash water or draining water.* Backwash water and draining water shall be discharged in accordance with the International Plumbing Code.

Exception: Residential pools may discharge into storm sewers or shall be drained by other means as approved by the code official.

321.4 *Residential pool and deck illumination.* Where lighting is installed for, and in, residential pools and permanent residential spas, such lighting shall be installed in accordance with NFPA 70.

1118.104 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 4 Public Swimming Pools.

—The following provisions amend Chapter 4 Public Swimming Pools in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

401.1 *Public swimming pools.* The provisions of this chapter shall apply to public swimming pools. Public swimming pools covered in this chapter include Class A, Class B, Class C, Class E and Class F pools.

401.4.1 *Class A pool tolerances.* Dimensional tolerances for Class A pools shall be determined by the authority that governs such pools but not less than the construction tolerances shown in Table 401.4.

402.2 *Manufactured and fabricated diving equipment.* Manufactured and fabricated diving equipment shall be in accordance with this Chapter and shall be designed for swimming pool use.

403.1 *Maximum bather load.* The maximum bather load of Class A, Class B, Class C and Class F pools shall be in accordance with Table 403.1.

Table 403.1 Maximum Bather Load

Pool Type	Bather Load
A, B, C, F	20 sq. ft. of water surface area per user
Diving area (per diving board)	300 sq. ft. of water surface area per user
Deck at A, B, C, F	50 sq. ft. of deck surface area per user

For SI: 1 square foot = 0.0929 square meters

405.1 *Wading pools.* Class F wading pools shall be separate pools with an independent circulation system, shall be physically separated from other classes of pools by a minimum distance of 15 feet (4572 mm) or by a barrier in accordance with Section 305 and shall be constructed in accordance with Sections 405.2 through 405.6.

405.6 *Suction entrapment avoidance.* Wading pools shall not have suction outlets. Skimmers or overflow gutters shall be installed and shall accommodate 100 percent of the circulation system flow rate.

Exception: Wading pools having gravity or suction outlets for cleaning/maintenance purposes only, shall comply with APSP-7 and shall have suction outlet covers that are flush to the floor so as not to present a tripping hazard.

410.2 *Plumbing Fixtures.* Class A through F public swimming pools shall be provided with plumbing fixtures in accordance with Section 609.

Exception: Class C pools are required to provide only the rinse showers as required by Section 609 when the other plumbing fixtures required by Section 609 are provided within the associated lodgings.

1118.105 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 5 Public Spas and Public Exercise Spas.

—The following provisions amend Chapter 5 Public Spas and Public Exercise Spas in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

SECTION 510
CIRCULATION SYSTEMS

510.1 *General.* Circulation systems for spas shall comply with Section 311 and the provisions of this section.

510.2 *Turnover.* Circulation equipment shall be sized to turn over the entire water capacity of the spa as specified in Table 510.2. The system shall be designed to provide the required turnover rate based on the maximum pressure and flow rate recommended by the manufacturer of the filter with clean filter media.

Table 510.2 Maximum Bather Load and Turnover Rate

Class of Pool	Temperature	Maximum Bather Load	Maximum Turnover Time (hours)
E	≤72° - 93°F (22° - 34°C)	>2500 gallons/person	4 hours
E	≤72° - 93°F (22° - 34°C)	>450 gallons/person	2 hours
E	≤72° - 93°F (22° - 34°C)	≤450 gallons/person	1 hour
E	≥93°F - 104°F (34° - 40°C)	All	0.5 hours
Deck at E		50 sq. ft. of deck surface area per user	

For SI: 1 square foot = 0.0929 square meters, 1 gallon = 0.0038 cubic meters

1118.106 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 6 Aquatic Recreation Facilities.

—The following provisions amend Chapter 6 Aquatic Recreation Facilities in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

TABLE 604.2 TURNOVER TIME

Class of Pool	Maximum Turnover Time [a] (hours)
D-1	2
D-2	1
D-3	1
D-4	2

D-5	0.5
D-6	0.5

For SI: 1 inch = 25.4 mm.

a. Pools with a sand bottom require a 1-hour turnover time.

608.1 *Occupant load.* The occupant load for the pools or spas in the facility shall be calculated in accordance with Table 608.1. The occupant load shall be the combined total of the number of users based on the pool or spa water surface area and the deck area surrounding the pool or spa. The deck area occupant load shall be based on the occupant load calculation where a deck is provided or based on an assumed 5 foot wide (1219 mm) deck surrounding the entire perimeter of the pool or spa, whichever is greater.

Table 608.1, OCCUPANT LOAD - Delete and replace with:

Table 608.1 Occupant Load

Pool Type	Occupant Load
D-1	15 sq. ft. of water surface area per user
D-2	10 sq. ft. of water surface area per user
D-3	Per manufacturer
D-4	15 sq. ft. of water surface area per user
D-5	15 sq. ft. of water surface area per user
D-6	10 sq. ft. of water surface area per user
Deck	50 sq. ft. of deck surface area per user
Diving area (per board)	300 sq. ft. of water surface area per user

For SI: 1 square foot = 0.0929 square meters

609.2 *Number of fixtures.* Pools shall have toilet facilities with the number of fixtures in accordance with Table 609.2. Separate toilet facilities shall be provided for each sex. The minimum number of fixtures shall be calculated at 50 percent male and 50 percent female based on the total occupant load. Where applying the fixture ratios in Table 609.2, results in fractional numbers shall be rounded to the next whole number.

Table 609.2 Minimum Plumbing Fixtures

<table>
<tr><th colspan="2">Water Closets (Fixtures Per Person)</th><th>Urinals (Fixtures Per Person)</th><th colspan="2">Lavatories (Fixtures Per Person)</th><th>Cleansing Showers</th><th>Rinse Showers</th><th>Drinking Fountains/Facilities (Fixtures Per Person)</th><th>Other</th></tr>
<tr><td>Male
1:1-100
2:101-200
3:201-400</td><td>Female
1:1-25
2:26-50
3:51-100
4:101-200
6:201-300
8:301-400</td><td>Male
1:1-100
2:101-200
3:201-400
4:401-600</td><td>Male
1:1-200
2:201-400
3:401-600
4:601-750</td><td>Female
1:1-100
2:101-200
4:201-300
5:301-500
6:501-750</td><td rowspan="3">Min. of 1 for each sex for every 4000 square foot of collective water surface and deck area or fraction thereof.</td><td rowspan="3">Min. of 1 on the deck at the entry to each pool or spa</td><td>1:1-250
2:251-500
3:501-750</td><td rowspan="3">1 service sink or laundry tray</td></tr>
<tr><td colspan="2">Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 125 females.</td><td>Over 600, add 1 fixture for each additional 300 males.</td><td colspan="2">Over 750, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.</td><td>Over 750, add 1 fixture for each additional 500 persons.</td></tr>
</table>

609.3.1 *Rinse shower.* Rinse showers shall be located on the deck at the entrance to each pool in accordance with Table 609.2.

609.9 *Infant care.* Baby-changing tables shall be provided in each male, female and unisex toilet facility.

1118.108 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 8 Permanent Inground Residential Swimming Pools.

—The following provisions amend Chapter 8 Permanent Inground Residential Swimming Pools in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

801.2 *General.* In addition to the requirements of this chapter, permanent inground residential pools shall comply with the requirements of Chapter 3.

1118.111 - Amendments to the International Swimming Pool and Spa Code, 2015 Edition—Chapter 11 Referenced Standards.

—The following provisions amend Chapter 11 Referenced Standards in the International Swimming Pool and Spa Code, 2015 edition. Each code section that corresponds to one (1) of the following provisions is hereby deleted where so noted or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the code is hereby enacted and added thereto.

APSP - The Association of Pool & Spa Professionals. Amend Referenced Standards.

APSP	The Association of Pool & Spa Professionals 2111 Eisenhower Avenue Alexandria, VA 22314	
Standard reference number	Title	Referenced in code section number
ANSI/APSP/ICC 4 - 12	Standard for Aboveground/Onground Residential Swimming Pools	702.2.1

ANSI/APSP/ICC 7 - 13	American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins	310.1, 405.6
ANSI/APSP/ICC 14 - 11	American National Standard for Portable Electric Spa Energy Efficiency	303.2
ANSI/APSP/ICC 15a - 2013	American National Standard for Residential Swimming Pool and Spa Energy Efficiency	303.3
ANSI/APSP/ICC 16 - 11	American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs	202, 311.4.1, 311.4.4, 505.2.1

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI. Add the following St. Louis County Codes, Ordinances and Standards:

GOVERNMENT OF ST. LOUIS COUNTY, MISSOURI	St. Louis County Department of Transportation and Public Works 41 S. Central Ave. St. Louis, MO 63105	
Standard reference number	Title	Referenced in code section number
Building Code - Title XI, Chapter 1115 SLCRO 1974, as amended	Building Code	202
Electrical Code - Title XI, Chapter 1102 SLCRO 1974, as amended	Electrical Code	202

Existing Building Code - Title XI, Chapter 1117 SLCRO 1974 as amended	Existing Building Code	201.3
Floodplain Management Regulations - Title X, Chapter 1008 SLCRO 1974 as amended	Floodplain Management Regulations	101.5
Mechanical Code - Title XI, Chapter 1108 SLCRO 1974, as amended	Mechanical Code	202
Plumbing Code - Title XI, Chapter 1103 SLCRO 1974, as amended	Plumbing Code	202
Zoning Ordinance - Title X, Chapter 1003 SLCRO 1974 as amended	Zoning Ordinance	101.3, 202

ICC - International Code Council. Amend Referenced Standards.

ICC	International Code Council, Inc. 500 New Jersey Avenue, NW 6th Floor Washington, DC 20001	
Standard reference number	Title	Referenced in code section number
IBC - 15	International Building Code	101.3, 201.3, 202, 304.2, 306.1, 307.2, 307.4, 307.8, 307.9, 410.1
IECC - 15	International Energy Conservation Code	201.3, 316.4

IEBC - 15	International Existing Building Code	101.3, 201.3
IFC - 15	International Fire Code	201.3
IFGC - 15	International Fuel Gas Code	201.3, 316.4
IMC - 15	International Mechanical Code	101.3, 201.3, 316.4
IPC - 15	International Plumbing Code	101.3, 201.3, 302.2, 302.5, 302.6, 306.8, 306.8.1, 318.2, 410.1
IPMC - 15	International Property Maintenance Code	101.3, 201.3
IRC - 15	International Residential Code	101.3, 102.7.1, 201.3, 202, 304.2, 306.1, 306.3, 306.8, 307.2, 307.4, 307.8, 307.9, 316.4, 321.2.1, 703.1, 802.1, 802.2

NFPA - National Fire Protection Association. Amend Referenced Standards:

NFPA	National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471	
Standard reference number	Title	Referenced in code section number
NFPA 70 - 2014	National Electric Code	101.3, 201.3, 302.1, 316.4, 321.2.1, 321.4

Attachment 'I'

a) Definitions. When used in this chapter:

1) *City*: shall mean the City of Chesterfield, St. Louis County, Missouri.

2) *Director*: Shall mean the Director of Planning of the City of Chesterfield, Missouri, and shall include his authorized agents.

3) *Explosives* and *explosive materials* when used herein shall mean gunpowder used for blasting, all forms of high explosives, fuses, detonators and other detonating agents, smokeless powders, and any chemical compound or mechanical mixture that is commonly used or intended for the purpose of producing an explosion containing any oxidizing and combustible units or other ingredients in such proportions, quantities, or packing, that ignition by fire, by friction, by concussion, by percussion, by detonation of, by any part of the compound or mixture may cause such a sudden generation of highly heated gasses that the resultant gas pressures are capable of producing destructive effects on contiguous objects or of destroying life or limb; but explosives shall not include small arms ammunition, gasoline, kerosene, or oils, greases or other petroleum products intended for lubrication purposes. For the purposes of this ordinance, explosives shall be classified as Class A, high explosives and Class B, low explosives and said classifications shall be as follows:

Class A, high explosives: Those explosives possessing detonating qualities such as dynamite, nitroglycerin, picric acid, lead azide, fulminate of mercury, smokeless powder, blasting caps and detonating primers.

Class B, low explosives: Those explosives not otherwise specified herein as Class A Explosives, including, but not limited to, explosives presenting a flammable hazard such as propellant explosives and photographic flash powder.

4) *Blasting agent:* Shall mean any material or mixture consisting of a fuel and oxidizer intended for blasting, not otherwise classified herein as an explosive, in which none of the ingredients are classified as explosives provided that the finished product, as mixed and packaged for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when

unconfined.

5) *Blasting Cap No. 8:* A No. 8 test blasting cap is one containing two (2) grams of a mixture of eighty (80) percent mercury fulminate and twenty (20) percent potassium chlorate or a cap of equivalent strength.

6) *Pyrotechnics*: Shall mean and include any combustible or explosive composition or manufactured articles designated and prepared for the purpose of producing audible or visual effects which are commonly referred to as fireworks.

7) *Person:* Shall mean any individual, firm, co-partnership, corporation, company, association, joint stock association, and including any trustee, receiver, assignee or personal representative thereof.

8) *Singular and plural:* Words used in the singular number shall include the plural and in the plural the singular.

9) *Small arms ammunition:* Shall mean any shotgun, rifle, pistol or revolver cartridge.

10) *Scaled distance* shall mean the actual distance (in feet) to the nearest structure, divided by the square root of the maximum explosive weight (in pounds) per eight-millisecond (or greater) delay. If delay intervals less than eight (8) milliseconds are employed or if instantaneous blasting is employed, scaled distance shall be computed by dividing the actual distance (in feet) by the square root of the total explosive weight in pounds.

11) *Uncontrolled structures* shall mean any building not owned or controlled by the explosives user.

b) *Scope*. This section shall apply to the manufacture, storage, sale, transportation or use of explosives and blasting agents in the City. It shall not apply to the discharge of small arms ammunition when discharged in connection with hunting or target shooting or other lawful uses connected with firearms.

c) *Exception—Military or Governmental Use*. Nothing contained in this section shall be construed as applying to the regular military or naval forces of the United States, the duly authorized Militia of the State, the Police or Fire Departments or to regular employees of the City in the proper performance of their official duties.

d) *Exception*—Amount of Explosives. It shall be unlawful for any person to possess, store, stock or hold for resale, any amount of explosives, blasting agents or blasting caps unless such person has first obtained a written permit therefore from the Director as hereinafter provided, except for the following items and amounts:

1) Thirty (30) pounds of smokeless powder and one thousand (1,000) small arms primers for hand loading of small arms ammunition.

2) Thirty (30) pounds of explosives or blasting agents in industrial research laboratories and laboratories of technical institutes, colleges, universities and similar institutions.

3) Pyrotechnics which shall be governed by other ordinances of the City.

Permit—Storage of Explosives—Requirements.—
Application for such permit to possess, store, stock or hold for sale those items specified in Section 711.070 hereof shall be made to the Director at the Courthouse on forms provided and shall contain the following information:

(1) Name of applicant.
(2) Address of residence.
(3) Place of business.
(4) Occupation.
(5) Age.
(6) Experience in the use of explosives and such other information relative thereto as the Director may prescribe or require.
(7) Maximum amount of each kind of explosives, blasting agents or blasting caps applicant intends to store or stock at any one time and the location and type of construction of the magazine or storage place of same.

711.080 - Permit Shall Be Granted—When.—
A person shall be entitled to a permit to store or stock explosives or blasting agents in the City who has met the following requirements:

(1) Filed an application as provided in Section 711.070 hereof.
(2) Secured whatever construction, occupancy or other permits which the applicant may otherwise be required by law to obtain.
(3) Obtained a proper storage facility for the storage of such explosives as the same may be required by this chapter.

711.090 - Storage of Explosives.—
1. No person shall store any explosive materials in a manner not in conformity to this chapter.
2. Any change, addition, or modification to an approved storage facility shall not be made unless authorized by a new permit under Section 711-080.

711.100 - Types of Storage Facilities.—
For purposes of this chapter, there shall be five (5) types of storage facilities. These types, together with the classes of explosive materials which shall be stored therein, are as follows:

(a) *Type 1 storage facilities.* Permanent storage facilities for the storage of high explosives, subject to the limitations prescribed by sections 711.130 and 711.146. Other classes may also be stored therein.

(b) *Type 2 storage facilities.* Portable indoor and outdoor storage facilities for the storage of high explosives, subject to the limitations prescribed by sections 711.130, 711.134(b) and 711.146. Other classes may also be stored therein.

(c) *Type 3 storage facilities.* Portable outdoor facilities for the temporary storage of high explosives while attended (for example, a "day-box"), subject to the limitations prescribed by sections 711.130 and 711.146. Other classes may also be stored therein.

(d) *Type 4 storage facilities.* Facilities for the storage of low explosives, subject to the limitations prescribed by sections 711.130(b), 711.138(b) and 711.146. Blasting agents may also be stored therein.

(e) *Type 5 storage facilities.* Facilities for the storage of blasting agents, subject to the limitations prescribed by sections 711.130(a) and (c), 711.140(b), and 711.146.

711.110 - Inspection of Storage Facilities.—
Any person storing explosive materials shall open and inspect his storage facilities at intervals not greater than three (3) days to determine whether the explosives therein are intact and to determine whether there has been unauthorized entry or attempted entry into the storage facilities or the unauthorized removal of facilities or their contents.

711.115 - Storage Records to Be Kept.—
Records shall be kept of all Class A high explosives when such are kept in or on any premises in the portions of the City covered by this chapter or when stored in facilities licensed under the terms of this chapter. Such records shall consist of:

a. Quantities of all materials entering or leaving the facility.
b. Dates and times of all material entering or leaving the facility or premise.
c. A description, brand name and serial number(s) of all involved material.
d. Names of the person(s) removing any involved material and the reason for the removal.
e. Any other information that the Director may require in a written notification to the licensee or permittee.

Such written records shall be kept at or near the storage facility and shall be available at all times to the Director or his agent.

711.120 - Removal of Explosive Materials.—
All explosive materials must be kept in storage facilities meeting the standards prescribed by this chapter unless they are:

(a) In the process of manufacture, or
(b) Being physically handled in the operating process of a licensee or user, or
(c) Being used, or
(d) Being transported to a place of storage or use by a permittee or by a person who has lawfully acquired explosive materials in the manner required by this chapter.

711.130 - Location of Storage Facilities.—
(a)(1) Except as otherwise provided in this chapter, storage facilities in which any explosive materials are stored shall be located at minimum distances from inhabited buildings, passenger railways, public highways, and from other storage facilities in which explosive materials are stored as specified in the American Table of Distances (Appendix A). Provided, that this table shall not apply to any indoor storage facility. When a storage facility is not barricaded, the distances shown in the American Table of Distances shall be doubled. For purposes of this paragraph, a storage facility shall be deemed barricaded when it is effectually screened from inhabited buildings, passenger railways, public highways, and other storage facilities in which explosive materials are stored either by a natural or artificial barricade of such height that a straight line from the top of any side wall of the storage facility to the eave line of such other inhabited building or storage facility, or to a point twelve (12) feet above the center of a passenger railway or public highway, will pass through such intervening barricade.

(2) If any two (2) or more storage facilities are separated from each other by less than the distances specified in Appendix A, then such two (2) or more storage facilities, as a group, shall be considered as one storage facility, and the total quantity of explosive materials stored in such group shall be treated as if stored in a single facility and shall comply with the minimum of distances specified in Appendix A from other storage facilities, inhabited buildings, passenger railways, and public highways.

(b) Storage facilities in which low explosives are stored shall be located at minimum distances from inhabited buildings, passenger railways, public highways, and from other storage facilities in which explosive materials are stored as specified in the table of distances for storage of low explosives as set forth in 27 CFR Section 181.199. Provided, that this table shall not apply to any indoor storage facility. The distances shown therein shall not be reduced by the presence of barricades.

(c) Ammonium nitrate and storage facilities in which blasting agents are stored shall be located at minimum distances from storage facilities containing high explosives or blasting agents as specified in the Table of Recommended Separation Distances of Ammonium

Nitrate and Blasting Agents from Explosives or Blasting Agents as set forth in 27 CFR Section 181.200.

711.132 - Construction of Type 1 Storage Facilities.—
A type 1 storage facility shall be a permanent structure: a building, an igloo or Army-type structure, a tunnel, or a dugout. It shall be bullet-resistant, fire-resistant, weather-resistant, theft-resistant, and well ventilated.

(a) *Buildings.* All building-type storage facilities shall be constructed of masonry, wood, metal, or a combination of these materials and shall have no openings except for entrances and ventilation. Ground around such storage facilities shall slope away for drainage.

(1) *Masonry wall construction.* Masonry wall construction shall consist of brick, concrete, tile, cement block, or cinder block and shall be not less than six (6) inches in thickness. Hollow masonry units used in construction shall have all hollow spaces filled with well-tamped coarse dry sand or weak concrete (a mixture of one (1) part cement and eight (8) parts of sand with enough water to dampen the mixture while tamping in place). Interior walls shall be covered with a nonsparking material.

(2) *Fabricated metal wall construction.* Metal wall construction shall consist of sectional sheets of steel or aluminum not less than number 14 gauge, securely fastened to a metal framework. Such metal wall construction shall be either lined inside with brick solid cement blocks, hardwood not less than four (4) inches in thickness, or shall have at least a six-inch sand fill between interior and exterior walls. Interior walls shall be constructed of or covered with a nonsparking material.

(3) *Wood frame wall construction.* The exterior of outer wood walls shall be covered with iron or aluminum not less than number 26 gauge. An inner wall of nonsparking material shall be constructed so as to provide a space of not less than six (6) inches between the outer and inner walls, which space shall be filled with coarse dry sand or weak concrete.

(4) *Floors.* Floors shall be constructed of a nonsparking material and shall be strong enough to bear the weight of the maximum quantity to be stored.

(5) *Foundations.* Foundations shall be constructed of brick, concrete, cement block, stone, or wood posts. If piers or posts are used, in lieu of a continuous foundation, the space under the buildings shall be enclosed with metal.

(6) *Roof.* Except for buildings with fabricated metal roofs, the outer roof shall be covered with no less than number 26 gauge iron or aluminum fastened to seven-eighth-inch sheathing.

(7) *Bullet-resistant ceilings or roofs.* Where it is possible for a bullet to be fired directly through the roof and into the storage facility at such

an angle that the bullet would strike a point below the top of inner walls, storage facilities shall be protected by one of the following methods:

(i) A sand tray shall be located at the tops of inner walls covering the entire ceiling area, except that necessary for ventilation, lined with a layer of building paper, and filled with not less than four (4) inches of course dry sand.

(ii) A fabricated metal roof shall be constructed of three-sixteenth-inch plate steel lined with four (4) inches of hardwood. (For each additional one-sixteenth-inch of plate steel, the hardwood lining may be decreased one (1) inch.)

(8) *Doors.* All doors shall be constructed of one-fourth-inch plate steel and lined with two (2) inches of hardwood. Hinges and hasps shall be attached to the doors by welding, riveting or bolting (nuts on inside of door). They shall be installed in such a manner that the hinges and hasps cannot be removed when the doors are closed and locked.

(9) *Locks.* Each door shall be equipped with two (2) mortise locks; or with two (2) padlocks fastened in separate hasps and staples; or with a combination of mortise lock and a padlock; or with a mortise lock that requires two (2) keys to open; or a three-point lock. Locks shall be five-tumbler proof. All padlocks shall be protected with one-fourth-inch steel caps constructed so as to prevent sawing or lever action on the locks or hasps. All doors shall be kept locked at all times, except during placement and removal of stocks of explosives, or during repairs to storage facilities.

(10) *Ventilation.* Except at doorways, a two-inch air space shall be left around ceilings and the perimeter of floors. Foundation ventilators shall be not less than four (4) by six (6) inches. Vents in the foundation, roof, or gables shall be screened and offset.

(11) *Exposed metal.* No sparking metal construction shall be exposed below the top of walls in the interior of storage facilities, and all nails therein shall be blind-nailed or countersunk.

(b) *Igloos, Army-type structures, tunnels, and dugouts.* Igloo, Army-type tunnel, and dugout storage facilities shall be constructed of reinforced concrete, masonry, metal, or a combination of these materials. They shall have an earth mound covering of not less than twenty-four (24) inches on the top, sides and rear. Interior walls and floors shall be covered with a nonsparking material. Storage facilities of this type shall also be constructed in conformity with the requirements of paragraph (a)(4) and paragraphs (a)(8) through (11) of this section.

711.134 - Construction of Type 2 Storage Facilities. A type 2 storage facility shall be a box, a trailer, a semitrailer or other mobile facility. It shall be bullet-resistant, fire-resistant, weather-resistant, theft-resistant, and well ventilated. Except as provided in paragraph (c) of this section, hinges and hasps shall be

attached to the covers or doors in the manner prescribed in Section 711.132(a)(8) and the locking system shall be that prescribed in Section 711.132(a)(9).

(a) *Outdoor storage facilities.* Outdoor storage facilities shall be at least one (1) cubic yard in size and supported in such a manner so as to prevent direct contact with the ground. The sides, bottoms, tops, and covers or doors shall be constructed of one-fourth-inch steel and shall be lined with two (2) inches of hardwood. Edges of metal covers shall overlap sides at least one inch. The ground around such storage facilities shall slope away for drainage. When unattended, vehicular storage facilities shall have wheels removed or shall be otherwise effectively immobilized by kingpin locking devices or other methods approved by the Director.

(b) *Indoor storage facilities.* No indoor facility for the storage of high explosives shall be located in a residence or dwelling. When located in a warehouse, wholesale, or retail establishment, such storage facilities shall be provided with substantial wheels or casters to facilitate removal therefrom. No more than two (2) indoor storage facilities shall be kept in any one (1) building. Two (2) storage facilities may be kept in the same building only when one (1) is used for the storage of blasting caps, squibs, or similar items and the other facility is used for the storage of other high explosives. Each storage facility shall be located on the floor nearest the ground level and within ten (10) feet of an outside exit. Indoor storage facilities within one building shall be separated by a distance of not less than ten (10) feet. No indoor storage facility shall contain a quantity of high explosives in excess of fifty (50) pounds or more than five thousand (5,000) blasting caps. Indoor facilities shall be of wood or metal construction as prescribed in paragraphs (b)(1) or (2) of this section.

(1) *Wood construction.* Wood indoor storage facilities shall have sides, bottoms, and covers or doors constructed of two-inch hardwood and shall be well braced at corners. They shall be covered with sheet metal of not less than number 20 gauge. Nails exposed to the interior of such facilities shall be countersunk.

(2) *Metal construction.* Metal indoor storage facilities shall have sides, bottoms, and covers or doors constructed of number 12 gauge metal and shall be lined inside with a nonsparking material. Edges of metal covers shall overlap sides at least one inch.

(c) *Cap boxes.* Storage facilities for blasting caps in quantities of one hundred (100) or less shall have sides, bottoms, and covers constructed of number 12 gauge metal and lined with a nonsparking material. Hinges and hasps shall be attached thereto by welding. A single five-tumbler proof lock shall be sufficient for locking purposes.

711.136 - Construction of Type 3 Storage Facilities.

A type 3 storage facility shall be a "day-box" or other portable facility. It shall be constructed in the same manner prescribed for type 2 outdoor storage

facilities in Section 711.134(a), except that it may be less than one cubic yard in size, and shall be bullet-resistant, fire-resistant, weather-resistant, theft-resistant, and well ventilated. Hinges, hasps, locks, and lock protection shall be in conformity with the requirements of Section 711.132(a)(8) and (9). The ground around such storage facilities shall slope away for drainage. No explosive materials shall be left in such facilities if unattended. The explosive materials contained therein must be removed to types 1 or 2 storage facilities for unattended storage.

711.138 - Construction of Type 4 Storage Facilities.
A type 4 storage facility may be a building, an igloo or Army-type structure, a tunnel, a dugout, a box, a trailer, or a semi-trailer or other mobile facility and shall be fire-resistant, weather-resistant, and theft-resistant. It shall be constructed of masonry, metal-covered wood, fabricated metal, or a combination of these materials. The walls and floors of such storage facilities shall be lined with a nonsparking material. The doors or covers shall be metal or solid wood covered with metal. The foundations, locks, lock protection, hinges, hasps, and interior shall be in conformity with the requirements of Section 711.132(a)(5), (8), (9), and (11).

(a) *Outdoor storage facilities.* The ground around such storage facilities shall slope away for drainage. When unattended, vehicular storage facilities shall have wheels removed or shall be otherwise effectively immobilized by kingpin locking devices or other methods approved by the Director.

(b) *Indoor storage facilities.* No indoor facility for the storage of low explosives shall be located in a residence or dwelling. When located in a warehouse, wholesale, or retail establishment, such storage facilities shall be provided with substantial wheels or casters to facilitate removal therefrom. No more than one indoor storage facility shall be kept in any one building. It shall be located on the floor nearest the ground level and within ten (10) feet of an outside exit. No indoor storage facility shall contain a quantity of low explosives in excess of fifty (50) pounds.

711.140 - Construction of Type 5 Storage Facilities.
A type 5 storage facility may be a building, an igloo or Army-type structure, a tunnel, a dugout, a bin, a box, a trailer, or a semitrailer or other mobile facility and shall be theft-resistant. The doors or covers thereof shall be solid wood or metal. The hinges, hasps, locks, and lock protection shall be in conformity with the requirements of Section 711.132 (a)(8) and (9).

(a) *Outdoor storage facilities.* The ground around such storage facilities shall slope away for drainage. When unattended, vehicular storage facilities shall have wheels removed or shall be otherwise effectively immobilized by king-pin locking devices or other methods approved by the Director.

(b) *Indoor storage facilities.* No indoor storage facility for the storage of blasting agents shall be located in a residence or dwelling.

711.143 - Smoking and Open Flames.
Smoking, matches, open flames, and spark-producing devices shall not be permitted in, or within fifty (50) feet of, any outdoor storage facility.

711.146 - Storage of Blasting Caps.
Blasting caps shall not be stored with other explosive materials in the same storage facility.

711.150 - Storage Within Types 1, 2, 3, and 4 Facilities.
(a) Explosive materials within a storage facility shall not be placed directly against interior walls. Any devices constructed or placed within a storage facility shall not interfere with ventilation.

(b) Containers of explosive materials shall be stored by being laid flat with top sides up. Corresponding classes, grades, and brands shall be stored together within a storage facility in such a manner that class, grade, and brand marks are easily visible upon inspection. Stocks of explosive materials shall be stored so as to be easily counted and checked.

(c) Except with respect to fiberboard containers, containers of explosive materials shall not be unpacked or repacked inside a storage facility or within fifty (50) feet thereof, and shall not be unpacked or repacked in close proximity to other explosive materials. Containers of explosive materials shall be securely closed while being stored.

(d) Tools used for opening or closing containers of explosive materials shall be of nonsparking materials, except that metal slitters may be used for opening fiberboard containers. A wood wedge and a fiber, rubber, or wooden mallet shall be used for opening or closing wood containers of explosive materials. Metal tools other than nonsparking transfer conveyors shall not be stored in any storage facility containing high explosives.

711.160 - Transportation of Explosives in City—Duties of Consignee.
When explosives or blasting agents are brought into the City by railroad or other conveyance or means of transportation, for delivery to a consignee, the person in charge of such delivery for such railroad or public conveyance shall notify the consignee immediately upon arrival of such explosives at a railroad station or any other place customarily used by public conveyance for receipt and delivery of shipments, and if said consignee does not remove said explosives from said location within twenty-four (24) hours after such notification, then the person in charge of such railroad station or other conveyance shall immediately notify the Director, and shall remove said explosives beyond the limits of the City, or to a magazine authorized by the Director. The time allowance may be extended by special written permission from the Director, when the Director determines that conditions beyond the control of the consignee prevent the consignee from complying with the provisions of this section.

711.170 - Failure to Remove Explosives on Arrival—Unlawful.—
It shall be unlawful for any owner, consignee, agent or employee thereof, having been notified of the arrival of the shipment of explosives as provided in Section 711.160 above, to fail to remove or cause the removal of said explosives within twenty-four (24) hours after receipt of said notice or by the time set by the Director, to some place meeting the requirements of this ordinance.

711.180 - Transportation of Explosives—General Provisions.—
1. Explosives shall not be transported through any prohibited vehicular tunnel, subway or over any prohibited bridge, roadway or elevated highway.
2. No person shall smoke, carry matches or any other flame-producing device, or carry any firearms or loaded cartridges while in or near a motor vehicle transporting explosives; or drive, load or unload such vehicle in a careless or reckless manner.
3. Explosives shall not be carried or transported in or upon a public conveyance or vehicle carrying passengers for hire.
4. Explosives may be loaded into and transported on any truck and a full trailer attached thereto provided that there shall be no more than one truck and one trailer comprising the combination.
5. Explosives shall not be transferred from one vehicle to another within the City without first informing the Director and the Chesterfield Police Department. In the event of breakdown or collision, the Director and the Chesterfield Police Department shall be promptly notified to help safeguard such emergencies. Explosives shall be transferred from the disabled vehicle to another only when proper and qualified supervision is provided.
6. It shall be unlawful for any person to transport, haul or otherwise convey blasting caps on the streets and highways of the City on the same vehicle with explosives except that not more than fifty (50) pounds of explosives and not more than twenty-five (25) blasting caps may be transported on the same vehicle if the blasting caps are transported in a container approved by the Director.

711.190 - Transportation Vehicles—Requirements.—
1. Vehicles used for transporting explosives shall be strong enough to carry the load without difficulty and be in good mechanical condition. If vehicles do not have a closed body, the body shall be covered with a flame-proof and moistureproof tarpaulin or other effective protection against moisture and sparks. All vehicles used for the transportation of explosives shall have tight floors and any exposed spark-producing metal on the inside of the body shall be covered with wood or other nonsparking materials to prevent contact with packages of explosives. Packages of explosives shall not be loaded above the sides of an open-body vehicle.
2. Every vehicle used for transporting explosives shall be marked or placarded on both sides, front and rear with the word "Explosives" in letters not less than three (3) inches in height in contrasting and clearly readable colors. In addition to such marking or placarding, the vehicle may display, in such a

manner that it will be readily visible from all directions, a red flag eighteen (18) inches by thirty (30) inches, with the word "Explosives" painted, stamped or sewed thereon in white letters at least six (6) inches in height.

3. Every motor vehicle used for transporting explosives shall be equipped with one of the following minimum fire extinguishing units:
   (1) One 2A 40BC fire extinguishing unit; or
   (2) Two (2) 2A 20BC fire extinguishing units.

Only extinguishers listed or approved by Underwriters' Laboratories, Inc., Underwriters' Laboratories of Canada, Factory Mutual Laboratories or by some other nationally recognized fire equipment testing laboratory, shall be deemed suitable for use on explosive-carrying vehicles. Extinguishers shall be filled and ready for immediate use and located near the driver's seat. Extinguishers shall be examined periodically by a competent person.

4. All motor vehicles used for transporting explosives shall meet the following requirements for safe transportation of explosives:
   (1) Fire extinguishers shall be filled and in working order.
   (2) All electrical wiring shall be completely protected and securely fastened to prevent short circuiting.
   (3) Chassis, motor, pan and underside of body shall be reasonably clean and free of excess oil and grease.
   (4) Fuel tank and feed line shall be secure and have no leaks.
   (5) Brakes, lights, horn, windshield wipers and steering apparatus shall function properly.
   (6) Tires shall be checked for proper inflation and defects.
   (7) The vehicle shall be in proper condition in every other respect and acceptable for handling explosives.
5. Vehicles transporting explosives shall only be drive by, and be in charge of, a driver who is physically fit, careful, capable, reliable, able to read and write the English language, and not addicted to the use or under the influence of intoxicants or narcotics, and not less than twenty-one (21) years of age. He shall be familiar with the traffic regulations, state laws and the provisions of this chapter.
6. Except under emergency conditions, no vehicle transporting explosives shall be parked before reaching its destination, even though attended, on any public street adjacent to, or in proximity to, any bridge, tunnel, dwelling, building or place where people work, congregate or assemble.
7. No spark-producing metal, spark-producing metal tools, oils, matches, firearms, electric storage batteries, flammable substances, acids, oxidizing materials or corrosive compounds shall be carried in the body of any motor truck and/or vehicle transporting explosives.
8. Vehicles transporting explosives shall avoid congested areas and heavy traffic. Where routes through congested areas have been designated, such routes shall be followed.
9. Delivery shall only be made to authorize persons and/or into authorized magazines or approved temporary storage or handling areas.

711.200 - Permit to Explode or Blast Required, Blaster's License.—

1. It shall be unlawful, without first having received a permit from the Director, to explode or cause to be exploded, any gunpowder, dynamite, giant powder, gun cotton or other explosive for the purpose of blasting out rock, gravel, earth or other like substance within the City.
2. No person shall use or detonate explosives unless he is in possession of a valid license, obtained from the Director, to use explosives for blasting purposes. This license shall be known as a blaster's license. For the purpose of this chapter, the Director is authorized to publish qualifications necessary for an applicant to obtain a blaster's license. Such qualifications shall take into consideration age, training, education, and experience in the knowledge and use of explosives and shall include a written examination. A license shall be issued by the Director to any applicant meeting the requirements set forth by the Director for such a license.
3. The handling of explosives may be performed by other employees provided the work is done under the direct supervision of the person holding the permit to use explosives and providing such employees are at least twenty-one (21) years of age.
4. The person possessing a valid blaster's license shall be in charge of all blasting operations. If there is more than one person possessing such a license on any one operation, one will be designated as being blaster in charge and shall be responsible for the entire operation.

711.210 - Application for Permit to Blast—Requirements.—

Application for a permit to use explosives shall be made to the Director at the Courthouse on forms provided and shall contain the following information:

(1) Name of applicant.
(2) Address of residence.
(3) Place of business.
(4) Occupation.
(5) Age.
(6) The location where the blasting is to be done, the type of blasting material to be used in each charge, the number and location of charges and the manner in which the material is to be detonated.
(7) The time and date of blasting when requested by the Director.
(8) The name, age and address of the blaster or blasters who shall be the person or persons who shall actually detonate or have actual charge of the detonation of any explosive or blasting agent.
(9) Blaster's license number.
(10) When blasting operations are conducted on a continuous basis, such as quarry blasting and construction work, the Director may, in lieu of (6), above, direct that the applicant furnish the location where blasting is to be done, the type of blasting material generally used, the approximate frequency of detonations based on past performance and the manner in which the explosives are to be detonated.

In addition to the above information, there shall be attached to the application for a permit to blast, the following: A certificate of liability insurance in the minimum amount of five hundred thousand dollars ($500,000.00) for injury to persons and property resulting from the blasting operations. Such insurance shall be carried in a firm or corporation which has been duly licensed or permitted to carry on such business in the State of Missouri and shall be kept and maintained continuously in force and effect for the duration of the blasting permit.

711.220 - Blasting—Rules and Regulations.—
All blasting operations within the City shall be conducted in strict accordance with the following rules and regulations and it shall be unlawful for any person to fail to observe and follow said rules and regulations when blasting. In the event there is a violation of said rules and regulations, the Director shall have the power and it shall be his duty to revoke the blasting permit issued in connection with the operation, revoke the license of the blaster in charge, all in accordance with the terms of this chapter, and in addition, the violator or violators may be punished as otherwise provided by this chapter for violations thereof.

(1) Blasting operations shall be carried on with the smallest possible number of persons present.
(2) All drill holes shall be of sufficient size so that the cartridges of explosives can be easily inserted to the bottom of the hole without forcing or ramming.
(3) Explosives should not be removed from the original wrapper before being loaded into bore holes except when irregularities of the hole make it impossible to load whole cartridges with safety or in block-holing where small charges are desirable. This rule shall not apply to free running explosives.
(4) Excessive ramming should be avoided in loading or tamping explosives in a bore hole and wooden tools only, with no exposed metal parts, shall be used for this purpose. In tamping, only hardwood rods without metal parts, other than non-ferrous metal ferrules for extending the length thereof, shall be used.
(5) When loading free running or bulk explosives, a bronze, wooden or heavy paper funnel should be used unless the explosives can be poured directly from a container into the hole in such a manner as to prevent scattering of loose explosives around the collar of the hole.
(6) When priming with electric caps, said caps shall be tested with a blasting galvanometer after being loaded but before the hole is stemmed. Primers shall be made up just prior to loading. The cap must be properly embedded in the cartridge and the primer seated in the charge without rough handling.
(7) When firing with a blasting machine, the blasting machine shall be located at a safe distance to be determined by the blaster.

(8) When firing by means of a blasting machine, the leading wires shall be kept short-circuited until the shot is ready for firing and shall not be connected to the blasting machine until immediately before the time of firing and shall be disconnected from the blasting machine and short-circuited immediately after firing.

(9) Electric detonators and blasting circuits shall be tested only by means of a blasting galvanometer designed for this purpose.

(10) Before firing any blast, all means of access to the danger zone (the extent of which shall be determined by the blaster, but in no case to be closer to the explosion than the blaster himself), shall be effectively guarded to exclude all unauthorized personnel. When practical, the blaster shall then sound a warning of sufficient intensity and duration to be distinctly audible to all persons within the danger zone and all such persons shall retire beyond the danger zone. The danger zone shall then be examined by the blaster to make certain that all persons have retired therefrom to a place of safety. No blast shall be fired while any person is in the danger zone.

(11) When the point of explosion is within three hundred (300) feet of a roadway, the blaster shall, just prior to the blast, designate a sufficient number of employees of the operator, each carrying a red warning flag, to stop all vehicular and pedestrian traffic on each possible route of travel within three hundred and fifty (350) feet of the point of explosion until the blast has been fired.

(12) No person shall return to the danger zone until permitted to do so by the blaster as announced by audible or visual signal.

(13) Immediately following the blast the area shall be examined by the blaster for evidence of misfired charges.

(14) All misfires shall be reported at once to the superintendent or manager who shall then determine the safe and proper method of disposal. The unexploded charge shall be detonated if such can be accomplished without risk of injury to personnel or damage to property. If repriming is necessary, any stemming present in the hole may be removed by a jet of water. The jetting tool should be of non-sparking metal, rubber or plastic. If electric blasting caps are used for in-the-hole initiation, an air jet should not be used.

(15) Drilling in any hole that is known to contain or have contained explosives is prohibited until complete neutralization is effected.

(16) A complete record shall be kept by the blaster showing all misfires and method of disposal.

(17) In case a charge fires but does not bring down the burden, it is permissible to reload the bore hole, if in suitable condition, but only after the temperature of the hole has been reduced by water or otherwise to not more than one hundred fifty (150) degrees Fahrenheit.

(18) Each blast hole shall be stemmed to the collar or to a point high enough to provide efficient confinement of the charge and to minimize the chance of injury to personnel from flying material. Block holes shall

contain at least eighty-five (85) percent of stemming material. For toe holes, the collar stemming shall in no case be less than one-third the depth of the hole.

(19) When electric blasting caps are transported in a motor vehicle, equipped with a radio transmitter, they shall either be in their original package or stored in a closed metal box that is lined with a cushioning material such as wood or sponge rubber. When the electric caps are being placed into or removed from the box, the transmitter shall not be used.

(20) Unless otherwise expressly authorized in writing by the Director, all blasting operations shall be conducted at no less distance from any fixed or mobile radio transmitter than indicated in the following table:

Minimum Distance

From Blasting Operations Using Transmitter Power Output in Watts	Electric Blasting Caps, in Feet
5—25	100
25—50	150
50—100	220
100—250	350
250—500	450
500—1,000	650
1,000—2,500	1,000
2,500—5,000	1,500
5,000—10,000	2,200
10,000—25,000	3,500
25,000—50,000	5,000
50,000—100,000	7,000

When it can be demonstrated by means of approved tests that electric blasting may be carried out at lesser distances from the transmitter than required by the table shown, the Director may allow a variation from the requirements of said table.

When blasting operations are located near highways or other public ways, signs shall be erected at least five hundred (500) feet from the blast areas reading: "BLAST AREA-SHUT OFF ALL TWO-WAY RADIOS". The letters of these signs shall be not less than four (4) inches in height on a contrasting background.

(21) In no case shall drilling be conducted closer than twenty-five (25) feet to a loaded hole or a hole that is being loaded.

(22) Holes shall be checked prior to loading to determine depth and condition. Holes may be checked with a dolly or tamping block or by visual inspection with the aid of a mirror. After any explosives have been loaded, all measuring shall be done with a cloth tape or non-ferrous measuring device and lead plumb bob, or a wooden tamping pole or wooden dolly free of exposed metal parts.

(23) Under no circumstances shall the amount of explosives taken within three hundred (300) feet of a potential point of explosion exceed the amount estimated by the blaster as necessary for the blast. Such explosives shall be stacked in piles at least twenty-five (25) feet from the nearest holes being loaded and at such distances apart, as provided in Section 32, that any premature explosion will not be likely to propagate from one (1) pile to another.

(24) The explosives containers, if any, shall be opened at the pile and carried up to the hole, one (1) case or unit at a time for immediate loading or placed at a loading station not less than six (6) feet from the hole except that not more than one hundred (100) pounds of explosives shall be allowed at the loading station at any one time. All empty explosives containers (boxes, bags, crates, etc.) shall be properly disposed of, daily, in a safe manner.

(25) Explosives shall be distributed in such a manner that the distances from storage piles to the allowable maximum quantity of one hundred (100) pounds of explosives at the loading station or between such one hundred pound-loading station piles shall not be less than the quantities shown in the following quantity-distance table:

Pounds of Explosives	*Distance Between Piles of Explosives in Feet*
up to 50	21
100	25
200	32
300	37
400	41
500	44
750	50
1,000	55
1,500	64
2,000	70
2,500	75
5,000	96
10,000	123

(26) Drill holes shall not be sprung when they are less than one hundred (100) feet from the nearest hole containing explosives. Holes that have been sprung shall not be charged with explosives until the maximum temperature in any portion of such holes has been reduced to one hundred fifty (150) degrees Fahrenheit. Where possible, water is to be used for cooling purposes.

(27) When loading a blast primed with detonating fuse, the detonator or detonators required for firing the blast shall not be brought within fifty (50) feet of the hole area nor attached to the detonating fuse until all persons, except the blaster and his assistants, have been cleared from the danger zone.

(28) In all blasting where the firing of any one (1) hole is likely to break into or damage another hole in the vicinity or where the firing of any hole may propagate the charge in a loaded hole in the vicinity, all holes which have been loaded shall be included and fired in the blast.

(29) Water standing in blast holes should be bailed out, if possible, or the holes shall be loaded with an explosive of adequate water resistance.

(30) Blasting crews shall consist of the minimum number of experienced men to do the work in an efficient manner and should be organized carefully and each man assigned to definite tasks to avoid confusion.

(31) A blast shall be planned before the loading is started. The planned charge for each hole shall be recorded prior to the blast.

(32) The condition of each hole to be loaded and the amount, height, and position of the explosives charge or charges placed in the hole shall be recorded on a loading chart prior to the blast.

(33) Members of loading crews engaged in loading blast holes should be prohibited from wearing hobnail or steel-plated shoes to avoid striking sparks on rocks.

(34) Large dynamite cartridges may be dropped in blast holes only when the hole is free from obstructions to the depth at which the cartridge is to rest.

(35) Large dynamite cartridges shall not be dropped in blast holes containing excessive water until the charge is above the water level.

(36) Large dynamite cartridges that have been wedged in a blast hole shall not be tamped with a dolly. After pouring water into the hole, attempts to dislodge or pierce them shall be made with a spear-shaped wooden tamping block or a small-diameter wooden pole.

(37) Rough or ragged holes and holes partly closed by an obstruction that cannot be readily removed shall be loaded with cartridged dynamite lowered with a rope, with free running powder or dynamite cut in small pieces.

(38) When loading a long line of holes with more than one (1) loading crew, the crews shall be separated by the greatest practical distance which can be maintained as the loading operations progress and which is consistent with efficient operation and supervision of the crews. Every effort shall be made to keep the loading crews a minimum of twenty-five (25) feet apart and to prevent the simultaneous loading of adjacent holes.

(39) Excessively large amounts of explosives shall not be delivered to the loading area at one (1) time. If deliveries of explosives are made by truck, the quantity permitted at or near the loading operations shall be limited to one (1) truck load. Other trucks loaded with explosives shall wait or be unloaded in separate safe places away from the loading operations.

(40) Explosives should be delivered first to the holes farthest from the truck to avoid driving or walking among piles of explosives.

(41) Explosives in excess of immediate requirements when removed from the main storage magazine and delivered in the vicinity of a blasting operation, shall be stored in a Class II magazine.

(42) The required stemming or tamping material shall be placed by each hole before the delivery of explosives to the holes is started. Stemming material shall be screened or free from excessively coarse pieces.

(43) Stemming shall be placed in each hole to avoid damage to the detonating fuse or leg wires of electric detonators.

(44) A single hole or any number of holes in a row should not be fired when adjacent to or near one (1) or more other holes which are loaded and which are not intended to be fired.

(45) All detonating fuses shall be covered with adequate stemming where physically possible to reduce noise.

(46) The detonating fuse shall extend from the hole a distance of one (1) or two (2) feet more than sufficient to compensate for any subsidence, should be drawn taut and made secure on the top where it will not interfere with loading operations or come in contact with explosives on the ground.

(47) The detonating fuse shall be checked each time before stemming material is used to see that it has not been broken; if it has, it shall be repaired before proceeding.

(48) When a detonating fuse is used, main or trunk line splices shall be factory splices or tight square knots. No splices or knots shall be used in the drill hole.

(49) All branch line connections and all connections in the main line other than splices shall be tight and at right angles.

(50) The main or trunk line shall be laid out free of kinks or coils and all connections shall be inspected before firing the blast.

(51) When connecting an electric blasting cap to detonating fuse, a connector for the purpose shall be used in accordance with the Director's instructions. The cap may also be securely taped to the detonating fuse.

(52) Caps shall not be brought to the loading area nor attached to the detonating fuse until all is in readiness to fire the blast.

(53) Plain detonating fuse may be used for trunk lines or in shallow drill holes, but reinforced or wire protected types shall be used in deep or ragged holes.

(54) Toe hole blasting is defined as the removing of ledges or high bottoms that remain after a main or primary shot or blast using moderate quantities of explosives loaded in small diameter holes. In toe hole blasting, the charge of explosives shall be pushed to the end of the hole with a wooden pole using care not to block the hole or suitable free-running blasting agents may be blown into the hole with an approved pneumatic loader.

(55) Secondary blasting is defined as the reduction of oversize material by the use of explosives to facilitate shovel operations or to be accompanied by the crusher. It shall include mud-capping and blockholing. In secondary blasting, wherever practicable, oversize fragments shall be reduced to shovel or crusher size by use of the drop-ball method, except as otherwise directed by the Director.

(56) Charges of explosives shall be confined in all cases (drill holes) by suitable, inert stemming material.

(57) No person, except the blaster and any others directly engaged in loading block holes, shall be permitted within the immediate area while loading is being performed. Loading of any block hole shall be completed in one continuous operation including insertion of the primer and the stemming.

(58) Blast matting (which may include earth) shall be required when blast operations and/or geological conditions create fly rock that could damage or injure persons or property, or at the decision of the Director.

(59) In all blasting operations, except as hereinafter otherwise provided, the maximum peak particle velocity of any one (1) of three (3) mutually perpendicular components of the ground motion in the vertical and horizontal directions shall not exceed two (2) inches per second.

(60) Instrumentation shall be in good operating condition and be properly calibrated with a current (within one (1) year of date of use) calibration sticker affixed to each instrument. If an instrument(s) is found to be not operating properly or out of calibration, blasting operations shall be halted until the appropriate repairs or recalibration are performed or a proper instrument(s) is provided. Seismograph operator shall be trained in the use of that instrument(s).

(61) Seismographic instrumentation shall be required on any blast site where the nearest uncontrolled structure or public utility is located within a scaled distance of sixty-five (65) (as defined in Rule 69) or at the request of the Director. An uncontrolled structure is defined as any occupied building not owned or controlled by the explosives user. The seismograph shall be placed at or near the closest uncontrolled structure(s).

(62) Blasting operations without instrumentation will be considered as being within the limits set forth in this subsection if at a specified location on at least five (5) blasts instrumentation has shown that the maximum peak particle velocity at the specified location is fifty (50) percent or less of the limit set forth in this subsection, and with written permission from the Director, provided, that for all future blasts the scaled distance is equal to or greater than the scaled distance for the instrumental blast. However, if a scaled distance less than thirty-five (35) is employed, a seismograph is required regardless of the seismic readings of previous blasts. "Scaled distance" means the actual distance in feet divided by the square root of the maximum explosive weight in pounds that is detonated per delay period for delay intervals of eight (8) milliseconds or greater. If delay intervals less than eight (8) milliseconds are employed or if instantaneous blasting is employed, scaled distance shall be computed by dividing the actual distance in feet by the square root of the total explosive weight in pounds. When blasting operations are contemplated which would result in ground vibrations that would have a particle velocity of any one (1) of three (3) mutually perpendicular components in

excess of two (2) inches per second, blasting operations may proceed after receiving written consent from the property owner or owners affected and the Director.

(63) (A) Airblast shall be controlled so that it does not exceed the maximum limits specified below at any uncontrolled structure (as defined in rule 68(A)).

Lower frequency limits of measuring system, Hz *(+ 3dB)*	Maximum *level in dB*
0.1 Hz or lower—flat response	134 peak
2 Hz or lower—flat response	133 peak
6 Hz or lower—flat response	129 peak
C-weighted, slow response	105 peak dBc

(B) All measuring systems used shall have a flat frequency response of at least 200 Hz at the upper end.

(C) The permittee may satisfy the provisions of this section by meeting any of the four (4) specifications in the chart in Rule 73 of this section; provided however, the 0.1 Hz or lower-flat response or C-weighted slow response can only be used if approved by the Director.

(64) When blasting in the vicinity of uncontrolled structures (as defined in Rule 59(A)) the explosives user will determine the structures lying within a scaled distance of thirty-five (35). The distance will be determined by the following:

$D = 35 (W^2)$

Where D is the distance limit and W is the maximum charge weight per 8 ms delay interval.

The explosives user will make a good faith effort to contact the owners of structures within the distance limit and offer to have a pre-blast inspection performed on their structure at no cost to the owner.

711.230 - Blasting Agents—Transportation, Storage and Use.—

Unless otherwise set forth in this chapter, blasting agents shall be transported, stored and used in the same manner as explosives.

711.240 - Buildings Used for Mixing of Blasting Agents—Location.—

Buildings or other facilities used for mixing blasting agents shall be located, with respect to inhabited buildings, passenger railroads and public highways in accordance with the American Table of Distance (Appendix "A").

(1) Any oxidizer stored at a closer distance to the blasting agent storage area than as provided in (2) below shall be added to the quantity of blasting agents to calculate the total quantity involved for application of the aforementioned Table.

(2) Minimum intra-plant separation (distances between mixing units and the oxidizer) storage areas and blasting agent storage areas shall be determined by competent persons and these distances shall be approved by the Director.

711.250 - Buildings Used for Mixing of Blasting Agents—Construction.—

1. Buildings used for the mixing of blasting agents shall conform to the requirements of this section unless otherwise specifically approved by the Director.
   (1) Buildings should preferably be of noncombustible construction or sheet metal on wood studs.
   (2) The layout of the mixing building shall be such as to provide physical separation between the finished product storage and the mixing and packaging operation.
   (3) Floors in storage areas and in the processing plant should be of concrete. Isolated fuel storage shall be provided to avoid contact between molten oxidizer and fuel in case of fire.
   (4) The building shall be well ventilated.
   (5) Heat shall be provided exclusively from a unit outside the building.
2. The design of the mixer should minimize the possibility of frictional heating, compaction, and especially, confinement. Open mixers are preferable to enclosed mixers. Bearings and gears should be protected against the accumulation of oxidizer dust. All surfaces should be accessible for cleaning. Mixing and packaging equipment should be constructed of materials compatible with the fuel-oxidizer composition. Mobile equipment, such as ready-mix concrete trucks, shall not be used for blending fuels with oxidizers while in transit on public highways. The provisions of this section shall be considered when determining blasting agent composition. The sensitivity of the blasting agent shall be determined by means of a No. 8 test blasting cap at regular intervals and after every change in ingredients or composition, or as may be requested by the Director.
3. Oxidizers of small particle size, such as crushed prills or fines, may be more sensitive and hazardous than the ordinary prills and should be handled with greater care.
4. No liquid fuel with higher volatility than that of No. 2 diesel fuel (minimum flash point of 145 degrees Fahrenheit, ASTM closed-up procedure) shall be used.
5. Crude oil and crankcase oil should not be used because they may contain light ends that offer increased vapor-explosion hazards or gritty particles that tend to sensitize the resulting blasting agent.
6. If solid fuels are used, they shall be chosen so as to minimize dust-explosion hazard.
7. Metal dusts (aluminum powder, etc.), peroxides chlorates, or perchlorates shall not be used unless such operations are conducted in a manner approved by the Director.
8. Unusual compositions shall not be attempted except under the supervision of competent personnel equipped to determine the overall hazard of the resulting compositions.
9. All electrical switches, controls, motors and lights, if allocated in the mixing room, should conform to the requirements of Article 502, Class II, Division 2

of the Electrical Code of the City of Chesterfield; otherwise they should be located outside the mixing room. The frame of the mixer and all other equipment that may be used shall be electrically bonded and provided with a continuous path to the ground.

10. Washdown facilities should be provided. An automatic water-deluge system with adequate capacity is recommended to protect mixers and the finished-explosives storage area in the plant. Floors shall be constructed so as to eliminate open floor drains and piping into which molten materials could flow and be confined in case of fire. The floors and equipment of the mixing and packaging room shall be washed down frequently to prevent accumulation of oxidizers or fuels and other sensitizers. The entire mixing and packaging plant shall be washed down periodically to prevent excessive accumulation of dust.
11. Smoking or open flames shall not be permitted in or within fifty (50) feet of any building or facility used for the mixing of blasting agents.
12. Empty oxidizer bags shall be disposed of daily in a safe manner.
13. Not more than one day's production of blasting agents or the limit determined by the American Table of Distances (Appendix A), whichever is less, shall be permitted in or near the mixing and packaging plant or area. Larger quantities shall be stored in separate warehouses or magazines.

711.270 - Transportation of Blasting Agents.—

1. When blasting agents are transported in the same vehicle with explosives, all of the requirements of Section 711.180 of this chapter shall be complied with.
2. Vehicles transporting blasting agents shall only be driven by and be in charge of a driver at least twenty-one (21) years of age who is capable, careful, reliable and in possession of a valid motor vehicle operator's license. Such a person shall also be familiar with the State vehicle and traffic laws.
3. No sparking metal, sparking metal tools, oils, matches, firearms, acids or other corrosive liquids shall be carried in the bed or body of any vehicle containing blasting agents.
4. No person shall be permitted to ride upon, drive, load or unload a vehicle containing blasting agents while smoking or under the influence of intoxicants or narcotics.
5. It is prohibited for any person to transport or carry any blasting agents upon any public vehicle carrying passengers for hire.
6. Vehicles transporting blasting agents shall be in safe operating condition at all times.
7. When offering blasting agents for transportation on City roads and highways, they shall be packaged in a manner to render them safe for transportation and handling and marked or labeled so as to be readily identifiable.

711.280 - Use of Blasting Agents.—

Persons using blasting agents shall comply with all of the applicable provisions of this chapter for the use of explosives.

711.290 - Records.—

1. A record known as a log shall be kept for every primary blast in an approved manner and for such other blasting as the Director may require.
2. A blasting record, known as a log, shall be kept on the site of any blasting operations. This log shall be made available to the Director or his authorized agents upon demand. This record shall be maintained available for inspection for a period of six (6) months after such blasting operations are completed.
3. Minimum recorded data shall be as follows:
   (a) Plan of the involved portion of the blasting site showing location of holes and spacing of holes.
   (b) A cross-section of each hole showing overburden; burden at top of face and toe; height of face; depth of hole; kind and quantity of explosives including distribution of explosives load as deck charges, or otherwise as appropriate; length and kind of stemming material.
   (c) Drilling record showing unusual joint or seam conditions in the rock.
   (d) Amount of explosives used (weight).
   (e) Kind of blasting caps, distribution of instantaneous or short-period delay blasting caps, or both; delay interval used; order of firing by switch.
   (f) Comments by blaster in charge regarding character of breakage; height of breakage; length of throw; effectiveness of shot; unusual results of effects.
   (g) Weather conditions including direction and approximate velocity of wind; atmospheric temperature; relative humidity; cloud conditions.
   (h) Date and time of firing of blast.
      (i) Name of person in responsible charge of loading and firing; blaster's permit number.
   (j) Name and location of blasting site.
   (k) Signature and title of person making report.
4. Any falsification, alterations or misrepresentation of any records of blasting operations will be cause for suspension or revocation of blasting permits and blaster's license.

711.300. - Fees.

—The fee for an annual blaster's license shall be fifty dollars ($50.00).

The fees for blasting and storage of explosives permits required by this chapter shall be as prescribed in Sections 1100.210, 1100.220 and 1100.230, SLCRO 1974 as amended.

711.310 - Hours During Which Blasting Prohibited.—

It shall be unlawful for any person to explode, or cause to be exploded, any gunpowder, dynamite, giant powder, gun cotton or other explosives as herein defined for any purpose during the hours of 6:00 p.m. to 8:00 a.m., except that a special permit to use explosives during the hours of 6:00 p.m. to 8:00 a.m. may be issued by the Director when the Director determines that conditions

beyond the control of the person seeking a special permit prevent such person from using explosives during regular hours permitted.

711.320 - Permit—Licenses—Duration.—
1. Blaster's licenses shall expire at the expiration of twelve (12) months from date of issuance, but may be renewed at the discretion of the Director without written examination.
2. Permits to store explosives or blasting agents shall expire at the expiration of twelve (12) months from date of issuance, or when location of magazine is changed.
3. Permit to blast shall expire on the date specified on the permit issued by the Director, but may be extended by the Director.
4. All permits and licenses issued pursuant to this chapter may be suspended by the Director for good cause shown as hereinafter provided.

711.330 - Right of Inspection.—
1. The Director or any authorized police officer, may, at any reasonable time, inspect premises, buildings and installations used for storage or sale of explosives or blasting agents, or any premises on which blasting operations are being conducted for the purpose of determining whether the provisions of this chapter are being complied with.
2. The Director or any authorized police officer may, during normal business hours, enter and inspect the premises, including places of storage, of any licensed importer, licensed manufacturer, licensed manufacturer-limited, licensed dealer, or permittee for the purpose of inspecting or examining any documents and records required to be kept by such person by law and any explosive materials kept or stored by such person.
3. Any person who shall hinder or obstruct the Director or any police officer in the performance of his official duties shall be guilty of a violation of the provisions of this chapter and upon conviction thereof, shall be punished as provided in Section 711.390.

711.335 - Inspection of Fire or Accident Scene.—
The Director or any authorized police officer may inspect the site of any accident or fire in which there is reason to believe any explosive materials were involved. The Director or any authorized police officer may, at any reasonable time, enter into or upon any property where explosive materials have been used or are suspected of having been used, or have been found in an otherwise unauthorized location.

711.340 - Violation of Inspection—Notice to Violator.—
1. If upon inspection by the Director or his agents, a violation of this chapter is found to exist, the Director shall file with the person holding the permit a notice citing the violation and ordering its correction. If such order is not complied with within the time period specified in the notice, which may require immediate compliance, the Director may suspend any permit or license issued

to the person involved. Nothing herein relating to revocation of permits shall be construed to abrogate or suspend any proceedings against or prosecution of the violator which may be instituted against the violator under the provisions of this chapter.

2. Immediately after the suspension of the permit to store or to blast, the Director shall give the permittee written notice of the complaint or charge and shall fix the date for a hearing to be held within five (5) days of said notice, at which hearing the permittee shall have the right to counsel and to produce witnesses and other evidence in his behalf. For the purpose of said hearing, the Director is empowered to issue subpoenas and all necessary processes, administer oaths and take testimony at said hearing. All evidence offered at the hearing shall be preserved by the Director and oral testimony shall be recorded verbatim.
3. If the Director shall, after such hearing, decide that the operation for which the permit was issued was in violation of any provision of this chapter, he may revoke any permit or license of the person involved permanently or for such lesser period of time as he shall determine.

711.350 - Conflict With State or Federal Regulation of Explosives—Suspension.—
During such time as any provision herein shall conflict with any State or Federal statute or regulation, such provision herein conflicting shall be suspended.

711.360 - Reckless and Wanton Handling of Explosives—Prohibited.—
No person shall load, unload or otherwise handle explosives in a reckless and wanton manner, thereby endangering the life, limb or property of any person.

711.365 - Stolen Explosives.—
No person shall, with the intent of depriving the owner of lawful possession thereof, use, possess, receive, conceal, transport, sell or dispose of any stolen explosive materials knowing or having reasonable cause to believe such materials were stolen.

711.370 - Sale to Minors—Prohibited.—
It shall be unlawful for any person to sell, vend, give away or otherwise supply any explosive as defined herein in any quantity to any person under the age of twenty-one (21) years.

711.375 - Theft or Loss of Explosives.—
Any person who has knowledge of the theft or loss of any explosive materials shall immediately report such theft or loss to the Director and the ChesterfieldPolice Department.

711.380 - Vendor to Keep Record of Sales—Duties.—

Every person who has a permit to store, stock or store for resale explosives as defined herein shall be required to maintain a bound ledger and shall record or cause to be recorded therein the following information in connection with every sale, vending or other disbursement of explosives:

(1) Name of vendee.
(2) Address of vendee.
(3) Date and time of sale.
(4) Type of explosive.
(5) Quantity of explosive.

Such record shall be open to inspection by the Director or is agent during usual business hours. No licensed user of explosives or blasting agents shall be allowed to resell explosives or blasting agents except by the written authorization of the Director.

711.390 - Penalties.—
Any person violating any of the provisions of this chapter shall, upon conviction thereof, be punished by a fine not to exceed five hundred dollars ($500.00) or imprison for a period not to exceed one year or both and each such violation shall constitute a separate offense. In addition to the penalties prescribed herein, the City Administrator may take such other action, either legal or equitable, that he deems necessary in order to execute and enforce the provisions of this chapter.

711.400 - Right to Appeal.—
1. Any applicant, permittee or other person aggrieved by any order of the Director issued pursuant to this chapter, except the revocation of a permit which is covered elsewhere in this chapter, may file an appeal with the Director within ten (10) days of such order, and the Director shall fix a time and place for hearing to be held not less than five (5) days nor more than ten (10) days of the filing of appeal at which hearing the permittee shall have the right to counsel and to produce witnesses and other evidence in his behalf. For the purpose of said hearing, the Director is empowered to issue subpoenas and all necessary processes, administer oaths and take testimony at said hearings. All evidence offered at the hearing shall be preserved by the Director and oral testimony shall be recorded verbatim.
2. The decision and action of the Director at the hearing to revoke the permit shall be reviewable in a court of competent jurisdiction by a writ of certiorari filed by the permittee so affected or by any other person aggrieved by the action of the Director, within ten (10) days after said decision in writing has been made and forwarded to said permittee.

APPENDIX A

The American Table of Distances for storage of Explosives as revised and approved by the Institute of Makers of Explosives, September 30, 1955, which is a part hereof and is designated herein as Appendix A reads and provides as follows:

Quantity-Distance Tables
American Table of Distances for Storage of Explosives *

Explosives		*Distances in Feet When Storage in Barricaded* **			
Pounds Over	Pounds Not over	Inhabited Buildings	Passenger Railways	Public Highways	*Separa-* tion of Magazines
2	5	70	30	30	6
5	10	90	35	35	8
10	20	110	45	45	10
20	30	125	50	50	11
30	40	140	55	55	12
40	50	150	60	60	14
50	75	170	70	70	15
75	100	190	75	75	16
100	125	200	80	80	18
125	150	215	85	85	19
150	200	235	95	95	21
200	250	255	105	105	23
250	300	270	110	110	24
300	400	295	120	120	27
400	500	320	130	130	29
500	600	340	135	135	31
600	700	355	145	145	32
700	800	375	150	150	33
800	900	390	155	155	35
900	1,000	400	160	160	36
1,000	1,200	425	170	165	39
1,200	1,400	450	180	170	41
1,400	1,600	470	190	175	43
1,600	1,800	490	195	180	44
1,800	2,000	505	205	185	45
2,000	2,500	595	220	190	49

2,500	3,000	580	235	195	52
3,000	4,000	635	255	210	58
4,000	5,000	685	275	225	61
5,000	6,000	730	295	235	65
6,000	7,000	770	310	245	68
7,000	8,000	800	320	250	72
8,000	9,000	835	335	255	75
9,000	10,000	865	345	260	78
10,000	12,000	875	370	270	82
12,000	14,000	885	390	275	87
14,000	16,000	900	405	280	90
16,000	18,000	940	420	285	94
18,000	20,000	975	435	290	98
20,000	25,000	1,055	470	315	105
25,000	30,000	1,130	500	340	112
30,000	35,000	1,205	525	360	119
35,000	40,000	1,275	550	380	124
40,000	45,000	1,340	570	400	129
45,000	50,000	1,400	590	420	135
50,000	55,000	1,460	610	440	140
55,000	60,000	1,515	630	455	145
60,000	65,000	1,565	645	470	150
65,000	70,000	1,610	660	485	155
70,000	75,000	1,655	675	500	160
75,000	80,000	1,695	690	510	165
80,000	85,000	1,730	705	520	170
85,000	90,000	1,760	720	530	175
90,000	95,000	1,790	730	540	180
95,000	100,000	1,815	745	545	185
100,000	110,000	1,835	770	550	195
110,000	120,000	1,855	790	555	205
120,000	130,000	1,875	810	560	215

130,000	140,000	1,890	835	565	225
140,000	150,000	1,900	850	570	235
150,000	160,000	1,935	870	580	245
160,000	170,000	1,965	890	590	255
170,000	180,000	1,990	905	600	265
180,000	190,000	2,010	920	605	275
190,000	200,000	2,030	935	610	285
200,000	210,000	2,055	955	620	295
210,000	230,000	2,100	980	635	315
230,000	250,000	2,155	1,010	650	335
250,000	275,000	2,215	1,040	670	360
275,000	300,000	2,275	1,075	690	385

*As revised and approved by the Institute of Markers of Explosives, September 30, 1955.

**"Barricaded" means that a building containing explosives is effectually screened from a magazine, building, railway, or highway, either by a natural barricade, or by an artificial barricade of such height that a straight line from the top of any sidewall of the building containing explosives to the eave line of any magazine, or building, or to a point 12 feet above the center of a railway or highway, will pass through such intervening natural or artificial barricade. "Natural barricade" means natural features of the ground, such as hills, or timber of sufficient density that the surrounding exposures which require protection cannot be seen from the magazine when the trees are bare of leaves. "Artificial barricade" means an artificial mound or revetted wall of earth of a minimum thickness of 3 feet.

Note: When a building containing explosives is not barricaded, the distances shown in the Table shall be doubled.

NOTES TO AMERICAN TABLE OF DISTANCES FOR STORAGE OF EXPLOSIVES

Note 1. "Barricaded" means that a building containing explosives is effectually screened from a magazine, building, railway or highway, either by a natural barricade or by an artificial barricade of such height that a straight line from the top of any sidewall of the building containing explosives to the eave line of any magazine or building or to a point 12 feet above the center of a railway or highway, will pass through such intervening natural or artificial barricade.

Note 2. "Natural barricade" means natural features of the ground, such as hills or timber of sufficient density that the surrounding exposures which

require protection cannot be seen from the magazine when the trees are bare of leaves.

Note 3. "Artificial barricade" means an artificial mound or revetted wall of earth of a minimum thickness of 3 feet.

Note 4. When a building containing explosives is not barricaded, the distances shown in the Table shall be doubled.

Note 5. When 2 or more storage magazines are located on the same property, each magazine must comply with the minimum distances specified from inhabited buildings, railways and highways, and in addition, they should be separated from each other by not less than the distances shown for "Separation of Magazines", except that the quantity of explosives contained in cap magazines shall govern in regard to the spacing of said cap magazines from magazines containing other explosives. If any 2 or more magazines are separated from each other by less than the specified "Separation of Magazines" distances, then such 2 or more magazines, as a group, must be considered as one magazine, and the total quantity of explosives stored in such group must be treated as if stored in a single magazine located on the site of any magazine of the group, and must comply with the minimum distances specified from other magazines, inhabited buildings, railways and highways.

Note 6. The permanent storage of more than 300,000 pounds of commercial explosives in one magazine or in a group of magazines which is considered as one magazine is not permitted except by specific approval of the Director.

Note 7. This Table applies only to the manufacture and permanent storage of commercial explosives. It is not applicable to transportation of explosives or any handling or temporary storage necessary or incident thereto. It is not intended to apply to bombs, projectiles, or other heavily encased explosives. For storage in connection with transportation, see Section 711.180.

Note 8. All types of blasting caps in strengths through No. 8 cap shall be rated at 1½ pounds of explosives per 1,000 caps. For strength higher than No. 8 cap, consult the Director.

Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Date: April 24, 2020

CC Date: May 4, 2020

RE: **Chesterfield Presbyterian Church Sign Package:** A request for a Sign Package consisting of an Electronic Message Center for a 12.44-acre tract of land located on the north side of Clayton Road, west of Baxter Road (21S620485).

Summary

Chesterfield Presbyterian Church, in partnership with Landmark Sign USA, is requesting a Sign Package including an Electronic Message Center (EMC) for the Chesterfield Presbyterian Church subdivision. In accordance with the Unified Development Code (UDC), a Sign Package must be submitted for proposed EMC signage requests. If approved, the proposed Comprehensive Sign Package would serve as the site-specific regulations pertaining to signage throughout this development.

This Sign Package is being requested to convert one (1) existing V-shaped free-standing sign on the southern boundary along Clayton Rd. from a static sign display to an Electronic Message Center (EMC). In addition, this sign package also inventories the existing signage throughout the site.

Planning Commission recommended approval of the request on April 13, 2020 by a vote of 9-0. Power of Review was called in accordance with Section 31-02-20 of the Unified Development Code on April 15, 2020.

On April 23, 2020, Planning and Public Works Committee recommended the project for approval by a vote of 4-0 with the condition that the sign message be allowed to change a maximum of twice in a 24-hour period.

Attached to this report please find a copy of the Planning Commission Staff Report and the Sign Package. Additionally, staff has attached minutes from discussions about recent EMC proposals for Edison Express (Monarch Center), Midwest Bank (Chesterfield Village Mall), Brite Worx, and The District.

Figure 1: Subject Site Aerial

Attachments: Planning Commission Staff Report
Chesterfield Presbyterian Sign Package
Planning Commission Meeting Minutes 11-14-2016 (Edison Express)
Edison Express Approved Sign Package
Planning Commission Meeting Minutes 10-09-17 (Chesterfield Village Mall)
Planning Commission Meeting Minutes 03-25-19 (Brite Worx)
Planning Commission Meeting Minutes 10-16-19 (The District)

VII.A.

690 Chesterfield Pkwy W ● Chesterfield MO 63017-0760
Phone: 636-537-4000 ● Fax 636-537-4798 ● www.chesterfield.mo.us

Planning Commission Staff Report

Project Type: Sign Package

Meeting Date: March 23, 2020

From: Chris Dietz, Planner

Location: 15037 Clayton Road

Applicant: Chesterfield Presbyterian Church

Description: **Chesterfield Presbyterian Church Sign Package:** A request for a Sign Package consisting of an Electronic Message Center for a 12.44-acre tract of land located on the north side of Clayton Road., west of Baxter Road (21S620485).

PROPOSAL SUMMARY

Chesterfield Presbyterian Church, in partnership with Landmark Sign USA, has submitted a request for a Sign Package including an Electronic Message Center (EMC) for the Chesterfield Presbyterian Church subdivision. In accordance with the Unified Development Code (UDC), a Sign Package must be submitted for proposed EMC signage requests. If approved, the proposed Comprehensive Sign Package would serve as the site-specific regulations pertaining to signage throughout this development.

Figure 1. Aerial of Subject Site

This Sign Package is being requested to convert one (1) existing V-shaped free-standing sign on the southern boundary along Clayton Rd. from a static sign display to an Electronic Message Center (EMC). In addition, this sign package also inventories the existing signage throughout the site.

HISTORY

The church building on the subject site was constructed prior to City incorporation. The Site Plan has been amended and approved four (4) times since 2000, primarily consisting of parking lot and building additions. Each of the previously approved Amended Site Plans show the freestanding sign location as it is today. A second freestanding sign for the New Hope Counseling Service building is located on the west end of the site. This sign existed prior to a Boundary Adjustment Plat in 2002 when the site on which it is located was part of a different development. This sign was later included on a Partial Amended Site Development Plan that was approved in 2009.

In 2013, a previous sign permit application requesting a freestanding electronic messaging center was rejected due to EMCs being prohibited. The existing "V-shape" freestanding sign was introduced on the most recent Amended Site Plan (2014) to replace the older double-sided sign that stood at the current location. The full Amended Site Plan is enclosed in the applicant's Sign Package submittal packet.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

The subject site is located along the north side of Clayton Rd, which serves as the City Limit boundary between Chesterfield and Ballwin to the south. The land use that surround the subject site is predominantly single-family residential, with the exception of an adjacent church to the west of this property and another church, located to the south, across the street from this development.

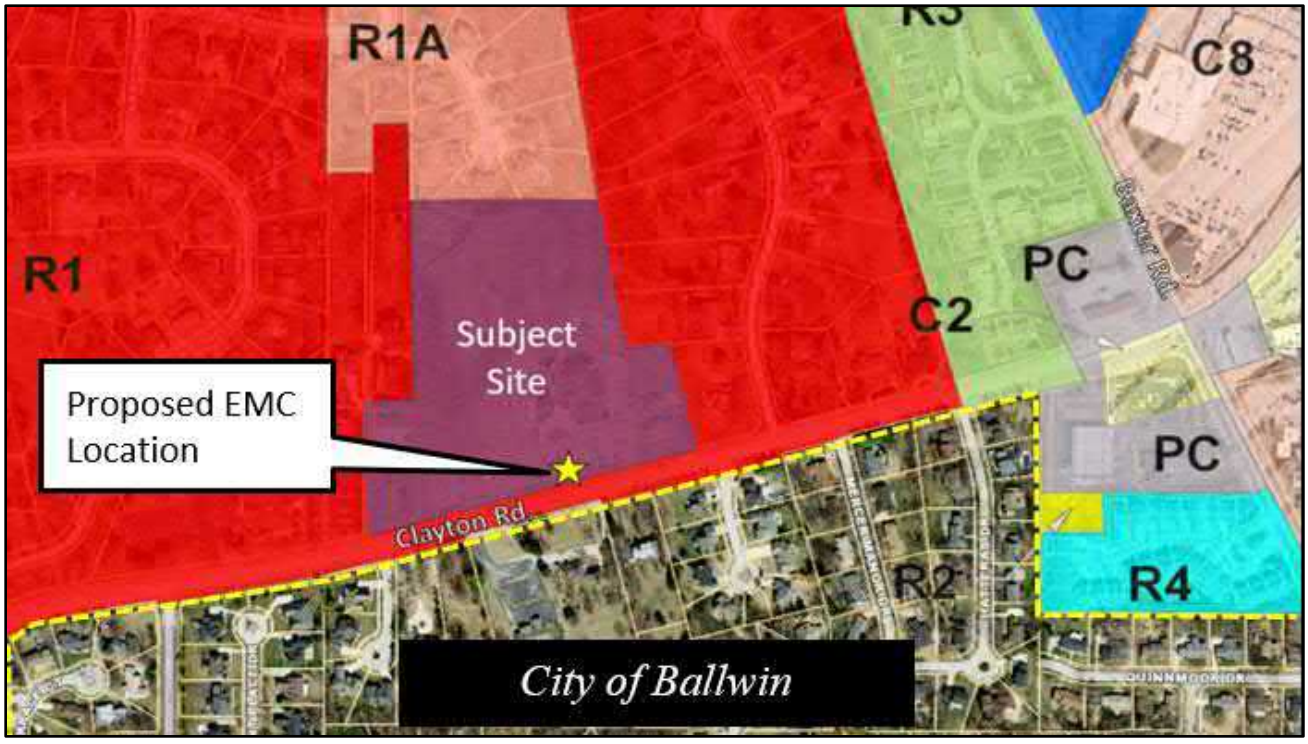


Figure 2: Zoning Map

The land uses and zoning for surrounding properties of this development are described as follows:

Direction	Zoning	Land Use
North	R1A – Residential District	Single-Family Residential
East	R1-Residential District	Single-Family Residential
West	R1- Residential District	Church / Single-Family Residential
South	(City of Ballwin)	Church / Single-Family Residential

COMPREHENSIVE PLAN ANALYSIS

There is one specific Plan Policy pertaining to signage that has been adopted as part of the Comprehensive Plan, as follows:

Plan Policy 3.4.1: Preserve Aesthetics and Public Safety - To preserve the high aesthetic quality and public safety interests along the Corridor and other major highways/roads, signs of ever-increasing size, brightness and garishness should be prohibited.

STAFF ANALYSIS

UDC Freestanding Monument Sign Regulations

The proposed sign in this request complies with UDC sign regulations for free-standing signs, which state that each developed lot may have no more than one (1) freestanding sign facing each roadway on which the lot has frontage. The height of these signs shall not exceed six (6) feet in height when located within the minimum front yard setback of a particular zoning district. However, EMCs require a sign package to be submitted for approval by Planning Commission.

Sign Packages

The purpose of a Sign Package, which serves as the mechanism for allowing modifications to the UDC sign regulations, is to provide comprehensive, complementary, and unified signage throughout a development. The UDC states that "in order to encourage superior design, quality and character, comprehensive sign packages allow for specialized review of signs and flexibility from standard signage requirements."

The UDC includes the following review factors that are to be considered by the Planning Commission when discussing the appropriateness of any requested sign package:

1. The physical impact of the proposed comprehensive sign package;
2. The quality of the proposed comprehensive sign package; and
3. Mitigation of unfavorable conditions such as excessive signs, light spillover from signs, height, and other related conditions and potentially negative impacts.

Electronic Messaging Centers

In addition to general sign package criteria, the regulations pertaining specifically to Electronic Messaging Centers are described in UDC Section 31-04-05 D.5, as listed in the table below.

UDC Electronic Message Center Requirements	**Proposed Sign Package Compliance**
Images shall have a minimum duration of 10 seconds while being displayed.	Applicant has stated that sign can be set/ controlled with manufacturer's software program to comply with this code requirement.
Image shall be static display, with no motion, blinking, scrolling, color change or special effects.	Applicant has stated that static image requirements can be set/ controlled easily with manufacturer's software program to comply with this code requirement.
The transition between displays shall be instantaneous re-pixelization.	Applicant has stated that transition requirements can be set/ controlled easily with manufacturer's software program to comply with this code requirement.
EMCs shall be equipped with automatic dimmer control according to ambient light and time of day.	Applicant has stated that a photocell will be installed to determine when ambient light conditions change, and that the sign's internal software also features a mechanism to adjust brightness based on geolocation and timing of sunrise and sunset.
EMCs shall not exceed brightness of 7,000 NITs. **NIT: Unit of light intensity used to measure brightness.*	Applicant has stated that the limit of brightness will be 6,500 NITs.
No portion of the EMC may flash, strobe or fluctuate in brightness.	Applicant has stated that fluctuation and flashing illumination will be controlled easily with manufacturer's software program to comply with this code requirement.
In case of malfunction, EMCs are required to contain a default design to freeze message in one position.	Applicant has stated that this EMC requirement will be managed with the programming available from the manufacturer.
EMCs shall not have a resolution with a pixel pitch larger than 16 mm.	Applicant has stated that the resolution for this EMC will be between 6.67mm – 10mm, meeting this requirement.
V-shaped EMC signs must display the same image on both sign faces.	Applicant has stated that both sides will display the same messaging simultaneously.

Please find these requirements along with the Applicant's response to each item enclosed in the Planning Commission packet.

Additional Planning Commission Review Criteria

In addition to the criteria listed above, Planning Commission shall consider the following additional items as they pertain to the City of Chesterfield's EMC requirements:

1) Proximity of the proposed electronic message center to other similar signs.

This church across Clayton Rd. is located in Ballwin and has an existing EMC facing the road. If approved, the proposed EMC would be roughly 255 feet from the existing EMC for the church located across the street in Ballwin, shown in Figures 3 and 4:

Figure 3: Westward View of both EMCs

2) Proximity and impact on adjacent land uses with particular consideration given to residential properties and uses.

The proposed sign would be visible when traveling both eastbound and westbound along Clayton Rd. and would be only partially visible from the residential development across the street.

3) Impact of the total amount of signage on the site in conjunction with the use of the electronic message center.

The location of the proposed EMC has a freestanding sign that measures 40 square feet in area. The proposed EMC will be slightly smaller with an area 39.23 square feet, and will utilize the existing sign base of the existing sign. The site has a combination of freestanding business identification signs as well as incidental signs found within the site. Figure 5 below shows the location of all signage for the property. There are currently four (4) freestanding signs along Clayton Rd. This includes the V-shaped sign ("B"-shown below) that serves as the main identification sign for the church to be replaced with an EMC, and a freestanding sign that identifies a counseling service building on the west end of the site ("A"). Both signs have City-approved sign permits allowing them.

There are also two additional freestanding signs located along Clayton Rd. ("C" and "D") that are not City-approved. The applicant has stated that these signs will be removed following approval of this Sign Package, since information from these signs can be consolidated into the proposed EMC sign. All other signs shown below are incidental in nature. Please find a complete list of these signs and their dimensions in the Planning Commission packet.

Figure 5: Existing Free-standing Signage Locations

This request entails one (1) existing V-shaped freestanding business sign along Clayton Rd. to be replaced with a V-shaped LED EMC that will utilize the existing brick sign base. The sign area of the proposed EMC would be slightly smaller than the existing sign, at 39.69 square feet, but would be able to display more content through digital programming. The maximum illumination for this sign will be 7,000 NITs. This is the only change on site in the proposed comprehensive Sign Package for this development.

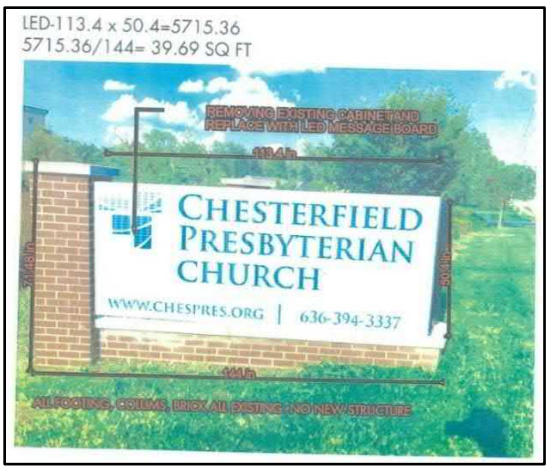


Figure 6: Proposed Free-standing EMC

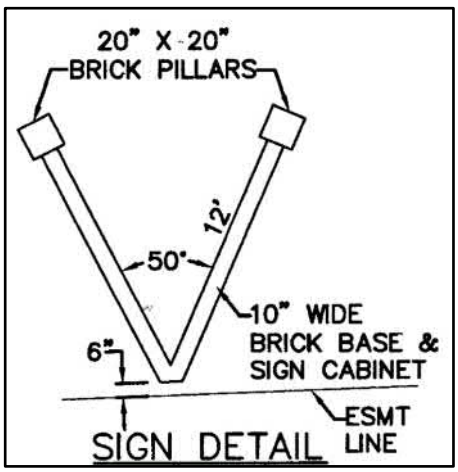


Figure 7: Existing Free-standing Sign Detail

4) Nature and character of the roadway on which the project is located.

Clayton Rd. is classified as a major arterial roadway with two lanes and median/turn lane in between and a speed limit of 40 miles-per-hour. There are multiple signs along this corridor, including an EMC sign for another church across the street, shown below:

Figure 8: Existing Free-standing Sign Detail

5) Nature and character of the proposed use and the area within which the project is located.

The proposed EMC sign is intended to serve as the primary advertising mechanism for an existing church along an arterial roadway.

6) Size of the project and roadway frontage.

The church is located on a site that is 12.44 acres in size with other buildings located within it. In total, the subject site has roughly 930 linear feet of roadway frontage.

7) **Resolution of proposed sign accounting for size of sign, roadway characteristics, and other relevant features.**

The proposed EMC sign will be slightly smaller than what is currently there today and will have a resolution that fulfills and surpasses requirements, with a pixel pitch of 6.67mm to 10.00mm. Sign Package requirements state that the maximum cannot be more than 15mm, effectively complying with this standard. This EMC will be viable from both east- and westbound traffic along Clayton Rd., which has a three-lane section along this corridor with a speed limit of 40 miles-per-hour. Below is a view looking west along the corridor.

Figure 9: Clayton Rd.

These requirements can be found in their entirety within the Attachment A of Ordinance 3060.

RECOMMENDATION

Staff has reviewed the proposed Sign Package for the Chesterfield Presbyterian Church subdivision and all required items have been submitted. Staff recommends that the Planning Commission take action on this request. Please find the applicant's Sign Package submittal packet attached.

MOTION

The following options are provided to the Planning Commission for consideration relative to this application:

1) "I move to approve (or deny) the Sign Package for Chesterfield Presbyterian Church."

2) "I move to approve the Sign Package for Chesterfield Presbyterian Church with the following conditions…" (Conditions may be added, eliminated, altered or modified)

Attachments: Sign Package Submittal

February 18, 2020

RECEIVED
FEB 24 2020
City of Chesterfield-Department of Planning

City of Chesterfield
690 Chesterfield Parkway West
Chesterfield, MO 63017

Re: Monument Sign Submittal
Electronic Message Center Narrative

This Sign Package Submittal is being made specifically to replace the existing monument sign of Chesterfield Presbyterian Church that fronts Clayton Road, which was previously approved by the City with MZA 140603 in July 2014. The current V-shaped back-lighted static sign panels are 48"h x 120"w and would be replaced with new electronic message centers, which are slightly smaller at 50"h x 113"w. This improved technology would allow the church to more specifically and succinctly communicate the various services and activities available to the community within the surrounding development and neighborhoods. Examples of services currently provided and/or hosted by the organization to the surrounding community include:

a) Counselor-led groups for people needing help in different areas of life (grief, divorce, caring for children with special needs, and other identified areas of need)
b) Large and small group meetings for outside organizations (such as addiction groups, health-related groups, and conferences)
c) Community outreach gatherings open to the public, such as outdoor picnics, festivals and concerts
d) Educational opportunities available to the community:
    - Adult education classes
    - Preschool classes and activities
    - Homeschool classes and activities
e) Athletic events available for children and adults, such as baseball, softball, soccer and other field sports held on the church campus

The replacement sign will give Chesterfield Presbyterian Church the opportunity to communicate these community opportunities with clarity, brevity and accuracy, which will add value to the surrounding neighborhoods and community.

We have attached to this letter specific responses regarding how this submittal complies with the requirements of City Ordinance 3060, Attachment A, Section D.5.a. Please contact us with any additional questions or comments regarding these submittal documents.

Sincerely,

CHESTERFIELD PRESBYTERIAN CHURCH

Kent Whitaker
Director of Service

Electronic Message Centers.

a. In addition to submittal requirements noted in sub -section 4., any request for an electronic message center shall comply with the following:

1) Distance. Electronic message centers that exceed the size requirements eligible for administrative approval per the Unified Development Code UDC) for permanent freestanding signs shall not be permitted within 2,000 feet of any property with a land use designation that permits residential uses as determined by the Comprehensive Land Use Plan.
This submittal does not exceed the ordinance size requirement

2) Distance. Electronic message centers that exceed the size requirements eligible for administrative approval per the Unified Development Code UDC) for permanent freestanding signs shall not be permitted within 1, 000 feet from the center point of two intersecting arterial roadways as designated within the City of Chesterfield Street Classification Map.
This submittal does not exceed the ordinance size requirement

3) Duration of image display. Each image displayed shall have a minimum duration of ten (10) seconds.
This can easily be set/controlled to comply with the ordinance requirements with the sign manufacturers software program

4) Presentation. The image shall be a static display. No portion of the image shall flash, scintillate, fade in or fade out, scroll, twirl, change color, or in any manner imitate movement. No motion imagery, special effect to imitate movement, or presentation of graphics displayed in a progression of frames that give the illusion of motion shall be permitted.
Static image requirements of the ordinance will be controlled easily with the programming provided in the manufacturers software.

5) Transition. When the image or any portion thereof changes, the change sequence shall only be accomplished by means of instantaneous repixelization.
Image change requirements of the ordinance will be controlled easily with the programming provided in the manufacturers software.

6) Dimmer control. The electronic message center shall be equipped with an automatic dimmer control to automatically produce a distinct illumination change from a higher illumination level to a lower level according to ambient light conditions and for the time period between sundown and sunrise.
This ordinance requirement will be managed with the installation of a photocell that will determine when ambient light conditions change. In addition the programming has the ability to control when the illumination level will change, because there is also a geolocation feature built in, which will automatically adjust based upon sunup and sundown every day.

7) Brightness. The electronic message center shall not exceed a maximum of seven thousand (7,000) nits (candelas per square meter) during daylight hours and a maximum illumination of six hundred (600) nits candelas per square meter) between sundown and sunrise measured from the sign's face at maximum brightness.
This ordinance requirement will be met with factory settings by the manufacturer and can be monitored ny the user as well.

8) Fluctuating or flashing illumination. No portion of the electronic message center may fluctuate in light intensity or use intermittent, strobe or moving light or light that changes in intensity in sudden transitory bursts, streams, zooms, twinkles, sparkles or that in any manner creates the illusion of movement.
Fluctuating or flashing image requirements of the ordinance will be controlled easily with the programming provided in the manufacturers software.

9) Malfunction and noncompliance. In the case of malfunction, digitally - illuminated signs are required to contain a default design to freeze the sign message in one position.
This requirement will be managed with programming available from the manufacturer

10) Resolution and pixel spacing. The electronic message center shall not have a pixel pitch larger than sixteen (16) millimeters (mm).
This ordinance requirement is met or exceeded because the electronic message centers proposed are up to 6.67mm resolution and not less than 10mm resolution, far more clear and crisp than required.

11) Angle. When the interior angle formed by the faces of a V- shaped sign is less than one hundred eighty (180) degrees, both faces of the sign must display the same image.
This ordinance requirement is met or exceeded because the sign is manufactured as a master-slave, so both panels will display the identical image at the same time.

LED-113.4 x 50.4=5715.36
5715.36/144= 39.69 SQ FT

RECEIVED
FEB 24 2020
City of Chesterfield-Department of Planning

A
60" X 92"

B
48" x 120"

C
36" x 96"

D
36" x 96"

E
24" x 36"

F
24" x 36"

G
24" x 36"

H
24" x 36"

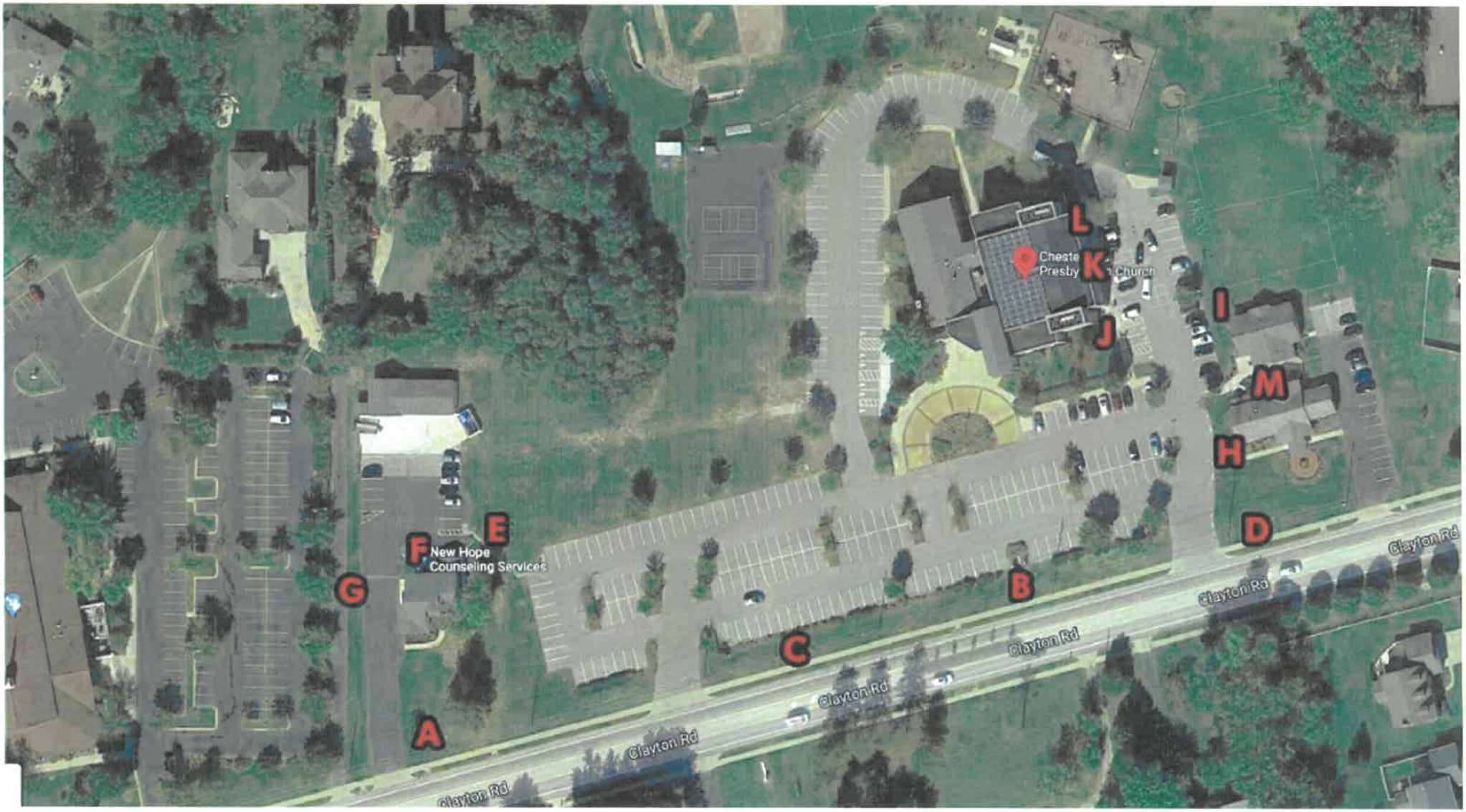
I
24" x 36"

J
24" x 36"

K
24" x 36"

L
24" x 36"

M
24" x 36"

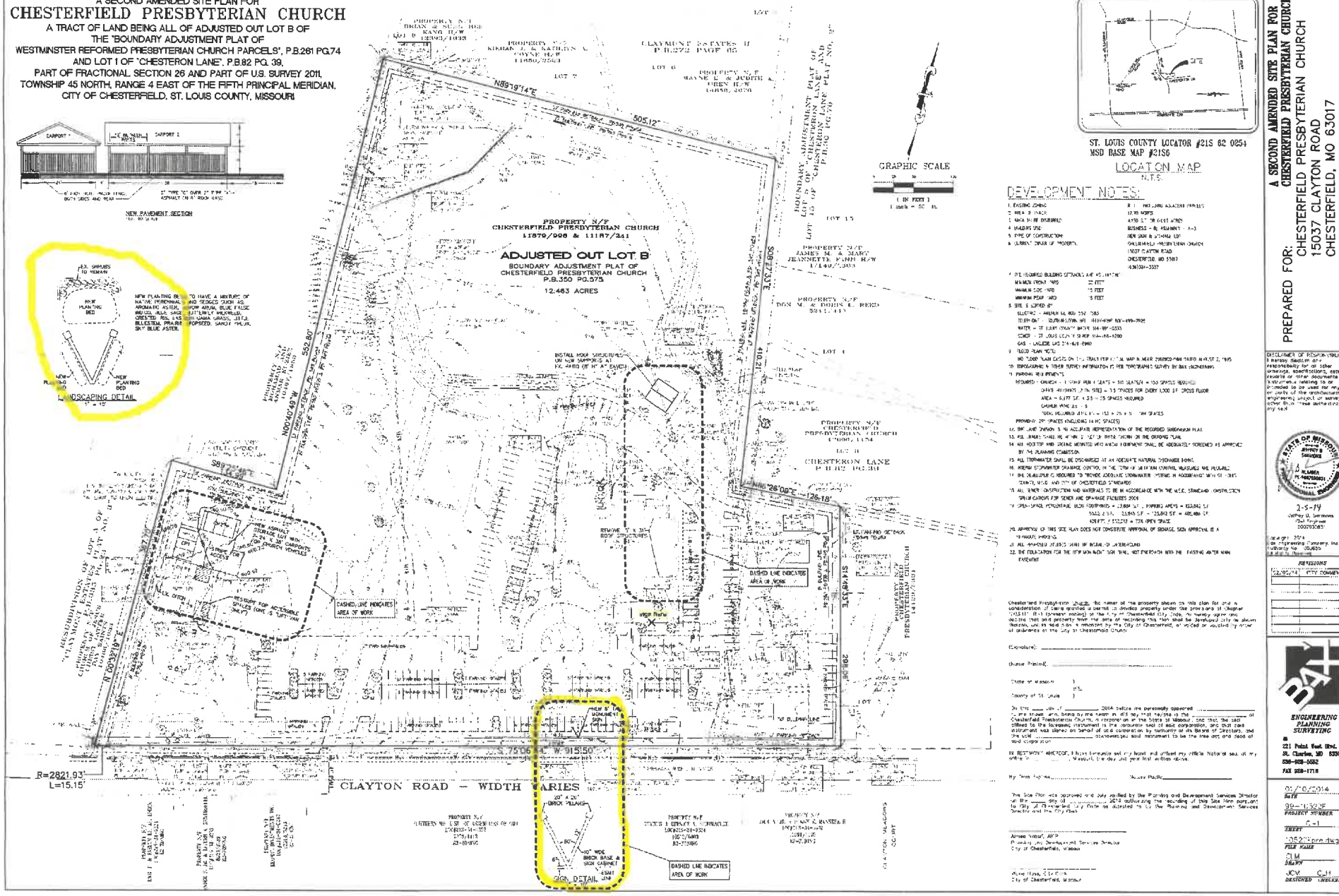

A
B
C
D
E
F
G
H
I
J
K
L
M
New Hope
Counseling Services
Clayton Rd
Clayton Rd
Clayton Rd
Clayton Rd
Clayton Rd

CHESTERFIELD
PRESBYTERIAN
CHURCH
WWW.CHESPRES.ORG | 636-394-3337

A SECOND AMENDED SITE PLAN FOR

CHESTERFIELD PRESBYTERIAN CHURCH

A TRACT OF LAND BEING ALL OF ADJUSTED OUT LOT B OF
THE "BOUNDARY ADJUSTMENT PLAT OF
WESTMINSTER REFORMED PRESBYTERIAN CHURCH PARCELS", P.B.261 PG.74
AND LOT 1 OF "CHESTERON LANE", P.B.82 PG. 39,
PART OF FRACTIONAL SECTION 26 AND PART OF U.S. SURVEY 2011,
TOWNSHIP 45 NORTH, RANGE 4 EAST OF THE FIFTH PRINCIPAL MERIDIAN,
CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI



ST. LOUIS COUNTY LOCATOR #21S 62 0254
MSD BASE MAP #218G

LOCATION MAP
N.T.S.

DEVELOPMENT NOTES:

1. EXISTING ZONING: R-1 ONE UNIT RESIDENCE DISTRICT
2. AREA IN ACRES: 12.463 ACRES
3. AREA TO BE DISTURBED: 4.150 SF OR 0.095 ACRES
4. BUILDING USE: BUSINESS - B; ASSEMBLY - A-3
5. TYPE OF CONSTRUCTION: NON SPRINKLERED
6. CURRENT OWNER OF PROPERTY: CHESTERFIELD PRESBYTERIAN CHURCH
   15037 CLAYTON ROAD
   CHESTERFIELD, MO 63017
   636-394-3337

7. PRE-ASSIGNED BUILDING SETBACKS AND RESTRICTIONS:
   MINIMUM FRONT YARD: 30 FEET
   MINIMUM SIDE YARD: 15 FEET
   MINIMUM REAR YARD: 35 FEET
8. SITE IS SERVED BY:
   ELECTRIC - AMEREN UE 800-552-7583
   TELEPHONE - SOUTHWESTERN BELL 800-246-8355 OR 636-498-7000
   WATER - ST LOUIS COUNTY WATER 314-991-3333
   SEWER - ST. LOUIS COUNTY SEWER 314-768-4200
   GAS - LACLEDE GAS 314-621-6960
9. FLOOD PLAIN NOTE:
   NO FLOOD PLAIN EXISTS ON THIS TRACT PER FIRM MAP NUMBER 29189C0045G DATED AUGUST 2, 1995
10. TOPOGRAPHIC & OTHER SURVEY INFORMATION IS PER TOPOGRAPHIC SURVEY BY BAX ENGINEERING
11. PARKING REQUIREMENTS:
    REQUIRED - CHURCH - 1 SPACE PER 4 SEATS = 301 SEATS/4 = 150 SPACES REQUIRED
    OFFICE ASSEMBLY 2 PER 1000 = 3.5 SPACES FOR EVERY 1,000 SF GROSS FLOOR AREA = 6,377 SF x 3.5 = 25 SPACES REQUIRED
    CARWASH VANE #1 - 5
    TOTAL REQUIRED SPACES = 150 + 25 + 5 = 180 SPACES
    PROVIDED: 291 SPACES (INCLUDING 14 HC SPACES)
12. THE LAND SHOWN IS AN ACCURATE REPRESENTATION OF THE RECORDED SUBDIVISION PLAT.
13. ALL HUMUS SHALL BE WITHIN 2' VERT. OF BASE SHOWN ON THE GRADING PLAN.
14. ALL ROOFTOP AND GROUND MOUNTED MECHANICAL EQUIPMENT SHALL BE ADEQUATELY SCREENED AS APPROVED BY THE PLANNING COMMISSION.
15. ALL STORMWATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT.
16. ADEQUATE STORMWATER DRAINAGE CONTROL IN THE FORM OF SEDIMENT CONTROL MEASURES ARE REQUIRED.
17. THE DEVELOPER IS REQUIRED TO PROVIDE ADEQUATE STORMWATER SYSTEMS IN ACCORDANCE WITH ST. LOUIS COUNTY, MSD, AND CITY OF CHESTERFIELD STANDARDS.
18. ALL SEWER CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH THE M.S.D. STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER AND DRAINAGE FACILITIES 2004.
19. OPEN SPACE PERCENTAGE (BLDG FOOTPRINTS = 2,884 SF ; PAVING AREAS = 153,842 SF
    9522 SF - 23,845 SF = 123,842 SF = 48,486 SF
    428 PTS. / 552,218 = 78% OPEN SPACE
20. APPROVAL OF THIS SITE PLAN DOES NOT CONSTITUTE APPROVAL OF SIGNAGE. SIGN APPROVAL IS A SEPARATE PROCESS.
21. ALL APPROVED UTILITIES SHALL BE INSTALLED UNDERGROUND.
22. THE FOUNDATION FOR THE NEW MONUMENT SIGN SHALL NOT ENCROACH INTO THE EXISTING WATER MAIN EASEMENT.

Chesterfield Presbyterian Church, the owner of the property shown on this plan for and in consideration of being granted a permit or privilege property under the provisions of Chapter 1003.111 (R-1 Ordinance number) of the City of Chesterfield City Code, do hereby agree and declare that said property from the date of recording this Plan shall be developed only as shown thereon, and as may be modified or amended by the City of Chesterfield, or vacated or vacated by order of ordinances of the City of Chesterfield Council.

(Signature): _____

(Name Printed): _____

State of Missouri)
) SS.
County of St. Louis)

On this ____ day of _____, 2014 before me personally appeared _____ to me known, who, being by me sworn in did say that he/she is the _____ of Chesterfield Presbyterian Church, a corporation in the State of Missouri, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said _____ acknowledged said instrument to be the free act and deed of said corporation.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official Notarial seal at my office in _____, Missouri, the day and year first written above.

My Term Expires: _____ Notary Public: _____

This Site Plan was approved and duly verified by the Planning and Development Services Director on the ____ day of _____, 2014 authorizing the recording of this Site Plan pursuant to City of Chesterfield City Code as delegated to it by the Planning and Development Services Director and the City Clerk.

_____
Aimee Nassif, AICP
Planning and Development Services Director
City of Chesterfield, Missouri

_____
Vickie Hass, City Clerk
City of Chesterfield, Missouri

A SECOND AMENDED SITE PLAN FOR CHESTERFIELD PRESBYTERIAN CHURCH

PREPARED FOR:
CHESTERFIELD PRESBYTERIAN CHURCH
15037 CLAYTON ROAD
CHESTERFIELD, MO 63017
636-394-3337

DISCLAIMER OF RESPONSIBILITY
It hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or prepared to be used for any part or parts of the architectural or engineering project of survey other than those authenticated by my seal.

STATE OF MISSOURI
JEFFREY W. SEVERNES
NUMBER PE-2009018651
PROFESSIONAL ENGINEER

1-5-14
Jeffrey W. Severnes
Civil Engineer
2009018651

Copyright 2014
Bax Engineering Company, Inc
Authority No. 000835
All rights reserved

REVISIONS
12/05/14 | PTY COMMENTS

BAX
ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-0552
FAX 928-1718

01/10/2014
DATE
99-15302F
PROJECT NUMBER
C-1
SHEET
-3527-pre.dwg
FILE NAME
CLM
DRAWN
JCV CLM
DESIGNED CHECKED

VII. SITE PLANS, BUILDING ELEVATIONS AND PLATS

A. **Arbors at Wilmas Farm (Record Plat 1)**: A Record Plat for a 39.88 acre tract of land zoned "PUD" Planned Unit Development District located on the south side of Wild Horse Creek Road west of its intersection of Long Road and east of its intersection with Arbor Grove Court.

Commissioner Hansen, representing the Site Plan Committee, made a motion recommending approval of the Record Plat for Arbors at Wilmas Farm (Record Plat 1). The motion was seconded by Commissioner Wuennenberg and **passed by a voice vote of 9 to 0**.

B. **Arbors at Wilmas Farm (Record Plat 2)**: A Record Plat for a 10.64 acre tract of land zoned "PUD" Planned Unit Development District located on the south side of Wild Horse Creek Road west of its intersection of Long Road and east of its intersection with Arbor Grove Court.

Commissioner Hansen, representing the Site Plan Committee, made a motion recommending approval of the Record Plat for Arbors at Wilmas Farm (Record Plat 2). The motion was seconded by Commissioner Midgley and **passed by a voice vote of 9 to 0**.

C. **Hampton Inn Chesterfield Lodging (AAE)**: Amended Architectural Elevations and Architect's Statement of Design for a 1.92 acre tract of land zoned "C-8" Planned Commercial District located on the north side of Swingley Ridge Rd., west of Nardin Dr.

Commissioner Hansen, representing the Site Plan Committee, made a motion recommending approval of the Amended Architectural Elevations, as presented, for Hampton Inn Chesterfield Lodging. The motion was seconded by Commissioner Midgley and **passed by a voice vote of 9 to 0**.

D. **Harmony Seven (Record Plat)**: A Record Plat for a 2.75 acre tract of land zoned "R2" Residential District located on the south side of Olive Boulevard and west of its intersection with Stablestone Drive.

Commissioner Hansen, representing the Site Plan Committee, made a motion recommending approval of the Record Plat for Harmony Seven. The motion was seconded by Commissioner Geckeler and **passed by a voice vote of 9 to 0**.

E. **Monarch Center, Sign Package**: A request for a Sign Package to establish sign criteria for the Monarch Center development located north of Edison Avenue and east of Long Road.

Commissioner Hansen, representing the Site Plan Committee, made a motion to postpone the vote on the monument signs until a later date. The motion was seconded by Commissioner Wuennenberg and **passed by a voice vote of 9 to 0.**

Commissioner Hansen, representing the Site Plan Committee, made a motion to approve the LED gas grades with three LED changeable copy areas, each 1.6 square feet in area, prohibiting rolling, scrolling, flashing, animated or otherwise intermittently-lit characters. The motion was seconded by Commissioner Lueking and **passed by a voice vote of 9 to 0.**

Commissioner Hansen, representing the Site Plan Committee, made a motion to approve three free-standing drive-thru menu boards, as presented, with two menu boards at 26.7 square feet each, and one menu board at 12 square feet. The motion was seconded by Commissioner Wuennenberg and **passed by a voice vote of 9 to 0.**

Commissioner Hansen, representing the Site Plan Committee, made a motion to approve four double-faced directional signs, as presented, with three signs at 3'6" in height and 6 square feet in area; and one sign at 5'6" in height and 12 square feet in area. The motion was seconded by Commissioner Midgley and **passed by a voice vote of 8 to 1** with Commissioner Lueking voting "no".

VIII. UNFINISHED BUSINESS - None

IX. NEW BUSINESS - None

X. COMMITTEE REPORTS - None

XI. ADJOURNMENT

The meeting adjourned at 8:02 p.m.

_____

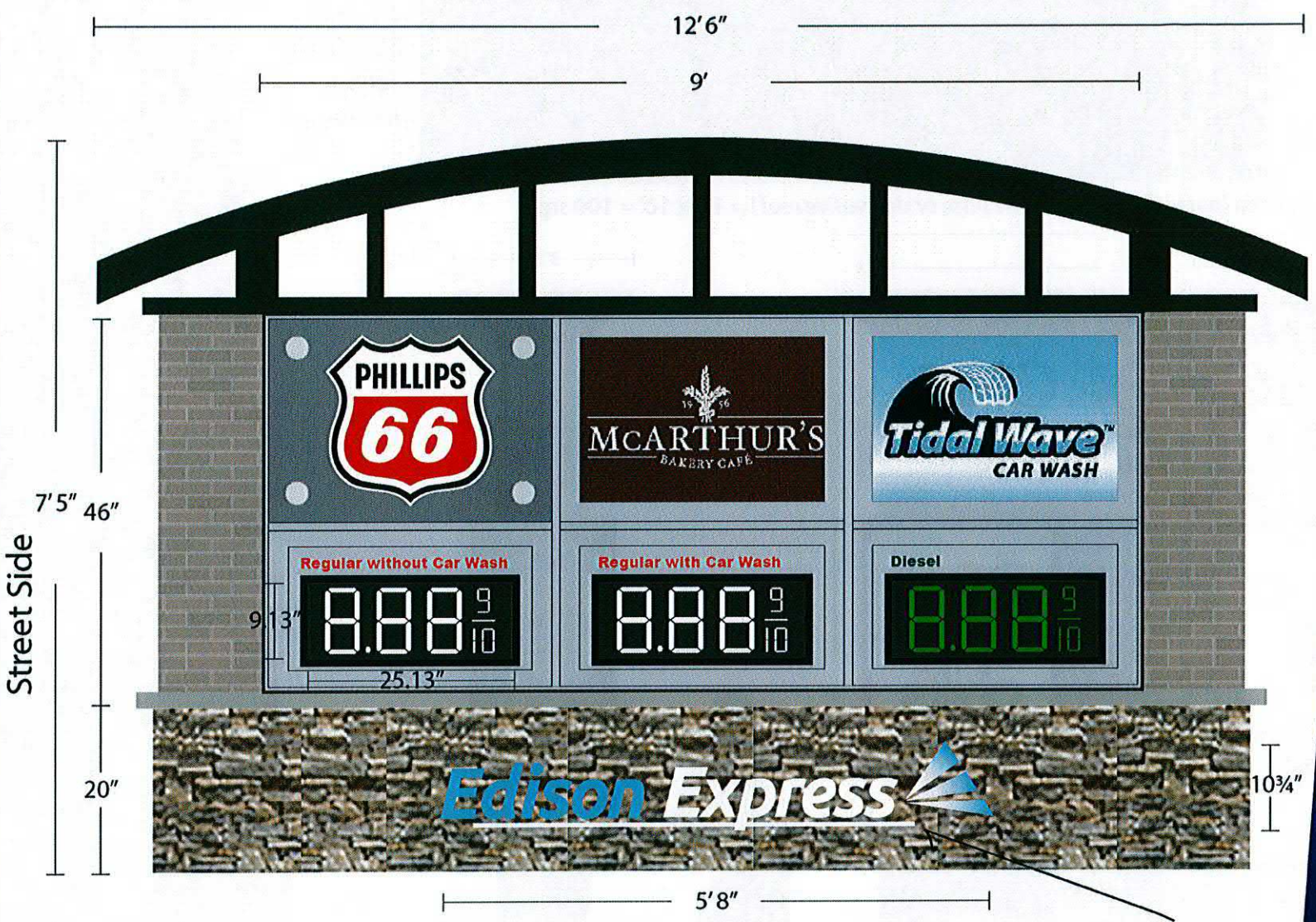
Steve Wuennenberg, Secretary

MONARCH CENTER DEVIATIONS MATRIX

Site Map Numbers	UDC 31-04-05	Summary
Site Map #1 Monarch Center Monument Sign West Entrance Identification/Tenant Sign 143 sq. ft. *(100 sq.ft. w/o base and roof)* 13' tall	F-2-b-2-a-2	The UDC Code states that *"The maximum outline area and/or height of any freestanding business sign may be increased to a maximum of one hundred (100) square feet..."* We are requesting to deviate from this limit by 7 feet in height and 43 square feet in sign area. This center will have up to 15+ tenants. Monarch Center requires a tenant sign that can be easily read by local traffic and to clearly display these tenants. The UDC code regulations are not sufficient to achieve this goal at this particular location. The sign was designed with the appropriate proportions to accomplish identifying these businesses and the overall development. It complements the building with matching stone base and dryvit on the background of the sign. The stone base and decorative roof are included in the calculation of this sign.
Site Map #2 Edison Express Monument Sign 93 sq. ft. 7' 5" tall	F-2-b-2-a-2 F-2-c F-5-g	The UDC Code states that *"A service station shall be permitted one (1) separate price sign attached to the same structure of any one (1) permitted freestanding business sign" (F-2-c)* We are asking for a height of five inches over the regulations and 43 square feet over the required sign area. This sign is in addition to two main tenant monument signs. This is further in the lot and will direct and identify the Edison Express station along with its own specific tenants. This sign is there to help direct traffic to their desired destination. The stone base and decorative roof are included in the calculation of this sign. According to the UDC, *"No flashing, intermittent, or moving light or lights shall be allowed."* (F-5-g) We are asking for LED illuminated gas grades for ease of changing gas prices from inside the station, to improve clarity and create higher visibility. Theses signs do not flash nor are they intermittent or moving. They are identical to lighted changeable copy letters/numbers, except one is changed manually outdoors and one is changed by a push of a button indoors. There are more worker injury issues with manual changeable copy, especially in inclement weather, than with LED price signs.
Site Map #3 Monarch Center Monument Sign South Entrance Identification/Tenant Sign 143 sq. ft. *(100 sq.ft. w/o base and roof)* 13' tall	F-2-b-2-a-2	This sign is identical to Site Map #1. The UDC Code states that *"The maximum outline area and/or height of any freestanding business sign may be increased to a maximum of one hundred (100) square feet..."* We are requesting to deviate from this limit by 7 feet in height and 43 square feet in sign area. This center will have up to 15+ tenants. Monarch Center requires a tenant sign that can be easily read by local traffic and to clearly display these tenants. The UDC code regulations are not sufficient to achieve this goal at this particular location. The sign was designed with the appropriate proportions to accomplish identifying these businesses and the overall development. It complements the building with matching stone base and dryvit on the background of the sign. The stone base and decorative roof are included in the calculation of this sign.

**The digital visible opening of each LED price panel is 9.13" high x 25.13" wide. Each number is 8" high.*

Site Map #2
(FH Alt)



Qty (1)

Two-sided Illuminated Monument Tenant Sign

- *Extruded aluminum roof construction*
- *LED internal illumination*
- *Flat acrylic faces with vinyl graphics*
- *LED Gas price signs (8" High LED numbers)*
- *Non-illuminated flat cut acrylic letters*
- *Brick & Stone base*
- *UL Listed with lockable disconect switch*

Monarch Center Sign Package

Bill Yount Signs and Electric

2002 Woodson Rd., St. Louis, MO 63114
(314) 423-2933 *ph* (314) 423-8056 *fax*
www.BillYountSigns.com

This print and design is exclusive property of Bill Yount Signs & Electric. Any unauthorized use or duplication will result in a 20% charge per occurrence per the value of the display.

VI. PUBLIC COMMENT

~~Mr. Matt Surdyke, Petitioner for **P.Z. 07-2017 Chesterfield Valley Motor Sports** 17501 N. Outer 40 Road, Chesterfield, MO.~~

~~Mr. Surdyke stated that the request is for: (1) an outdoor storage area for overnight storage within a privacy-fenced area on the back side of the site; and (2) the ability to display their products within the requested display areas without a limitation on the number of vehicles to be displayed. Mr. Surdyke noted that the vehicles have varying sizes and styles, so he is requesting that the current restriction of allowing only 6 display vehicles be removed.~~

The following individuals were present representing the Petitioner for **500 Chesterfield Center (Midwest BankCentre) Sign Package:**

1. Mr. David Asmus, Legal Counsel for the Petitioner, 120 S. Central Avenue, #700, Clayton, MO.
2. Mr. Bill Behrens, Warren Sign Company
3. Mr. Mike Flavin, Regional President of Midwest BankCentre, 273 Pennington Lane, Chesterfield, MO.

It was agreed that the Petitioners would be given an opportunity to address the Commission during the *Site Plan* portion of the meeting.

~~Mr. Drew Bextermueller, Director of Real Estate, Dierbergs Market, representing the Petitioner for **Dierbergs the Market Place Sign Package**, 16690 Swingley Ridge, Chesterfield, MO.~~

~~Mr. Bextermueller stated that Dierbergs is requesting to relocate the signs for the Florist and Pharmacy departments to coincide with the remodel of the store's interior – no new signage is being requested.~~

VII. SITE PLANS, BUILDING ELEVATIONS AND PLATS

A. **500 Chesterfield Center (Midwest BankCentre) Sign Package**: A request for a Sign Package to establish sign criteria for the Midwest BankCentre for a 2.25 acre tract of land located southwest of the intersection of I-64/US 40 and Clarkson Road, on the northeast quadrant of Chesterfield Center, and south of South Outer 40 Road (18S140365).

Commissioner Midgley, representing the Site Plan Committee, made a motion to approve identification signage over the door, as presented. The motion was seconded by Commissioner Wuennenberg and **passed by a voice vote of 7 to 0**.

Commissioner Midgley then reported that the Site Plan Committee denied the requested monument sign with electronic message center by a vote of 3 to 1, but agreed to allow the Petitioner to make a presentation during the Planning Commission meeting.

Mr. Bill Behrens of Warren Sign Company gave a PowerPoint Presentation providing the following information:

- The current monument sign includes the tenant name on the top portion of the sign with the middle portion of the sign having a Dow Jones display, along with the time and temperature.
- The site-governing ordinance allows *manual* changeable message center signs. Such signs are now considered outdated and unsafe when trying to manually change the message.
- They are proposing to replace the top portion of the sign with a message center screen to show the Midwest BankCentre name. The sign would also include static informational messages regarding the bank's location and other useful information. Sachs Properties, the owner of the building, is reserving the bottom half of the sign for an additional building tenant.
- The message center sign is not considered a *flashing sign* as it is not designed to attract attention.
- The proposed message center sign is considered a *changing sign*, which would include a static message for a specific period of time before instantaneously changing to the next static message – there would not be any flashing, blinking or animations.
- Electronic message center signs do not adversely impact driver safety per a 2015 study performed by Texas A&M University.
- Manual-changing message center signs employ old technology, are unattractive, dangerous to workers, burdensome to change, and subject to wind damage and vandalism.
- Electronic message centers use new technology, are attractive, safe, and easily updated.

In an effort to address concerns about electronic message centers, Mr. Behrens provided the following list of recommended restrictions which could be included as part of the sign package for their requested EMC:

- Duration of Image Display. Each image displayed shall have a minimum duration of seven (7) seconds.
- Presentation. The image shall be a static display. No portion of the image shall flash, scintillate, fade in or fade out, scroll, twirl, change color, or in any manner imitate movement.
- Transition. When the image or any portion thereof changes, the change sequence shall only be accomplished by means of instantaneous re-pixelization.
- Malfunction and Non-Compliance. The electronic message center shall be designed and equipped to freeze the device in one position if a malfunction occurs. The electronic message center shall be equipped with a means to immediately discontinue the display if it malfunctions.
- Intensity of light. The maximum luminance produced by the sign shall not exceed three-tenths (0.3) foot-candles greater than the ambient light level. The light level produced by the sign shall be measured at the property line nearest an adjacent dwelling. Automatic dimming capability shall adjust the sign's illumination to the ambient light at all times of the day or night.

Discussion

Responding to questions, Mr. Behrens clarified the following:

- There would not be any charges associated with advertising community events on the electronic message center (EMC).

- It is not anticipated that the bottom portion of the sign, reserved for a future tenant, would include rotating signage. Mr. Behrens suggested that such a restriction could be included as part of the sign package.

During discussion, the Commission agreed that the new technology for message centers is preferable but noted that the current City code prohibits EMCs. Consequently, Chair Hansen suggested that the Petitioner install a temporary static monument sign within the requirements of the existing sign package giving the Commission time to review and update the City code regarding electronic message centers.

Commissioner Harris noted that Parkway High School has an electronic message center, which is much easier to read than the old sign board at the middle school. She then inquired as to how the high school was approved for an EMC. Senior Planner Jessica Henry stated that, at the time, it was the City's determination that the school district is a jurisdictional authority and as such, the City could not regulate its signage.

Mr. Behrens suggested that the Commission approve the requested monument sign permitting Midwest BankCentre to display only two things: (1) the bank name; and (2) time and temperature. This would allow the bank to install their sign now with the necessary technology to provide future electronic messages in accordance with any updates to the City code. Mr. Asmus added that the City could also include the restrictions which were outlined earlier to the approval of the monument sign.

Commissioner Lueking clarified that Mr. Behrens' suggestion is for a monument sign with two screens on a message center, which she again pointed out is currently against City code and, if approved, would be precedent-setting.

Discussion continued regarding how to best assist Midwest BankCentre's need for signage within the confines of the City code. While acknowledging that the recommended restrictions provided by the Petitioner are appreciated, the Commission expressed concern that there may be other issues and details that aren't being addressed.

Ms. Henry offered her opinion that it is not advisable to approve conditions on the assumption that such restrictions would ultimately be included in the Unified Development Code. Staff is seeing these restrictions for the first time and has not been able to conduct its own independent research. In addition, the City Attorney has not yet seen these restrictions. She expressed her concern about accepting a set of restrictions proposed by a proponent vs. an independent review. Ms. Henry also noted that the requested sign is larger and taller than what is permitted at the base code allowance of 50 sq. ft. and 6 ft. in height. Commissioner Wuennenberg thanked Ms. Henry for her input on this matter.

Further discussion continued as to what options were available to the Commission for approving a monument sign for the site. Ms. Henry advised that the Commission could entertain a motion to approve a standard monument sign with the dimensions as shown in the sign package.

Commissioner Wuennenberg made a motion to approve a monument sign of size and shape as requested, with signage panels to comply with the regulations of the Unified Development Code. The motion was seconded by Commissioner Midgley.

Discussion on the Motion

Commissioner Harris asked how the issue of electronic message centers will be brought to Council's attention for review so that this matter does not become a repeated process every time someone wants a modern sign. Ms. Henry replied that City Council has already directed Staff to open Article 4 of the Unified Development Code, which includes signage regulations. It is anticipated that the signage code will be re-written in 2018.

A voice vote was then taken on the above motion to approve, which passed by a vote of 7 to 0.

B. Dierbergs the Market Place Sign Package: A request for a Sign Package for the Dierbergs the Market Place development for an 11.35 acre tract of land located east of Clarkson Road and north of Baxter Road.

Commissioner Midgley, representing the Site Plan Committee, made a motion recommending approval of the Sign Package for Dierbergs the Market Place. The motion was seconded by Commissioner Marino and **passed by a voice vote of 7 to 0**.

VIII. UNFINISHED BUSINESS

A. P.Z. 07-2017 Chesterfield Valley Motor Sports (17501 N Outer 40 Rd): A request for an amendment to an existing "C8" Planned Commercial District for a 3.0 acre tract of land located north of North Outer 40 Rd west of its intersection with Boone's Crossing (17U510051).

Project Planner Cecilia Dvorak stated that the Applicant's request is to remove the current restriction of a maximum of six vehicles for the outdoor display area to the southwest of the existing building. The Applicant is also requesting to expand the outdoor storage area to the northeast of the building by approximately 55 feet, as shown on the Preliminary Plan. A Public Hearing was held for this petition in April, 2017. At that time, four issues were raised to which the Applicant has provided the following response:

1. **Location of the display areas in front of the 50-foot building line and parking setback:** The Petitioner has removed one of the display areas and adjusted another to insure that none of the display areas are within the building or parking setbacks.
2. **Need for a sight barrier of the storage area from the Levee Trail:** The Petitioner has agreed to use a wood slat fence as opposed to the existing chain link fence to ensure that there is a sight barrier between the Levee Trail and the proposed storage area.
3. **Concern for the type of display proposed, including the number of vehicles and/or total square footage of display requested and type of items requested to be displayed:** The Petitioner's request is to limit the area of display as opposed to the number of vehicles to be displayed. The areas of display shown on the plan are about 2,500 square feet in the grass area and 2,000 square feet for the wrap-around deck display area, totaling about 4,500 square feet.

2. **Christopher Roth**, Real Estate Manager-Midwest Region, Banfield Pet Hospital, 2175 NW Irving Street, Portland, OR

Mr. Roth stated that Banfield is a general practice veterinary clinic specializing in preventative care, small procedures, nutrition, and diet services. Major procedures are done through partnerships with local vets. The site will not have any overnight boarding or outside facilities.

SPEAKERS IN FAVOR: None

SPEAKERS IN OPPOSITION: None

SPEAKERS – NEUTRAL: None

Commissioner Midgley read the Closing Comments for the Public Hearings.

V. APPROVAL OF MEETING SUMMARY

Commissioner Wuennenberg made a motion to approve the Meeting Summary of the March 11, 2019 Planning Commission Meeting. The motion was seconded by Commissioner Tilman and **passed by a voice vote of 7 to 0.**

VI. PUBLIC COMMENT

A. Mobil on the Run at Clayton and Baxter (Brite Worx) Sign Package

1. **Garrett Newhouse**, Ziglin Sign Company, 540 Vossbrink, Washington, MO – speaking on behalf of the Petitioner.

Mr. Newhouse reviewed the proposed sign package:

- **North and South Elevations** – They propose 2 signs on each elevation totaling 75.75 sq. ft. to keep it in line with the standard branding of the Brite Worx Car Wash, and being under the square footage allowed for 1 sign.
- **Canopy Sign** – They propose *a car wash entrance* sign at the top of the canopy directing patrons to the car wash. Below the entrance sign would be 3 *lane signs* for a cashier lane and members lanes.
- **Monument Signs with Electronic Message Centers** – They propose 2 monument signs with *electronic message centers (EMC)*. The monument signs would be reduced 40% in brightness; would have a 15-minute hold time to rotate 2 messages; would have no animations; and would only be 32 sq. ft. instead of the allowed 42 sq. ft.
- **Monument Signs without Electronic Message Centers –** If EMC signs are not approved, they propose two 42 sq. ft. monument signs.

2. **Dean Berger**, 457 Baxton Way, Chesterfield, MO – speaking from a Neutral viewpoint.

Mr. Berger stated that his home faces the western boundary of the subject car wash. After a review of the sign package, he does not have any issue with the proposed two smaller signs on the building vs. one larger sign. He noted that the developer has included a plan showing the sight lines from different residential lots, which indicates that those homeowners will not see the signage on the buildings.

Mr. Berger then expressed concern about the lighting of the monument signs as he believes that the signs and their lighting will be seen from the residents' homes. He also asked for clarification as to the hours of when the monument signs would be lit noting that conflicting information has been provided – either from dusk to 10 pm, or from dusk to dawn. He pointed out that the lights associated with the car wash are to be turned off at 8:30 pm and questioned why the monument signs would be lit for a longer period of time.

VII. SITE PLANS, BUILDING ELEVATIONS AND PLATS

A. Mobil on the Run at Clayton and Baxter (Brite Worx) Sign Package: A request for a Sign Package for a 1.72 acre tract of land zoned "PC" Planned Commercial District located on the western corner of the intersection of Clayton Rd. and Baxter Rd.

Discussion ensued regarding the standards used for Electronic Message Centers (EMC) with respect to brightness. Mr. Newhouse explained that the EMC signs come at a 10,000 nit brightness and they are proposing to reduce the brightness level to 6,000 nits. It was noted that the City is in the process of establishing standards for Electronic Message Centers and since those standards have not yet been established, the EMCs will not be recommended for approval at this time.

Mr. Newhouse then provided the following information about the proposed Sign Package:

- **North and South Elevations** – They feel that having two smaller signs, totaling 75.75 sq. ft. on each elevation, is a better design than the one larger 121 sq. ft. sign allowed.
- **Canopy Signs –** They are requesting one sign at the top of the canopy stating ***Car Wash Entrance*** to help funnel traffic to the car wash as opposed to the vacuum area. The canopy would also include signage below the ***Car Wash Entrance*** sign designating 3 different traffic lanes – 1 cash only and 2 members lanes.

It was also clarified that there is no signage directing traffic to the vacuums, which are available to the public at no charge.

Commissioner Wuennenberg, representing the Site Plan Committee, made a motion recommending approval of the Sign Package for Mobil on the Run at Clayton and Baxter (Brite Worx), as follows:

- **North and South Elevations: One sign each per wall, 5% total size**
- **East Elevation: One sign as proposed**
- **Canopy: Three signs for lane delineations**
- **Monument Signs: As proposed without Electronic Message Center**
- **Directional Signs: Two signs as proposed**

The motion was seconded by Commissioner Tilman**.**

Amendment #1 – Canopy Sign

Commissioner Tilman made a motion to amend the motion to approve the Canopy sign, as proposed. It was clarified that the canopy would include a *Car Wash Entrance* sign at the top of the canopy, with 3 lane delineation signs below. The motion was seconded by Commissioner Midgley and **passed by a voice vote of 7 to 0**.

Amendment #2 – North and South Elevations

Commissioner Rosenauer made a motion to amend the motion to approve the two signs for the North and South Elevations, as proposed. It was clarified that the two signs would have a square foot limitation of 75.75 sq. ft., which is 60% less than what is authorized by the ordinance. **The motion died due to the lack of a second.**

Amendment #3 – Monument Signs

It was noted that if the Electronic Message Centers were not approved, the Applicant is requesting that the monument signs be approved for the allowed square footage of 42 sq. ft. Mr. Newhouse also clarified that the monument sign would be six feet tall and would have a full stone background. The sign would be placed on the stone and would be 42 sq. ft.

Commissioner Marino made a motion to amend the motion that the two monument signs be permitted to be within the sign parameters permitted by the Unified Development Code. The motion was seconded by Commissioner Tilman.

During discussion, it was clarified that standards regulating Electronic Message Centers are being worked on at this time. Knowing that, Commissioner Tilman asked the Applicant if this information has any impact on how they want to proceed with the monument signs. Mr. Mark Jordan of Wallis Companies replied that their preference is to install EMCs at this time with one static message of the Brite Worx logo; but if they aren't permitted to install the EMCs, the preference is to install the larger, 42 sq. ft. monument signs. These signs could be modified at a later date if EMCs are allowed in the future.

The above motion **passed by a voice vote of 5 to 2** with Commissioners Rosenauer and Wuennenberg voting "no".

Mr. Wyse then summarized the motion and amendments, as follows:

To approve the Sign Package for Brite Worx, as noted below:

- **Wall signage on the north and south elevations to be limited to one sign per façade with a maximum sign area of 5% per facade;**
- **Wall signage on the eastern façade, as proposed;**
- **Canopy signage, as proposed;**
- **Monument signs without electronic message centers with size to be as allowed under the Unified Development Code; and**
- **Directional signage, as proposed;**

Discussion

Councilmember Hurt asked for clarification with respect to the hours lighting is permitted on the site, and whether signage lighting is permitted different hours. Planner Mike Knight responded that the hours for signage lighting was considered separately from site lighting based on the Applicant's sign package submittal, which is requesting that signage be lit from dusk to 10 pm. He also confirmed that the ordinance states that *non-security lighting shall not be on 30 minutes prior to opening or past closing*; it was noted that closing is at 8:00 pm. The Applicant confirmed that all proposed signage is lit, except for the two directional signs.

Discussion followed as to whether the sign lighting should be allowed to be on until 10 pm or turned off at 8:30 pm. City Attorney Chris Graville advised that if the Commission wants to change the hours for any of the sign lighting, an amendment would be necessary.

Chair Hansen reminded the Commission that Mr. Berger, a resident of the adjacent neighborhood, indicated that the building signage would not be seen from his neighborhood based on the sight lines submitted by the Applicant. Mr. Jordan of Wallis Companies pointed out that while sight lines were not provided for the monument signs, he did not believe the lighting from the monument sign along Baxter Road will be seen by the residents based on the elevation and six-foot fence along the property line. He also pointed out that the other businesses at this intersection have lights on past 10 pm, but proposed that they would turn off the monument lighting at closing if it is not adequately screened from the residents.

Amendment #4 – Signage Lighting

Commissioner Tilman made a motion to amend the motion that if the monument signs are visible from the property line shared with adjacent residential properties, monument sign lighting will be turned off 30 minutes after closing (8:30 pm). The motion was seconded by Commissioner Marino and **passed by a voice vote of 6 to 1** with Commissioner Wuennenberg voting "no".

The motion to approve the Sign Package, as amended, passed by a voice vote of 6 to 1 with Commissioner Rosenauer voting "no".

V. APPROVAL OF MEETING SUMMARY

Commissioner Schenberg made a motion to approve the Meeting Summary of the September 23, 2019 Planning Commission Meeting. The motion was seconded by Commissioner Wuennenberg and **passed by a voice vote of 6 to 0.** *(Commissioner Midgley abstained.)*

VI. PUBLIC COMMENT

The District – Petitioners:

1. Mr. Mike Doster, member of the Development Team for the Staenberg Group, 16090 Swingley Ridge Road, Chesterfield, MO – available for questions

2. Mr. Mike Chiodini, Chiodini Architects, 1401 South Brentwood Road, St. Louis, MO – available for questions.

3. Mr. Steven Mueller, Chiodini Architects, 1401 S. Brentwood, St. Louis, MO – available for questions

4. Mr. Tim Lowe, Vice-President of Leasing & Development, Staenberg Group, 121 Bellerosa, St. Louis, MO.

Mr. Lowe stated that they envision The District as a new entertainment-type venue. Because entertainment venues have different requirements than traditional retail developments, he asked that such be considered when reviewing the two projects noting that the proposed amended site plan and sign package go hand-in-hand.

P.Z. 12-2019 Burkhardt Place (16626 Old Chesterfield Road)

1. Mr. James Mettrick, Studio Manager of 89th Key Studio, 16626 Old Chesterfield Road, Chesterfield, MO – available for questions.

Commissioner Wuennenberg made a motion to amend the agenda to review item VIII.A. P.Z. 12-2019 Burkhardt Place (16626 Old Chesterfield Road) next. The motion was seconded by Commissioner Marino and **passed by a voice vote of 7 to 0.**

VIII. UNFINISHED BUSINESS

A. P.Z. 12-2019 Burkhardt Place (16626 Old Chesterfield Road): A request to amend Ordinance 2170 to add coffee shop as a permitted use for 0.22 acres of land within an existing "PC" Planned Commercial District with a "LPA" Overlay located south of Old Chesterfield Road and north of Santa Maria Drive (17T310412).

Planner Annisa Kumerow stated that the petitioner is requesting to add *coffee shop* as a permitted use. The proposed use will be contained within the existing structure and no exterior modifications are proposed with this petition.

A Public Hearing for this request was held on September 23, 2019 and no issues were raised by the Planning Commission.

Chesterfield Outlets (17107 N Outer 40 Road – The District). The motion was seconded by Commissioner Wuennenberg.

Discussion

Landscaping

Commissioner Wuennenberg asked whether any interim landscaping could be added in front of the parking garage in order to enhance the area until the next construction phase begins. He suggested providing trees in planter boxes to soften the look of the garage. Mr. Lowe stated that they are targeting completion of Phase 1 by March 2021, with the goal of having Phases 2 and 3 under construction at that time. He indicated that they could take a look at this suggestion but did not feel there would be a lot of value in putting a few trees in front of the parking garage.

Traffic

For the record, Chair Hansen noted that traffic could become a challenge for the site. Mr. Lowe acknowledged the traffic issue and noted that a traffic report and traffic management plan have been prepared. The plan has a lot of flexibility allowing the possible addition of more entrances and openings to move vehicles around. He explained that because parking for the music venue is both in the deck and on surface parking, it should prevent major traffic jams.

Councilmember Mastorakos stated that she met with both Mr. Lowe and Julie Nolfo, who had prepared the traffic report, to discuss incoming traffic concerns. The developer has indicated that will there will be enough personnel on site directing traffic. It was also noted that there are no parking fees, which will allow traffic to move freely into the site without stopping to get a parking ticket. Councilmember Mastorakos added that she hopes the traffic issue is monitored as time goes on so that traffic does not back up on the interstate while trying to enter the venue.

The vote to approve passed by a voice vote of 7 to 0.

C. Chesterfield Outlets (The District) Sign Package: A request for a Sign Package to establish sign criteria for the Chesterfield Outlets Subdivision, a 48.2 acre tract of land zoned "PC" Planned Commercial District located north of North Outer 40 Road and east of Boone's Crossing.

Because the Site Plan Committee was unable to complete its discussion on the Electronic Message Center component of the proposed Sign Package, Mr. Lowe was asked to finish his presentation.

Mr. Lowe stated that the purpose of the Electronic Message Center is twofold: (1) to allow the music venue to advertise its events; and (2) to advertise other tenants on the property with each tenant getting a turn on the rotation in lieu of having pylon and wall signage. The only tenants that will be allowed signage are tenants that have doors facing the interstate.

To address Commissioner Schenberg's concern raised in the Site Plan Committee meeting, Mr. Lowe confirmed that ***The District*** sign on top of the pavilion will only be the name of the property and nothing more in perpetuity.

Commissioner Schenberg motion to approve the sign package, as presented, with the petitioner's stipulation that the rooftop pavilion sign, (*The District)* will only be

the name of the property in perpetuity. The motion was seconded by Commissioner Marino.

Discussion

Commissioner Marino referred to the dialogue in the previous Site Plan Committee meeting regarding whether the Electronic Message Center (EMC) could be used for public announcements vs. using it only for The District. He then expressed his preference that the EMC should never be allowed to be blank. Chair Hansen noted a desire to retain the option of allowing the City to utilize the EMC to communicate with its residents.

Commissioner Midgley noted that the EMC is directly across from *The District* rooftop signage and asked whether it would be better to move the EMC further west or east. Mr. Lowe responded that the two signs serve different purposes – the rooftop signage is considered a project ID sign giving the development character, while the EMC provides information for motorists traveling along the interstate.

The vote to approve passed by a voice vote of 7 to 0.

IX. NEW BUSINESS - None

X. COMMITTEE REPORTS - None

XI. ADJOURNMENT

The meeting adjourned at 7:50 p.m.

Gene Schenberg, Secretary

Memorandum
Department of Public Works

TO: Michael O. Geisel, P.E.
City Administrator

FROM: James A. Eckrich, P.E.
Public Works Dir. / City Engineer

DATE: February 29, 2020

RE: August Hill Drive Streetlighting

City Council Policy PW36 (attached) covers the installation of streetlights within the City of Chesterfield. Streetlights are typically required as part of subdivision development, and are funded and maintained by the subdivision. However, there are cases where the City has decided to fund streetlights (Chesterfield Parkway, Veterans Place Drive), and the Policy specifically states that nothing prevents the City Council from installing lighting "along or within City property, trails, and beautification areas."

At its February 6, 2020 meeting, the Planning and Public Works Committee directed Staff to obtain costs for streetlighting on August Hill Drive from Central Park to Baxter Road, for the purpose of lighting the road for pedestrians accessing Central Park. Accordingly, I have compiled two estimates. Both estimates include nine new streetlights beginning approximately 230 feet west of the existing light at Monarch Trace and extending to the intersection at Baxter Road. In both cases I have skipped the intersection of August Hill and Stone Brook / Willow Weald Path, which is lit by two streetlights. The lights would be spaced roughly 200 to 230 feet apart. See the attached schematic drawing.

The first estimate is for electric streetlights through Ameren. These would be conventional "dusk to dawn" lights constructed of black fiberglass with an Early American style post top. In order to install these lights, Ameren requires that the customer (in this case the City) install underground conduit in order for Ameren to pull the electric necessary to power the lights. The estimated costs for conventional streetlights are as follows:

Conduit at $32.70/LF	2,350 LF	$76,845
Ameren Connection Cost @ $300/EA	10 EA	$3,000
Ameren Cost to Pull Cable @ $4.12/LF	2,350 LF	$9,682
TOTAL COST		**$89,527**

In addition to the costs above, there would be a $22.59 per month, per light charge for the street lighting. This would result in an annual charge to the City of Chesterfield of $2,440.

The second estimate is for solar streetlights. I have found a company called ClearWorld which has a patented system utilizing solar LED technology. The ClearWorld lights eliminate the raised solar panel / pad you see on most conventional solar lights. Instead, the solar power system is incorporated into the light, as shown in the attached proposal. In my opinion, this results in a more aesthetically pleasing light. The cost estimate for nine lights provided by ClearWorld is $38,907, excluding shipping and installation (see attached Sales Proposal). It is my understanding that these lights could be installed by Public Works maintenance personnel, with training provided by ClearWorld. As these lights are solar, there would be no annual charge associated with these lights.

When this matter is considered by the Planning and Public Works Committee I will provide a brief presentation showing the different styles of lights and lighting options.

Action Recommended

The Planning and Public Works Committee of City Council should consider whether the City of Chesterfield should install streetlighting on August Hill Drive from Central Park to Baxter Road. If the PPW Committee determines that lighting should not be installed, no action is required.

If lighting is desired, PPW should determine whether lighting should be conventional streetlighting, solar streetlighting provided by ClearWorld, or another type of lighting. Depending upon the style chosen, PPW should recommend an appropriate budget adjustment to the full City Council. As the numbers provided herein are rough estimates, I would recommend the use of a budget adjustment of $100,000 for conventional streetlights (plus monthly charge) and $50,000 for ClearWorld solar streetlights.

Please forward to PPW for review and direction.

2/26/2020

August Hill Dr - Street Lights

Street Lights

- Existing (5)
- Proposed (9)

0 100 200 400 600 800 1,000 Feet

N

CITY OF CHESTERFIELD
POLICY STATEMENT

PUBLIC WORKS		**NO.**	36
SUBJECT	Streetlight Installation	**INDEX**	PW
DATE ISSUED	10/7/1991 (as PH&S #7)	**DATE REVISED**	5/01/2017

POLICY

Streetlights are required as part of development, as detailed in the City of Chesterfield Municipal Code. These streetlights are to be funded and maintained by the Subdivision. The City of Chesterfield will not construct, fund, or maintain streetlights unless those streetlights are specifically approved by City Council.

The City Council will consider requests for streetlights only at intersections involving a City roadway with a State roadway, a County roadway, or a City Collector or Arterial roadway. All requests shall be submitted in writing to the City Engineer, and shall include the reasoning for the request.

In considering a request for street lighting, one or more of the following criteria must be met:

1. The presence of a marked pedestrian crosswalk.
2. Close proximity to a public or private school.
3. Adjacent to large population concentrations (i.e. apartment complex, subdivision clubhouse facility, recreational facility, etc.)
4. Any quantitatively identifiable high accident location where lack of lighting has been determined to be a causative factor or contributing circumstance.
5. Any intersection not currently illuminated by a light system, the lack of which, in the opinion of the City Engineer, poses a hazard to pedestrian or vehicular traffic.

Nothing in this Policy shall be construed as preventing the City Council from approving the installation of streetlights which, in its determination, benefit the City of Chesterfield. This includes lighting along or within City property, trails, and beautification areas.

RECOMMENDED BY:

5/1/2017 PPW Committee 3/23/2017

Department Head/Council Committee (if applicable) **Date**

APPROVED BY:

City Administrator **Date**

5/1/2017

City Council (if applicable) **Date**

Ameren Missouri

LED Dusk-To-Dawn Outdoor Lighting

LED Area Lighting

Type of Fixture	Lamp Rating**	Monthly Rate*
Bracket Mount	100 LED (Light Emitting Diode)	$ 10.31
Bracket Mount	250 LED	$ 16.70
Bracket Mount	400 LED	$ 30.89
Directional	Small	$ 21.61
Directional	Medium	$ 34.69
Directional	Large	$ 69.13

* Less Federal Tax Rate Reduction plus FAC and all applicable sales and municipal taxes

** Lamp Rating for Bracket Mount LED is high-pressure sodium watts equivalent. LEDs are more efficient and use less energy than the rating shown. For more information please go to **AmerenMissouri.com/Streetlights.**

Monthly rate includes fixture, electricity and maintenance. If wire span or pole is required, installation charges will apply.

Bracket Mount

Directional

LED Post Top Lantern

All Styles	Lamp Rating**	Monthly Rate*
	100 LED	$22.59

Overall height is approximately 16 feet on a tapered pole.

* Less Federal Tax Rate Reduction plus FAC and all applicable sales and municipal taxes

** Lamp Rating for Post Top Lantern LED is high-pressure sodium watts equivalent. LEDs are more efficient and use less energy than the rating shown. For more information please go to **AmerenMissouri.com/Streetlights.**

All post top fixtures require underground wiring (cost of which is not included in the above).

Monthly rate includes fiberglass pole, fixture, lamp electricity and maintenance.

Early American

Colonial

Contemporary**

Aspen**

**Additional initial charge applies

Rates effective August 1, 2018

Ameren Missouri

Dusk-To-Dawn Outdoor Lighting

The Safety and Security of Outdoor Lighting for Your Home or Business

- Provides optimum security over a large area
- Turns on at dusk and off at dawn automatically

Two Options Available

- Post Top Lantern – freestanding pole lamp
- Area Lighting – mounted to utility pole

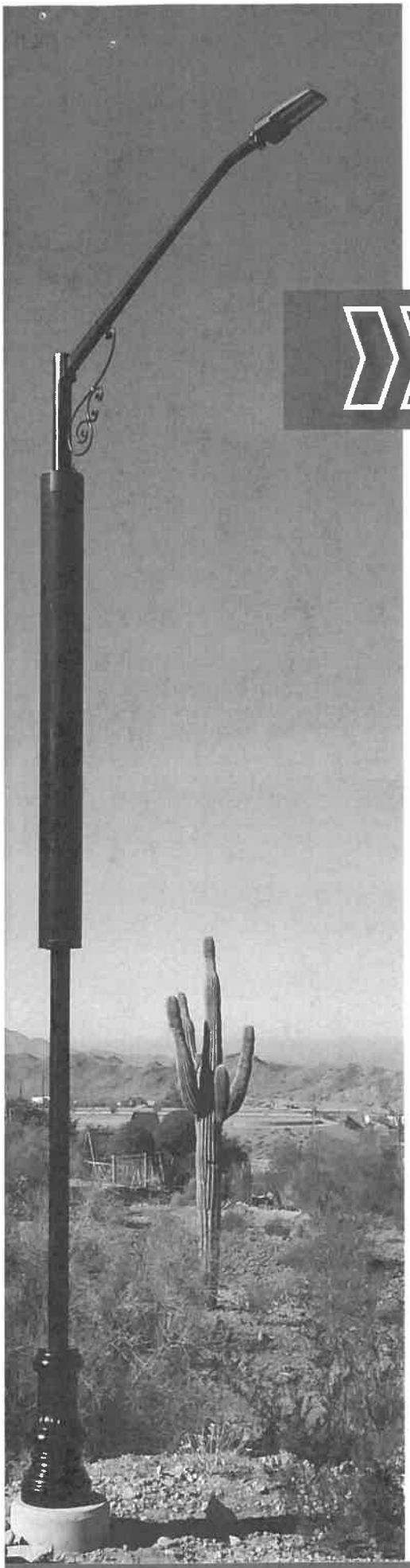
To find out more about Dusk-To-Dawn Outdoor Lighting, contact Ameren Missouri Construction Hotline toll-free at **1.866.992.6619**. For more information go to **BuildWithAmeren.com.**

For more information on LED lights or Ameren Missouri's conversion project, go to **AmerenMissouri.com/Streetlights**

Ameren MISSOURI

Rev. 8/18

Printed on recycled paper.



ClearWorld

LIGHTING THE WAY IN SOLAR LED TECHNOLOGY

Sales Proposal

Proposal No. City of Chesterfield-01

February 18th 2020

1613 Justin Road | Metairie, LA 70001 | 855.786.5331 (SunLED1) | www.clearworld.us

Attention:
James A. Eckrich, P.E.
Director of Public Works / City Engineer
City of Chesterfield
(636) 537-4764

Re: Proposal for 9- RetroFlex Systems w/ 20' poles and hardware

Dear Jim,

ClearWorld is pleased to submit this proposal for the sale of our advanced RetroFlex Solar LED Systems. We're confident the multiple applications and the associated benefits of our RetroFlex systems will far exceed other options being considered for new and existing projects. RetroFlex is an easy choice for our customers looking for immediate cost savings, favorable project economics, and improved safety through a sustainable, renewable solar lighting system.

ClearWorld can provide you and your team the support you need throughout the proposal process. We are available to meet and discuss product specifications with your engineering group, provide an independent ClearWorld cost-benefit analysis to support your financial review, and be on-site to discuss the installation process once the RetroFlex systems are delivered. We are confident that we can meet the challenges ahead, and look forward to working with you now and in the future. If you have questions on this proposal, feel free to contact us at your convenience. We will be in touch with you next week to arrange a follow-up conversation on the proposal.

Thank you for your consideration,

Larry Tittle
Founder/CEO
504-615-9000

Proposal Summary

ClearWorld is an alternative energy systems solution provider responsible for the creation of RetroFlex: a retrofit energy-efficient system that reduces utility operating and maintenance costs in pursuit of grid independence.

This Proposal is for 9 RetroFlex systems with Hardware. The project is with the City of Chesterfield M.O.. The project is located between Baxter and end of August Hill Rd: - These RetroFlex systems are to add to existing light poles in other areas and eliminate the need to replace with conventional street light infrastructure.

Benefits of RetroFlex New Installations:

- Reduced costs and maintenance: RetroFlex is an easy decision for any projects requiring new infrastructure or in lieu of replacing existing infrastructure. RetroFlex can provide you with up to 100% savings on recurring costs; it also eliminates the need for trenching and reduces costs for new infrastructure. It can also be installed to replace existing infrastructure to eliminate significant repair and replacement costs.
- Reliability and Safety: When the grid goes down, RetroFlex won't leave you in the dark, and it provides improved illumination to help reduce crime.
- Environment: ClearWorld's Retroflex eliminates the carbon footprint of traditional utility light poles.

ClearWorld Planning & Support:

ClearWorld coordinates site planning with the customer to ensure adequate lighting based on the customer's needs. ClearWorld provides shading analysis to the customer prior to any installations to ensure proper sunlight levels during all seasons and all weather conditions. This shading analysis is conducted by ClearWorld at no additional cost to the customer.

Proposal Pricing – Systems and Installation

The following table is an estimate of the basic RetroFlex system design. The details include costs for RetroFlex, poles and associated hardware.

Product/Work Description	Cost per Unit	# Units	Total Price
RetroFlex Solar LED Off-Grid System (Model #RW240W) 40W LED @162 LM/W (6,480)	$2,825.00	9	$25,425.00
18' power coated black Pole w/ 4' straight pole and 6" base (Taller pole additional)	$1,350.00	9	$12,150.00
Installation kit includes: Four J-bolts, 18" x 1", eight 1" washers and nuts, ClearWorld bolt pattern,	$148.00	9	$1,332.00
Total Cost for 9 RetroFlex Units with poles		**9**	**$38,907.00**

The Pricing for Systems does not include any permitting fees, impact fees, or other fees that may be assessed for installation of each system. The Pricing for Systems does not include shipping and handling for delivery. All contract terms and conditions shall be mutually agreed to by the parties.

Payment terms: 50% down payment to begin production. The remaining balance 30 days from shipping.

Pricing – Additional System Features (Optional)

Product/Work Description	Cost per Unit	# Units	Total Price
Gateway Communications per unit (wireless monitoring/controls)	N/A	0	N/A
RetroFlex Installation Training by certified ClearWorld Installer	$500	3 day min.	$1,500
RetroFlex Bluetooth App	Included	1	Included
Total Cost for Additional System Features			**$1,500**

Total: $38,907.00

Proposal – Product Details

Product Details for Model RW2402460 – Off-Grid

SPECIFICATIONS	RW240
Description	Roadway 240
Model #	RW2402460-OG
Hardware	Patented Adjustable Aluminum Array
Solar Panels	240W
Battery Pack	24V, 60AH Lithium Ion
Charge Controller	Smart MPPT Smart Controller
Lighting Control	Integrated Bluetooth (via iOS & Android)[3]
LED Light	40W LED, 162 lumens per watt
Dimensions (length)	8' 6"
Weight (lbs.)	88

RetroFlex System Warranty Information

1. Overall full system parts warranty for 10 years.
2. Solar Panels: 25 years.
   - At least 90% output on years 0-10
   - At least 83.5% output on years 10-20
   - At least 80% output on years 20-25

Proposal – Additional Details

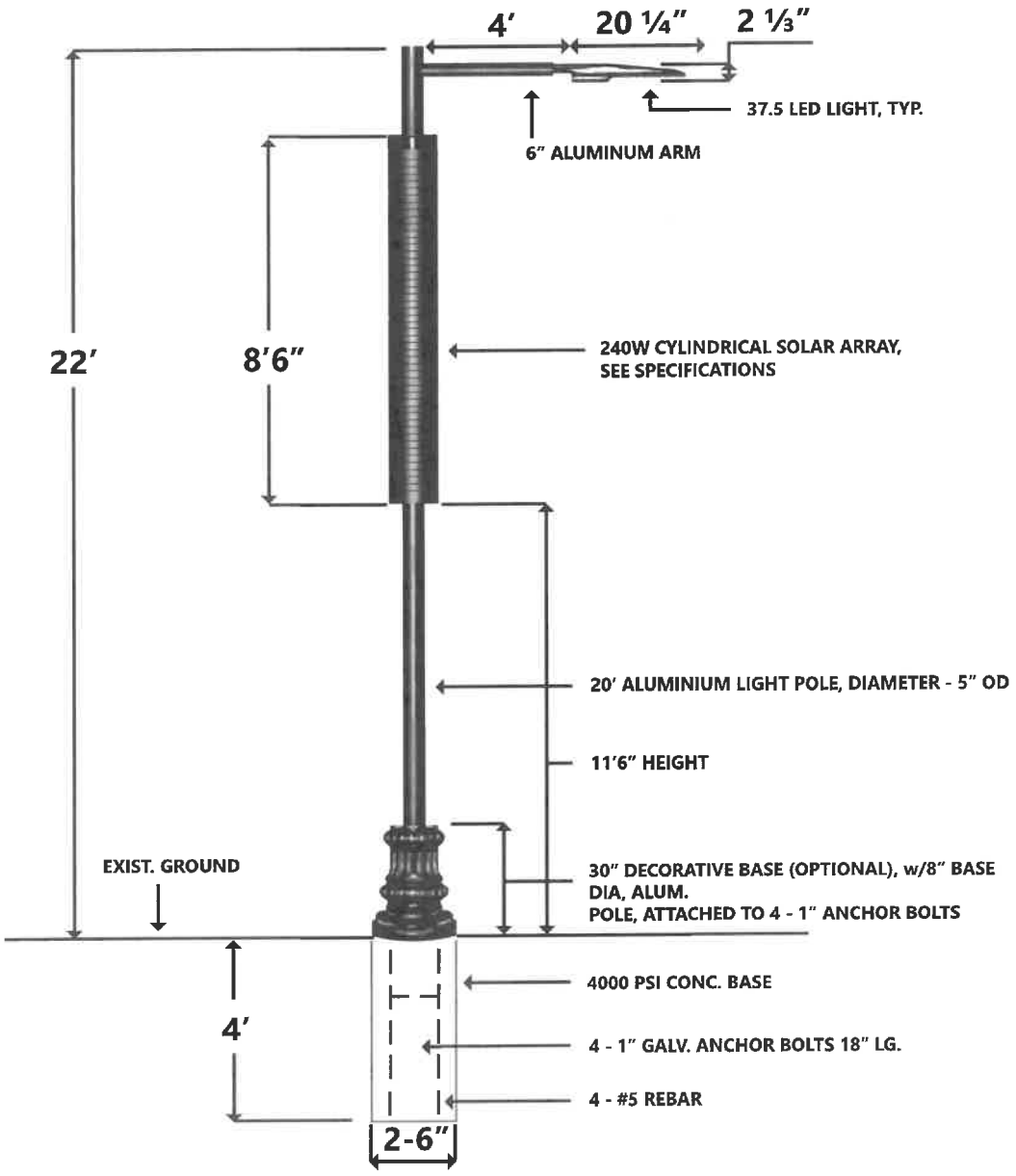
ClearWorld Manufacturing & Quality Controls

ClearWorld continues to expand its QC systems to ensure RetroFlex continues to be the most reliable, effective solar LED lighting solution system on the market. RetroFlex is manufactured at our facility in Louisiana and shipped directly to customer locations nationwide. We maintain a spare parts inventory and expert technicians on-hand to remedy any customer issues post-installation. To date, ClearWorld's installed systems have met or exceeded our base performance measures including total illumination and adverse weather performance.

Solar Incentives

ClearWorld's RetroFlex can qualify for Federal Investment Tax Credits and associated accelerated depreciation for taxable entities. These incentives typically reduce overall system costs by ~50% in the form of tax credit and cash equivalent via depreciation. ClearWorld can provide additional details to the City or its partners upon request. *Note: ClearWorld is not offering legal, tax or accounting advice.*

ClearWorld
» Lighting the Way in Solar LED Technology



Component Specifications : RW2402460	
Solar Array	240W (8' 6" in length) with adjustable aluminum array
Lighting	37.1W LED Module @ 161 LM/W 5,973 Lumens, Dimmable @ 3,000 - 5,000K
Battery	24V - 60AH Lithium Ion 1.44 KWH (12+ years life expectancy)
Controller	Electronic MPPT Charge Controller/Regulator
Lighting Controls	Bluetooth Monitoring
EPA	3.09 ft2 (Solar Panel); .62 ft2 (Fixture); 2.4 ft2 (Arm)

ClearWorld
Lighting the Way in Solar LED Technology

1613 Justin Rd
Metairie, Louisiana 70001

November 21, 1019

Wayne Davis, CIO
City of Hampton
22 Lincoln Street, 6th Floor
Hampton, VA 23669

ClearWorld, LLC, a limited liability company duly organized and operating under the laws of the State of Louisiana, is the sole source provider for a retro-fitting solar LED street light application. This sole source status was confirmed by the granting of a patent to Larry Tittle for the application (abstract to follow) from the United States Patent and Trademark Office on May 6, 2014, patent number US 8,714,768 B2. By definition, the granting of the patent to Larry Tittle, who is the sole managing member of ClearWorld, LLC, provides sole source status to the application covered by the granted patent.

For your convenience, the abstract of the patent states as follows:

"A solar retrofit lighting system for light poles with a solar array panel assembly having semi-circular backing panels attached to adjustable internal mounting brackets or pole frames suitable to any size light pole and mounted in parallel with the longitudinal axis of the light pole with thin film photovoltaic laminate adhesively attached to the outer convex sides of the backing panels. A battery for storage of electrical energy from the thin film photovoltaic laminate will be provided along with a charge controller to regulate the charging of the battery, an inverter to convert DC to AC power and an LED light fixture extending from the pole. Alternatively, an on-grid option will be utilized at the pole, to convert and send energy back to the grid and draw power from the grid as needed when sunlight is unavailable."

Via the statutory language and protection of federal and state laws for patented products, ClearWorld, LLC is the only company capable of providing the above listed application, which has been designated and marketed as the ClearWorld's Retroflex unit.

We understand that Virginia state procurement laws normally require any purchase, not meeting an exception, must be competitively bid; however, we feel that our position as a sole source provider of the Retroflex unit covered by Federal patent may satisfy Virginia procurement laws.

ClearWorld's patented Retroflex unit and ClearWorld's federal and state protections over the same should allow for a local governmental entity in Virginia to contract with ClearWorld for the purchase and acquisition of the Retroflex unit without having to proceed through the competitive bidding process normally associated with such a purchase by local governmental entities.

ClearWorld
Lighting the Way in Solar LED Technology

1613 Justin Rd
Metairie, Louisiana 70001

We look forward to cooperating with you regardless of the method of acquisition deemed appropriate after due consideration from your counsel; however, we are and will remain confident in our position that we are the sole source provider for the Retroflex product by virtue of the previously mentioned federal patent granted to Larry Tittle, sole managing-member of ClearWorld, LLC. Obviously, by federal and state law provisions and protection, no other company nor individual may manufacture, sell, or distribute said product with the sole exception of ClearWorld, LLC.

Please, do not hesitate to contact us if there are any questions or concerns. We are more than happy to work with you to bring ClearWorld's patented Retroflex unit to your area.

Sincerely,

Larry Tittle
Managing Member
ClearWorld, LLC

FINANCE AND ADMINISTRATION COMMITTEE

Chair: Councilmember Moore
Vice-Chair: Councilmember Keathley

Bill No. 3303 – Codification An Ordinance adopting and enacting a new code for the City of Chesterfield, Missouri; providing for the repeal of certain Ordinances not included therein, except as herein expressly provided; providing a penalty for the violation thereof; providing for the manner of amending such code; and providing when such code and this Ordinance shall become effective. **(First Reading) Finance & Administration Committee recommends approval.**

The next meeting of the Finance and Administration Committee has not yet been scheduled.

If you have any questions or require additional information, please contact Finance Director Jeannette Kelly or me prior to Monday's meeting.

City of Chesterfield

DATE: **April 27, 2020**

TO: **Mike Geisel, City Administrator**

FROM: **Vickie McGownd, City Clerk**

SUBJECT: **Codification Update**

As approved and provided in the 2017 budget, the City of Chesterfield entered into agreement with General Code on August 25, 2017 for codification services.

The codification process should occur on a routine and regular basis, and is simply a compilation of thousands of individual ordinances into a single document that provides transparency and ease of use. When compiling and consolidating multiple ordinances (some which amend, append, repeal, and/or replace prior ordinances), it is necessary to organize by subject matter. The compiled City Code reflects the current text of the City's ordinances and becomes the official resource reference for legal purposes.

General Code currently administers, maintains, and publishes the City's Code of Ordinances. There have been statutory changes in the criminal code that need to be reflected in our municipal code and a thorough review is necessary and warranted, since our Code has not been comprehensively codified and reviewed.

Since August 2017, the City Attorney and Staff have met with General Code and worked extensively to complete the first step in the codification review process. **No substantive changes are being recommended at this time; the purpose of this review is simply to "clean up" the Code and bring it in line with state statutes.** I have attached the Report of Codification Changes prepared by General Code and a proposed ordinance necessary to adopt and enact the new Code.

Action Recommended

Please add this proposed ordinance to the May 4, 2020 City Council meeting agenda for consideration and approval.

BILL NO. 3303 **ORDINANCE NO.**_____

AN ORDINANCE ADOPTING AND ENACTING A NEW CODE FOR THE CITY OF CHESTERFIELD, MISSOURI; PROVIDING FOR THE REPEAL OF CERTAIN ORDINANCES NOT INCLUDED THEREIN, EXCEPT AS HEREIN EXPRESSLY PROVIDED; PROVIDING A PENALTY FOR THE VIOLATION THEREOF; PROVIDING FOR THE MANNER OF AMENDING SUCH CODE; AND PROVIDING WHEN SUCH CODE AND THIS ORDINANCE SHALL BECOME EFFECTIVE.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. Approval, Adoption and Enactment of Code.
Pursuant to Section 71.943 of the Revised Statutes of Missouri, the codification of ordinances, as set out in Titles I through VI, each inclusive, of the "Code of Ordinances of the City of Chesterfield," is hereby adopted and enacted; and shall supersede all other general and permanent ordinances of the City passed on or before January 6, 2020, to the extent provided in Section 3 hereof.

Section 2. When Code Provisions Effective.
All provisions of such Code shall be in full force and effect from and after the effective date of this ordinance as set forth herein.

Section 3. Repeal of Legislation Not Contained in Code; Legislation Saved From Repeal; Matters Not Affected By Repeal.

A. All ordinances of a general and permanent nature of the City adopted on final passage on or before January 6, 2020, and not included in such Code or recognized and continued in force by reference therein, are hereby repealed from and after the effective date of this ordinance, except those which may be specifically excepted by separate ordinance, and except the following which are hereby continued in full force and effect, unless specifically repealed by separate ordinance:

    1. Ordinances promising or guaranteeing the payment of money for the City, or authorizing the issuance of any bonds or notes of the City or any other evidence of the City's indebtedness, or authorizing any contract or obligation assumed by the City.

    2. Ordinances levying taxes or making special assessments.

3. Ordinances appropriating funds or establishing salaries and compensation, and providing for expenses.

4. Ordinances granting franchises or rights to any person, firm or corporation.

5. Ordinances relating to the dedication, opening, closing, naming, establishment of grades, improvement, altering, paving, widening or vacating of streets, alleys, sidewalks or public places.

6. Ordinances authorizing or relating to particular public improvements.

7. Ordinances respecting the conveyances or acceptance of real property or easements in real property.

8. Ordinances dedicating, accepting or vacating any plat or subdivision in the City or any part thereof, or providing regulations for the same.

9. Ordinances annexing property to the City.

10. All zoning and subdivision ordinances not specifically repealed and not included herein.

11. Ordinances establishing special taxing districts, including, but not limited to Tax Increment Financing Areas, Transportation Development Districts, Community Improvement Districts, Neighborhood Improvement Districts or redevelopment districts.

12. Ordinances relating to traffic schedules (e.g., stop signs, parking limits, etc.).

13. All ordinances relating to personnel regulations (e.g., pensions, retirement, job descriptions and insurance, etc.).

14. Ordinances authorizing the establishment of industrial development corporations.

15. Ordinances establishing tax rates for the City.

16. Ordinances relating to the City's personnel policy.

17. Ordinances establishing City sales taxes.

B. The repeal provided for in this Section shall not be construed to revive any ordinance or part thereof that has been repealed by a subsequent ordinance which is repealed by this ordinance.

C. The repeal provided for in this Section shall not affect any offense or act committed or done or any penalty or forfeiture incurred or any contract or right established or accruing before the effective date of this ordinance, nor shall it affect any prosecution, suit or proceeding pending or any judgment rendered prior to such date.

Section 4. Amendments To Code.

Any and all additions and amendments to such Code when passed in such form as to indicate the intention of the City Council to make the same a part thereof shall be deemed to be incorporated in such Code so that reference to the "Code of Ordinances of the City of Chesterfield" shall be understood and intended to include such additions and amendments.

Section 5. Violations and Penalties.

A. Except as hereinafter provided, whenever in any rule, regulation or order promulgated pursuant to such ordinances of the City, any act is prohibited or is made or declared to be unlawful or an offense or a misdemeanor, or whenever in such City ordinance, rule, regulation or order doing of any act is required or the failure to do any act is declared to be unlawful, where no specific penalty is provided therefor, the violation of any such ordinance of the City, or of any rule, regulation or order promulgated pursuant to such City ordinance, shall be punished by a fine not exceeding one thousand dollars ($1,000.00) or by imprisonment for a period not to exceed three (3) months, or by both such fine and imprisonment.

B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of these ordinances or rules, regulations or orders promulgated pursuant thereto to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision of these ordinances or rules, regulations or orders shall be punished by the imposition of not more

than the maximum fine or imprisonment so authorized, or by both such fine and imprisonment.

C. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State establishes a penalty differing from that provided by this Section for an offense similar to any offense established by these ordinances, rules, regulations or other orders of the City, the violation of such City law, ordinance, rule, regulation or order shall be punished by the fine or imprisonment established for such similar offense by such State law.

D. Each day any violation of these ordinances, rules, regulations or orders promulgated pursuant thereto shall continue shall constitute a separate offense, unless otherwise provided.

E. Whenever any act is prohibited by this Code, by an amendment thereof, or by any rule or regulation adopted thereunder, such prohibition shall extend to and include the causing, securing, aiding or abetting of another person to do said act. Whenever any act is prohibited by this Code, an attempt to do the act is likewise prohibited.

Section 6. Applicability of General Penalty.
In case of the amendment by the City Council of any Section of such Code for which a penalty is not provided, the general penalty as provided in Section 5 of this ordinance shall apply to the Section as amended; or in case such amendment contains provisions for which a penalty other than the aforementioned general penalty is provided in another Section in the same Chapter, the penalty so provided in such other Section shall be held to relate to the Section so amended, unless such penalty is specifically repealed therein.

Section 7. Filing of Copy of Code; Codes To Be Kept Up-To-Date.
A copy of such Code shall be kept on file in the office of the City Clerk, preserved in loose-leaf form or in such other form as the City Clerk may consider most expedient. It shall be the express duty of the City Clerk, or someone authorized by said officer, to insert in their designated places all amendments and all ordinances or resolutions which indicate the intention of the City Council to make the same part of such Code when the same have been printed or reprinted in page form and to extract from such Code all provisions which from time to time may be repealed by the City Council. This copy of such Code shall be available for all persons desiring to examine the same.

Section 8. Altering or Tampering With Code; Violations and Penalties.
It shall be unlawful for any person to change or alter by additions or deletions any part or portion of such Code, or to insert or delete pages or portions thereof, or to alter or tamper with such Code in any manner whatsoever which will cause the law of the City of Chesterfield to be misrepresented thereby. Any person violating this Section shall be punished as provided in Section 5 of this ordinance.

Section 9. Severability.
It is hereby declared to be the intention of the City Council that the Sections, paragraphs, sentences, clauses and phrases of this ordinance and the Code hereby adopted are severable, and if any phrase, clause, sentence, paragraph or Section of this ordinance or the Code hereby adopted shall be declared unconstitutional or otherwise invalid by the valid judgment or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining phrases, clauses, sentences, paragraphs and Sections of this ordinance or the Code hereby adopted.

Section 10. Effective Date.
This ordinance and the Code adopted hereby shall be in full force and effect from and after its passage and approval.

Passed and approved this _____ day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

CITY CLERK CODIFICATION CERTIFICATION

I, Vickie McGownd, City Clerk of the City of Chesterfield, Missouri, hereby certify that the attached documents are true and correct copies of the municipal code of the City of Chesterfield and are published in book form.

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: _____

GENERAL CODE

A Member of the ICC Family of Companies

Report of Final Codification Changes

PREPARED FOR:

City of Chesterfield, Missouri

PROJECT EDITOR:

Margaret A. Perry

MAPerry@generalcode.com | 800.836.8834

Contents

Introduction....3
General Decisions....4
Nomenclature Changes....4
Previous Code Elements To Be Excluded....5
TITLE I, GOVERNMENT CODE....6
Chapter 100, General Provisions....6
Chapter 105, Elections....7
Chapter 110, Administration....8
Chapter 115, Officers and Employees....9
Chapter 120, City Departments....10
Chapter 123, Purchasing Regulations....11
Chapter 125, Boards, Commissions, Committees, Etc.....11
Chapter 130, Municipal Court....12
Chapter 135, Fiscal Year and Budget Procedures....14
Chapter 140, Disposal Of Unclaimed Property And Evidence....14
TITLE II, PUBLIC HEALTH, SAFETY AND WELFARE....15
Chapter 200, Police....15
Chapter 203, Fire Prevention And Protection....16
Chapter 205, Animals And Fowl....17
~~Chapter 210, Offenses~~....20
Chapter 210A, Offenses (UPDATED MODEL) *(now Chapter 210)*....34
Chapter 215, Nuisances....37
Chapter 217A, Abandoned Property (UPDATED MODEL) *(now Chapter 217)*....38
Chapter 220, Parks And Recreation....38
Chapter 225, Emergency Management....39
~~Chapter 230, Human Rights~~....39
Chapter 230A, Human Rights (UPDATED MODEL) *(now Chapter 210)*....39
Chapter 235, Solid Waste....39
Chapter 240, Health And Sanitation....40
Chapter 245, Aircraft And Aviation....40
TITLE III, TRAFFIC CODE....41
General Notes....41
Chapter 300, General Provisions....41
Chapter 305, Traffic Administration....42
Chapter 310, Enforcement And Obedience To Traffic Regulations....42
Chapter 320, Speed Regulations....44
Chapter 325, Turning Movements....44

Chapter 340, Miscellaneous Driving Rules 45
~~Chapter 342, Alcohol-Related Traffic Offenses~~ 47
Chapter 342A, Alcohol-Related Traffic Offenses (UPDATED MODEL) *(now Chapter 342)* 48
Chapter 345, Pedestrians Rights And Duties 48
Chapter 355, Stopping, Standing Or Parking Prohibited In Specified Places 48
Chapter 370, Vehicle Equipment 48
Chapter 375, Parades 51
Chapter 380, Licensing 51
Chapter 385, Abandoned, Wrecked Or Inoperable Vehicles 53
~~Chapter 385A, Abandoned Vehicles (UPDATED MODEL)~~ *(see now Chapter 217)* 53
Chapter 390, Sale Of Motor Vehicles On Private Or Commercial Parking Lots 53
Traffic Schedules 54
TITLE IV, LAND USE 55
Chapter 400, Planning 55
Chapter 405, Unified Development Code 55
TITLE V, BUILDING AND CONSTRUCTION 59
Chapter 500, Buildings And Building Regulations 59
Chapter 505, Streets And Sidewalks 61
TITLE VI, BUSINESS AND OCCUPATION 63
Chapter 600, Alcoholic Beverages 63
~~Chapter 600A, Alcoholic Beverages (UPDATED MODEL)~~ 65
Chapter 605, Licenses And Business Regulations 66
Chapter 610, Alarm Systems 68
Chapter 615, Public Utilities License Tax 69
Chapter 620, Cable Television 69

INTRODUCTION

Report

This report is based on the Editorial and Code Analysis completed by City Officials and returned to General Code in December 2018, as well as the City's responses to the Final Draft questions returned in January 2020. It has been updated with decisions by the City Officials, which are indicated with *italics* after **Decision** throughout this document.

Statutory Updates

The Model Code provisions of the City's Code have been updated through the 2019 Statutory Updates as indicated throughout this Report.

Legal Advice

Please note that it is not the intent of General Code to give legal advice or opinions by way of the Editorial and Code Analysis, but rather to provide as much information as possible to enable City Officials to make necessary decisions. Any questions as to validity or legal sufficiency of legislation, or as to interpretation of cases and statutes, will properly remain the responsibility of your Municipal Attorney.

We have reviewed the City's provisions taking into account the provisions of Section 71.010, RSMo., which states: "Any municipal corporation in this State, whether under general or special charter, and having authority to pass ordinances regulating subjects, matters and things upon which there is a general law of the state, unless otherwise prescribed or authorized by some special provision of its charter, **shall confine and restrict its jurisdiction and the passage of its ordinances to and in conformity with the state law upon the same subject**."

Last Legislation in Code

The last legislation received for the Final Publication of the Code was Ord. No. 3080.

Process/Next Steps

Deliverables under the terms of the contract are fifteen (15) Code volumes with an Index and Title tabs.

This Report of Final Codification Changes and the 2012 Draft Review should be kept with the Code Adoption Ordinance supplied by General Code.

After adoption, the Code will be put on the web in eCode360® format.

GENERAL DECISIONS

Nomenclature Changes

A. The City should review the first page of the 2012 Draft Review for the listing of the names of various officials, departments and directors that the City changed during the 2012 recodification project. A copy of the 2012 Draft Review is included following the "Other" tab of the Codification Portfolio. Due to the numerous changes to the names/titles of officials, departments and directors made in the 2012 recodification project by the City, we believe a **separate** review of these items is necessary. Since this is outside the scope of this recodification agreement and will involve added research and time it will incur additional cost.

- For example, when reviewing this Manuscript, we noted the change of the "Department of Public Works" as well as other official names to "Department of Planning, Public Works and Parks." We do not see that the City has chosen to change this by ordinance in the current Code. In fact "public works and planning" appears to now be separated from the parks department. This is one example of the type of issue we would need to address in the new Code that could not have been foreseen in the recodification agreement.

- Additionally, the City appears to be in the process of reviewing its boards and committees as stated in recent Ord. No. 2985 which repealed the "Public Works Board of Variance." A Code review approach could possibly assist in this process. We do note that the "Public Works Board of Variance" still occurs in the Code and may need to be addressed as a new issue not related to the 2012 recodification project. See also our questions under Chapter 12, Article I, and Chapter 405, Article I, below.

If the City agrees with our evaluation, we would suggest a meeting when the City receives this Editorial and Code Analysis to discuss how to go forward regarding the officials, directors and departments. Then an estimate could be determined as to the additional cost to the City.

Decision With Final Draft:

Term	***Change To***
Finance Department *Department of Finance and Administration*	*Department of Finance*
Director of Finance and Administration *Finance Director*	*Director of Finance*
Public Works Department	*Department of Public Works*
Public Works Director (except as otherwise noted in this Report) *Director of Planning, Public Works and Parks* *Director of Public Services (except as otherwise noted in this Report)*	*Director of Public Works*
Public Works Department employee *Streets and Engineering Department employee*	*Public Works employee*
Planning Department	*Department of Planning*

Division of Planning and Development Services *Department of Planning, Public Works and Parks (except as otherwise noted in this Report)* *Department of Public Services (except as otherwise noted in this Report)* *PDS Division* *Planning and Development Services Division* *Department of Planning and Development*	
Planning Director *Planning and Development Services Director (except as otherwise noted in this Report)* *Director of Planning and Development Services*	*Director of Planning*
Community Development Department employee	*Planning Department employee*
Parks, Recreation and Arts Department *Parks Division*	*Department of Parks*
Director of Parks, Recreation and Arts	*Director of Parks*

B. The term "Councilmember" and "Council member" are both used in the Code. The City should determine which term should be used to be consistent throughout the Code. Note that "Councilmember" is the term used much more frequently throughout the Code.

Decision With Final Draft:

Use only "Council Member" and carry through this style when the Code is updated in the future.

Previous Code Elements To Be Excluded

The new Code will exclude the following parts of the 1990 City Code:

- The Resolution Disposition Table will no longer be maintained as part of the Code as a cost-saving measure for the City. Resolutions are not codified and the City's Resolutions are readily available as digital images on the City's website at https://www.chesterfield.mo.us/resolutions.html. That page states: "Resolutions are not part of our codified law, but rather formal statements of a decision or opinion of the Council."
    - Additionally, we would note that the City can create a "Public Documents" tab of eCode360® (https://www.ecode360.com/CH3266) and place these there, which would make them searchable on the eCode360 platform alongside the Code material, rather than in a different area of the City's website.
- The Checklist of Up-To-Date Pages will also be excluded from the new Code as a cost-saving measure. The use of print copies of the Code is now minimized due to eCode360, and the pagination tied to chapter numbering in the print Code will help keep it accurate as it is updated in the future.

Decision:

These exclusions are acceptable to the City.

TITLE I, GOVERNMENT CODE

Chapter 100, General Provisions

A. See Section 100.020. Note that the similar statutory provisions of Section 1.020(1), RSMo., contain an additional definition of "Certified Mail or Certified Mail with Return Receipt Requested" which is not included herein. The City may want to include this definition as set out below.

"*CERTIFIED MAIL or CERTIFIED MAIL WITH RETURN RECEIPT REQUESTED — Includes certified mail carried by the United States Postal Service or any parcel or letter carried by an overnight, express or ground delivery service that allows a sender or recipient to electronically track its location and provides a record of the signature of the recipient."*

Decision:

Add this definition to Section 100.020.

B. Since the term "Delegation of Authority" defined in Section 100.020 seems to be a procedure as opposed to a definition, possibly this term and its description should be included as Subsection (C) of this Section 100.020. Review and advise if this is acceptable.

Decision:

No revision desired.

C. Section 100.080 contains general penalty provisions which derive from Sections 77.590 and 546.902, RSMo. Note that Senate Bills 5 and 572 adopted in 2015 and 2016 have set out different penalties in certain circumstances, which the City may want to review. Since communities appear to be incorporating these provisions differently, the City's Attorney should assist the City in making a decision regarding these provisions and how to include them in the Code.

479.350. DEFINITIONS.

For purposes of sections 479.350 to 479.372, the following terms mean:

(1) "Annual general operating revenue," revenue that can be used to pay any bill or obligation of a county, city, town, or village, including general sales tax; general use tax; general property tax; fees from licenses and permits; unrestricted user fees; fines, court costs, bond forfeitures, and penalties. Annual general operating revenue does not include designated sales or use taxes; restricted user fees; grant funds; funds expended by a political subdivision for technological assistance in collecting, storing, and disseminating criminal history record information and facilitating criminal identification activities for the purpose of sharing criminal justice-related information among political subdivisions; or other revenue designated for a specific purpose;
(2) "Court costs," costs, fees, or surcharges which are retained by a county, city, town, or village upon a finding of guilty or plea of guilty, and shall exclude any costs, fees, or surcharges disbursed to the state or other entities by a county, city, town, or village and any certified costs, not including fines added to the annual real estate tax bill or a special tax bill under section 67.398, 67.402, or 67.451;
(3) "Minor traffic violation," a municipal or county traffic ordinance violation prosecuted that does not involve an accident or injury, that does not involve the operation of a commercial motor vehicle,

and for which no points are assessed by the department of revenue or the department of revenue is authorized to assess one to four points to a person's driving record upon conviction. Minor traffic violation shall include amended charges for any minor traffic violation. Minor traffic violation shall exclude a violation for exceeding the speed limit by more than nineteen miles per hour or a violation occurring within a construction zone or school zone;
(4) "Municipal ordinance violation," a municipal or county ordinance violation prosecuted for which penalties are authorized by statute under sections 64.160, 64.200, 64.295, 64.487, 64.690, 64.895, 67.398, 71.285, 89.120, and 89.490. Municipal ordinance violation shall include amended charges for municipal ordinance violations.

479.353. CONDITIONS. *— Notwithstanding any provisions to the contrary, the following conditions shall apply to minor traffic violations and municipal ordinance violations:*
(1) The court shall not assess a fine, if combined with the amount of court costs, totaling in excess of:
(a) Two hundred twenty-five dollars for minor traffic violations; and
(b) For municipal ordinance violations committed within a twelve month period beginning with the first violation: two hundred dollars for the first municipal ordinance violation, two hundred seventy-five dollars for the second municipal ordinance violation, three hundred fifty dollars for the third municipal ordinance violation, and four hundred fifty dollars for the fourth and any subsequent municipal ordinance violations;
(2) The court shall not sentence a person to confinement, except the court may sentence a person to confinement for any violation involving alcohol or controlled substances, violations endangering the health or welfare of others, or eluding or giving false information to a law enforcement officer;
(3) A person shall not be placed in confinement for failure to pay a fine unless such nonpayment violates terms of probation or unless the due process procedures mandated by Missouri Supreme Court Rule 37.65 or its successor rule are strictly followed by the court;
(4) Court costs that apply shall be assessed against the defendant unless the court finds that the defendant is indigent based on standards set forth in determining such by the presiding judge of the circuit. Such standards shall reflect model rules and requirements to be developed by the supreme court; and
(5) No court costs shall be assessed if the defendant is found to be indigent under subdivision (4) of this section or if the case is dismissed.

Decision:

Add new Subsections (E), Minor Traffic Violations, and (F), Municipal Ordinance Violations, to Section 100.080. Add new definitions of MINOR TRAFFIC VIOLATION and MUNICIPAL ORDINANCE VIOLATION to Section 100.020 (per Attorney Chris Graville's recommendation).

Chapter 105, Elections

See Section 105.010. Note that the City may want to include the "ward descriptions" or a map thereof under the "Public Documents" tab that the City can create in eCode360® (https://www.ecode360.com/CH3266). Then this will be available and searchable while searching within the Code.

NO DECISION REQUIRED

Chapter 110, Administration

Article I, In General

Section 2-2 of the 1990 City Code was removed in the 2012 recodification project due to the fact that it does not agree with the provisions of Chapter 610, RSMo. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Article I, Mayor and City Council

Division 2, Mayor

Section 2-30 of the 1990 City Code was removed in the 2012 recodification project at the request of the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Reinsert this Section.

Division 3, City Council

A. See Section 110.350. Note that this Section was revised to comply with the statutory provisions of Section 77.070, RSMo. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. Section 2-49 of the 1990 City Code was removed in the 2012 recodification project at the request of the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Reinsert this Section.

C. Section 110.400 refers to "a misdemeanor." We believe that reference to "an ordinance violation" would more appropriately describe this offense. If the City agrees with our assessment, we will change the term "a misdemeanor" to "an ordinance violation" throughout the Code, where appropriate.

Decision:

Make the above-noted change here and throughout the Code.

D. Section 2-53 of the 1990 City Code was replaced with the statutory provisions of Section 77.450, RSMo., now contained in this Section 110.410. Please confirm this revision. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

E. Section 2-55 of the 1990 City Code was replaced with a portion of the statutory provisions of Section 77.090, RSMo., now contained in this Section 110.430. Please confirm this revision. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Article V, City Officials

A. See Section 110.860. Section 2-106 of the 1990 City Code was revised in the 2012 recodification project at the request of the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. Section 2-107 of the 1990 City Code was removed in the 2012 recodification project at the request of the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Chapter 115, Officers and Employees

Article I, Generally

A. Note that Sections 2-341 to 2-345 and 2-347 to 2-353 were deleted in the 2012 recodification at the City's request. These Sections deal with the Personnel Policy, which the City determined should be held on file in the City offices. Section 2-346 regarding Personnel Director was placed in Section 120.040(J) as part of the Director of Finance and Administration's duties. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Additionally note that the City can place these under the "Public Documents" tab that the City can create in eCode360 (https://www.ecode360.com/CH3266). Then they would be searchable on the eCode360 platform alongside the Code material. The City could add an Article in this Chapter simply stating that the Personnel Policy is on file in the City offices.

Decision:

Create Article III, Personnel Policy, setting out one section referring to the Personnel Policy which is on file in the City offices; save them from repeal in the Code Adoption Ordinance.

B. See Section 115.020. Portions of this Section were revised in the 2012 recodification at the City's request. This Section derives from Section 2-302 of the 1990 City Code. Revisions were made in Subsections (A)(2), (C), (I) and (J). See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Reinsert Section 2-302 as it appears in the 1990 Code.

Article II, Conflicts Of Interest

Division 1, Generally

See Section 115.090. This Section was revised in the 2012 recodification by the revision and inclusion of definitions from Section 105.450, RSMo. This Section derives from Section 2-322 of the 1990 City Code. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Chapter 120, City Departments

Article I, Department Of Finance And Administration

A. See Subsection 120.040. As stated above in the first note to Chapter 115, Section 2-346 of the 1990 City Code was moved to Subsection (J) of this Section. This Section derives from Section 2-124 of the 1990 City Code, and Subsection (E) was deleted in the 2012 recodification. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Reinsert Subsection (E) as it appears in the 1990 Code.

B. See Section 120.050. This Section derives from Section 2-125 of the 1990 City Code, however in the 2012 recodification the City removed paragraphs 2 and 3 of this Section. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Reinsert these two paragraphs.

Article III, Department Of Planning, Public Works And Parks

This entire Article derives from a combination of Article VI, Divisions 5 and 6, of the 1990 City Code. In the 2012 recodification the City provided a strikeout version of this Article, renaming the departments and changing much of this Article. The City should review this carefully since almost none of the material in Sections 2-166 through 2-181 or 2-191 through 2-195 reads as it originally existed. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Replace this Article with 1990 Code Chapter 2, Article VI, Divisions 5 and 6.

Decision With Final Draft:

Delete Section 120.410.

Chapter 123, Purchasing Regulations

A. Section 2-136 of the 1990 City Code was removed in the 2012 recodification project at the request of the City. The remaining Sections in Article VI, Division III, of Chapter 2 of the 1990 City Code were moved to this Chapter. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Reinsert this Section.

B. See Subsection 123.050(D)(2)(e)(2)(b). The City may want to consider adding the words "equal to or" before the words "less than five thousand dollars" as they appear in the second line of this Section in order to avoid any potential misinterpretation.

Decision:

Make the change noted above.

Chapter 125, Boards, Commissions, Committees, Etc.

Article I, Generally

A. See Section 125.020. Note that in the recodification of 2012 the "Public Works Board of Variance" and the "Finance and Administration Citizens Advisory Committee" were both removed from the listing herein. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. Note that this Board and Committee were recently repealed by Ord. Nos. 2985 and 2994, respectively.

NO DECISION REQUIRED

B. Note that this entire Article should be reviewed for accuracy as we received a strikeout version of this material for the 2012 recodification. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Article II, Board Of Adjustment

A. See Section 125.060. This Section which derives from Section 2-211 of the 1990 City Code was revised to comply with the statutory provisions of Section 89.080, RSMo. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. See Sections 125.170 and 125.180. Are the fees set out in these Sections still current? They do not appear to have been amended since 1990.

Decision:

Remove the fees in these Sections.

Chapter 130, Municipal Court

A. See Section 130.010. Note that the term "Court Clerk" was changed to "Court Administrator" in the 2012 recodification at the request of the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. See Section 130.050. Note that this Section derives from Section 19-5 of the 1990 City Code and was revised to delete subsections (e) and (f) in the 2012 recodification at the request of the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Delete the first sentence of Section 130.050(B)(3).

C. See Section 130.060. Note that this Section derives from Section 19-5 of the 1990 City Code and was revised to change "Traffic Violations Bureau" to simply read "Violations Bureau" as it is stated in Supreme Court Rule 37.49. This revision was made throughout the Code. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

D. The City should review the Court costs set out in Sections 130.070, 130.075, 130.080 and 130.100 and confirm these are all the costs being charged in the City's Municipal Court. We recommend that you review the notes below before making any decisions regarding the costs.

Decision:

Retain as shown in the Manuscript, except as noted below.

E. See Subsection 130.070~~(D)~~*(E)*. Note that the provisions of Section 488.607, RSMo., appear to allow "up to $4.00" for this court cost. Also, note that the reference to 479.261 is not correct, this should read 488.607.

488.607. Additional surcharges authorized for municipal and associate circuit courts for cities and towns having shelters for victims of domestic violence, amount, exceptions.--

The governing body of any county or any city having a shelter for victims of domestic violence established pursuant to sections 455.200 to 455.230, or any municipality within a county which has such shelter, or any county or municipality whose residents are victims of domestic violence and are admitted to such shelters in another county, may, by order or ordinance provide for an additional surcharge in an amount of up to four dollars per case for each criminal case, including violations of any county or municipal ordinance. No surcharge shall be collected in any proceeding when the proceeding or defendant has been dismissed by the court or when costs are to be paid by the state, county or municipality. Such surcharges collected by municipal clerks in municipalities electing or required to have violations of municipal ordinances tried before a municipal judge pursuant to section 479.020, or to employ judicial personnel pursuant to section 479.060, shall be disbursed to the city at least monthly, and such surcharges collected by circuit court clerks shall be collected and disbursed as provided by sections 488.010 to 488.020. Such fees shall be payable to the city or county wherein such fees originated. The county or city shall use such moneys only for the purpose of providing operating expenses for shelters for battered persons as defined in sections 455.200 to 455.230.

*(L. 1991 H.B. 566, A.L. 1992 H.B. 1471 merged with S.B. 457, A.L. 1996 S.B. 869, A.L. 1999 S.B. 1, et al., A.L. 2000 S.B. 1002 Revision § 479.261 subsec. 1, A.L. 2001 S.B. 267, A.L. 2005 S.B. 420 & 344, A.L. 2014 H.B. 1238) *Transferred 2000; formerly 479.261 subsec. 1*

Decision:

Change this to read "up to $4.00" and change the statutory reference from 479.261 to 488.607.

F. Note that Section 130.085 may need to be adjusted based on SB 5 requirements which are set out in Section 479.360, RSMo. Review said requirements below with the City's Attorney and advise how or if this should be revised.

479.360. Certification of substantial compliance, filed with state auditor--procedures adopted and certified.

1. Every county, city, town, and village shall file with the state auditor, together with its report due under section 105.145, its certification of its substantial compliance signed by its municipal judge with the municipal court procedures set forth in this subsection during the preceding fiscal year. The procedures to be adopted and certified include the following:

(1) Defendants in custody pursuant to an initial arrest warrant issued by a municipal court have an opportunity to be heard by a judge in person, by telephone, or video conferencing as soon as practicable and not later than forty-eight hours on minor traffic violations and not later than seventy-two hours on other violations and, if not given that opportunity, are released;

(2) Defendants in municipal custody shall not be held more than twenty-four hours without a warrant after arrest;

(3) Defendants are not detained in order to coerce payment of fines and costs unless found to be in contempt after strict compliance by the court with the due process procedures mandated by Missouri Supreme Court Rule 37.65 or its successor Rule;

(4) The municipal court has established procedures to allow indigent defendants to present evidence of their financial condition and takes such evidence into account if determining fines and costs and establishing related payment requirements;

(5) The municipal court only assesses fines and costs as authorized by law;

(6) No additional charge shall be issued for the failure to appear for a minor traffic violation;

(7) The municipal court conducts proceedings in a courtroom that is open to the public and large enough to reasonably accommodate the public, parties, and attorneys;

(8) The municipal court makes use of alternative payment plan;

(9) The municipal court makes use of community service alternatives for which no associated costs are charged to the defendant; and

(10) The municipal court has adopted an electronic payment system or payment by mail for the payment of minor traffic violations.

2. On or before December 31, 2015, the state auditor shall set forth by rule a procedure for including the addendum information required by this section. The rule shall also allow reasonable opportunity for demonstration of compliance. (L. 2015 S.B. 5; A.L. 2016 S.B. 572)

Decision:

Insert a new Subsection (B) which reads: "No additional charge shall be issued for the failure to appear for a minor traffic violation."

Chapter 135, Fiscal Year and Budget Procedures

The City's Code does not include currently include sales taxes. If the City wants these included, please provide the taxes and their enacting ordinances and we will add them as an Article in this Chapter. If the City does not want them included we will save them from repeal in the Adopting Ordinance.

Decision:

Do not place sales taxes in the Code, and save them from repeal in the Adopting Ordinance.

Chapter 140, Disposal Of Unclaimed Property And Evidence

See Section 140.080. Note that this Section derives from Section 2-368 of the 1990 City Code and was revised to delete the words of the second sentence therein. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

TITLE II, PUBLIC HEALTH, SAFETY AND WELFARE

Chapter 200, Police

Article I, In General

A. Are the Police Department fees set out in Section 200.010 still current?

Decision:

No revision desired.

B. If the Policy Manual described in Section 200.020 has not been reviewed or updated since 1988, the City may want to review the same even though it is not included in the Code.

NO DECISION REQUIRED

C. Is there a newer ordinance in which the City has contracted with the County? If so, provide the number and we will insert it herein.

Decision:

Remove the ordinance reference from Section 200.030.

Article II, Police Personnel Board

A. See Section 200.130. In the 2012 recodification we replaced this Section with a combination of Sections 24-19, 24-65 and 24-76 of the 1990 City Code as provided by the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. There were minor changes made by the City within this Article/Chapter; see Sections 200.210, 200.230(A)(6), 200.250(D)(1), 200.270, 200.320, 200.340, 200.350, 200.360, 200.580 and 200.710 (these exist in Articles III, IV and V). See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Article III, Merit System

Sections 24-71 and 24-72 of the 1990 City Code were deleted by the City in the 2012 recodification. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Chapter 203, Fire Prevention And Protection

Article I, Fireworks

See the definitions of CONSUMER FIREWORKS and DISPLAY FIREWORKS in Section 203.010. Note that these definitions were inserted to replace COMMON FIREWORKS and SPECIAL FIREWORKS in the 1990 City Code Section 13-21. Also note that the City deleted the definition of FIREWORKS SEASON. These definitions have been further revised in the statutes to read as follows:

320.106. Definitions.

As used in sections 320.106 to 320.161, unless clearly indicated otherwise, the following terms mean:

(1) "American Pyrotechnics Association (APA), Standard 87-1," or subsequent standard which may amend or supersede this standard for manufacturers, importers and distributors of fireworks;

(2) "Chemical composition," all pyrotechnic and explosive composition contained in fireworks devices as defined in American Pyrotechnics Association (APA), Standard 87-1;

(3) "Consumer fireworks," explosive devices designed primarily to produce visible or audible effects by combustion and includes aerial devices and ground devices, all of which are classified as fireworks, UNO336, within 49 CFR Part 172;

(4) "Discharge site," the area immediately surrounding the fireworks mortars used for an outdoor fireworks display;

(5) "Dispenser," a device designed for the measurement and delivery of liquids as fuel;

(6) "Display fireworks," explosive devices designed primarily to produce visible or audible effects by combustion, deflagration or detonation. This term includes devices containing more than two grains (130 mg) of explosive composition intended for public display. These devices are classified as fireworks, UN0333 or UN0334 or UNO335, within 49 CFR Part 172;

(7) "Display site," the immediate area where a fireworks display is conducted, including the discharge site, the fallout area, and the required separation distance from mortars to spectator viewing areas, but not spectator viewing areas or vehicle parking areas;

(8) "Distributor," any person engaged in the business of selling fireworks to wholesalers, jobbers, seasonal retailers, other persons, or governmental bodies that possess the necessary permits as specified in sections 320.106 to 320.161, including any person that imports any fireworks of any kind in any manner into the state of Missouri;

(9) "Fireworks," any composition or device for producing a visible, audible, or both visible and audible effect by combustion, deflagration, or detonation and that meets the definition of consumer, proximate, or display fireworks as set forth by 49 CFR Part 171 to end, United States Department of Transportation hazardous materials regulations;

(10) "Fireworks season," the period beginning on the twentieth day of June and continuing through the tenth day of July of the same year and the period beginning on the twentieth day of December and continuing through the second day of January of the next year, which shall be the only periods of time that seasonal retailers may be permitted to sell consumer fireworks;

(11) "Jobber," any person engaged in the business of making sales of consumer fireworks at wholesale or retail within the state of Missouri to nonlicensed buyers for use and distribution outside the state of Missouri during a calendar year from the first day of January through the thirty-first day of December;

(12) "Licensed operator," any person who supervises, manages, or directs the discharge of outdoor display fireworks, either by manual or electrical means; who has met additional requirements established by promulgated rule and has successfully completed a display fireworks training course recognized and approved by the state fire marshal;

(13) "Manufacturer," any person engaged in the making, manufacture, assembly or construction of fireworks of any kind within the state of Missouri;

(14) "NFPA," National Fire Protection Association, an international codes and standards organization;

(15) "Permanent structure," buildings and structures with permanent foundations other than tents, mobile homes, and trailers;

(16) "Permit," the written authority of the state fire marshal issued pursuant to sections 320.106 to 320.161 to sell, possess, manufacture, discharge, or distribute fireworks;

(17) "Person," any corporation, association, partnership or individual or group thereof;

(18) "Proximate fireworks," a chemical mixture used in the entertainment industry to produce visible or audible effects by combustion, deflagration, or detonation, as classified within 49 CFR Part 172 as UN0431 or UN0432;

(19) "Pyrotechnic operator" or "special effects operator," an individual who has responsibility for pyrotechnic safety and who controls, initiates, or otherwise creates special effects for proximate fireworks and who has met additional requirements established by promulgated rules and has successfully completed a proximate fireworks training course recognized and approved by the state fire marshal;

(20) "Sale," an exchange of articles of fireworks for money, including barter, exchange, gift or offer thereof, and each such transaction made by any person, whether as a principal proprietor, salesman, agent, association, copartnership or one or more individuals;

(21) "Seasonal retailer," any person within the state of Missouri engaged in the business of making sales of consumer fireworks in Missouri only during a fireworks season as defined by subdivision (10) of this section;

(22) "Wholesaler," any person engaged in the business of making sales of consumer fireworks to any other person engaged in the business of making sales of consumer fireworks at retail within the state of Missouri. (L. 1985 S.B. 76 § 1, A.L. 1987 H.B. 416, A.L. 1999 H.B. 343, A.L. 2004 S.B. 1196, A.L. 2007 S.B. 22, A.L. 2012 H.B. 1647 merged with S.B. 835) Effective 6-11-12 (S.B. 835) 7-10-12 (H.B. 1647)

Decision:

Insert the newest definitions underlined above, except for FIREWORKS SEASON.

Chapter 205, Animals And Fowl

Article I, In General

Section 205.030(D) sets out a penalty differing from the General Penalty set out in Section 100.080. Would the City prefer we refer to Section 100.080?

Decision:

Delete Subsection (D) in Sections 205.030 and 205.060.

Article II, Animals At Large

A. Section 5-19 of the 1990 City Code was not retained in the 2012 recodification. It is a penalty Section and should not be necessary, since the General Penalty applies to the entire Code. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. See Section 205.140. As to the definition of FARM ANIMAL, note that Section 578.005, RSMo., contains a slightly different definition which the City may want to review for possible inclusion herein.

578.005. Definitions.

As used in sections 578.005 to 578.023, the following terms shall mean:

(1) "Adequate care," normal and prudent attention to the needs of an animal, including wholesome food, clean water, shelter and health care as necessary to maintain good health in a specific species of animal;

(2) "Adequate control," to reasonably restrain or govern an animal so that the animal does not injure itself, any person, any other animal, or property;

(3) "Animal," every living vertebrate except a human being;

(4) "Animal shelter," a facility which is used to house or contain animals and which is owned, operated, or maintained by a duly incorporated humane society, animal welfare society, society for the prevention of cruelty to animals, or other not-for-profit organization devoted to the welfare, protection, and humane treatment of animals;

(5) "Farm animal," an animal raised on a farm or ranch and used or intended for use in farm or ranch production, or as food or fiber;

(6) "Farm animal professional," any individual employed at a location where farm animals are harbored;

(7) "Harbor," to feed or shelter an animal at the same location for three or more consecutive days;

(8) "Humane killing," the destruction of an animal accomplished by a method approved by the American Veterinary Medical Association's Panel on Euthanasia (JAVMA 173: 59-72, 1978); or more recent editions, but animals killed during the feeding of pet carnivores shall be considered humanely killed;

(9) "Owner," in addition to its ordinary meaning, any person who keeps or harbors an animal or professes to be owning, keeping, or harboring an animal;

(10) "Person," any individual, partnership, firm, joint stock company, corporation, association, trust, estate, or other legal entity;

(11) "Pests," birds, rabbits, or rodents which damage property or have an adverse effect on the public health, but shall not include any endangered species listed by the United States Department of the Interior nor any endangered species listed in the Wildlife Code of Missouri. (L. 1983 S.B. 211 § 1, A.L. 2012 S.B. 631)

Decision:

Insert the above underlined definition to replace the current definition.

Article III, Abuse And Neglect Of Animals

See Sections 205.230 and 205.240. These Sections were replaced by the current statutory provisions in place at the time of the 2012 recodification. These Sections were again revised and a new Section added in the statutes as well. The City may want to review the similar statutory provisions of Sections 578.009, 578.110 and 578.012, RSMo., and determine if any revisions are necessary.

Section578.009. Animal Neglect.

A. A person commits the offense of animal neglect if he or she:

1. Has custody or ownership of an animal and fails to provide adequate care; or

2. Knowingly abandons an animal in any place without making provisions for its adequate care.

B. All fines and penalties for a first finding of guilt under this Section may be waived by the court if the person found guilty of animal neglect shows that adequate, permanent remedies for the neglect have been made. Reasonable costs incurred for the care and maintenance of neglected animals may not be waived. This Section shall not apply to the provisions of Section 578.007, RSMo., or Chapter 272, RSMo.

C. In addition to any other penalty imposed by this Section 578.009, RSMo., the court may order a person found guilty of animal neglect to pay all reasonable costs and expenses necessary for:

1. The care and maintenance of neglected animals within the person's custody or ownership;

2. The disposal of any dead or diseased animals within the person's custody or ownership;

3. The reduction of resulting organic debris affecting the immediate area of the neglect; and

4. The avoidance or minimization of any public health risks created by the neglect of the animals. (RSMo. §578.009, 2013, 2014 effective 1-1-2017)

Section 578.011. Animal Trespass.

A. A person is guilty of animal trespass if a person having ownership or custody of an animal knowingly fails to provide adequate control for a period equal to or exceeding twelve (12) hours.

B. For a first conviction of animal trespass, each offense shall be punishable by a fine not to exceed two hundred dollars ($200.00). The second and all subsequent convictions shall be punishable by imprisonment or a fine not to exceed five hundred dollars ($500.00), or both such fine and imprisonment. All fines for a first conviction of animal trespass may be waived by the court provided that the person found guilty of animal trespass shows that adequate, permanent remedies for trespass have been made. Reasonable costs incurred for the care and maintenance of trespassing animals may not be waived. This Section shall not apply to the provisions of Section 578.007 or Sections 272.010 to 272.370, RSMo. (RSMo. §578.011, 2013)

Section 578.012. Animal Abuse.

A. A person commits the offense of animal abuse if he or she:

1. Intentionally or purposely kills an animal in any manner not allowed by or expressly exempted from the provisions of Sections 578.005 to 578.023 and 273.030, RSMo.;

2. Purposely or intentionally causes injury or suffering to an animal; or

3. Having ownership or custody of an animal knowingly fails to provide adequate care which results in substantial harm to the animal. (RSMo. §578.012, 2013, 2014 effective 1-1-2017)

Decision:

Delete Sections 205.230 and 205.240 and replace with all three of the above statutory Sections.

Article IV, Dangerous Animals

Additional Decision:

Revise Section 205.350 as follows: delete Subsection (A)(11)(b), in Subsection (A)(11)(c) [now (A)(11)(b)], change "provided above" to "set in this Code."

Article V, Deer Control Policy And Hunting Regulations

Are the four attachments at the end of this Chapter/Article needed in the Code or would these be better placed, and footnoted as, on file in the Clerk's office?

Decision:

Remove the attachments from the Code and include a footnote that they are on file in the City Clerk's office.

Additional Decision:

Revise Section 205.460 as follows: delete Subsection (B), remove Subsection designations, change "a misdemeanor" to read "an ordinance violation punishable as set out in Section 100.080."

~~Chapter 210, Offenses~~

General Notes

We have included the version of the Offenses Chapter approved by the City in the 2012 recodification project, with amendments, as this Chapter 210.

For comparison purposes, we have also included our **current** Model Offenses Code as Sample Chapter 210A of the Manuscript. It was updated in 2017 and accounts for the sweeping revisions to the State Crimes Code pursuant to SB 491 of 2014 that were effective as of January 1, 2017.

- The City may want to review our Offenses Chapter 210A and use it as a base for a new Offenses Chapter. Then the City could simply put any additional Code Sections desired for retention into this newest Statutory Chapter.
- Our questions below pertain mainly to the non-statutory wording included in this Chapter and any Sections retained from the 1990 City Code.
- Also note that the City should review Chapter 21, Offenses and Miscellaneous Provisions of the 1990 City Code, to confirm that we have included any currently applicable offenses. The Derivation Table at the end of the Manuscript, and a "CC 1900 § ___" history at a Section, will indicate where the City's prior material has been retained.

NO DECISION REQUIRED

Article I, In General

Additional Decision:

Include Section 210.010 (CC 1990 § 21-1) in Chapter 210A, Article XV.

A. Section 210.020 should be compared to the newest version of this statutory material (RSMo. §575.080) contained in Section 210A.380 of this Manuscript.

Decision:

City will use Chapter 210A.

B. Section 210.030 should be compared to the newest version of this statutory material (RSMo. §575.150) contained in Section 210A.390 of this Manuscript.

Decision:

City will use Chapter 210A.

C. Section 210.040 should be compared to the newest version of this statutory material (RSMo. §575.120) contained in Section 210A.370 of this Manuscript.

Decision:

City will use Chapter 210A.

D. Section 210.050 may be adequately addressed by Section 210.040 which contains language on fleeing an officer in Subsections 210.030(A)(1) and (C). It should be compared to the newest version of this statutory material (RSMo. §575.120) contained in Section 210A.370 of this Manuscript.

Decision:

Include Section 210.050 (CC 1990 § 21-5) in Chapter 210A, Article III.

E. Compare Section 210.060 to Section 210A.020 which is stated slightly different. If the City is using Chapter 210A, this Section 210.060 would not be necessary.

Decision:

City will use Chapter 210A; exclude Section 210.060.

F. Note that Section 21-8 of the 1990 City Code was deleted in the 2012 recodification project and is now addressed in Article IX "Offenses Concerning Tobacco." The newest version of this Article is set out in Chapter 210A, Article XIII, substantially amended in 2014. Confirm the exclusion of this Section.

Decision:

City will use Chapter 210A; exclude CC 1990 Section 21-8.

G. Section 210.070 should be compared to the newest version of this statutory material (RSMo. §570.120) contained in Section 210A.1190 of this Manuscript.

Decision:

City will use Chapter 210A.

Article II, Minors

Division 1, Generally

Note that Section 21-29 of the 1990 City Code was deleted in the 2012 recodification project and is now addressed in Article IX "Offenses Concerning Tobacco." The newest version of this Article is set out in Chapter 210A, Article XIII, amended in 2014. Confirm the exclusion of this Section.

Decision:

Exclude this Division; City will use Chapter 210A; exclude CC 1990 Section 21-29.

Division 2, Endangering The Welfare Of A Child

A. Section 210.260 should be compared to the newest version of this statutory material (RSMo. §568.050) contained in Section 210A.180 of this Manuscript.

Decision:

City will use Chapter 210A.

B. Note that Section 21-31 of the 1990 City Code was deleted in the 2012 recodification project and is not included in the Manuscript. Confirm the exclusion of this Section.

Decision:

Okay to exclude this Section as shown in Manuscript.

Additional Decision:

Include Section 210.270 (CC 1990 § 21-32) in Chapter 210A, Article II. Change "this Division" to "Section 210.180."

Article III, Offenses Against Morals

A. Section 210.350 should be compared to the newest version of this statutory material (RSMo. §566.093) contained in Section 210A.1510 of this Manuscript.

Decision:

City will use Chapter 210A.

B. Section 210.360 is covered in more than one statutory provision. Below we have set out the provisions of Sections 573.010 and 573.060, RSMo., all of which have been amended recently, effective 2017. The City should review this Section against Section 210.360 and determine if any changes should be made.

573.010. Beginning January 1, 2017--Definitions.

As used in this chapter the following terms shall mean:

(1) "Adult cabaret," a nightclub, bar, juice bar, restaurant, bottle club, or other commercial establishment, regardless of whether alcoholic beverages are served, which regularly features persons who appear semi-nude;

(2) "Characterized by," describing the essential character or dominant theme of an item;

(3) "Child," any person under the age of fourteen;

(4) "Child pornography":

(a) Any obscene material or performance depicting sexual conduct, sexual contact as defined in section 566.010, or a sexual performance and which has as one of its participants or portrays as an observer of such conduct, contact, or performance a minor; or

(b) Any visual depiction, including any photograph, film, video, picture, or computer or computer-generated image or picture, whether made or produced by electronic, mechanical, or other means, of sexually explicit conduct where:

a. The production of such visual depiction involves the use of a minor engaging in sexually explicit conduct;

b. Such visual depiction is a digital image, computer image, or computer-generated image that is, or is indistinguishable from, that of a minor engaging in sexually explicit conduct, in that the depiction is such that an ordinary person viewing the depiction would conclude that the depiction is of an actual minor engaged in sexually explicit conduct; or

c. Such visual depiction has been created, adapted, or modified to show that an identifiable minor is engaging in sexually explicit conduct. "Identifiable minor" means a person who was a minor at the time the visual depiction was created, adapted, or modified; or whose image as a minor was used in creating, adapting, or modifying the visual depiction; and who is recognizable as an actual person by the person's face, likeness, or other distinguishing characteristic, such as a unique birthmark or other recognizable feature. The term "identifiable minor" shall not be construed to require proof of the actual identity of the identifiable minor;

(5) "Employ," "employee," or "employment," any person who performs any service on the premises of a sexually oriented business, on a full-time, part-time, or contract basis, whether or not the person is denominated an employee, independent contractor, agent, or otherwise. Employee does not include a person exclusively on the premises for repair or maintenance of the premises or for the delivery of goods to the premises;

(6) "Explicit sexual material," any pictorial or three-dimensional material depicting human masturbation, deviate sexual intercourse, sexual intercourse, direct physical stimulation or unclothed genitals, sadomasochistic abuse, or emphasizing the depiction of postpubertal human genitals; provided, however, that works of art or of anthropological significance shall not be deemed to be within the foregoing definition;

(7) "Furnish," to issue, sell, give, provide, lend, mail, deliver, transfer, circulate, disseminate, present, exhibit or otherwise provide;

(8) "Material," anything printed or written, or any picture, drawing, photograph, motion picture film, videotape or videotape production, or pictorial representation, or any recording or transcription, or any mechanical, chemical, or electrical reproduction, or stored computer data, or anything which is or may be used as a means of communication. Material includes undeveloped photographs, molds, printing plates, stored computer data and other latent representational objects;

(9) "Minor," any person less than eighteen years of age;

(10) "Nudity" or "state of nudity," the showing of the human genitals, pubic area, vulva, anus, anal cleft, or the female breast with less than a fully opaque covering of any part of the nipple or areola;

(11) "Obscene," any material or performance if, taken as a whole:

(a) Applying contemporary community standards, its predominant appeal is to prurient interest in sex; and

(b) The average person, applying contemporary community standards, would find the material depicts or describes sexual conduct in a patently offensive way; and

(c) A reasonable person would find the material lacks serious literary, artistic, political or scientific value;

(12) "Operator," any person on the premises of a sexually oriented business who causes the business to function, puts or keeps the business in operation, or is authorized to manage the business or exercise overall operational control of the business premises. A person may be found to be operating or causing to be operated a sexually oriented business whether or not such person is an owner, part owner, or licensee of the business;

(13) "Performance," any play, motion picture film, videotape, dance or exhibition performed before an audience of one or more;

(14) "Pornographic for minors," any material or performance if the following apply:

(a) The average person, applying contemporary community standards, would find that the material or performance, taken as a whole, has a tendency to cater or appeal to a prurient interest of minors; and

(b) The material or performance depicts or describes nudity, sexual conduct, the condition of human genitals when in a state of sexual stimulation or arousal, or sadomasochistic abuse in a way which is patently offensive to the average person applying contemporary adult community standards with respect to what is suitable for minors; and

(c) The material or performance, taken as a whole, lacks serious literary, artistic, political, or scientific value for minors;

(15) "Premises," the real property upon which a sexually oriented business is located, and all appurtenances thereto and buildings thereon, including but not limited to the sexually oriented business, the grounds, private walkways, and parking lots or parking garages or both;

(16) "Promote," to manufacture, issue, sell, provide, mail, deliver, transfer, transmute, publish, distribute, circulate, disseminate, present, exhibit, or advertise, or to offer or agree to do the same, by any means including a computer;

(17) "Regularly," the consistent and repeated doing of the act so described;

(18) "Sadomasochistic abuse," flagellation or torture by or upon a person as an act of sexual stimulation or gratification;

(19) "Semi-nude" or "state of semi-nudity," the showing of the female breast below a horizontal line across the top of the areola and extending across the width of the breast at such point, or the showing of the male or female buttocks. Such definition includes the lower portion of the human female breast, but shall not include any portion of the cleavage of the female breasts exhibited by a bikini, dress, blouse, shirt, leotard, or similar wearing apparel provided the areola is not exposed in whole or in part;

(20) "Sexual conduct," actual or simulated, normal or perverted acts of human masturbation; deviate sexual intercourse; sexual intercourse; or physical contact with a person's clothed or unclothed genitals, pubic area, buttocks, or the breast of a female in an act of apparent sexual stimulation or gratification or any sadomasochistic abuse or acts including animals or any latent objects in an act of apparent sexual stimulation or gratification;

(21) "Sexually explicit conduct," actual or simulated:

(a) Sexual intercourse, including genital-genital, oral-genital, anal-genital, or oral-anal, whether between persons of the same or opposite sex;

(b) Bestiality;

(c) Masturbation;

(d) Sadistic or masochistic abuse; or

(e) Lascivious exhibition of the genitals or pubic area of any person;

(22) "Sexually oriented business" includes:

(a) An adult bookstore or adult video store. "Adult bookstore" or "adult video store" means a commercial establishment which, as one of its principal business activities, offers for sale or rental for any form of consideration any one or more of the following: books, magazines, periodicals, or other printed matter, or photographs, films, motion pictures, video cassettes, compact discs, digital video discs, slides, or other visual representations which are characterized by their emphasis upon the display of specified sexual activities or specified anatomical areas. A principal business activity exists where the commercial establishment:

a. Has a substantial portion of its displayed merchandise which consists of such items; or

b. Has a substantial portion of the wholesale value of its displayed merchandise which consists of such items; or

c. Has a substantial portion of the retail value of its displayed merchandise which consists of such items; or

d. Derives a substantial portion of its revenues from the sale or rental, for any form of consideration, of such items; or

e. Maintains a substantial section of its interior business space for the sale or rental of such items; or

f. Maintains an adult arcade. "Adult arcade" means any place to which the public is permitted or invited wherein coin-operated or slug-operated or electronically, electrically, or mechanically controlled still or motion picture machines, projectors, or other image-producing devices are regularly maintained to show images to five or fewer persons per machine at any one time, and where the images so displayed are characterized by their emphasis upon matter exhibiting specified sexual activities or specified anatomical areas;

(b) An adult cabaret;

(c) An adult motion picture theater. "Adult motion picture theater" means a commercial establishment where films, motion pictures, video cassettes, slides, or similar photographic reproductions, which are characterized by their emphasis upon the display of specified sexual activities or specified anatomical areas are regularly shown to more than five persons for any form of consideration;

(d) A semi-nude model studio. "Semi-nude model studio" means a place where persons regularly appear in a state of semi-nudity for money or any form of consideration in order to be observed, sketched, drawn, painted, sculptured, photographed, or similarly depicted by other persons. Such definition shall not apply to any place where persons appearing in a state of semi-nudity do so in a modeling class operated:

a. By a college, junior college, or university supported entirely or partly by taxation;

b. By a private college or university which maintains and operates educational programs in which credits are transferable to a college, junior college, or university supported entirely or partly by taxation; or

c. In a structure:

(i) Which has no sign visible from the exterior of the structure and no other advertising that indicates a semi-nude person is available for viewing; and

(ii) Where, in order to participate in a class, a student must enroll at least three days in advance of the class;

(e) A sexual encounter center. "Sexual encounter center" means a business or commercial enterprise that, as one of its principal purposes, purports to offer for any form of consideration physical contact in the form of wrestling or tumbling between two or more persons when one or more of the persons is semi-nude;

(23) "Sexual performance," any performance, or part thereof, which includes sexual conduct by a child who is less than seventeen years of age;

(24) "Specified anatomical areas" include:

(a) Less than completely and opaquely covered: human genitals, pubic region, buttock, and female breast below a point immediately above the top of the areola; and

(b) Human male genitals in a discernibly turgid state, even if completely and opaquely covered;

(25) "Specified sexual activity," includes any of the following:

(a) Intercourse, oral copulation, masturbation, or sodomy; or

(b) Excretory functions as a part of or in connection with any of the activities described in paragraph (a) of this subdivision;

(26) "Substantial," at least thirty percent of the item or items so modified;

(27) "Visual depiction," includes undeveloped film and videotape, and data stored on computer disk or by electronic means which is capable of conversion into a visual image.(L. 1977 S.B. 60, A.L. 1985 H.B. 366, et al., A.L. 1987 H.B. 113, et al., A.L. 1989 H.B. 225, A.L. 2000 S.B. 757 & 602, A.L. 2006 H.B. 1698, et al., A.L. 2014 S.B. 491) Effective 1-01-17

573.060. Beginning January 1, 2017--Public display of explicit sexual material--penalties.

1. A person commits the offense of public display of explicit sexual material if he or she recklessly:

(1) Exposes, places, exhibits, or in any fashion, displays explicit sexual material in any location, whether public or private, and in such a manner that it may be readily seen and its content or character distinguished by normal unaided vision as viewed from a street, highway, public sidewalk, or the property of others, or from any portion of the person's store, the exhibitor's store or property when items and material other than this material are offered for sale or rent to the public; or

(2) Fails to take prompt action to remove such a display from property in his or her possession after learning of its existence.

2. The offense of public display of explicit sexual material is a class A misdemeanor unless the person has been found guilty of an offense under this section committed at a different time, in which case it is a class E felony.

3. For purposes of this section, each day there is a violation of this section shall constitute a separate offense. (L. 1977 S.B. 60, A.L. 1987 H.B. 113, et al., A.L. 2009 H.B. 62, A.L. 2014 S.B. 491) Effective 1-01-17

Decision:

Include Section 210.360 (CC 1990 § 17-170) in Chapter 210A, Article X.

Article IV, Offenses Against Persons

A. Section 210.410 should be compared to the newest version of this statutory material (RSMo. §565.056) contained in Section 210A.120 of this Manuscript.

Decision:

City will use Chapter 210A.

B. Section 210.420 should be compared to the newest version of this statutory material (RSMo. §565.091) contained in Section 210A.150 of this Manuscript.

Decision:

City will use Chapter 210A.

C. Section 210.430 should be compared to the newest version of this statutory material (RSMo. §455.085) set out below.

455.085. Beginning January 1, 2017--Arrest for violation of order--penalties--good faith immunity for law enforcement officials.

1. When a law enforcement officer has probable cause to believe a party has committed a violation of law amounting to domestic violence, as defined in section 455.010, against a family or household member, the officer may arrest the offending party whether or not the violation occurred in the presence of the arresting officer. When the officer declines to make arrest pursuant to this subsection, the officer shall make a written report of the incident completely describing the offending party, giving the victim's name, time, address, reason why no arrest was made and any other pertinent information. Any law enforcement officer subsequently called to the same address within a twelve-hour period, who shall find probable cause to believe the same offender has again committed a violation as stated in this subsection against the same or any other family or household member, shall arrest the offending party for this subsequent offense. The primary report of nonarrest in the preceding twelve-hour period may be considered as evidence of the defendant's intent in the violation for which arrest occurred. The refusal of the victim to sign an official complaint against the violator shall not prevent an arrest under this subsection.

2. When a law enforcement officer has probable cause to believe that a party, against whom a protective order has been entered and who has notice of such order entered, has committed an act of abuse in violation of such order, the officer shall arrest the offending party-respondent whether or not the violation occurred in the presence of the arresting officer. Refusal of the victim to sign an official complaint against the violator shall not prevent an arrest under this subsection.

3. When an officer makes an arrest, the officer is not required to arrest two parties involved in an assault when both parties claim to have been assaulted. The arresting officer shall attempt to identify and shall arrest the party the officer believes is the primary physical aggressor. The term "primary physical aggressor" is defined as the most significant, rather than the first, aggressor. The law enforcement officer shall consider any or all of the following in determining the primary physical aggressor:

(1) The intent of the law to protect victims from continuing domestic violence;

(2) The comparative extent of injuries inflicted or serious threats creating fear of physical injury;

(3) The history of domestic violence between the persons involved.

No law enforcement officer investigating an incident of domestic violence shall threaten the arrest of all parties for the purpose of discouraging requests or law enforcement intervention by any party. Where complaints are received from two or more opposing parties, the officer shall evaluate each complaint separately to determine whether the officer should seek a warrant for an arrest.

4. In an arrest in which a law enforcement officer acted in good faith reliance on this section, the arresting and assisting law enforcement officers and their employing entities and superiors shall be immune from liability in any civil action alleging false arrest, false imprisonment or malicious prosecution.

5. When a person against whom an order of protection has been entered fails to surrender custody of minor children to the person to whom custody was awarded in an order of protection, the law enforcement officer shall arrest the respondent, and shall turn the minor children over to the care and custody of the party to whom such care and custody was awarded.

6. The same procedures, including those designed to protect constitutional rights, shall be applied to the respondent as those applied to any individual detained in police custody.

7. A violation of the terms and conditions, with regard to domestic violence, stalking, sexual assault, child custody, communication initiated by the respondent or entrance upon the premises of the petitioner's dwelling unit or place of employment or school, or being within a certain distance of the petitioner or a child of the petitioner, of an ex parte order of protection of which the respondent has notice, shall be a class A misdemeanor unless the respondent has previously pleaded guilty to or has been found guilty in any division of the circuit court of violating an ex parte order of protection or a full order of protection within five years of the date of the subsequent violation, in which case the subsequent violation shall be a class E felony. Evidence of prior pleas of guilty or findings of guilt shall be heard by the court out of the presence of the jury prior to submission of the case to the jury. If the court finds the existence of such prior pleas of guilty or finding of guilt beyond a reasonable doubt, the court shall decide the extent or duration of sentence or other disposition and shall not instruct the jury as to the range of punishment or allow the jury to assess and declare the punishment as a part of its verdict.

8. A violation of the terms and conditions, with regard to domestic violence, stalking, sexual assault, child custody, communication initiated by the respondent or entrance upon the premises of the petitioner's dwelling unit or place of employment or school, or being within a certain distance of the petitioner or a child of the petitioner, of a full order of protection shall be a class A misdemeanor, unless the respondent has previously pleaded guilty to or has been found guilty in any division of the circuit court of violating an ex parte order of protection or a full order of protection within five years of the date of the subsequent violation, in which case the subsequent violation shall be a class E felony. Evidence of prior pleas of guilty or findings of guilt shall be heard by the court out of the presence of the jury prior to submission of the case to the jury. If the court finds the existence of such prior plea of guilty or finding of guilt beyond a reasonable doubt, the court shall decide the extent or duration of the sentence or other disposition and shall not instruct the jury as to the range of punishment or allow the jury to assess and declare the punishment as a part of its verdict. For the purposes of this subsection, in addition to the notice provided by actual service of the order, a party is deemed to have notice of an order of protection if the law enforcement officer responding to a call of a reported incident of domestic violence, stalking, sexual assault, or violation of an order of protection presented a copy of the order of protection to the respondent.

9. Good faith attempts to effect a reconciliation of a marriage shall not be deemed tampering with a witness or victim tampering under section 575.270.

10. Nothing in this section shall be interpreted as creating a private cause of action for damages to enforce the provisions set forth herein. (L. 1980 S.B. 524 § 16, A.L. 1986 S.B. 450, A.L. 1989 S.B. 420, A.L. 1993 H.B. 476 & 194, A.L. 2000 H.B. 1677, et al., A.L. 2011 S.B. 320, A.L. 2013 H.B. 215, A.L. 2014 S.B. 491, A.L. 2015 S.B. 321 merged with S.B. 341) Effective 1-01-17

Decision:

City will use Chapter 210A. Include this Section in Chapter 210A, Article II, but use the newest version of this statutory material to replace this Section.

D. Section 210.440 should be compared to the newest version of this statutory material (the misdemeanor offense was transferred to RSMo. §565.227) contained in Section 210A.160 of this Manuscript.

Decision:

City will use Chapter 210A.

Article V, Offenses Against Property

A. Section 210.500 should be compared to the newest version of this statutory material (RSMo. §570.030) contained in Section 210A.1110 of this Manuscript. Section 210.500 contains only the misdemeanor offenses from the statutes.

Decision:

City will use Chapter 210A.

B. Section 210.510 should be compared to the newest version of this statutory materials contained herein. These provisions are now contained in more than one Section. See the definitions of "inhabitable structure" and "of another" in Section 210A.010 (RSMo. §565.061) of this Manuscript; and the remainder of this Section contained in Sections 210A.1060 and 210A.1070 which derive from RSMo. §§565.140 and 565.150.

Decision:

City will use Chapter 210A.

C. Section 210.520 should be compared to the newest version of this statutory material (RSMo. §569.120) contained in Section 210A.1040 of this Manuscript.

Decision:

City will use Chapter 210A.

D. Sections 210.530 and 210.540 may be adequately addressed by Sections 210.520(A)(1) and/or 210.620. Please review and determine if these Sections are needed.

Decision:

Include Sections 210.530 (CC 1990 § 21-59) and 210.540 (CC 1990 § 21-60) in Chapter 210A, Article VII.

E. Section 210.550 should be compared to the newest version of this statutory material (RSMo. §570.057) contained in Section 210A.1180 of this Manuscript.

Decision:

City will use Chapter 210A.

F. Section 210.560 should be compared to the newest version of this statutory material (RSMo. §569.065) contained in Section 210A.1100 of this Manuscript.

Decision:

City will use Chapter 210A.

G. Section 210.570 "receiving stolen property" which derived from Section 570.080, RSMo., was repealed without replacement by SB 491 in the 2014 Legislative Session, effective 1-1-2017. Please advise if this should be retained.

Decision:

Delete this Section.

Additional Decision:

Use Chapter 210A in lieu of Section 210.580.

H. The City may wish to review the provisions of Section 210.590(B) against the provisions of Section 214.131, RSMo., which provides that *"every person who shall knowingly destroy, mutilate, disfigure, deface, injure or remove any tomb, monument or gravestone, or other structure placed in any abandoned family cemetery or private burying ground, or any fence, railing, or other work for the protection or ornamentation of any such cemetery or place of burial of any human being, or tomb, monument or gravestone, memento, or memorial, or other structure aforesaid, or of any lot within such cemetery is guilty of a class A misdemeanor. For the purposes of this section and subsection 1 of section 214.132, an "abandoned family cemetery" or "private burying ground" shall include those cemeteries or burying grounds which have not been deeded to the public as provided in chapter 214, and in which no body has been interred for at least twenty-five years."* Advise if any changes are needed.

Decision:

Include Sections 210.590 (CC 1990 § 21-65), 210.600 (CC 1990 § 21-66), and 210.610 (CC 1990 § 21-67) in Chapter 210A, Article VII.

I. Section 210.620 should be compared to the newest version of this statutory material (RSMo. §569.090) contained in Section 210A.1030 of this Manuscript.

Decision:

City will use Chapter 210A.

J. Section 210.630 should be compared to the newest version of this statutory material (RSMo. §570.130) contained in Section 210A.1150 of this Manuscript.

Decision:

City will use Chapter 210A. Add the definition of CARDHOLDER from Section 210.630 and the definitions of CREDIT DEVICE and DEBIT DEVICE from Section 570.010, RSMo., to Section 210A.1150.

Article VI, Offenses Against Public Peace

A. Section 210.690 should be compared to the newest version of this statutory material (RSMo. §§574.005 to 574.020) contained in Sections 210A.660 to 210A.680 of this Manuscript.

Decision:

Replace Sections 210A.660 through 210A.680 with Section 210.690 (CC 1990 § 21-71).

B. Section 210.700 should be compared to the newest version of this statutory material (RSMo. §§574.040 to 574.060) contained in Sections 210A.690 to 210A.710 of this Manuscript.

Decision:

City will use Chapter 210A.

Additional Decision:

Include Sections 210.710 (CC 1990 § 21-73) and 210.720 (CC 1990 § 21-74) in Chapter 210A, Article V.

Article VII, Offenses Concerning Drugs

This Article was taken from statutory material in the 2012 recodification and should be compared to the newer material contained in Article XI of Chapter 210A, §§210A.1800 to 210A.1860. The City should advise of any changes needed.

Decision:

City will use Chapter 210A.

Article VIII, Offenses Concerning Weapons and Firearms

Sections 210.930 through 210.1005 of this Article were taken from our 2012 Model Code and statutory provisions and should be compared to the newest version of this statutory material contained in Sections 210A.830 through 210A.930 of Chapter 210A of this Manuscript. The City's Attorney should review this as well along with the note contained herein below regarding the authority of the City to regulate weapons and firearms. Note that Section 210.1010 and 210.1020 derive from the City's Sections 21-103 and 21-104 of the 1990 Code.

When reviewing this against Chapter 210A, Article VI, note that Section 210A.840 derives from Section 571.030, RSMo., as updated in 2016 and which is authorized and affected by Section 21.750, RSMo. We have set out Section 21.750, RSMo., below, as the City may want to revise Model Section 210A.840 based on some of the authority allowed therein. We have underlined the additional authorities for any political subdivisions in this State, which appear to include regulations concerning open carrying of firearms readily capable of lethal use or discharge of firearms within a jurisdiction. If this Section is

retained, the City should review all of this information with its Attorney and determine if any additional revisions are desired to Section 210.840.

21.750. Firearms legislation preemption by general assembly, exceptions--limitation on civil recovery against firearms or ammunitions manufacturers, when, exception.

1. The general assembly hereby occupies and preempts the entire field of legislation touching in any way firearms, components, ammunition and supplies to the complete exclusion of any order, ordinance or regulation by any political subdivision of this state. Any existing or future orders, ordinances or regulations in this field are hereby and shall be null and void except as provided in subsection 3 of this Section.

2. No county, city, town, village, municipality, or other political subdivision of this state shall adopt any order, ordinance or regulation concerning in any way the sale, purchase, purchase delay, transfer, ownership, use, keeping, possession, bearing, transportation, licensing, permit, registration, taxation other than sales and compensating use taxes or other controls on firearms, components, ammunition, and supplies except as provided in subsection 3 of this Section.

3. (1) Except as provided in subdivision (2) of this subsection, nothing contained in this Section shall prohibit any ordinance of any political subdivision which conforms exactly with any of the provisions of sections 571.010 to 571.070, with appropriate penalty provisions, or which regulates the open carrying of firearms readily capable of lethal use or the discharge of firearms within a jurisdiction, provided such ordinance complies with the provisions of section 252.243. No ordinance shall be construed to preclude the use of a firearm in the defense of person or property, subject to the provisions of chapter 563.

(2) In any jurisdiction in which the open carrying of firearms is prohibited by ordinance, the open carrying of firearms shall not be prohibited in accordance with the following:

(a) Any person with a valid concealed carry endorsement or permit who is open carrying a firearm shall be required to have a valid concealed carry endorsement or permit from this state, or a permit from another state that is recognized by this state, in his or her possession at all times;

(b) Any person open carrying a firearm in such jurisdiction shall display his or her concealed carry endorsement or permit upon demand of a law enforcement officer;

(c) In the absence of any reasonable and articulable suspicion of criminal activity, no person carrying a concealed or unconcealed firearm shall be disarmed or physically restrained by a law enforcement officer unless under arrest; and

(d) Any person who violates this subdivision shall be subject to the penalty provided in section 571.121.

4. The lawful design, marketing, manufacture, distribution, or sale of firearms or ammunition to the public is not an abnormally dangerous activity and does not constitute a public or private nuisance.

5. No county, city, town, village or any other political subdivision nor the state shall bring suit or have any right to recover against any firearms or ammunition manufacturer, trade association or dealer for damages, abatement or injunctive relief resulting from or relating to the lawful design, manufacture, marketing, distribution, or sale of firearms or ammunition to the public. This subsection shall apply to any suit pending as of October 12, 2003, as well as any suit which may be brought in the future. Provided, however, that nothing in this Section shall restrict the rights of individual citizens to recover for injury or death caused by the negligent or defective design or manufacture of firearms or ammunition.

6. Nothing in this Section shall prevent the state, a county, city, town, village or any other political subdivision from bringing an action against a firearms or ammunition manufacturer or dealer for breach of contract or warranty as to firearms or ammunition purchased by the state or such political subdivision.

*(L. 1984 H.B. 928 § 1, A.L. 2003 S.B. 13, A.L. 2007 S.B. 225, A.L. 2014 S.B. 656)*Effective 10-10-14, see § 21.250. S.B. 656 was vetoed July 14, 2014. The veto was overridden on September 10, 2014.*

Decision:

City will use Chapter 210A with the following revisions:

- *Replace Section 210A.840(A)(3) with Section 210.940(A)(3), regarding discharge of a firearm within City limits.*
- *Add Section 210.980 to Chapter 210A, Article VI.*
- *Add "Except as allowed in Chapter 205, Article V" to the beginning of Section 210A.920.*
- *Include Sections 210.1010 (CC 1990 § 21-103) and 210.1020 (CC 1990 § 21-104) in Chapter 210A, Article VI.*

Article IX, Concerning Tobacco

This Article was taken in part from statutory material in the 2012 recodification and should be compared to the newer material contained in Article XI of Chapter 210A, §§210A.2100 to 210A.2160. This revised Article in Chapter 210A now contains "Vapor Products" and "Alternative Nicotine Products" and revised regulations regarding those topics. In this Manuscript Chapter 210, sections 210.1120 and 210.1170 were not previously addressed in the statutory provisions; however these do appear to be addressed in the newest Article XIII of Chapter 210A. These Sections may no longer be needed if the newest provisions of Chapter 210A are retained.

Decision:

City will use Chapter 210A. Include Sections 210.1120 (CC 1990 §§ 21-34 — 21-35) and 210.1170 (CC 1990 § 21-7) in Chapter 210A, Article XIII.

Article X, Clean Air Code

This Article superseded and replaced Sections 21-106 through 21-110 of the 1990 Code at the City's direction. Please confirm this revision.

Decision:

Include in Chapter 210A as Article XIV.

Additional Decision:

Include Article X, Miscellaneous Offense, in Chapter 210A as Article XV.

Article XII, Offenses Concerning Prostitution

This Article should be compared to Article VIII of Chapter 210A, §§210A.1350 to 210A.1390, which contains the newest statutory material on this subject. The City should advise of any changes needed.

Decision:

City will use Chapter 210A.

Chapter 210A, Offenses (UPDATED MODEL) *(now Chapter 210)*

General Notes

For comparison purposes, we have included this current Model Chapter on Offenses which is for the most part derived from statutory provisions that have been updated through the 2017 Legislative Session.

- Please be advised that we have added an informational footnote to those Model provisions which can also be felony crimes under State law, under certain circumstances.
- Each Section the derives from State law is referenced at the end of the Section with the authorizing Section of the Statute.
- The notes above to Chapter 210 use this Chapter for comparison purposes if a similar statutory provision exists and is contained in this Chapter.
- If this Chapter is used as the base for the Offenses Chapter, then the notes below may need to be reviewed. For the most part we are simply stating which provisions are not statutory.

Statutory Updates

The following revisions from the 2018 Statutory Updates have been included in this Chapter:

Section/Subsection of the Code	Description of the Revision Based on State Law Change	Pursuant to RSMo. Section
210.1210	Throughout this Section, "metal" and "scrap metal" have been amended to read "material" where referring generally to items regulated by this Section. In addition, "motor vehicle, heavy equipment, or tractor battery" has been added to the list of items covered under this Section.	407.300
210.1360	A new paragraph has been added to this Section, which reads as follows: *"In addition to the affirmative defense provided in Subsection 2 of Section 566.223, RSMo., it shall be an affirmative defense to prosecution pursuant to this Section that the defendant was under the age of eighteen (18) and was acting under the coercion, as defined in Section 566.200, RSMo., of an agent at the time of the offense charged."*	567.020

The following revisions from the 2019 Statutory Updates have been included in this Chapter:

Section/Subsection of the Code	Description of the Revision Based on State Law Change	Pursuant to RSMo. Section
210.1360	The following sentence has been added to Subsection (B) of this Section: *"In such cases where the defendant was under the age of eighteen (18), the defendant shall be classified as a victim of abuse, as defined under Section 210.110, RSMo., and such abuse shall be reported, as required under Section 210.115, RSMo."*	567.020
Chapter 210, Article XI	A footnote has been added to this Article as follows: "Editor's Note: Article XIV, Medical Marijuana, of the Missouri Constitution may provide exceptions to some of the provisions in this Article."	Missouri Constitution Article XIV

Article V, Offenses Concerning Public Peace

Section 210A.720 is not a statutory Section. The City should review and determine if this Section is to be retained.

Decision:

Retain this Section without revision.

Article VI, Offenses Concerning Weapons and Firearms

A. Section 210A.840 derives from Section 571.030, RSMo., as updated in 2014 and 2016 and which is authorized and affected by Section 21.750, RSMo. We have set out Section 21.750, RSMo., below, as the City may want to revise Section 210A.840 of the Code based on some of the authority allowed therein. We have underlined the additional authorities for any political subdivisions in this State, which appear to include regulations concerning open carrying of firearms readily capable of lethal use or discharge of firearms within a jurisdiction. The City should review all of this information with its Attorney and determine if any additional revisions are desired to Section 210A.840.

21.750. Firearms legislation preemption by general assembly, exceptions--limitation on civil recovery against firearms or ammunitions manufacturers, when, exception.

1. The general assembly hereby occupies and preempts the entire field of legislation touching in any way firearms, components, ammunition and supplies to the complete exclusion of any order, ordinance or regulation by any political subdivision of this state. Any existing or future orders, ordinances or regulations in this field are hereby and shall be null and void except as provided in subsection 3 of this Section.

2. No county, city, town, village, municipality, or other political subdivision of this state shall adopt any order, ordinance or regulation concerning in any way the sale, purchase, purchase delay, transfer, ownership, use, keeping, possession, bearing, transportation, licensing, permit, registration,

taxation other than sales and compensating use taxes or other controls on firearms, components, ammunition, and supplies except as provided in subsection 3 of this Section.

3. (1) Except as provided in subdivision (2) of this subsection, nothing contained in this Section shall prohibit any ordinance of any political subdivision which conforms exactly with any of the provisions of sections 571.010 to 571.070, with appropriate penalty provisions, or which regulates the open carrying of firearms readily capable of lethal use or the discharge of firearms within a jurisdiction, provided such ordinance complies with the provisions of section 252.243. No ordinance shall be construed to preclude the use of a firearm in the defense of person or property, subject to the provisions of chapter 563.

(2) In any jurisdiction in which the open carrying of firearms is prohibited by ordinance, the open carrying of firearms shall not be prohibited in accordance with the following:

(a) Any person with a valid concealed carry endorsement or permit who is open carrying a firearm shall be required to have a valid concealed carry endorsement or permit from this state, or a permit from another state that is recognized by this state, in his or her possession at all times;

(b) Any person open carrying a firearm in such jurisdiction shall display his or her concealed carry endorsement or permit upon demand of a law enforcement officer;

(c) In the absence of any reasonable and articulable suspicion of criminal activity, no person carrying a concealed or unconcealed firearm shall be disarmed or physically restrained by a law enforcement officer unless under arrest; and

(d) Any person who violates this subdivision shall be subject to the penalty provided in section 571.121.

4. The lawful design, marketing, manufacture, distribution, or sale of firearms or ammunition to the public is not an abnormally dangerous activity and does not constitute a public or private nuisance.

5. No county, city, town, village or any other political subdivision nor the state shall bring suit or have any right to recover against any firearms or ammunition manufacturer, trade association or dealer for damages, abatement or injunctive relief resulting from or relating to the lawful design, manufacture, marketing, distribution, or sale of firearms or ammunition to the public. This subsection shall apply to any suit pending as of October 12, 2003, as well as any suit which may be brought in the future. Provided, however, that nothing in this Section shall restrict the rights of individual citizens to recover for injury or death caused by the negligent or defective design or manufacture of firearms or ammunition.

6. Nothing in this Section shall prevent the state, a county, city, town, village or any other political subdivision from bringing an action against a firearms or ammunition manufacturer or dealer for breach of contract or warranty as to firearms or ammunition purchased by the state or such political subdivision.

(L. 1984 H.B. 928 § 1, A.L. 2003 S.B. 13, A.L. 2007 S.B. 225, A.L. 2014 S.B. 656)

**Effective 10-10-14, see § 21.250. S.B. 656 was vetoed July 14, 2014. The veto was overridden on September 10, 2014.*

Decision:

See revisions noted in the comments to Ch. 200.

B. Section 210A.920 is not a statutory provision. The City should review this Section and determine if it should be retained.

Decision:

See revisions noted in the comments to Ch. 200.

C. Section 210A.930 is not a statutory provision. The City should review this Section and determine if it should be retained.

Decision:

Retain this Section without revision.

Article IX, Sexual Offenses

Section 210A.1560 is not a statutory provision. The City should review this Section and determine if it should be retained.

Decision:

Retain this Section without revision.

Article XII, Offenses Concerning Minors

The City should review this Article (Sections 210A.1970 through 210A.1990) in its entirety, since it is non-statutory and pertains to Curfew, to determine if it is necessary. If it is retained, do the timing and regulations meet the City's needs?

Decision:

No revision desired.

Chapter 215, Nuisances

Article I, Vegetation

A. Is Subsection 215.020(B) still necessary?

Decision:

No revision desired.

B. See Section 215.030(A)(2)(d). The City may wish to note the similar statutory provision of Section 269.020.1, RSMo., provides that "every person owning or caring for any animal that has died from any cause shall dispose of the animal carcass within twenty-four hours after knowledge of such death," which differs from the "twelve (12) hours" referenced herein.

Decision:

Change 12 hours to 24 hours.

C. We inserted the Appendix A to Ch. 20 of the 1990 City Code as Section 215.070 since it is only relevant to this Article.

Decision:

Okay as edited.

D. Section 20-22 of the 1990 Code was included in this Article by the City in the 2012 recodification project. Please confirm this placement.

Decision:

No revision desired.

Article II, Miscellaneous

A. In the 2012 recodification project Section 215.100 was moved to this Article from Chapter 18 of the 1990 City Code. Please confirm this placement.

Decision:

No revision desired.

B. In the 2012 recodification project Section 215.110 was moved to this Article from the Zoning Regulations. We note that with the 2014 adoption of the Unified Development Code, this now also exists in Chapter 405, Section 405.04.140(A)(14). We typically recommend that provisions are not duplicated in the Code. Is still needed in this Chapter?

Decision:

No revision desired.

Chapter 217A, Abandoned Property (UPDATED MODEL) *(now Chapter 217)*

This Sample Chapter is being included for comparison purposes only. See the notes to Chapter 385 below.

NO DECISION REQUIRED HERE

Chapter 220, Parks And Recreation

Article I, In General

Is the "Director of Parks, Recreation and Arts" the same as the "Parks and Recreation Director" as used a few other places in the Code? Should these all read "Director of Parks, Recreation and Arts"?

Decision:

Change all instances to read "Director of Parks, Recreation and Arts."

Chapter 225, Emergency Management

In the 2012 recodification project, the City indicated that current Chapter 8 "Civil Defense" adopted in 1990 was obsolete and superseded by current Ch. 11 "Emergency Management" which is included in this Chapter 225 along with revisions directed by the City during the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

~~Chapter 230, Human Rights~~

This Chapter was replaced in the 2012 recodification project with statutory provisions from Chapter 213, RSMo. However, note that we have included a sample of the updated model provisions as Chapter 230A of the Manuscript. It was revised to reflect changes from the 2017 Legislative Session, and the City should review Chapter 230A for possible replacement of this Chapter.

Decision:

Replace Chapter 230 with the updated statutory wording from Chapter 230A.

Decision With Final Draft:

Delete Articles II and IV of this Chapter.

Chapter 230A, Human Rights (UPDATED MODEL) *(now Chapter 210)*

This Sample Chapter is being included for comparison purposes only. See the notes to Chapter 230 above.

NO DECISION REQUIRED HERE

Chapter 235, Solid Waste

Article I, In General

Changes were made to the definitions in Section 235.010 in the 2012 recodification project to bring them up to date statutorily. Additionally the City requested certain changes within the text of this Chapter as well. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Chapter 240, Health And Sanitation

Article I, Health Department Services

Is the contract referenced in Section 240.010 still current?

Decision:

No revision desired.

Article II, Mosquito Control

Is the contract referenced in Section 240.070 still current?

Decision:

No revision desired.

Chapter 245, Aircraft And Aviation

Article I, Helicopters And Heliports

This Article was reviewed and revised in the 2012 recodification project. Minor changes were made by the City. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Article II, Drones (Unmanned Aircraft Systems)

This Article was adopted just last year.

Decision:

No revision desired.

TITLE III, TRAFFIC CODE

General Notes

This entire Title III was amended in the 2012 recodification project to bring it up to date as of 2012. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Also note that this is a combination of current Code Chapter 18 and Appendix C (which contains the 1988 Model Traffic Code from Chapter 300, RSMo., as revised in the 2012 recodification project).

NO DECISION REQUIRED

Chapter 300, General Provisions

Statutory Updates

The following revisions from the 2018 Statutory Updates have been included in this Chapter:

Section/Subsection of the Code	Description of the Revision Based on State Law Change	Pursuant to RSMo. Section
300.010	The definitions of "AUTOCYCLE" and "MOTORTRICYCLE" have been added to this Section.	301.010

Article I, In General

See Section 300.010 "Definitions," note that the definition of EMERGENCY VEHICLE from Section 304.022.4, RSMo., has been amended to read as follows:

> *EMERGENCY VEHICLE — A vehicle of any of the following types:*
> *1. A vehicle operated by the State Highway Patrol, the State Water Patrol, the Missouri Capitol Police, a Conservation Agent or a State Park Ranger, those vehicles operated by enforcement personnel of the State Highways and Transportation Commission, Police or Fire Department, Sheriff, Constable or Deputy Sheriff, Federal Law Enforcement Officer authorized to carry firearms and to make arrests for violations of the laws of the United States, Traffic Officer or Coroner or by a privately owned emergency vehicle company;*
> *2. A vehicle operated as an ambulance or operated commercially for the purpose of transporting emergency medical supplies or organs;*
> *3. Any vehicle qualifying as an emergency vehicle pursuant to Section 310.070 of this Title;*
> *4. Any wrecker or tow truck or a vehicle owned and operated by a public utility or public service corporation while performing emergency service;*
> *5. Any vehicle transporting equipment designed to extricate human beings from the wreckage of a motor vehicle;*
> *6. Any vehicle designated to perform emergency functions for a civil defense or emergency management agency established pursuant to the provisions of Chapter 44, RSMo.;*

7. Any vehicle operated by an authorized employee of the Department of Corrections who, as part of the employee's official duties, is responding to a riot, disturbance, hostage incident, escape or other critical situation where there is the threat of serious physical injury or death, responding to mutual-aid call from another criminal justice agency, or in accompanying an ambulance which is transporting an offender to a medical facility;
8. Any vehicle designated to perform hazardous substance emergency functions established pursuant to the provisions of Sections 260.500 to 260.550, RSMo.
9. Any vehicle owned by the State Highways and Transportation Commission and operated by an authorized employee of the Department of Transportation that is marked as a Department of Transportation emergency response or motorist assistance vehicle.
10. Any vehicle owned and operated by the civil support team of the Missouri National Guard while in response to or during operations involving chemical, biological, or radioactive materials, or in support of official requests from the State of Missouri involving unknown substances or hazardous materials, or as may be requested by the appropriate State agency acting on behalf of the Governor.

Decision:

Replace the definition of EMERGENCY VEHICLE with the updated material above.

Chapter 305, Traffic Administration

Some Sections were deleted from this Chapter in the 2012 recodification as follows: Current Code App. C §§300.025, 300.030, 300.035, 300.045, 300.050, 300.055 and 300.070. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Chapter 310, Enforcement And Obedience To Traffic Regulations

A. Section 310.025 may be adequately addressed by Section 310.010(C) and 310.020. Review and advise if this Section is necessary.

Decision:

Delete this Section.

B. Sections 310.060 and 310.070 derive from statutory provisions (Sections 304.022 and 307.175, RSMo.) which have been updated since the 2012 recodification. See the newly enacted provisions below.

Section 310.060. Emergency Vehicles — Use Of Lights And Sirens — Right-Of-Way — Stationary Vehicles, Procedure — Penalty.
A. Upon the immediate approach of an emergency vehicle giving audible signal by siren or while having at least one (1) lighted lamp exhibiting red light visible under normal atmospheric conditions from a distance of five hundred (500) feet to the front of such vehicle or a flashing blue light authorized by Section 310.070 of this Chapter, the driver of every other vehicle shall yield the right-of-way and shall immediately drive to a

position parallel to, and as far as possible to the right of, the traveled portion of the highway and thereupon stop and remain in such position until such emergency vehicle has passed, except when otherwise directed by a Police or Traffic Officer.
B. Upon approaching a stationary vehicle displaying lighted red or red and blue lights, or a stationary vehicle displaying lighted amber or amber and white lights, the driver of every motor vehicle shall:
1. Proceed with caution and yield the right-of-way, if possible with due regard to safety and traffic conditions, by making a lane change into a lane not adjacent to that of the stationary vehicle, if on a roadway having at least four (4) lanes with not less than two (2) lanes proceeding in the same direction as the approaching
vehicle; or
2. Proceed with due caution and reduce the speed of the vehicle, maintaining a safe speed for road conditions, if changing lanes would be unsafe or impossible.
C. Responsibilities Of Driver Of Emergency Vehicle.
1. The driver of any "emergency vehicle" defined in Section 300.010 of this Code shall not sound the siren thereon or have the front red lights or blue lights on except when such vehicle is responding to an emergency call or when in pursuit of an actual or suspected law violator, or when responding to, but not upon returning
from, a fire.
2. The driver of an emergency vehicle may:
a. Park or stand irrespective of the provisions of Sections 304.014 to 304.025, RSMo., and the provisions of this Code;
b. Proceed past a red or stop signal or stop sign, but only after slowing down as may be necessary for safe operation;
c. Exceed the prima facie speed limit so long as the driver does not endanger life or property;
d. Disregard regulations governing direction of movement or turning in specified directions.
3. The exemptions granted to an emergency vehicle pursuant to Subsection (C)(2) of this Section shall apply only when the driver of any such vehicle while in motion sounds audible signal by bell, siren or exhaust whistle as may be reasonably necessary, and when the vehicle is equipped with at least one (1) lighted lamp displaying a red light or blue light visible under normal atmospheric conditions from a distance of five hundred (500) feet to the front of such vehicle.
D. No person shall purchase an emergency light as described in this Section without furnishing the seller of such light an affidavit stating that the light will be used exclusively for emergency vehicle purposes. (RSMo. §304.022, 2012, 2016, 2017)

Section 310.070. Sirens And Flashing Lights Emergency Use — Persons Authorized — Violation — Penalty.
A. Motor vehicles and equipment, not otherwise defined in this Title as an authorized emergency vehicle, which are operated by any member of an organized Fire Department, ambulance association or rescue squad, whether paid or volunteer, may be operated on streets and highways in this City as an emergency vehicle under the provisions of Section 310.060 of this Chapter, while responding to a fire call or ambulance call or at the scene of a fire call or ambulance call and while using or sounding a warning siren and using or displaying thereon fixed, flashing or rotating blue lights, but sirens and blue lights shall be used only in bona fide emergencies.
B. Use Of Other Authorized Lights.
1. Notwithstanding Subsection (A) of this Section, the following vehicles may use or display fixed, flashing, or rotating red or red and blue lights:

a. Emergency vehicles, as defined in Section 304.022, RSMo., when responding to an emergency.
b. Vehicles operated as described in Subsection (A) of this Section.
c. Vehicles owned by a contractor or subcontractor performing work for the Department of Transportation, except that the red or red and blue lights shall be displayed on vehicles described in this Subsection only between dusk and dawn, when such vehicles are stationary, such vehicles are located in a work zone as defined in Section 304.580, RSMo., highway workers, as defined in Section 304.580, RSMo., are present, and such work zone is designated by a sign or signs.
2. The following vehicles may use or display fixed, flashing, or rotating amber or amber and white lights:
a. Vehicles owned or leased by the State Highways and Transportation Commission and operated by an authorized employee of the Department of Transportation.
b. Vehicles owned by a contractor or subcontractor performing work for the Department of Transportation, except that the amber or amber and white lights shall be displayed on vehicles described in this Subsection only when such vehicles are stationary.
c. Vehicles operated by a utility worker performing work for the utility, except that the amber or amber and white lights shall be displayed on vehicles described in this Subsection only when such vehicles are stationary. As used in this Subsection, the term "utility worker" means any employee while in performance of his or her job duties, including any person employed under contract of a utility that provides gas, heat, electricity, water, steam, telecommunications or cable services, or sewer services, whether privately,
municipally, or cooperatively owned.
C. Permits for the operation of such vehicles equipped with sirens or blue lights shall be in writing and shall be issued and may be revoked by the Chief of an organized Fire Department, organized Ambulance Association, Rescue Squad, or the State Highways and Transportation Commission and no person shall use or display a siren or blue lights on a motor vehicle, fire, ambulance, or rescue equipment without a valid permit
authorizing the use. A permit to use a siren or lights as heretofore set out does not relieve the operator of the vehicle so equipped with complying with all other traffic laws and regulations. Violation of this Section constitutes an ordinance violation. (RSMo. §307.175, 2004, 2016, 2017)

Decision:

Replace Section 310.060 and 310.070 with the updated statutory provisions.

Chapter 320, Speed Regulations

Confirm the speed limit in Section 320.030 is still current.

Decision:

No revision desired.

Chapter 325, Turning Movements

Section 325.010 was updated with newest statutes in 2012 recodification project. See the 2012 Draft Review following the “Other” tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Chapter 340, Miscellaneous Driving Rules

Many of the Sections in App. C Art. IX were already revised in the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. We will only comment on those Sections which need review due to statutory changes in the last five years.

NO DECISION REQUIRED

A. Is Section 340.040 still necessary in light of the newer statutory provisions included in Section 340.030 deriving from Sections 194.500 to 194.512, RSMo?

Decision:

Delete this Section; renumber subsequent Sections.

B. See Section 340.180. This Section was replaced with the statutory provisions of Section 577.060. The City may want to include the newly revised "Leaving the Scene of an Accident" which derives from Section 577.060, RSMo., as set out below. Additionally, this may be better placed in Chapter 310 of this Manuscript at the end of that Chapter.

Section 577.060. Leaving The Scene Of An Accident.
A. A person commits the offense of leaving the scene of an accident when:
1. Being the operator of a vehicle or a vessel involved in an accident resulting in injury or death or damage to property of another person; and
2. Having knowledge of such accident he or she leaves the place of the injury, damage or accident without stopping and giving the following information to the other party or to a Law Enforcement Officer, or if no Law Enforcement Officer is in the vicinity, then to the nearest law enforcement agency:
a. His or her name;
b. His or her residence, including City and street number;
c. The registration or license number for his or her vehicle or vessel; and
d. His or her operator's license number, if any.
B. For the purposes of this Section, all Law Enforcement Officers shall have jurisdiction, when invited by an injured person, to enter the premises of any privately owned property for the purpose of investigating an accident and performing all necessary duties regarding such accident.
C. A Law Enforcement Officer who investigates or receives information of an accident involving an all-terrain vehicle and also involving the loss of life or serious physical injury shall make a written report of the investigation or information received and such additional facts relating to the accident as may come to his or her knowledge, mail the information to the Department of Public Safety, and keep a record thereof in his or her office.
D. The provisions of this Section shall not apply to the operation of all-terrain vehicles when property damage is sustained in sanctioned all-terrain vehicle races, derbies and rallies. (RSMo. §577.060, 2014 effective 1-1-2017, 2017)

Decision:

Include the above Section at the end of Ch. 310 and delete the current Section 340.180; renumber subsequent Sections.

C. See Section ~~340.235~~ *340.220*. The statutes in Section 304.820, RSMo., below, appear to preempt this material. Review and advise if any changes should be made herein. We note that many communities do choose to include similar language regardless of the statutory requirements. However, we note that the state wording applies only to persons 21 and younger while Section 340.235 appears to apply to everyone.

304.820. Text messaging and using a hand-held mobile device while operating a motor vehicle prohibited, when--exceptions--definitions--violation, penalty.

1. Except as otherwise provided in this section, no person twenty-one years of age or younger operating a moving motor vehicle upon the highways of this state shall, by means of a hand-held electronic wireless communications device, send, read, or write a text message or electronic message.

2. Except as otherwise provided in this section, no person shall operate a commercial motor vehicle while using a hand-held mobile telephone.

3. Except as otherwise provided in this section, no person shall operate a commercial motor vehicle while using a wireless communications device to send, read, or write a text message or electronic message.

4. The provisions of subsection 1 through subsection 3 of this section shall not apply to a person operating:

(1) An authorized emergency vehicle; or

(2) A moving motor vehicle while using a hand-held electronic wireless communications device to:

(a) Report illegal activity;

(b) Summon medical or other emergency help;

(c) Prevent injury to a person or property; or

(d) Relay information between a transit or for-hire operator and that operator's dispatcher, in which the device is permanently affixed to the vehicle.

5. Nothing in this section shall be construed or interpreted as prohibiting a person from making or taking part in a telephone call, by means of a hand-held electronic wireless communications device, while operating a noncommercial motor vehicle upon the highways of this state.

6. As used in this section, "electronic message" means a self-contained piece of digital communication that is designed or intended to be transmitted between hand-held electronic wireless communication devices. "Electronic message" includes, but is not limited to, electronic mail, a text message, an instant message, or a command or request to access an internet site.

7. As used in this section, "hand-held electronic wireless communications device" includes any hand-held cellular phone, palm pilot, blackberry, or other mobile electronic device used to communicate verbally or by text or electronic messaging, but shall not apply to any device that is permanently embedded into the architecture and design of the motor vehicle.

8. As used in this section, "making or taking part in a telephone call" means listening to or engaging in verbal communication through a hand-held electronic wireless communication device.

9. As used in this section, "send, read, or write a text message or electronic message" means using a hand-held electronic wireless telecommunications device to manually communicate with any person by using an electronic message. Sending, reading, or writing a text message or electronic message does not include reading, selecting, or entering a phone number or name into a hand-held electronic wireless communications device for the purpose of making a telephone call.

10. A violation of this section shall be deemed an infraction and shall be deemed a moving violation for purposes of point assessment under section 302.302.

11. The state preempts the field of regulating the use of hand-held electronic wireless communications devices in motor vehicles, and the provisions of this section shall supersede any local laws, ordinances, orders, rules, or regulations enacted by a county, municipality, or other political subdivision to regulate the use of hand-held electronic wireless communication devices by the operator of a motor vehicle.

12. The provisions of this section shall not apply to:

(1) The operator of a vehicle that is lawfully parked or stopped;

(2) Any of the following while in the performance of their official duties: a law enforcement officer; a member of a fire department; or the operator of a public or private ambulance;

(3) The use of factory-installed or aftermarket global positioning systems (GPS) or wireless communications devices used to transmit or receive data as part of a digital dispatch system;

(4) The use of voice-operated technology;

(5) The use of two-way radio transmitters or receivers by a licensee of the Federal Communications Commission in the Amateur Radio Service. (L. 2009 H.B. 62, A.L. 2013 H.B. 103)

Decision:

No revision desired.

~~Chapter 342, Alcohol-Related Traffic Offenses~~

The City should review the revised provisions, based on Sections 577.00, 577.010, 577.012, 577.017 and 577.020, RSMo., which we have included as a sample Chapter 342A of the Manuscript. The City may want to include this revised sample Chapter in the new Code, or combine it with the current Chapter 342. Note that the Sections in the sample Chapter have been revised as recently as 2014, effective 2017.

Decision:

Use the updated statutory wording of Sections 342A.010 through 342A.040 in the new Code and retain only Section 342.030 from the current Manuscript as the last Section therein.

Chapter 342A, Alcohol-Related Traffic Offenses (UPDATED MODEL) *(now Chapter 342)*

This Sample Chapter is being included for comparison purposes only. See the notes to Chapter 342 above.

NO DECISION REQUIRED HERE

Chapter 345, Pedestrians Rights And Duties

There is a newer statutory provision now contained in this portion of the Model Traffic Code, pursuant to Section 300.411, RSMo., which the City may want to include herein. The new Model Section reads as follows:

> ***Section 345.100. Distance To Be Maintained When Overtaking A Bicycle.***
> *The operator of a motor vehicle overtaking a bicycle proceeding in the same direction on the roadway, as defined in Section 300.010, shall leave a safe distance when passing the bicycle, and shall maintain clearance until safely past the overtaken bicycle. (RSMo. §300.411, 2005)*

Decision:

Add the above statutory Section to this Chapter.

Chapter 355, Stopping, Standing Or Parking Prohibited In Specified Places

Article II, Stopping, Standing And Parking

The photos in Section 355.140 reflect those in the 1990 City Code, but we note that they are blurry. If the City has original files of these photos or clearer image files that you can provide, we can replace them in this Chapter.

Decision:

The City provided the original files of the photos in Figures 1 through 12.

Chapter 370, Vehicle Equipment

Statutory Updates

The following revisions from the 2018 Statutory Updates have been included in this Chapter:

Section/Subsection of the Code	Description of the Revision Based on State Law Change	Pursuant to RSMo. Section
370.270	A new Subsection has been added to this Section regarding the use of protective headgear while operating or riding in an autocycle.	304.005.2

Article I, Light Regulations

Portions of this Article were revised by inclusion of new statutory provisions in the 2012 recodification project. We are only noting amendments to those Sections which have statutorily been updated since 2012. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

NO DECISION REQUIRED

A. Section 370.070 was revised with the statutory provisions of Section 307.075, RSMo., which were revised in 2013 to read as set out below. The City may want to include the newest statutory provisions.

Section 370.050. Taillamps — Reflectors.
A. Every motor vehicle and every motor-drawn vehicle shall be equipped with at least two (2) rear lamps, not less than fifteen (15) inches or more than seventy-two (72) inches above the ground upon which the vehicle stands, which when lighted will exhibit a red light plainly visible from a distance of five hundred (500) feet to the rear. Either such rear lamp or a separate lamp shall be so constructed and placed as to illuminate with a white light the rear registration marker and render it clearly legible from a distance of fifty (50) feet to the rear. When the rear registration marker is illuminated by an electric lamp other than the required rear lamps, all such lamps shall be turned on or off only by the same control switch at all times.
B. Every motorcycle registered in this State, when operated on a highway, shall also carry at the rear, either as part of the rear lamp or separately, at least one (1) approved red reflector which shall be of such size and characteristics and so maintained as to be visible during the times when lighted lamps are required from all distances within three hundred (300) feet to fifty (50) feet from such vehicle when directly in front of a motor vehicle displaying lawful undimmed headlamps. A motorcycle may be equipped with a means of varying the brightness of the vehicle's brake light for a duration of not more than five (5) seconds upon application of the vehicle's brakes.
C. Every new passenger car, new commercial motor vehicle, motor-drawn vehicle and omnibus with a capacity of more than six (6) passengers registered in this State after January 1, 1966, when operated on a highway shall also carry at the rear at least two (2) approved red reflectors, at least one (1) at each side, so designed, mounted on the vehicle and maintained as to be visible during the times when lighted lamps are required from all distances within five hundred (500) to fifty (50) feet from such vehicle when directly in front of a motor vehicle displaying lawful undimmed headlamps. Every such reflector shall meet the requirements of this Article and shall be mounted upon the vehicle at a height not to exceed sixty (60) inches nor less than fifteen (15) inches above the surface upon which the vehicle stands.
D. Any person who knowingly operates a motor vehicle without the lamps required in this Section in operable condition is guilty of an ordinance violation. (RSMo. §307.075, 2013)

Decision:

Replace this Section with the newest provisions set out above.

B. There is a new provision which has been added to the Statutes in the 2017 Legislative Session. See Section 207.005, RSMo., set out below.

Section 370.015. Light-Emitting Diodes Deemed Operating Properly, When.
For purposes of this Article, a lamp, light, or other piece of lighting equipment consisting of multiple light-emitting diodes shall be deemed to be operating properly so long as not less than seventy-five percent (75%) of the light-emitting diodes are operating properly. (RSMo. §307.005, 2017)

Decision:

Insert the above provisions in this Article as an additional Section.

Article II, Vehicle Equipment

A. See Section 370.200. Note that this Section does not agree with the statutory provisions of Section 307.170.4, RSMo., as set out below. The City may want to revise this Section.

Section 307.140.4 Mirrors.

All motor vehicles which are so constructed or loaded that the operator cannot see the road behind such vehicle by looking back or around the side of such vehicle shall be equipped with a mirror so adjusted as to reveal the road behind and be visible from the operator's seat.

Decision:

Include the statutory provisions set out above to replace Section 370.200.

B. See Section 370.210. Note that this Section does not agree with the statutory provisions of Section 307.170.5, RSMo., as set out below. The City may want to revise this Section.

Section 307.140.5 Projections On Vehicles.

All vehicles carrying poles or other objects, which project more than five (5) feet from the rear of such vehicle, shall, during the period when lights are required by this Chapter, carry a red light at or near the rear end of the pole or other object so projecting. At other times a red flag or cloth, not less than sixteen (16) inches square, shall be displayed at the end of such projection.

Decision:

Include the statutory provisions set out above to replace Section 370.210.

C. See Section 370.270. Note that the similar statutory provisions of Section 302.020, RSMo., now appear to include "motortricycles" as well as motorcycles. Review and advise if any revisions should be made.

302.020. Beginning January 1, 2017--Operation of motor vehicle without proper license prohibited, penalty--motorcycles--special license--protective headgear, failure to wear, fine, amount--no points to be assessed.

1. Unless otherwise provided for by law, it shall be unlawful for any person, except those expressly exempted by section 302.080, to:

(1) Operate any vehicle upon any highway in this state unless the person has a valid license;

(2) Operate a motorcycle or motortricycle upon any highway of this state unless such person has a valid license that shows the person has successfully passed an examination for the operation of a motorcycle or motortricycle as prescribed by the director. The director may indicate such upon a valid license issued to such person, or shall issue a license restricting the applicant to the operation of a motorcycle or motortricycle if the actual demonstration, required by section 302.173, is conducted on such vehicle;

(3) Authorize or knowingly permit a motorcycle or motortricycle owned by such person or under such person's control to be driven upon any highway by any person whose license does not indicate that the person has passed the examination for the operation of a motorcycle or motortricycle or has been issued an instruction permit therefor;

(4) Operate a motor vehicle with an instruction permit or license issued to another person.

2. Every person operating or riding as a passenger on any motorcycle or motortricycle, as defined in section 301.010, upon any highway of this state shall wear protective headgear at all times the vehicle is in motion. The protective headgear shall meet reasonable standards and specifications established by the director.

3. Notwithstanding the provisions of section 302.340 any person convicted of violating subdivision (1) or (2) of subsection 1 of this section is guilty of a misdemeanor. A first violation of subdivision (1) or (2) of subsection 1 of this section shall be punishable as a class D misdemeanor. A second violation of subdivision (1) or (2) of subsection 1 of this section shall be punishable as a class A misdemeanor. Any person convicted a third or subsequent time of violating subdivision (1) or (2) of subsection 1 of this section is guilty of a class E felony. Notwithstanding the provisions of section 302.340, violation of subdivisions (3) and (4) of subsection 1 of this section is a misdemeanor, the first violation punishable as a class D misdemeanor, a second or subsequent violation of this section punishable as a class C misdemeanor, and the penalty for failure to wear protective headgear as required by subsection 2 of this section is an infraction for which a fine not to exceed twenty-five dollars may be imposed. Notwithstanding all other provisions of law and court rules to the contrary, no court costs shall be imposed upon any person due to such violation. No points shall be assessed pursuant to section 302.302 for a failure to wear such protective headgear. Prior pleas of guilty and prior findings of guilty shall be pleaded and proven in the same manner as required by section 558.021.

(RSMo 1939 § 8444, A.L. 1951 p. 678, A.L. 1967 p. 409, A.L. 1984 H.B. 1045, A.L. 1988 H.B. 990, A.L. 1989 1st Ex. Sess. H.B. 3, A.L. 1995 H.B. 717, A.L. 1996 H.B. 1047, A.L. 1999 S.B. 19, A.L. 2011 H.B. 111, A.L. 2014 S.B. 491)Effective 1-01-17

Decision:

Add "motortricycles" to this Section.

Chapter 375, Parades

The City may want to review this Chapter to confirm it is still currently applicable.

Decision:

No revision desired.

Chapter 380, Licensing

Much of this Chapter was revised by inclusion of new statutory provisions in the 2012 recodification project. We are only noting amendments to those Sections which have statutorily been updated since 2012. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

NO DECISION REQUIRED

Statutory Updates

The following revisions from the 2018 Statutory Updates have been included in this Chapter:

Section/Subsection of the Code	Description of the Revision Based on State Law Change	Pursuant to RSMo. Section
380.010	A new Subsection has been added to this Section regarding licensing requirements for autocycle operators.	304.005.3

Article III, Financial Responsibility

See Section 380.100. Note that the statutory provisions set out herein have been amended since the 2012 publication. The newly revised Section is set out as follows:

Section 380.140. Financial Responsibility Required.

A. No owner of a motor vehicle registered in this State, or required to be registered in this State, shall operate, register or maintain registration of a motor vehicle, or permit another person to operate such vehicle, unless the owner maintains the financial responsibility which conforms to the requirements of the laws of this State. No non-resident shall operate or permit another person to operate in this City a motor vehicle registered to such non-resident unless the non-resident maintains the financial responsibility which conforms to the requirements of the laws of the non-resident's state of residence. Furthermore, no person shall operate a motor vehicle owned by another with the knowledge that the owner has not maintained financial responsibility unless such person has financial responsibility which covers the person's operation of the other's vehicle. However, no owner or non-resident shall be in violation of this Subsection if he/she fails to maintain financial responsibility on a motor vehicle which is inoperable or being stored and not in operation.

B. For purposes of this Section, the term "financial responsibility" shall mean the ability to respond in damages for liability on account of accidents occurring after the effective date of proof of said financial responsibility, arising out of the ownership, maintenance or use of a motor vehicle, in the amount of twenty-five thousand dollars ($25,000.00) because of bodily injury to or death of one (1) person in any one (1) accident and, subject to said limit for one (1) person, in the amount of fifty thousand dollars ($50,000.00) because of bodily injury to or death of two (2) or more persons in any one (1) accident and in the amount of ten thousand dollars ($10,000.00) because of injury to or destruction of property of others in any one (1) accident.

C. Proof of financial responsibility may be shown by any of the following:

1. A current insurance identification card issued by a motor vehicle insurer or by the Director of Revenue of the State of Missouri for self-insurance. A motor vehicle liability insurance policy, a motor vehicle liability insurance binder, or receipt which contains the name and address of the insurer, the name and address of the named insured, the policy number, the effective dates of the policy and a description by year and make of the vehicle, or at least five (5) digits of the vehicle identification number or the word "Fleet" if the insurance policy covers five (5) or more motor vehicles shall be satisfactory evidence of insurance in lieu of an insurance identification card; or

2. A certificate of the State Treasurer of a cash or security deposit according to Section 303.240, RSMo.;

3. A surety bond according to Section 303.230, RSMo.; or

4. A photocopy or an image displayed on a mobile electronic device as authorized by and subject to the restrictions of Section 303.024, RSMo.

D. Proof of financial responsibility shall be carried at all times in the insured motor vehicle or by the operator of the motor vehicle if the proof of financial responsibility is effective as to the operator rather than to the vehicle. The operator of an insured motor vehicle shall exhibit the insurance identification card on the demand of any Peace Officer, commercial vehicle enforcement officer or commercial vehicle inspector who lawfully
stops such operator or investigates an accident while that officer or inspector is engaged in the performance of the officer's or inspector's duties.
E. However, no person shall be found guilty of violating this Section if the operator demonstrates to the court that he/she met the financial responsibility requirements of Section 303.025, RSMo., at the time the Peace Officer wrote the citation.
F. Any person who violates any provisions of this Section shall be guilty of an ordinance violation. (RSMo. §§303.025, 2011, 303.160, 303.190, 303.024, 2013, 2014 effective 1-1-2017)

Decision:

Include the statutory provisions set out above to replace Section 380.100.

Chapter 385, Abandoned, Wrecked Or Inoperable Vehicles

Due to the age of the enabling ordinances herein the City may want to review this Chapter for current applicability. Note that we have included **two** statutorily based Chapters related to this subject in the Manuscript. See Sample Chapter 217A and Sample Chapter 385A.

Decision:

Move Section 385.020 (CC 1990 § 18-146) to Chapter 215, Art. I, as Section 215.030(A)(2)(n). Delete Sections 385.030 through 385.050 (CC 1990 §§ 18-147 — 18-149).

Decision With Final Draft:

Delete Section 385.010, and this Chapter.

~~Chapter 385A, Abandoned Vehicles (UPDATED MODEL)~~ *(see now Chapter 217)*

This Sample Chapter is being included for comparison purposes only. See Sample Chapter 217A and the notes to Chapter 385 above.

Decision:

Combine Chapters 217A and 385A into one Chapter 217, Abandoned Property, as follows:

- *Include Sections 385A.020, 385A.030, 385A.050, and 385A.060.*
- *Include all of Chapter 217A, except replace Section 217A.050(B) with Section 385A.040(B).*
- *In Section 217.035(A)(3), change the reference to Section 385.010 to Section 217.020.*

Chapter 390, Sale Of Motor Vehicles On Private Or Commercial Parking Lots

Due to the age of the enabling ordinances, the City may wish to review this Chapter in its entirety to make certain it is still current.

Decision:

No revision desired.

Traffic Schedules

The City should review its lists of specific traffic regulations set forth in the following schedules and note any required revisions.

- Schedule I, Electric Traffic Control Signals
- Schedule II, Speed Limits On State Highways
- Schedule III, (RESERVED)
- Schedule IV, Turning And Directional Movement Restrictions
- Schedule V, Through Highways, Roads Or Streets
- Schedule VI, Intersection Stops
- Schedule VII, Yield Intersections
- Schedule VIII, (RESERVED)
- Schedule IX, Parking Restrictions
- Schedule X, Taxicab Stands
- Schedule XI, One-Way Roads, Streets And Alleys
- Schedule XII, Regulation Of The Kinds And Classes Of Traffic On Certain Roads
- Schedule XIII, Parking Restrictions On Certain Parking Lots
- Schedule XIV, (RESERVED)
- Schedule XV, (RESERVED)
- Schedule XVI, Emergency Snow Routes
- Schedule XVII, (RESERVED)

Decision:

Delete RESERVED Schedules III, VIII, XIV, XV and XVII, as well as Schedule X (which has no entries), and renumber the remaining schedules.

TITLE IV, LAND USE

Chapter 400, Planning

Article I, In General

The City may want to review the fees in Section 400.030 to make certain they are still current. Some of the language in Section 400.030 was changed by the City in 2012 (see the 2012 Draft Review following the "Other" tab of the Codification Portfolio); please review and confirm its accuracy. Note that possibly these fees are superseded by the fees set out in the 2014 Unified Development Code; see Sections 405.09.020 and 405.09.030 of this Manuscript.

Decision:

Delete this Section, it is superseded as noted above.

Article II, Planning And Zoning Commission

Some of this Article was revised by the City in the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. Please confirm that these revisions are desired.

Decision:

Revise as follows:

- *In Section 400.120(B), delete "if the Mayor chooses to be a member" and "if the Council chooses to have a member serve on the Commission," which were added during the 2012 recodification.*
- *In Section 400.140, insert CC 1990 § 23-30(a) as Subsection (A) (this was deleted during the 2012 recodification) and reletter the subsequent Subsections.*

Chapter 405, Unified Development Code

Note Re: Numbering

We have adjusted the recently adopted UDC so its numbering conforms to the rest of the new Code. We have retained the Article number and Section number, simply changing the Chapter number in the 1990 City Code to 405 and replacing the dashes with decimal points. So CC 1990 § 31-01-01 now reads Section 405.01.010. Note that the prior Code section is found in the history note following the Section heading. Please confirm this change.

Decision:

Okay as edited.

Article 01, General Provisions

The "Public Works Board of Variance" has been repealed by Ord. No. 2985. Note that reference to this Board still occurs in the UDC five times (but nowhere else in the Manuscript due to a removal from Section 125.020 of the Manuscript due to a revision indicated with the 2012 recodification project). Should these references be

changed to reflect another Board? We note that Section 2 of Ord. No. 2985 states: "The City of Chesterfield shall refer matters which may have previously been considered by the Public Works Board of Variance to the Board of Adjustment or the St. Louis County Building Commission, as appropriate."

**As Lisa Perry Eisenhauer noted in her April 20, 2018, e-mail to the City Clerk regarding a supplement to the 1990 City Code: "While incorporating Ord. No. 2985, which repealed the Public Works Board of Variance, we also searched the Code for references elsewhere to this Board and removed those from the Code. References were found in the following Sections: ~~2-202~~, 31-01-11(A), 31-02-12(D)(8), 31-02-18(D), 31-04-02(O)(2), and 31-09-02(A)(2). In this last Section we removed the entire Subsection and left it reserved. It previously read: The application fee for a variance to the Public Works Board of Variance shall be fifty dollars ($50.00)."

Note that these revisions are NOT reflected in the Manuscript; they await the City's input below.**

Decision:

Change the references to the repealed Board in the following sections as indicated:

1. *Section 405.01.110(A): delete the reference to Public Works Board of Variance.*
2. *Section 405.02.120(D)(8): change the reference to "Board of Adjustment."*
3. *Section 405.02.180(D): delete the reference to Public Works Board of Variance.*
4. *Section 405.04.020(O)(2): change the reference to "Board of Adjustment."*
5. *Section 405.09.020(A)((2): delete this Subsection; renumber subsequent Subsections.*

Decisions With Final Draft:

In Section 405.02.110(M)(2), revise the reference to Section 405.08.050 to read "Section 405.08.040."

In Section 405.02.120(B)(3), change "Director of Public Services" to "Director of Planning."

In the notice wording in Section 405.02.120(H)(1), change "Director of Public Services" to "Director of Planning."

In Section 405.03.020(A), revise the reference to Section 405.03.020(E) to read "Section 405.03.020(D)."

In Section 405.03.050(A)(6), revise the reference to "Chapter 14, Flood Damage Prevention, of the City Code" to read "Article 05, Flood Damage Prevention, of this Chapter."

In the first sentence of Section 405.04.070(B)(2)(f)(1), change "Department of Public Services" to "City of Chesterfield" in two locations.

In Section 405.04.070(B)(2)(f)(2), change "Department of Public Services" to "City of Chesterfield."

In Section 405.04.080(J)(1), change "Department of Public Services" to "City of Chesterfield."

In Section 405.04.110(D), change "Planning and Development Services Director" to "Director of Public Works."

In Section 405.04.110(E)(1)(f)(2), change "Public Works Director" to "Director of Planning."

In Section 405.09.030(A)(1), change "Director of Public Services'" to "Director of Planning's."

In Section 405.10.020 in the definition of "director," change "Director of Public Services" to "Director of Planning."

Article 08, Enforcement And Penalties

See Section 405.08.040(A), (C)(3), (D) and (E)(2), as well as Section 405.08.050. Note that Section 89.120, RSMo., should be reviewed against this Section. This statutory provision appears to set out different penalties for offenses regarding regulations adopted under the authority of Sections 89.010 to 89.140, RSMo. Review the statutory Section set out below and determine if any revisions are desired. Also note that SB 572 from the

2016 Legislative Session may affect application of these penalties in some instances. See the note above to Section 100.080 in Chapter 100, where the Statutory Sections possibly affecting this penalty are set out. See the definition of MUNICIPAL ORDINANCE VIOLATION set out therein.

89.120. Violations--penalties.

1. In case any building or structure is erected, constructed, reconstructed, altered, converted, or maintained, or any building, structure, or land is used in violation of sections 89.010 to 89.140 or of any ordinance or other regulation made under authority conferred hereby, the proper local authorities of the municipality, in addition to other remedies, may institute any appropriate action or proceedings to prevent such unlawful erection, construction, reconstruction, alteration, conversion, maintenance, or use, to restrain, correct, or abate such violation, to prevent the occupancy of such building, structure, or land, or to prevent any illegal act, conduct, business, or use in or about such premises. Such regulations shall be enforced by an officer empowered to cause any building, structure, place, or premises to be inspected and examined and to order in writing the remedying of any condition found to exist therein or thereat in violation of any provision of the regulations made under authority of sections 89.010 to 89.140.

2. The owner or general agent of a building or premises where a violation of any provision of said regulations has been committed or shall exist, or the lessee or tenant of an entire building or entire premises where such violation has been committed or shall exist, or the owner, general agent, lessee, or tenant of any part of the building or premises in which such violation has been committed or shall exist, or the general agent, architect, builder, contractor, or any other person who commits, takes part or assists in any such violation, or who maintains any building or premises in which any such violation shall exist shall be guilty of a misdemeanor punishable as follows:

(1) In any city with more than three hundred thousand inhabitants, by a fine of not less than ten dollars and not more than five hundred dollars for each and every day that such violation continues, or by imprisonment for ten days for each and every day such violation shall continue, or by both such fine and imprisonment in the discretion of the court. Notwithstanding the provisions of section 82.300, however, for the second and subsequent offenses involving the same violation at the same building or premises, the punishment shall be a fine of not less than two hundred and fifty dollars or more than one thousand dollars for each and every day that such violation shall continue, or by imprisonment for ten days for each and every day such violation shall continue, or by both such fine and imprisonment in the discretion of the court;

(2) In all other municipalities, by a fine of not less than ten dollars and not more than two hundred fifty dollars for each and every day that such violation continues, or by imprisonment for ten days for each and every day such violation shall continue, or by both such fine and imprisonment in the discretion of the court. Notwithstanding the provisions of section 82.300, for the second and subsequent offenses involving the same violation at the same building or premises, the punishment shall be a fine of not less than one hundred dollars or more than five hundred dollars for each and every day that such violation shall continue, or by imprisonment for ten days for each and every day such violation shall continue, or by both such fine and imprisonment in the discretion of the court.

3. Any such person who, having been served with an order to remove any such violation, shall fail to comply with such order within ten days after such service or shall continue to violate any provision of the regulations made under authority of sections 89.010 to 89.140 in the respect named in such order shall also be subject to a civil penalty of two hundred and fifty dollars.(RSMo 1939 § 7419, A.L. 1989 H.B. 498, A.L. 1998 H.B. 977 & 1608 and H.B. 1352, A.L. 2008 H.B. 1849 merged with S.B. 1002)Prior revision: 1929 § 7266

Decision:

Per Attorney Chris Graville's recommendation:

- *Replace Section 405.08.040 with provisions that comply with the above statutory language and SB572 from the 2016 Legislative Session.*
- *Retain Subsection (E)(1) and (2), regarding floodplains.*
- *Subsections (B), Removal Or Replacement Of Public Hearing Signs, and (C), Removal Of Trees, are covered by Sections 405.02.020(A)(5), 405.04.020(E)(2) and (I)(2).*
- *Delete Section 405.08.050 (CC 1990 § 31-08-05).*

Article 09, Fees

See the question above regarding whether the fees set out in Section 400.030 are superseded by this Article.

Additional Decision:

Delete Section 405.09.020(A)(5).
Delete Section 405.09.030(D); reletter subsequent Subsections.

TITLE V, BUILDING AND CONSTRUCTION

Chapter 500, Buildings And Building Regulations

Article I, Code Adoptions And County Enforcement Services

A. We deleted the authority and contract language currently in Sections 2-261 and 2-262 of the 1990 City Code and placed a note herein regarding copies retained on file at the City offices. This was approved in the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

B. Much of this Chapter was revised by the City and rearranged to keep all the provisions relating to Building and Construction in close proximity to one another. These derive from Chapters 2 and 7 of the 1990 City Code. With the agreement of the City they were rearranged in this manner and the City made changes herein. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. Review this entire Chapter to confirm it still meets with the City's approval.

Decision:

Revise this Chapter as noted below.

Article II, Minimum Standards Of Maintenance

A. This entire Article should be reviewed for current applicability as regards the procedures herein.

Decision:

No revision desired.

B. See Section 500.160(D). The City may wish to review the provisions of Section 500.200 as referenced herein which appears to set forth the summons and abatement procedures rather than specific penalties for violations of this Chapter.

Decision:

Revise to read: "Any person who interferes with an officer or agent of the City pursuant to this Article shall be ~~punished as provided in~~ subject to the enforcement proceedings of Section 500.200 of this Article."

C. As regards Section 500.170, the City may wish to review the provisions of this Section against the provisions of Section 1.190, RSMo., which provides that "*whenever any of the statutes of this state require or imply that a notice shall be given to any person concerning or affecting any right, property, claim, duty, matter or thing of any character or nature, unless the statutes expressly direct a different method of service, the delivery of a true copy of the notice to the person intended to be notified, or the leaving of a copy at his usual place of abode with some member of his family over the age of fifteen years, constitutes a valid and sufficient service of the notice.*"

Decision:

No revision desired.

Additional Decision:

In Section 500.200(A), undo the changes made during the 2012 recodification (use the original wording from the intro paragraph in CC 1990 § 7-16).

Article III, Commercial And Private Construction

Additional Decision:

In Section 500.300(B), undo the changes made during the 2012 recodification [use the original wording from CC 1990 § 7-1(b)].

Decision With Final Draft:

In Section 500.300(B), change "Director of Public Works" to "Director of Planning."

As regards Section 500.300(E), note that the General Penalty in Section 100.080 allows for a $1,000.00 fine. The City may want to delete this and simply rely on the General Penalty herein or reference Section 100.080 herein.

Decision:

Replace this penalty with a reference to the General Penalty Section 100.080.

Additional Decision:

Include CC 1990 § 7-2 as Section 500.310.

Article IV, Numbering Of Buildings

Due to the age of the enabling ordinances herein, the City may want to review this Section and confirm it is still the current policy.

Decision:

No revision desired.

Article V, Unfit Buildings

Due to the age of the enabling ordinances herein, the City may want to review this Article and confirm it is still the current policy. There were a number of changes made herein in the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Retain as shown in the Manuscript.

Additional Decision:

In Section 500.640, delete "for less."

Replace the last sentence in Section 500.660 with the following: "Any person removing any notice provided for in this Article shall be guilty of an offense. Any person violating this Section shall be subject to a penalty as set out in Section 100.080 of this Code."

Decision With Final Draft:

In Section 500.670, change "Department of Planning, Public Works and Parks" to "City of Chesterfield."

Article VI, Renewable Energy Systems On Residential Properties

Note that Section 500.770 references the prior Zoning Code penalty Section. The City may want to consider simply referencing the General Penalty in Section 100.080 or deleting this Section since the General Penalty does apply to the entire Code.

Decision:

Delete this Section.

Chapter 505, Streets And Sidewalks

A. Some changes were made by the City in this Chapter during the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio.

Decision:

Revise as follows:

- *Delete Section 505.160 (CC 1990 § 26-13).*
- *Delete Article II (it was repealed by Ord. No. 2801).*

B. Due to the age of the enabling ordinances herein, the City may want to review this entire Chapter and confirm it is still the current policy.

Decision:

No revision desired.

Division 2, Opening And Excavation Of Public Streets

As regards Section 505.130, the City may wish to review the provisions of this Section against the provisions of Section 71.365, RSMo., which provides that "*the governing body of each municipality in this state may provide for and regulate crosswalks, curbs and gutters. However, after September 28, 1975, all new curbs which are constructed in any municipality, and all existing curbs which are a part of any reconstruction, shall comply with this section. In order to enable persons using wheelchairs to travel freely and without assistance, at each crosswalk a ramp shall be built into the curb so that the sidewalk and street blend to a common level. Such ramp shall be not less than thirty-six inches wide and shall not have a slope greater than one inch rise per twelve*

inches length (eight and three-tenths percent). Where because of surrounding buildings or other restrictions it is impossible to conform the slope with this requirement, the ramp shall contain a slope with as shallow a rise as possible under the circumstances not to exceed ten percent. In all ramps there shall be a gradual rounding at the bottom of the slope." The City may wish to consider whether any additions or deletions may be necessary herein.

Decision:

No revision desired.

TITLE VI, BUSINESS AND OCCUPATION

Chapter 600, Alcoholic Beverages

General Notes

Much of this Chapter was revised by the City and rearranged to combine the City's provisions with newer statutory provisions. The City's provisions derive from Chapter 4 of the 1990 City Code and changes decided upon by the City in the 2012 recodification project (see the 2012 Draft Review following the "Other" tab of the Codification Portfolio). We have incorporated the amendments from Ord. No. 2763 adopted in 2013 in those Sections that were retained from the City's Code.

We are including a revised Chapter 600 which has been updated through 2017. For purposes of this Analysis it is numbered 600A in the Manuscript. Many of the statutory provisions which were included in the 2012 recodification project have been revised and we will refer to that document for updated Sections rather than setting out all the statutory material herein.

NO DECISION REQUIRED HERE

Statutory Updates

The following revisions from the 2019 Statutory Updates have been included in this Chapter:

Section/Subsection of the Code	Description of the Revision Based on State Law Change	Pursuant to RSMo. Section
600.190	Subsection (A)(3) has been divided into Subsections (A)(3) and (4), and the following wording has been added as a new Subsection (A)(4)(b): *"Unload delivery vehicles and transfer intoxicating liquor into retail licensed premises if such persons are supervised by a delivery vehicle driver who is twenty-one (21) years of age or older."* Subsection (A)(4) has been renumbered as Subsection (A)(5).	311.300

Article I, Generally

See Section 600.010, definition of MALT LIQUOR. Due to the amendment of Section 311.490, RSMo., regarding the ingredients used therein, possibly this definition should be changed as well. We have changed our sample definition of "Malt Liquor" to read as follows:

> *MALT LIQUOR — An intoxicating liquor containing alcohol not in excess of five percent (5%) and using the ingredients set out in Section 311.490, RSMo.*

Review the above note with the City's Attorney and the statutory provisions below and advise if any changes should be made.

311.490. Ingredients of beer--intoxicating malt liquor.

No person, partnership or corporation engaged in the brewing, manufacture or sale of beer as defined, in this chapter, or other intoxicating malt liquor, shall use in the manufacture or brewing thereof, or shall sell any such beer or other intoxicating malt liquor which contains ingredients not in compliance with the following standards:

(1) Beer shall be brewed from malt or a malt substitute, which only includes rice, grain of any kind, bean, glucose, sugar, and molasses. Honey, fruit, fruit juices, fruit concentrate, herbs, spices, and other food materials may be used as adjuncts in fermenting beer;

(2) Flavor and other nonbeverage ingredients containing alcohol may be used in producing beer, but may contribute to no more than forty-nine percent of the overall alcohol content of the finished beer. In the case of beer with an alcohol content of more than six percent by volume, no more than one and one-half percent of the volume of the beer may consist of alcohol derived from added flavors and other nonbeverage ingredients containing alcohol; and

(3) Beer, intoxicating malt liquor, and malt beverages, as defined in this section, shall not be subject to the requirements of subsection 1 of section 311.332 and sections 311.335 and 311.338. (RSMo 1939 § 4921, A.L. 2006 S.B. 725, A.L. 2009 H.B. 132)

Decision:

Insert the suggested definition set out above.

Article II, License Provisions

Division 1, License Regulations And Fees

A. Section 600.020 should be reviewed against Section 600A.020 which was revised shortly after the printing of the 2012 recodification.

Decision:

Include the newest Section 600A.020 to replace Section 600.020; delete references to Resort Licenses.

B. Section 600.030 should be reviewed against Section 600A.030 which was revised shortly after the printing of the 2012 recodification and in 2016 as well.

Decision:

Include the newest Section 600A.030 to replace Section 600.030.

Decision With Final Draft:

Delete Section 600.030(D) and renumber the subsequent Subsection.

C. Section 600.050 should be reviewed against Section 600A.040 which was revised in 2016. Also note that Ord. No. 2763 amended Section 4-45 of the 1990 City Code, which does not agree with Section 600A.040. These statutorily based Sections contain the maximum license fees allowed under State law.

Decision:

Include the newest Section 600A.040(A) to replace Section 600.050; delete references to Resort Licenses.

D. Section 600.060 should be reviewed against Section 600A.045 which was revised shortly after the printing of the 2012 recodification.

Decision:

Include the newest Section 600A.045 to replace Section 600.060.

Division 3, License Suspension/Revocation – Procedures

Sections 600.140 and 600.150 are not statutorily based and should be reviewed in conjunction with the provisions of Section 600.130 to determine if all of these provisions are needed.

Decision:

No revision desired.

Article III, Additional Regulations

A. Section 600.190 should be reviewed against Section 600A.060 which has been revised.

Decision:

Include the newest Section 600A.060 to replace Section 600.190.

B. Section 600.210 should be reviewed against Section 600A.070. The Manuscript Section 600.210 contains mostly sample provisions and City Code provisions as requested by the City in the 2012 recodification project.

Decision:

Include the newest Section 600A.070 to replace Section 600.210 entirely.

C. Model Chapter 600A has some additional Sections which the City may or may not want to include in the new Code. Review Sections 600A.047, 600A.050, 600A.053, 600A.075 and 600A.085. If the City wants any of these provisions included please advise.

Decision:

Include all these Sections in the new Code.

~~Chapter 600A, Alcoholic Beverages (UPDATED MODEL)~~

This Sample Chapter is being included for comparison purposes only. See the notes to Chapter 600 above which point to some of the Sections in this Chapter.

NO DECISION REQUIRED HERE

Chapter 605, Licenses And Business Regulations

Article I, In General

A. This entire Chapter was revised by the City in the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. We will only comment on statutory Sections that have been revised since 2012.

NO DECISION REQUIRED

B. The City may wish to review Section 605.050 to make certain the fee schedule is still current.

Decision:

No revision desired.

C. See Section 605.140. In the 2012 recodification project, the City was reviewing whether it wanted to charge more for a larger space if a business moves during the license year.

Decision:

Retain as shown in the Manuscript.

D. In Section 605.220, as regards the penalty for late payment, the City may want to review Section 71.625, RSMo., which has recently set out new provisions for collection of delinquent license fees. The City should determine, with your Attorney's assistance, how this should be handled.

71.625. License tax, payment, when deemed timely--municipal corporations, interest and penalties on delinquencies to apply.

1. The timely payment of a license tax due to any municipal corporation in this state, or any county pursuant to section 66.300, which is delivered by United States mail to the municipality or county office designated by such municipality or county office to receive such payments, shall be deemed paid as of the postmark date stamped on the envelope or other cover in which such payment is mailed. In the event any payment of tax due is sent by registered or certified mail, the date of the registration or certification shall be deemed the postmark date. No additional tax, penalty or interest shall be imposed by any municipality or county on any taxpayer whose payment is delivered by United States mail, if the postmark date stamped on the envelope or other cover containing such payment falls within the prescribed period on or before the prescribed date, including any extension granted, for making the payment. When the last day for making any license tax payment, including extensions, falls on a Saturday, a Sunday, or a legal holiday in this state, the payment shall be considered timely if the payment is made on the next succeeding day which is not a Saturday, Sunday or legal holiday.

2. Except as otherwise provided by law, the interest provisions of section 144.170 and penalty provisions of section 144.250 relating to delinquent sales taxes shall apply to delinquent taxes due as a result of the imposition of a license tax by any municipal corporation. The limitation for bringing suit for the collection of the delinquent tax and penalty shall be the same as that provided in sections 144.010 to 144.510. (L. 1998 H.B. 1301, A.L. 2012 H.B. 1504)

Decision:

No revision desired.

E. The City may wish to review Section 605.240 to make certain the fee is still current.

Decision:

No revision desired.

Article II, Solicitors

Due to the age of the enabling ordinances in this Article the City may want to review this Article for current applicability.

Decision:

No revision desired.

Article III, Vending Machines

Due to the age of the enabling ordinances in this Article the City may want to review this Article for current applicability.

Decision:

No revision desired.

Article IV, Tourist Camps

Due to the age of the enabling ordinances in this Article the City may want to review this Article for current applicability.

Decision:

No revision desired.

Decision With Final Draft:

In Section 605.610, change "Public Works Director" to "Director of Planning."

Article V, Pawnbrokers

Revisions were made to this Article based on the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. If any additional changes are required please advise.

Decision:

Retain as shown in the Manuscript.

Article VI, Tobacco Products

A. Revisions were made to this Article based on the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. If any additional changes are required please advise.

Decision:

Retain as shown in the Manuscript.

B. Note that Section 605.1110 doesn't agree with the General Penalty in Section 100.080 which has a maximum fine of $1,000.00. The City may want to delete this Section and rely on the General Penalty or reference said General Penalty in this Section.

Decision:

Delete this Section.

Article VII, Adult Entertainment Businesses

A. Revisions were made to this Article based on the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. If any additional changes are required please advise.

Decision:

Retain as shown in the Manuscript.

B. Note that the words set out in Section 605.1210 do not match the words now contained in the more recently adopted UDC; see Section 405.10.100 of this Manuscript. Does the City want to change these?

Decision:

Simply reference Section 405.10.100; do not list specific words.

Chapter 610, Alarm Systems

Article I, In General

A. Due to the age of the enabling ordinances herein, the City may want to review this Chapter in its entirety for current applicability.

Decision:

No revision desired.

B. Review the fines in Section 610.080 and confirm they are still current.

Decision:

No revision desired.

Chapter 615, Public Utilities License Tax

A. Revisions were made to this Chapter based on the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. If any additional changes are required please advise.

Decision:

Retain as shown in the Manuscript.

B. See Section 620.100. Note that this Section appears to be at least in part be based on compliance with HB209 of the 2006 Missouri Legislative Session. Provisions contained in HB209 were subsequently deemed unconstitutional by the Missouri Supreme Court on August 8, 2006 in City of Springfield, Appellant V Sprint Spectrum, L.P., Respondent Case No. SC87238. Consequently, some of this language regarding the 2.4% tax could be possibly removed. The City's Attorney may want to review this language and determine if any changes are desired.

Decision:

No revision desired.

Chapter 620, Cable Television

Articles I and II, Cable Television—Customer Service Rules and Rate Regulations

Comments were made to this Chapter based on the 2012 recodification project. See the 2012 Draft Review following the "Other" tab of the Codification Portfolio. If any additional changes are required please advise.

Decision:

Retain as shown in the Manuscript.

Article III, Video Services Providers

Was this Article intended to supersede Articles I and II of this Chapter?

Decision:

No revision desired.

PARKS, RECREATION AND ARTS COMMITTEE

Chair: Councilmember DeCampi
Vice Chair: Councilmember Hurt

The next meeting of the Parks, Recreation and Arts Committee has not yet been scheduled.

If you have any questions or require additional information, please contact Director of Parks, Recreation and Arts, Tom McCarthy or me prior to Monday's meeting.

PUBLIC HEALTH AND SAFETY COMMITTEE

Chair: Councilmember Monachella
Vice Chair: Michael Moore

The next meeting of the Public Health and Safety Committee has not yet been scheduled.

If you have any questions or require additional information, please contact Chief Ray Johnson or me prior Monday's meeting.

REPORT FROM THE CITY ADMINISTRATOR & OTHER ITEMS REQUIRING ACTION BY CITY COUNCIL

Bid Recommendation - Old Chesterfield Road Culvert Replacement Project
The Department of Public Works sought bids for the failing brick arch culvert under Old Chesterfield Road. Staff requests and recommends that City Council accept the low bid as submitted by Gershenson Construction Incorporated, and to authorize the City Administrator to enter into an Agreement with in an amount not to exceed $550,000. The 2020 Capital Projects Budget includes $550,000 for the replacement of the culvert and an asphalt overlay on Old Chesterfield Road. **(Roll Call Vote) Department of Public Works recommends approval.**

Bid Recommendation – Public Works Facility Roof Replacement (Equipment Storage Building and Material Storage Building) The Department of Public Works sought bids for the roof replacement for the equipment and material storage buildings at the Public Works Facility, that was budgeted but deferred from 2019. Staff requests and recommends that the City Council accept the low bid as submitted by Glandt Roofing LLC, and to authorize the City Administrator to enter into an agreement in an amount not to exceed $77,000. The 2020 Capital Projects Budget includes $123,000 for the replacement of the roofs on the Equipment Storage Building and the Material Storage Building located at the Public Works Facility. **(Roll Call Vote) Department of Public Works recommends approval.**

Bid Recommendation - 2020 Sidewalk Replacement Project B The Department of Public Works sought bids for the second City sidewalk replacement project in 2020. Staff requests and recommends that the City Council accept the low bid as submitted by Amcon Municipal Concrete, and to authorize the City Administrator to enter into an Agreement in an amount not to exceed $200,000. The funding for 2020 contractual sidewalk repair is $535,000. 2020 Sidewalk Replacement Project A was approved by City Council in March in an amount not to exceed $335,000, leaving $200,000 available for Project B. **(Roll Call Vote) Department of Public Works recommends approval.**

Financial Services Agreement – Piper Sandler The firm of Piper Sandler (formerly Piper Jaffray) serves as the City's financial adviser with regard to public debt. They provide counsel to the City as necessary, advise the City relative to timing and issuance, and finally they represent the City to the various rating agencies when Debt is anticipated. Staff recommends and requests that Council authorize the City Administrator to execute the Financial Services Agreement with Piper Sandler for the purpose of representing the financial aspects of debt issuance associated with the potential parks land acquisition. **(Roll Call Vote) The Department of Finance recommends approval.**

Covid 19 Pandemic Financial Projections and Recommendations
Council was provided updated financial projections on April 20th, prior to distribution of the Council packet to allow more time for you to review. There are three general decision areas contained within the memorandum, where Council was asked for direction and\or approval:

- **2020 Operational Closure of the City Aquatic Facility**
- **2020 Fourth of July Event**
- **Financial Strategy**

Memorandum
Department of Public Works

TO: Michael O. Geisel, P.E.
City Administrator

FROM: James A. Eckrich, P.E.
Public Works Dir. / City Engineer

DATE: April 15, 2020

RE: Old Chesterfield Road Culvert Replacement Project

For some time the City of Chesterfield has been planning for the replacement of the failing culvert underneath Old Chesterfield Road. As you will recall, in late 2017 the City of Chesterfield City Council approved a contact with Oates Associates, Incorporated for engineering services necessary to construct this project. Since that time the project has been designed, easements have been acquired, utilities have been relocated, and bid documents have been created. The 2020 Capital Projects Budget includes $550,000 for the replacement of the culvert and an asphalt overlay on Old Chesterfield Road. Construction is scheduled to commence this summer, subject to City Council approval.

The Department of Public Works publicly opened bids for the Old Chesterfield Road Culvert Replacement Project on April 7, 2020. The results of the bid opening are detailed in the attached memorandum from Senior Civil Engineer Jeff Paskiewicz. After reviewing the bids, Staff recommends the project be awarded to the low bidder, Gershenson Construction Company Incorporated, in an amount not to exceed $550,000. This includes the low bid amount ($522,042) and a modest contingency to account for change orders which may become necessary during construction of the project. Gershenson has successfully performed road improvement projects for the City of Chesterfield in the past and is positively recommended by City Staff.

If you have questions or require additional information on this project, please let me know.

Action Recommended

This matter should be forwarded to the City Council for consideration. Should Council concur with Staff's recommendation, it should authorize the City Administrator to enter into an Agreement with Gershenson Construction Company Incorporated in an amount not to exceed $550,000.

Concurrence: _____
Jeannette Kelly, Finance Director

Please forward for approval by the City Council at their 5/4/2020 meeting.

2020-4-15

Memorandum
Department of Public Works

TO: **James A. Eckrich, PE – Director of Public Works /City Engineer**

FROM: **Jeff Paskiewicz, PE – Senior Civil Engineer**

DATE: **April 14, 2020**

RE: **Old Chesterfield Road Culvert Replacement Project 2017-PW-16**

As you are aware, sealed bids for the project were opened on April 7, 2020 at 11:00 AM. There were five (5) bidders on the project; Gershenson Construction, XL Contracting, RV Wagner, Pace Construction, and Raineri Construction. The project bid tabulation is attached. Gershenson Construction is the lowest, responsive and responsible bidder with a bid of $522,042.20 (bid attached). Gershenson Construction has positive references for this type of work and has successfully completed projects similar to this in the St. Louis area and for the City of Chesterfield.

I recommend requesting authorization to enter into an agreement with Gershenson Construction Company, Inc. to provide for construction of the Old Chesterfield Road Culvert Replacement Project in an amount not to exceed $550,000.00. This amount includes an approximate 5.35% contingency to allow for any unforeseen conditions and/or additional work as may be necessary to complete this project.

The 2020 budget allocation for construction of this project is $550,000.00

Attachments: Old Chesterfield Road Culvert Replacement Project Bid Tabulation
Gershenson Construction Bid

Cc: Zach Wolff, Assistant City Engineer
File 2017-PW-16

EXHIBIT A

BID FORM

BID TIME: 11:00 a.m.
BID DATE: Tuesday, April 7, 2020

TO: THE CITY OF CHESTERFIELD

The undersigned, having carefully examined the site and all the Contract Documents, adding Addenda 1 through 1, for the

Old Chesterfield Road Culvert Replacement Project
2017-PW-16

being familiar with the local conditions affecting the work, hereby proposes to furnish all labor, materials, equipment and services required for the performance and completion of said project in accordance with the said Contract Documents for the following itemized bid.

The City is requesting unit price proposals for this work, consisting of all work necessary to remove and replace an existing 9.5'x9.5' limestone arch culvert with a 12'x10' cast in place concrete box culvert and mill and resurface approximately 1,400 feet of Old Chesterfield Road.

The Contract contains a binding arbitration provision which may be enforced by the parties.

Bid submitted by:

Company Name: Gerstenson Construction Co, INC.

Address: 2 Truitt Drive

City, State Eureka, MO 63025

Phone number: 636-938-9595 Fax: 636-938-9501

E-mail address: mhibbard@gerstenson.com

Type of Firm: Sole Partnership ____ Partnership ____
Corporation X Other ____

Officer Edward Gerstenson

Title President

Signature

Date 4-7-2020

ITEMIZED BID FORM

Item No.	Items	Unit	Quantity	Unit Price	Total
201-20.10	CLEARING AND GRUBBING	LS	1	20,000.00	20,000.00
202-20.10	REMOVAL OF IMPROVEMENTS	LS	1	7,500.00	7,500.00
203-10.00	CLASS "A" EXCAVATION	CU YD	1,315	20.00	26,300.00
204-60.10	EMBANKMENT IN PLACE	CU YD	3,245	19.00	61,655.00
206-33.00	CLASS 4 EXCAVATION	CU YD	785	23.00	18,055.00
304-05.04	TYPE "5" AGGREGATE BASE (4 INCHES)	SQ YD	405	9.00	3,645.00
405-30.10	TYPE "C" BITUMINOUS CONCRETE (PAVEMENT), 2"	SQ YD	5,253	9.25	48,590.25
405-30.30	TYPE "X" BITUMINOUS CONCRETE (BASE), 8"	SQ YD	240	50.00	12,000.00
412-10.00	PAVEMENT SURFACING AND TEXTURING, 2"	SQ YD	5,013	2.15	10,777.95
604-20.30	ADJUSTING MANHOLE TO GRADE	EACH	2	225.00	450.00
608-50.08	PAVED APPROACH (8")	SQ YD	145	65.00	9,425.00
611-30.99	FURNISHING AND PLACING TYPE 2 ROCK BLANKET	SQ YD	1,043	40.00	41,720.00
612-30.15	TRAFFIC CONTROL (ALL INCLUSIVE)	LS	1	5,544.00	5,544.00
619-00.00	MOBILIZATION	LS	1	30,000.00	30,000.00
621-20.10	PERMANENT YELLOW PAVEMENT STRIPING, PAINT	LF	3,720	0.30	1,116.00
621-20.11	PERMANENT WHITE PAVEMENT STRIPING, PAINT	LF	3,200	0.30	960.00
621-20.15	PERMANENT PAVEMENT MARKING ARROWS, PAINT	EACH	2	65.00	130.00
624-99.05	GEOTEXTILE FABRIC	SQ YD	405	1.60	648.00
627-40.00	CONTRACTOR FURNISHED SURVEY AND STAKING	LS	1	3,100.00	3,100.00
627-99.01	AS BUILT PLANS	LS	1	500.00	500.00
703-40.40	CLASS B-1 CONCRETE (CULVERTS-BRIDGE)	CU YD	229.7	700.00	160,790.00
706-10.20	REINFORCING STEEL (CULVERTS-BRIDGE)	LB	34,000	1.22	41,480.00
805-10.00	SEEDING	SQ YD	565	4.00	2,260.00
806-30.01	ROCK DITCH CHECK	EACH	4	275.00	1,100.00
806-50.00	TEMPORARY SEEDING AND MULCHING	SQ YD	565	1.00	565.00
806-70.00	SILT FENCE	LF	328	4.75	1,558.00
999-00.01	ROCK MAT	CU YD	147	70.00	10,290.00
999-00.02	GEOGRID FOR ROCK MAT	SQ YD	294	3.00	882.00
999-99.01	AMEREN INSURANCE REQUIREMENTS	LS	1	1.00	1.00
	CUT AND CAP MSD FORCE MAIN	LS	1	1,000.00	1,000.00
TOTAL ESTIMATED COST OF WORK INCLUDING ALL LABOR, MATERIALS & PROFITS					522,042.20

City of Chesterfield

BID TABULATION
OLD CHESTERFIELD ROAD CULVERT REPLACEMENT PROJECT
2017-PW-16
April 7, 2020

ITEM #	DESCRIPTION	UNIT	QUANTITY	PROJECT ESTIMATE		GERSHENSON CONSTRUCTION		XL CONTRACTING		RV WAGNER		PACE CONSTRUCTION		RAINERI CONSTRUCTION	
				UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE
1	CLEARING AND GRUBBING	LS	1	$8,000.00	$8,000.00	$20,000.00	$20,000.00	$10,404.00	$10,404.00	$22,000.00	$22,000.00	$13,000.00	$13,000.00	$3,850.00	$3,850.00
2	REMOVAL OF IMPROVMENTS	LS	1	$15,000.00	$15,000.00	$7,500.00	$7,500.00	$56,141.00	$56,141.00	$17,000.00	$17,000.00	$15,000.00	$15,000.00	$63,969.50	$63,969.50
3	CLASS "A" EXCAVATION	CU YD	1,315	$12.00	$15,780.00	$20.00	$26,300.00	$14.82	$19,488.30	$11.00	$14,465.00	$24.00	$31,560.00	$41.01	$53,928.15
4	EMBANKMENT IN PLACE	CU YD	3,245	$15.00	$48,675.00	$19.00	$61,655.00	$20.03	$64,997.35	$25.50	$82,747.50	$11.00	$35,695.00	$44.44	$144,207.80
5	CLASS 4 EXCAVATION	CU YD	786	$30.00	$23,580.00	$23.00	$18,055.00	$20.66	$16,218.10	$48.00	$37,680.00	$70.00	$54,950.00	$42.03	$32,993.55
6	TYPE 5 AGGREGATE BASE (4 INCHES)	SQ YD	405	$5.00	$2,025.00	$9.00	$3,645.00	$5.81	$2,353.05	$12.00	$4,860.00	$7.75	$3,138.75	$11.78	$4,770.90
7	TYPE "C" BITUMINOUS CONCRETE (PAVEMENT), 2"	SQ YD	5,253	$8.00	$42,024.00	$9.25	$48,590.25	$8.94	$46,961.82	$9.00	$47,277.00	$9.50	$49,903.50	$9.40	$49,378.20
8	TYPE "X" BITUMINOUS CONCRETE (BASE), 8"	SQ YD	240	$40.00	$9,600.00	$50.00	$12,000.00	$50.02	$12,004.80	$48.00	$11,520.00	$17.50	$4,200.00	$50.05	$12,012.00
9	PAVEMENT SURFACING AND TEXTURING, 2"	SQ YD	5,013	$3.00	$15,039.00	$2.15	$10,777.95	$2.54	$12,733.02	$2.25	$11,279.25	$2.50	$12,532.50	$2.36	$11,830.68
10	ADJUSTING MANHOLE TO GRADE	EACH	2	$800.00	$1,600.00	$225.00	$450.00	$2,146.76	$4,293.52	$1,200.00	$2,400.00	$2,000.00	$4,000.00	$440.00	$880.00
11	PAVED APPROACH (6")	SQ YD	145	$70.00	$10,150.00	$65.00	$9,425.00	$98.52	$14,285.40	$67.50	$9,787.50	$80.00	$11,600.00	$116.97	$16,960.65
12	FURNISHING AND PLACING TYPE 2 ROCK BLANKET	SQ YD	1,043	$50.00	$52,150.00	$40.00	$41,720.00	$28.72	$29,954.96	$47.00	$49,021.00	$55.00	$57,365.00	$32.87	$34,283.41
13	TRAFFIC CONTROL (ALL INCLUSIVE)	LS	1.0	$5,000.00	$5,000.00	$5,544.00	$5,544.00	$9,250.22	$9,250.22	$9,800.00	$9,800.00	$5,544.00	$5,544.00	$9,084.90	$9,084.90
14	MOBILIZATION	LS	1.0	$20,000.00	$20,000.00	$30,000.00	$30,000.00	$16,377.60	$16,377.60	$33,000.00	$33,000.00	$85,007.00	$85,007.00	$46,436.50	$46,436.50
15	PERMANENT YELLOW PAVEMENT STRIPING, PAINT	LF	3,720	$2.00	$7,440.00	$0.30	$1,116.00	$0.33	$1,227.60	$0.35	$1,302.00	$0.30	$1,116.00	$0.33	$1,227.60
16	PERMANENT WHITE PAVEMENT STRIPPING, PAINT	LF	3,200	$2.00	$6,400.00	$0.30	$960.00	$0.33	$1,056.00	$0.35	$1,120.00	$0.30	$960.00	$0.33	$1,056.00
17	PERMANENT PAVEMENT MARKING ARROWS, PAINT	EACH	2	$750.00	$1,500.00	$65.00	$130.00	$71.50	$143.00	$68.00	$136.00	$65.00	$130.00	$71.50	$143.00
18	GEOTEXTILE FABRIC	SQ YD	405	$4.00	$1,620.00	$1.60	$648.00	$2.73	$1,105.65	$1.00	$405.00	$2.50	$1,012.50	$5.05	$2,045.25
19	CONTRACTOR FURNISHED SURVEY AND STAKING	LS	1	$5,000.00	$5,000.00	$3,100.00	$3,100.00	$1,980.00	$1,980.00	$3,800.00	$3,800.00	$1,800.00	$1,800.00	$2,684.00	$2,684.00
20	AS BUILT PLANS	LS	1	$5,000.00	$5,000.00	$500.00	$500.00	$880.00	$880.00	$840.00	$840.00	$800.00	$800.00	$1,419.00	$1,419.00
21	CLASS B-1 CONCRETE (CULVERTS-BRIDGE)	CU YD	229.7	$700.00	$160,790.00	$700.00	$160,790.00	$867.08	$199,168.28	$790.00	$181,463.00	$850.00	$195,245.00	$447.85	$102,871.15
22	REINFORCING STEEL (CULVERTS-BRIDGE)	LB	34,000	$1.50	$51,000.00	$1.22	$41,480.00	$1.16	$39,440.00	$1.00	$34,000.00	$0.96	$32,640.00	$1.94	$65,960.00
23	SEEDING	SQ YD	565	$4.00	$2,260.00	$4.00	$2,260.00	$5.49	$3,101.85	$4.50	$2,542.50	$4.25	$2,401.25	$4.87	$2,838.55
24	ROCK DITCH CHECK	EACH	4	$500.00	$2,000.00	$275.00	$1,100.00	$421.31	$1,685.24	$400.00	$1,600.00	$170.00	$680.00	$412.50	$1,650.00
25	TEMPORARY SEEDING AND MULCHING	SQ YD	565	$2.00	$1,130.00	$1.00	$565.00	$2.70	$1,525.50	$1.50	$847.50	$1.50	$847.50	$3.02	$1,706.30
26	SILT FENCE	LF	328	$3.00	$984.00	$4.75	$1,558.00	$4.13	$1,354.64	$9.00	$2,952.00	$5.00	$1,640.00	$5.50	$1,804.00
27	ROCK MAT	CU YD	147	$60.00	$8,820.00	$70.00	$10,290.00	$54.43	$8,001.21	$53.00	$7,791.00	$65.00	$9,555.00	$52.11	$7,660.17
28	GEOGRID FOR ROCK MAT	SQ YD	294	$4.00	$1,176.00	$3.00	$882.00	$5.16	$1,517.04	$3.00	$882.00	$4.00	$1,176.00	$4.41	$1,296.54
29	AMEREN INSUREANCE REQUIREMENTS	LS	1	$5,000.00	$5,000.00	$1.00	$1.00	$100.00	$100.00	$3,500.00	$3,500.00	$1.00	$1.00	$5,500.00	$5,500.00
30	CUT AND CAP MSD FORCE MAIN	LS	1	$5,000.00	$5,000.00	$1,000.00	$1,000.00	$987.00	$987.00	$2,000.00	$2,000.00	$1,500.00	$1,500.00	$5,500.00	$5,500.00
	BID FORM TOTAL				$533,713.00		$522,042.20		$578,736.15		$598,018.25		$615,000.00		$589,737.60

Memorandum
Department of Public Works

TO: Michael O. Geisel, P.E.
City Administrator

FROM: James A. Eckrich, P.E.
Public Works Dir. / City Engineer

DATE: April 15, 2020

RE: Public Works Facility – Roof Replacement
Equipment Storage Bldg and Material Storage Bldg

As you know, the 2020 Capital Projects Budget includes $123,000 for the replacement of the roofs on the Equipment Storage Building and the Material Storage Building located at the Public Works Facility. Those buildings are 25 years old, with roofs that have an expected life of 20 – 25 years. The roofs periodically leak, with problems being addressed by Building Maintenance Staff. As you may recall, this project was originally budgeted for 2019, but was delayed due to needed structural repairs. Those repairs were completed in 2019.

The Department of Public Works publicly opened bids for this project on April 7, 2020. The results of the bid opening are detailed in the attached memorandum from Civil Engineer Steve Merk. After reviewing the bids, Staff recommends the project be awarded to the low bidder, Glandt Roofting LLC, in an amount not to exceed $77,000. This includes the low bid amount ($69,882) and a modest contingency. Glandt Roofing has worked for the City of Chesterfield in the past, and is positively recommended by City Staff.

I considered deferring this project until 2021 due to financial concerns related to COVID-19. However, because the bid from Glandt is well below the Budget ($123,000) and the next lowest bidder ($95,130), it is my recommendation that we proceed with this project at this time. Should you have questions or require additional information on this project, please let me know.

Action Recommended

This matter should be forwarded to the City Council for consideration. Should Council concur with Staff's recommendation, it should authorize the City Administrator to enter into an Agreement with Glandt Roofing in an amount not to exceed $77,000.

Concurrence:

Jeannette Kelly, Finance Director

Please forward for approval by City Council at their 5/4/2020 meeting

2020/4/15

Memorandum
Department of Public Works

TO: **James A. Eckrich, P.E. – Director of Public Works / City Engineer**

FROM: **Steven J. Merk, P.E. – Civil Engineer**

DATE: **April 15, 2020**

RE: **Public Works Facility – Roof Replacement 2020-PW-05**

As you are aware, sealed bids for the project were opened on April 7, 2020 at 10:30 a.m. There were six (6) bidders on the project: Glandt Roofing, Missouri Builders Service, Jim Taylor Roofing, Bartch Roofing, Bi-State Roof Systems, and Lakeside Roofing. The project bid tabulation is attached. Glandt Roofing is the lowest, responsive and responsible bidder with a bid of $69,882.00 (bid attached). Glandt Roofing has positive references for this type of work and has successfully completed projects similar to this in the St. Louis area. In addition, Glandt Roofing performed the roof replacement for the Public Works Facility main building in 2017.

I recommend requesting authorization to enter into an agreement with Glandt Roofing to provide the installation of the new roofs for the Public Works Facility Roof Replacement Project in an amount not to exceed $76,900.00. This amount includes an approximate 10% contingency to allow for any unforeseen conditions and/or additional work as may be necessary to complete this project.

The 2020 budget allocation for construction of this project is $123,000.00.

Attachments: Public Works Facility Roof Replacement Project Bid Tabulation
Glandt Roofing Bid

cc: Zachary S. Wolff, P.E. – Assistant City Engineer
File 2020-PW-05

City of Chesterfield

BID TABULATION
PUBLIC WORKS FACILITY ROOF REPLACEMENT
2020-PW-05
April 7, 2020

ITEM #	DESCRIPTION	UNITS	QTY	ENGINEER'S ESTIMATE		GLANDT ROOFING		MISSOURI BUILDERS SERVICE, INC.		JIM TAYLOR, INC.		BARTCH ROOFING		BI-STATE ROOF SYSTEMS		LAKESIDE ROOFING	
				UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE
1	NEW ROOF ON MATERIAL STORAGE BUILDING	LUMP SUM	1	$25,500.00	$25,500.00	$18,741.00	$18,741.00	$22,995.00	$22,995.00	$26,100.00	$26,100.00	$35,945.00	$35,945.00	$26,412.00	$26,412.00	$30,472.00	$30,472.00
2	NEW ROOF ON EQUIPMENT STORAGE BUILDING	LUMP SUM	1	$94,000.00	$94,000.00	$49,541.00	$49,541.00	$70,735.00	$70,735.00	$70,810.00	$70,810.00	$61,039.00	$61,039.00	$80,859.00	$80,859.00	$81,712.00	$81,712.00
3	REMOVE & REPLACE DAMAGED/DETERIORATED PERIMETER WOOD BLOCKING	LN.FT.	400	$4.00	$1,600.00	$4.00	$1,600.00	$3.50	$1,400.00	$4.15	$1,660.00	$7.50	$3,000.00	$9.18	$3,672.00	$2.50	$1,000.00
	TOTAL BID				$121,100.00		$69,882.00	* math error	$95,130.00	*math error	$98,570.00		$99,984.00		$110,943.00		$113,184.00

EXHIBIT A

BID FORM

BID TIME: 10:30 a.m.
BID DATE: Tuesday, April 7, 2020

TO: THE CITY OF CHESTERFIELD

The undersigned, having carefully examined the site and all the Contract Documents, adding Addenda 1 through 1, for the

PUBLIC WORKS FACILITY ROOF REPLACEMENT
2020-PW-05

being familiar with the local conditions affecting the work, hereby proposes to furnish all labor, materials, equipment and services required for the performance and completion of said project in accordance with the said Contract Documents for the following itemized bid.

The City is requesting unit price proposals for this work, consisting of all work necessary to complete the installation of approximately 17,000 s.f. of an EPDM membrane fully adhered roofing system. Installation will include flashings, metal edges, and insulation as specified herein and as indicated on the drawings in accordance with the manufacturer's most current specifications and details.

The Contract contains a binding arbitration provision which may be enforced by the parties.

Bid submitted by:

Company Name: Glandt Roofing LLC

Address: 7803 Triiple Lakes Road

City, State East Carondelet, IL 62240

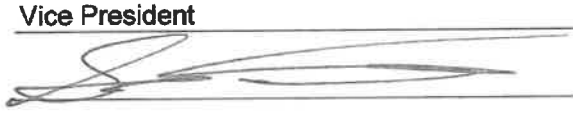
Phone number: 618-973-1823 Fax: n/a

E-mail address: Andrea@glandtrfg.com

Type of Firm: Sole Partnership _____ Partnership _____
Corporation X Other _____

Officer Sean Drury

Title Vice President

Signature 

Date 4/7/2020

EXHIBIT A

BID FORM

The bid items shall include all materials, labor, delivery and installation necessary for

Item	Description	Unit	Quantity	Price
1	New Roof on Material Storage Building	Lump Sum	1	$ 18,741.00
2	New Roof on Equipment Storage Building	Lump Sum	1	$ 49,541.00
3	Remove and Replacing Damaged/Deteriorated Perimeter Wood Blocking	Linear Foot	400	$ 1600.00
		Total Bid		$ 69,882.00

President/ Chair

Memorandum
Department of Public Works

TO: Michael O. Geisel, P.E.
City Administrator

FROM: James A. Eckrich, P.E.
Public Works Dir. / City Engineer

DATE: April 15, 2020

RE: 2020 Sidewalk Replacement Project B

As you know, due to the impacts of the Emerald Ash Borer (EAB) the Public Works Department has directed one street maintenance crew to work exclusively on the removal of Ash Trees located within the public right of way, as detailed in the EAB Action Plan approved by City Council in late 2015. Because the maintenance division will be concentrating its efforts on tree removal, the funding for 2020 contractual sidewalk repair was increased from $235,000 to $535,000 via Budget Adjustment DPW#1, approved by City Council on January 6, 2020.

The Public Works Department plans to address sidewalk deficiencies through two separate projects in 2020. The first of these projects, known as 2020 Sidewalk Replacement Project A, was approved by City Council at its March 16, 2020 meeting, in an amount not to exceed $335,000. That project will concentrate on sidewalk deficiencies within the Spring Hill Bluffs, Countryside at Chesterfield, Baxter Oaks, and Conway Springs subdivisions. Project A will also address sidewalk deficiencies within portions of the Baxter Lakes Addition 2 subdivision, as well as Sycamore Hill Court. The second project, Sidewalk Replacement Project B, is an annual contract intended to address work orders and sidewalk deficiencies which the City becomes aware of throughout the year.

The Department of Public Works publicly opened bids for the 2020 Sidewalk Replacement Project B on April 7, 2020. The results of the bid opening are detailed in the attached memorandum from Project Manager Matt Dooley. After reviewing the bids, Staff recommends the project be awarded to the low bidder, Amcon Municipal Concrete, in an amount not to exceed $200,000. This includes the low bid amount ($185,050) and a modest contingency to account for change orders which may be necessary. Amcon has previously performed a number of concrete projects for the City of Chesterfield, and is positively recommended by City Staff.

Should you have questions or require additional information on this project, please let me know.

Action Recommended

This matter should be forwarded to the City Council for consideration. Should Council concur with Staff's recommendation, it should authorize the City Administrator to enter into an Agreement with Amcon Municipal Concrete in an amount not to exceed $200,000.

Concurrence: _____
Jeannette Kelly, Director of Finance

Please forward for approval by City Council at their 5/4/2020 meeting

_____ 2020/4/15

MEMORANDUM

DATE: April 7, 2020

TO: Jim Eckrich, Public Works Director

FROM: Matt Dooley, Project Manager

SUBJECT: 2020 Sidewalk Replacement Project, 2020-PW-04B

As you are aware, we opened bids for the above referenced project on April 7, 2020. Four bids were received:

Contractor	Total Bid
Amcon Municipal Concrete	$ 185,050.00
Lamke Trenching & Excavating	$ 185,100.00
Raineri Construction	$ 187,150.00
Spencer Contracting	$ 423,000.00

The low bidder, Amcon Municipal Concrete has successfully performed sidewalk work in the past for other municipalities as well as the City of Chesterfield. **Accordingly, I recommend acceptance of the bid of $185,050.00 submitted by Amcon Municipal Concrete, with the cost of the project not to exceed $200,000.** Adequate funding is available in the Capital Projects Sidewalk Improvements account, 120-079-5497, to fund this project.

A copy of the lowest and best bid is attached for the Department of Finance and Administration's use in preparing a purchase order for the project. Should you require additional information, please advise.

EXHIBIT A

BID FORM

BID TIME: 10:00 a.m.
BID DATE: Tuesday, April 7, 2020

TO: THE CITY OF CHESTERFIELD

The undersigned, having carefully examined the site and all the Contract Documents, adding Addenda _____ through ____, for the

Sidewalk Replacement Project
2020-PW-04 B

being familiar with the local conditions affecting the work, hereby proposes to furnish all labor, materials, equipment and services required for the performance and completion of said project in accordance with the said Contract Documents for the following itemized bid.

The City is requesting unit price proposals for this work, consisting of all work necessary to remove and reconstruct 4" thick, 6" thick existing sidewalk, handicap ramps, and concrete aprons, including all necessary property restoration in various locations, as designated by the City.

This project is intended to address sidewalk deficiencies throughout the City for the period of May 1, 2020 to April 30, 2021. Sidewalk quantity will vary based upon need; an estimate is provided in the bid tab for the purpose of comparing bids. The City intends to construct $200,000 worth of sidewalk improvements with this project.

The Contract contains a binding arbitration provision which may be enforced by the parties.

Bid submitted by:

Company Name: Amcon Municipal Concrete, LLC

Address: 850 Lonestar Dr.

City, State O'Fallon, MO 63366

Phone number: 636-379-9396 Fax: 636-240-3699

E-mail address: amconconcrete@yahoo.com

Type of Firm: Sole Partnership ____ Partnership ✓
Corporation ____ Other ____

Officer Paul J. Amelong

Title Member

Signature Paul J. Amelong

Date 4/7/2020

ITEMIZED BID
CITY OF CHESTERFIELD
2020 SIDEWALK REPLACEMENT PROJECT
2020-PW-04 B

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	EXTENDED PRICE
1.1	Removal and Replacement of 4" Sidewalk - Limestone or Meramec Gravel Aggregate	Sq. Ft.	25,000	7.05	176,250.00
2.1	Removal and Repalcement of 6" Sidewalk - Limestone or Meramec Gravel Aggregate	Sq. Ft.	1,000	7.80	7,800.00
3.1	Removal and Replacement Accessible Curb Ramps	Each	1	500.00	500.00
4.1	Removal and Replacement of Drive Approach	Each	1	500.00	500.00
				TOTAL BID	185,050.00

City of Chesterfield

BID TABULATION
2020 SIDEWALK REPLACEMENT PROJECT
2020-PW-04B
April 7, 2020

ITEM #	DESCRIPTION	UNITS	QUANTITY	ENGINEER'S ESTIMATE		AMCON MUNICIPAL CONCRETE		LAMKE TRENCHING & EXCAVATING		RAINERI CONSTRUCTION		SPENCER CONTRACTING	
				UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE
1.1	Removal and Replacement of 4" Sidewalk - Limestone or Meramec Gravel Aggregate	Sq. Ft.	25,000	$7.50	$187,500.00	$7.05	$176,250.00	$7.00	$175,000.00	$7.00	$175,000.00	$16.00	$400,000.00
2.1	Removal and Repalcement of 6" Sidewalk - Limestone or Meramec Gravel Aggregate	Sq. Ft.	1,000	$8.50	$8,500.00	$7.80	$7,800.00	$8.00	$8,000.00	$8.25	$8,250.00	$18.00	$18,000.00
3.1	Removal and Replacement Accessible Curb Ramps	L.S.	1	$1,000.00	$1,000.00	$500.00	$500.00	$900.00	$900.00	$1,400.00	$1,400.00	$2,500.00	$2,500.00
4.1	Removal and Replacement of Drive Approach	L.S.	1	$1,500.00	$1,500.00	$500.00	$500.00	$1,200.00	$1,200.00	$2,500.00	$2,500.00	$2,500.00	$2,500.00
	TOTAL BID				**$198,500.00**		**$185,050.00**		**$185,100.00**		**$187,150.00**		**$423,000.00**

Finance Director
636-537-4726

Please forward for inclusion on the agenda for the 5/4/ 2020 City Council meeting.

2020/4/20

M E M O

DATE: April 20, 2020

TO: Mike Geisel, City Administrator

FROM: Jeannette Kelly, Finance Director

RE: Financial Services Agreement – Piper Sandler

As you know, earlier this year the City Council authorized the Brandywine Neighborhood Improvement project and Purchase / Sale Agreement for the Sachs Downtown Chesterfield tract of land including any necessary financing for these.

Attached to this memorandum is the Financial Services Agreement with Piper Sandler (formerly Piper Jaffrey) outlining the scope of services to be performed for Certificate of Participation and Neighborhood Improvement Bonds to be issued this year. This agreement also includes an automatic renewal (Section VII) for additional one-year terms unless one of the parties provides a 30-day written notice of termination prior to the anniversary date. Piper Sandler has provided financial services for the City of Chesterfield in the past, and is positively recommended by City Staff.

During my conversation with Piper Sandler with regards to the land acquisition financing, the rating call with Moody's to discuss the project, financials, pandemic impact, and strategy moving forward would be July / August; however, we could begin preliminary steps in preparation. When the transaction closes, the Moody's fee is included in the cost of issuance along with bond counsel, underwriting and services to complete the transaction. The risk associated with the rating call is the Moody's fee (approximately $20,000 - $25,000) if the transaction does not close.

It is my recommendation that we enter into this agreement with Piper Sandler. Should you have questions or require additional information, please let me know.

Action Recommended

This matter should be forwarded to the City Council for consideration. Should Council concur with Staff's recommendation, it should authorize the City Administrator to enter into an Agreement with Piper Sandler.

PIPER | SANDLER

FINANCIAL SERVICES AGREEMENT

This Financial Services Agreement, (the Agreement) is entered into on April 17, 2020 by and between City of Chesterfield Missouri (the Client) and Piper Sandler & Co. (Piper Sandler or the Financial Services Provider). This Agreement will serve as our mutual agreement with respect to the terms and conditions of our engagement as your financial services provider, effective on the date this Agreement is executed (the Effective Date).

I. Scope of Services.

(A) ***Services to be provided*.** Piper Sandler is engaged by the Client to provide services with respect to the planned issuance of the Client's Series 2020 Certificate of Participation and Neighborhood Improvement Bonds (the Issues) and any additional issues to be identified in an amendment to the Agreement.

(B) ***Scope of Services***. The Scope of Services to be provided respecting the Issue(s) may consist of the following, if directed by the Client:

1. Evaluate options or alternatives with respect to the proposed new Issue(s),
2. Consult with and/or advise the Client on actual or potential changes in market place practices, market conditions or other matters that may have an impact on the Issues or Products.
3. Assist the Client in establishing a plan of financing
4. Assist the Client in establishing the structure, timing, terms and other similar matters concerning the Issue
5. Prepare the financing schedule
6. Provide assistance as to scheduling, coordinating and meeting procedural requirements relating to any required bond referendum
7. Consult and meet with representatives of the Client and its agents or consultants with respect to the Issue
8. Attend meetings of the Client's governing body, as requested
9. Advise the Client on the manner of sale of the Issue
10. Make arrangements for printing, advertising and other vendor services necessary or appropriate in connection with the Issue
11. Advise the Client with regard to continuing disclosure matters, as requested
12. In a competitive bid sale, prepare the bid package, obtain CUSIP numbers, assist the Client in collecting and analyzing bids submitted by underwriters and in connection with the Client's selection of a winning bidder
13. At the time of sale, provide the Client with relevant data on comparable issues recently or currently being sold nationally and by comparable Clients
14. In a negotiated sale, coordinate pre-pricing discussions, supervise the sale process, advise the Client on matters relating to retail or other order periods and syndicate priorities, review the order book, and if directed by the Client, advise on the acceptability of the underwriter's pricing and offer to purchase
15. Assist the Client in identifying an underwriter in a negotiated sale or other deal participants such as an escrow agent, accountant, feasibility consultant, etc. to work on the Issue
16. Respond to questions from underwriters
17. Arrange and facilitate visits to, prepare materials for, and make recommendations to the Client in connection with credit ratings agencies, insurers and other credit or liquidity providers
18. Coordinate working group sessions, closing, delivery of the new Issue and transfer of funds
19. Prepare a closing memorandum or transaction summary

20. Advise Client on potential exercise of optional or other call rights, or potential tender offers, for outstanding Issue(s)
21. Advise Client on potential refunding or other refinancing opportunities of its outstanding Issue(s)
22. Consult with and/or advise Client on actual or potential changes in market place practices, market conditions or other matters that may have an impact on Client's outstanding Issue(s)
23. Assist Client in responding to inquiries from investors or other market participants in connection with Client's outstanding Issue(s)

For Services Respecting Official Statement. Piper Sandler has not assumed responsibility for preparing or certifying as to the accuracy or completeness of any preliminary or final official statement, other than with respect to written information about Piper Sandler as the municipal advisor if provided by Piper Sandler in writing for inclusion in such documents.

***II. Limitations on Scope of Services*.** In order to clarify the extent of our relationship, Piper Sandler is required under MSRB Rule G-42[1] to describe any limitations on the scope of the activities to be performed for you. Accordingly, the Scope of Services are subject to the following limitations:

The Scope of Services is limited solely to the services described herein and is subject to limitations set forth within the descriptions of the Scope of Services. Any duties created by this Agreement do not extend beyond the Scope of Services or to any other contract, agreement, relationship, or understanding, if any, of any nature between the Client and the Financial Services Provider.

To assist us in complying with our duties to our regulators, you agree that if we are asked to evaluate the advice or recommendations of third parties, you will provide us written direction to do so.

The Scope of Services does not include tax, legal, accounting or engineering advice with respect to any Issue or Product or in connection with any opinion or certificate rendered by counsel or any other person at closing and does not include review or advice on any feasibility study.

III. Amending Scope of Services. The Scope of Services may be changed only by written amendment or supplement. The parties agree to amend or supplement the Scope of Services promptly to reflect any material changes or additions to the Scope of Services.

Compensation. Compensation is contingent on size of bond issue or nominal value of product and contingent on closing. Piper Sandler & Co. will charge a fee of $25,000 for the issuance of Certificate of Participation and a fee of $50,000 for the issuance of Neighborhood Improvement District Bonds. Compensation is payable in immediately available funds at closing.

IV. IRMA Matters. If the Client has designated Piper Sandler as its independent registered municipal advisor ("IRMA") for purposes of SEC Rule 15Ba1-1(d)(3)(vi) (the "IRMA exemption"), the extent of the IRMA exemption is limited to the Scope of Services and any limitations thereto. Any reference to Piper Sandler, its personnel and its role as IRMA in the written representation of the Client contemplated under SEC Rule 15Ba1-1(d)(3)(vi)(B) is subject to prior approval by Piper Sandler and Client agrees not to represent, publicly or to any specific person, that Piper Sandler is Client's IRMA with respect to any aspect of municipal financial products or the issuance of municipal securities, or with respect to any specific municipal financial product or any specific issuance of municipal securities, outside the Scope of Services without Piper Sandler's prior written consent.

V. Piper Sandler's Regulatory Duties When Servicing the Client. MSRB Rule G-42 requires that Piper Sandler undertake certain inquiries or investigations of and relating to the Client in order for Piper

[1] See MSRB Rule G-42(c)(v).

Sandler to fulfill certain aspects of the fiduciary duty owed to the Client. Such inquiries generally are triggered: (a) by the requirement that Piper Sandler know the essential facts about the Client and the authority of each person acting on behalf of the Client so as to effectively service the relationship with the Client, to act in accordance with any special directions from the Client, to understand the authority of each person acting on behalf of the Client, and to comply with applicable laws, regulations and rules; (b) when Piper Sandler undertakes a determination of suitability of any recommendation made by Piper Sandler to the Client, if any or by others that Piper Sandler reviews for the Client, if any; (c) when making any representations, including with regard to matters pertaining to the Client or any Issue or Product; and (d) when providing any information in connection with the preparation of the preliminary or final official statement, including information about the Client, its financial condition, its operational status and its municipal securities or municipal financial products. Specifically, Client agrees to provide to Piper Sandler any documents on which the Client has relied in connection with any certification it may make with respect to the accuracy and completeness of any Official Statement for the Issue.

Client agrees to cooperate, and to cause its agents to cooperate, with Piper Sandler in carrying out these duties to inquire or investigate, including providing to Piper Sandler accurate and complete information and reasonable access to relevant documents, other information and personnel needed to fulfill such duties.

In addition, the Client agrees that, to the extent the Client seeks to have Piper Sandler provide advice with regard to any recommendation made by a third party, the Client will provide to Piper Sandler written direction to do so as well as any information it has received from such third party relating to its recommendation.

VI. Expenses. Piper Sandler will be responsible for all of Piper Sandler's out-of-pocket expenses unless otherwise agreed upon or if travel is directed by Client. If travel is directed by the Client, Client will reimburse Piper Sandler for their expenses. In the event a new issue of securities is contemplated by this Agreement, Client will be responsible for the payment of all fees and expenses commonly known as costs of issuance, including but not limited to: publication expenses, local legal counsel, bond counsel, ratings, credit enhancement, travel associated with securing any rating or credit enhancement, printing of bonds, printing and distribution of required disclosure documents, trustee fees, paying agent fees, CUSIP registration, and the like.

VII. Term of Agreement. The term of this Agreement shall begin on the Effective Date and ends, unless earlier terminated as provided below, on the last day of the month in which the first anniversary date of the Effective Date shall occur (the "Original Termination Date"). Unless Piper Sandler or the Client shall notify the other party in writing at least thirty (30) days in advance of the Original Termination Date that this Agreement will not be renewed, this Agreement will be automatically renewed on the Original Termination Date for an additional one (1) year period and thereafter will be automatically renewed on each anniversary date of the Original Termination Date for successive one (1) year periods unless Piper Sandler or the Client shall notify the other party in writing at least thirty (30) days in advance of such successive anniversary date.

This Agreement may be terminated with or without cause by either party upon the giving of at least thirty (30) days prior written notice to the other party of its intention to terminate, specifying in such notice the effective date of such termination. All fees due to Piper Sandler shall be due and payable upon termination. Upon termination, the obligations of Piper Sandler under this Agreement, including any amendment shall terminate immediately and Piper Sandler shall thereafter have no continuing fiduciary or other duties to the Client. The provisions of Sections IV, VII, XII, XIV, XV and XVII shall survive termination of this Agreement.

VIII. Independent Contractor. The Financial Services Provider is an independent contractor and nothing herein contained shall constitute or designate the Financial Services Provider or any of its employees or agents as employees or agents of the Client.

IX. Entire Agreement/Amendments. This Agreement, including any amendments and Appendices hereto which are expressly incorporated herein, constitute the entire Agreement between the parties hereto and sets forth the rights, duties, and obligations of each to the other as of this date. Any prior agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect. This Agreement may not be modified except by a writing executed by both the Financial Services Provider and Client.

X. Required Disclosures. MSRB Rule G-42 requires that Piper Sandler provide you with disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Such disclosures are provided in Piper Sandler's Disclosure Statement attached as Appendix A to this Agreement.

XI. Limitation of Liability. In the absence of willful misconduct, bad faith, gross negligence or reckless disregard of obligations or duties hereunder on the part of Piper Sandler or any of its associated persons, Piper Sandler and its associated persons shall have no liability to the Client for any act or omission in the course of, or connected with, rendering services hereunder, or for any error of judgment or mistake of law, or for any loss arising out of any issuance of municipal securities, any municipal financial product or any other investment, or for any financial or other damages resulting from the Client's election to act or not to act, as the case may be, contrary to any advice or recommendation provided by Piper Sandler to the Client. No recourse shall be had against Piper Sandler for loss, damage, liability, cost or expense (whether direct, indirect or consequential) of the Client arising out of or in defending, prosecuting, negotiating or responding to any inquiry, questionnaire, audit, suit, action, or other proceeding brought or received from the Internal Revenue Service in connection with any Issue or Product, if any or otherwise relating to the tax treatment of any Issue or Product if any, or in connection with any opinion or certificate rendered by counsel or any other party. Notwithstanding the foregoing, nothing contained in this paragraph or elsewhere in this Agreement shall constitute a waiver by Client of any of its legal rights under applicable U.S. federal securities laws or any other laws whose applicability is not permitted to be contractually waived, nor shall it constitute a waiver or diminution of Piper Sandler's fiduciary duty to Client under Section 15B(c)(1), if applicable, of the Securities Exchange Act of 1934, as amended, and the rules thereunder.

XII. Indemnification. Unless prohibited by law, the Client hereby indemnifies and holds harmless the Financial Services Provider, each individual, corporation, partnership, trust, association or other entity controlling the Financial Services Provider, any affiliate of the Financial Services Provider or any such controlling entity and their respective directors, officers, employees, partners, incorporators, shareholders, trustees and agents (hereinafter the "Indemnitees") against any and all liabilities, penalties, suits, causes of action, losses, damages, claims, costs and expenses (including, without limitation, fees and disbursements of counsel) or judgments of whatever kind or nature (each a "Claim"), imposed upon, incurred by or asserted against the Indemnitees arising out of or based upon (i) any allegation that any information in the Preliminary Official Statement or Final Official Statement contained (as of any relevant time) an untrue statement of a material fact or omitted (as of any relevant time) or omits to state any material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

XIII. Official Statement. The Client acknowledges and understands that state and federal laws relating to disclosure in connection with municipal securities, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the Client and that the failure of the Financial Services Provider to advise the Client respecting these laws shall not constitute a breach by the Financial Services Provider or any of its duties and responsibilities under this Agreement. The Client acknowledges that any Official Statement distributed in connected with an issuance of securities are statements of the Client and not of Piper Sandler.

XIV. Notices. Any written notice or communications required or permitted by this Agreement or by law to be served on, given to, or delivered to either party hereto, by the other party shall be in writing and shall be deemed duly served, given, or delivered when personally delivered to the party to whom it is addressed

or in lieu of such personal services, when deposited in the United States' mail, first-class postage prepaid, addressed to the Client at:

City of Chesterfield
690 Chesterfield Parkway West
Chesterfield, MO 63017

Michael O. Geisel, City Administrator
636-537-4711
mgeisel@chesterfield.mo.us

Or to the Financial Services Provider at:

Piper Sandler & Co.
8235 Forsyth Boulevard, Suite 600
Clayton, MO 63105

Chris Collier, Managing Director
314-726-7535
chris.collier@psc.com

With a copy to:

Piper Sandler & Co.
Legal Department
800 Nicollet Mall, Suite 1000
Minneapolis, MN 55402

XV. Consent to Jurisdiction; Service of Process. The parties each hereby (a) submits to the jurisdiction of any State or Federal court sitting in the state of Missouri for the resolution of any claim or dispute with respect to or arising out of or relating to this Agreement or the relationship between the parties (b) agrees that all claims with respect to such actions or proceedings may be heard and determined in such court, (c) waives the defense of an inconvenient forum, (d) agrees not to commence any action or proceeding relating to this Agreement other than in a State or Federal court sitting in the state of Missouri and (e) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

XVI. Choice of Law. This Agreement shall be construed and given effect in accordance with the laws of the state of Missouri.

XVII. Counterparts; Severability. This Agreement may be executed in two or more separate counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any term or provision of this Agreement which is invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction.

XVIII. Waiver of Jury Trial. THE PARTIES EACH HEREBY AGREES TO WAIVE ANY RIGHT TO A TRIAL BY JURY WITH RESPECT TO ANY CLAIM, COUNTERCLAIM OR ACTION ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THE RELATIONSHIP BETWEEN THE PARTIES. PARTIES AGREE TO WAIVE CONSEQUENTIAL AND PUNITIVE DAMAGES.

XIX. No Third Party Beneficiary. This Agreement is made solely for the benefit of the parties and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended

to confer on any person, other than the parties and their respective successors and permitted assigns, any rights, remedies, obligations or liabilities under or by reason of this Agreement.

XX. Authority. The undersigned represents and warrants that they have full legal authority to execute this Agreement on behalf of the Client. The following individual(s) at the Client have the authority to direct Piper Sandler's performance of its activities under this Agreement:

Michael Geisel, City Adminstrator
Jeannette Kelly, Finance Director

The following individuals at Piper Sandler have the authority to direct Piper Sandler's performance of its activities under this Agreement:

Chris Collier, Managing Director

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above written. By the signature of its representative below, each party affirms that it has taken all necessary action to authorize said representative to execute this Agreement.

PIPER SANDLER & CO.

By: _____
Chris Collier
Its: Managing Director
Date: April 17, 2020

ACCEPTED AND AGREED:

CITY OF CHESTERFIELD, MISSOURI

By: _____
Michael Geisel
Its: City Administrator
Date: _____

Piper Sandler & Co. is registered with the U.S. Securities and Exchange Commission and the Municipal Securities Rulemaking Board ("MSRB"). A brochure is posted on the website of the MSRB, at www.msrb.org that describes the protections that may be provided by MSRB rules and how to file a complaint with an appropriate regulatory authority.

APPENDIX A – DISCLOSURE STATEMENT

Municipal Securities Rulemaking Board Rule G-42 (the Rule) requires that Piper Sandler provide you with the following disclosures of material conflicts of interest and of information regarding certain legal events and disciplinary history. Accordingly, this Appendix A provides information regarding conflicts of interest and legal or disciplinary events of Piper Sandler required to be disclosed to pursuant to MSRB Rule G-42(b) and (c)(ii).

(A) ***Disclosures of Conflicts of Interest*.** The Rule requires that Piper Sandler provide to you disclosures relating to any actual or potential material conflicts of interest, including certain categories of potential conflicts of interest identified in the Rule, if applicable. If no such material conflicts of interest are known to exist based on the exercise of reasonable diligence by us, Piper Sandler is required to provide a written statement to that effect.

Accordingly, we make the following disclosures with respect to material conflicts of interest in connection with the Scope of Services under the Agreement, together with explanations of how we address or intend to manage or mitigate each conflict. To that end, with respect to all of the conflicts disclosed below, we mitigate such conflicts through our adherence to our fiduciary duty to you in connection with municipal advisory activities, which includes a duty of loyalty to you in performing all municipal advisory activities for the Client. This duty of loyalty obligates us to deal honestly and with the utmost good faith with you and to act in your best interests without regard to our financial or other interests. In addition, as a broker dealer with a client oriented business, our success and profitability over time is based on assuring the foundations exist of integrity and quality of service. Furthermore, Piper Sandler's supervisory structure, utilizing our long-standing and comprehensive broker-dealer supervisory processes and practices, provides strong safeguards against individual representatives of Piper Sandler potentially departing from their regulatory duties due to personal interests. The disclosures below describe, as applicable, any additional mitigations that may be relevant with respect to any specific conflict disclosed below.

Compensation-Based Conflicts. The fees due under the Agreement are based on the size of the Issue and the payment of such fees is contingent upon the successful delivery of the Issue. While this form of compensation is customary in the municipal securities market, this may present the appearance of a conflict or the potential for a conflict because it could create an incentive for Piper Sandler to recommend unnecessary financings or financings that are disadvantageous to the Client, or to advise the Client to increase the size of the issue. We believe that the appearance of a conflict or potential conflict is mitigated by our duty of care and fiduciary duty and the general mitigations related to our duties to you, as described above.

***Transactions in Client's Securities*.** As a municipal advisor, Piper Sandler cannot act as an underwriter in connection with the same issue of bonds for which Piper Sandler is acting as a municipal advisor. From time to time, Piper Sandler or its affiliates may submit orders for and acquire your securities issued in an Issue under the Agreement from members of the underwriting syndicate, either for its own trading account or for the accounts of its customers. Again, while we do not believe that this activity creates a material conflict of interest, we note that to mitigate any perception of conflict and to fulfill Piper Sandler's regulatory duties to the Client, Piper Sandler's activities are engaged in on customary terms through units of Piper Sandler that operate independently from Piper Sandler's municipal advisory business, thereby eliminating the likelihood that such investment activities would have an impact on the services provided by Piper Sandler to you under the Agreement.

(B) ***Disclosures of Information Regarding Legal Events and Disciplinary History*.** The Rule requires that all municipal advisors provide to their clients certain disclosures of legal or disciplinary events material to a client's evaluation of the municipal advisor or the integrity of the municipal advisor's management or advisory personnel. Accordingly, Piper Sandler sets out below required disclosures and related information in connection with such disclosures.

I. Material Legal or Disciplinary Event. There are no legal or disciplinary events that are material to the Client's evaluation of Piper Sandler or the integrity of Piper Sandler's management or advisory personnel disclosed, or that should be disclosed, on any Form MA or Form MA-I filed with the SEC.

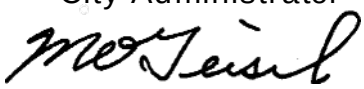
II. Most Recent Change in Legal or Disciplinary Event Disclosure. Piper Sandler has not made any material legal or disciplinary event disclosures on Form MA or any Form MA-I filed with the SEC.

(C) ***How to Access Form MA and Form MA-I Filings*.** Piper Sandler's most recent Form MA and each most recent Form MA-I filed with the SEC are available on the SEC's EDGAR system at http://www.sec.gov/edgar/searchedgar/companysearch.html. The Form MA and the Form MA-I include information regarding legal events and disciplinary history about municipal advisor firms and their personnel, including information about any criminal actions, regulatory actions, investigations, terminations, judgments, liens, civil judicial actions, customer complaints, arbitrations and civil litigation. The SEC permits certain items of information required on Form MA or MA-I to be provided by reference to such required information already filed by Piper Sandler in its capacity as a broker-dealer on Form BD or Form U4 or as an investment adviser on Form ADV, as applicable. Information provided by Piper Sandler on Form BD or Form U4 is publicly accessible through reports generated by BrokerCheck at http://brokercheck.finra.org, and Piper Sandler's most recent Form ADV is publicly accessible at the Investment Adviser Public Disclosure website at http://www.adviserinfo.sec.gov. For purposes of accessing such BrokerCheck reports or Form ADV, Piper Sandler's CRD number is 665.

(D) ***Future Supplemental Disclosures*.** As required by the Rule, this Section 5 may be supplemented or amended, from time to time as needed, to reflect changed circumstances resulting in new conflicts of interest or changes in the conflicts of interest described above, or to provide updated information with regard to any legal or disciplinary events of Piper Sandler. Piper Sandler will provide you with any such supplement or amendment as it becomes available throughout the term of the Agreement.

Mike Geisel

City Administrator



690 Chesterfield Pkwy W

Chesterfield MO 63017

Phone 636-537-4711

Fax 636-537-4798

OFFICE OF THE CITY ADMINISTRATOR

TO: Mayor & City Council

Date: April 20th, 2020

RE: COVID 19 Pandemic – Financial Projections

Since the onset of the COVID-19 Pandemic, the City has aggressively worked to develop plans and strategies in response to the community health crisis and as an employer. The purpose of this memo is to update and provide information as to the "current" financial status of the City, and to share additional recommendations.

It should be clear that the financial impacts of this crisis have yet to be experienced by the City and the duration of the event is yet to be defined. The City's sales tax revenues lag by at least two months, utility taxes can lag as much as a full quarter, and intergovernmental taxes may be received annually. To further complicate the issue, many businesses are closed and tax reporting may be delayed or non-existent. As such, this information and the associated strategies are extremely fluid, are continuously adjusted and subject to regular revision. We simply cannot afford to wait until we have solid information to report. It is imperative that we provide early projections such that the City is in the best position to recover. Again, consider this information as a point in time analysis, which will be reviewed and updated on a regular basis as community decisions are known and additional information synthesized.

I've attached three appendices. The first document is the updated spreadsheet which provides the estimated revenue losses associated with the pandemic event. This is the same document you were previously provided, but with actual updated April sales tax numbers. As with the previous version, this document estimates revenue losses for four scenarios, each representing an economic closure duration between 30 and 120 days. Obviously, we have already experienced the 30-day closure. While discussions have begun regarding re-opening businesses, no definitive date or plan has been presented. At this juncture, our estimates suggest that a 60, to 90-day scenario is most

likely. Again, that is subject to change, but it will be the basis for this communication.

The second document is a linear presentation of the General Fund – Fund Balance estimates, based on the 2019 End of Year Fund Balance. While this document looks complex, it is a sequential presentation of the fund balance results, under various scenarios. This communication will step through the analysis for the 60, and 90-day scenarios.

The third document provides definition for specific programs or line items where staff proposes to reduce expenditures. This document is not intended to be comprehensive, but descriptive of the overall intent and expectations.

Per the 2020 budget document, the 2019 end of year fund balance was projected to be $9,174,018. However, at the last meeting of the year, City Council authorized a budget transfer of $415,000 to partially fund synthetic turf installation at the CVAC.

The 2020 approved budget, reflected $1,656,896 net positive revenues over expenditures, resulting in a projected end of year 2020 fund balance of $10,415,914.

Of that amount, $133,830 is restricted, for public safety purposes, so the balance available is reduced accordingly, although that money remains in the fund balance.

Council also approved fund transfers in the amount of $1,816,000 for:

Emerald Ash Borer program
Snow Removal reimbursement,
Brandywine NID

Council also approved additional net revenues for 2020 in the amount of $15,931, associated with the consolidation of the Clarkson Valley municipal court.

As you also know, the City has previously financed the Broadmoor and Chesterfield Hills NIDs, providing future receivables in the amount of $1,418,277. However, only $85,634 will be recognized as revenue during 2020.

Finally, although initially a liability $1,090,000, we anticipate that the Brandywine NID project will be completed this construction season and the

City will issue the Brandywine NID debt in that same amount to make it a net zero transaction.

NOTE: It is critically important to acknowledge that the following calculations of Fund Reserve percentages continue to be based on the original 2020 budget values. If these calculations were adjusted for the proposed, reduced 2020 budget which reflect the proposed reduced expenditures, the associated percentage of reserve funds would increase proportionally.

This results in a 2020 end of year projected fund balance, pre-pandemic, and pre-land purchase, of $9,925,309, or 50.99% of the GF budget, including transfers. This does not include the non-liquid future NID reimbursements. When those are included, the balance increases to $11,257,952, 57.84% of the GF. This is the number that we have traditionally used as the 40% policy threshold. It should also be recognized that this value does not include the $5,530,546 set aside for debt pre-payment.

From this point, we consider the various alternatives and potential losses.

Pandemic Loss Projections

Referring to document one, our 60 day and 90-day projected losses are estimated at $6.1 to $7.6 million, respectively. The result of those losses on our Fund Reserve drops the Fund Balance to $5,084,695 (26.12%) or $3,611,122 (18.55%) respectively. These balances do not include the pre-paid debt assets that Council has designated for early payment of existing debt. This, in and of itself is mis-leading, because the pre-paid debt is unrestricted and remains available in an emergency. These funds have just been placed in a holding fund, but can be accessed at any time. While designated, these funds are not restricted and are part of our Fund Reserves. So, for the sake of full understanding, know that the pre-paid debt actually increases the available fund balance by 28.41%, all by itself, increasing the fund balance to 54.54% or 46.97% after the 60 or 90-day pandemic losses are realized.

Expense Reductions

As previously discussed, Staff has implemented and continues to identify expenses that can be deferred and delayed. As with the estimated losses, this is a fluid analysis and will be very dependent on decisions that will be made in the immediate future. These numbers will be impacted by our decisions, amongst others, as to whether we open the aquatic center and whether or not we elect to cancel our Independence Day celebration. It should also be clear, that these reductions certainly impact the level of service, programs, and response provided by the City. It should be apparent that there is no feasible

way to reduce expenditures at this proportion without noticeable temporary reductions in service and appearance.

For the purposes of this analysis, the expense reductions are comprised of delays, deferrals, activity reductions, service reductions, and cancellations. These numbers will certainly change and hopefully increase as we continue to fine tune, and the aforementioned decisions are made. In addition, if we do ultimately qualify for any reimbursements, the bottom line improves directly. For the purposes of this analysis, it is a conservative place to start. After recognizing the pandemic losses, and including the reduction in expenses, the estimated fund reserve balances are projected to be $8,030,448 (41.26%) or $6,556,875 (33.69%) for the 60, and 90-day events respectively. For the sake of completeness, these balances are increased by the inclusion of the pre-paid debt respectively, $13,560,994 (69.67%) or $12,087,421 (62.10%).

It is our intent to delay\defer the following projects from the capital projects fund:

a. Crack Sealing Project - $75,000
b. Three 2 ½ ton Truck Purchases - $420,000
c. HVAC Piping Replacement at City Hall - $50,000
d. Isolated Asphalt Overlay - $75,000
e. Wild Horse Parkway Bridge Concrete Overlay - $350,000
f. Public Works Facility Feasibility Study - $30,000

We intend to proceed with the following existing and proposed capital projects:

a. Slab Replacement Projects A & B
b. Sidewalk Project A
c. Sidewalk Project B
g. Schoettler Road Improvement Project
h. Old Chesterfield Road
i. Public Works Facility Roof

In consultation with our Parks, Recreation and Arts Department, we now recommend that City DOES NOT open its aquatic Facility at any time during 2020. It is simply too costly to accomplish the repairs, open, and with the extended stay at home order, we can't train the lifeguards, the season will be shortened causing an increasing operational deficit.

We also recommend that the City cancel the annual July 4th, Independence Day celebration. It will be impossible to provide the festivities, with a band, food vendors, child play area, and spectator seating while

maintaining social distancing. Even if we elected to proceed, a large proportion of the community will likely refrain from participating.

The Parks, Recreation and Arts Department will selectively reduce (not eliminate) programming, and maintenance activities. We will plant, mow, irrigate and trim less. We will maintain all of the areas we currently maintain, but the standard of care and overall appearance will be temporarily reduced. The spring planting season has already been impacted, but our intent is simply to preserve and re-start during 2021. Our focus will be maintaining our high traffic\use areas, while reducing the frequency of care in less intensely used areas. We will delay opening the water features at Dierberg Park and the Veterans Honor Park until after the stay at home order has been lifted. The Community Gardens may remain closed for 2020, depending on the date the stay at home order is lifted. We will eliminate the routine art receptions at City Hall.

We continue to believe that there will be a summer athletic season at the athletic complex. However, we will adjust operations and concessions accordingly. It is our intent to reduce our concession locations, menu, and staffing to reduce costs. We will limit our seasonal maintenance and concession staffing, temporarily relying on other full-time staff during the interim.

The City's finances will be closely monitored, and the other three projects may be stopped if necessary. That is NOT expected at this time, but remains a possibility.

Parks Land Purchase

Per Council's instructions, we are proceeding with the City's due diligence to purchase the ~8 acres of parkland. Per the original purchase strategy, this will consume $4 million of the General Fund – Fund Reserves. In turn, that impacts the General Fund – Fund Balance as well. That reduces the projected end of year Fund Balance to $4,030,448 (20.71%) or $2,556,875 (13.14%).

However, please note that these figures do not include the $5.53 million of pre-paid debt set aside, which is available should conditions warrant.

When only the City Hall pre-paid debt reserve is included, the projected fund balance is $6,605,167 (33.93%) or $5,131,594 (26.36%) respectively for the 60 and 90-day event scenarios.

When the entire pre-paid debt reserve is included, the projected fund balance is $9,625,319 (49.45%) or $8,151,746 (41.88%) respectively for the 60 and 90-day event scenarios. The spreadsheet also calculates the value in these scenarios without the non-liquid future NID reimbursements, just for informational and convenience purposes. While these are certainly legitimate assets, they cannot be converted to cash for short term purposes.

Conclusion

This is a "point in time" analysis and will change continuously as the duration and impacts of the COVID 19 pandemic become known. While there are multiple potential opportunities for financial assistance, there are no current commitments for such. Accordingly, our analysis is not predicated upon any governmental reimbursement. Should such assistance develop, our analysis will only improve. The City's robust Fund Reserve and fiscal conservancy has positioned the City to survive and resume operations at the cessation of this crisis. However, we should all remain aware that while this analysis demonstrates that the City is able to maintain a positive Fund Balance, we all have to be aware of annual demands on the fund balance. Specifically, the Fund Balance is drawn down each year by the snow removal recoupment program (~$166,000 in 2020) and we have two remaining years of the Emerald Ash Borer program to eradicate and eliminate our liability for ash trees within the right of way (~$560,000 in 2020). We are also keenly aware of legislative efforts to reduce the City's video franchise fee revenues, albeit not likely to occur in 2020.

Accordingly, future budgets will have to be prepared with an understanding of the potential impact on revenues, expenditures, and with a planned strategy to re-build the fund reserve, perhaps within a 5-year interval. It is unlikely, given the potential losses, both temporary and permanent, that we will likely be able to do so any quicker.

Summary

As of the date of this communication, the County has extended the Stay at Home order indefinitely.

THERE IS A VIABLE PATH OUT. A reasonable strategy that allows the City to survive the pandemic, come out of the crisis and continue with the parks land purchase with positive but diminished fund reserves.

Based on our analysis, we will continue to identify reductions in expenses.

Unless directed otherwise, Staff will continue along this path. Within the next few weeks, we will update the information provided herein and make additional recommendations with regard to specific programs, events and finances. City Council is scheduled to meet Monday, May 4th, at which time formal action may be taken on such recommendations. At that time, I request that Council discuss the information contained herein (including subsequent updates, if any) and either affirm the strategy or provide other direction.

City of Chesterfield
2020 Revenue Projections due to Pandemic

Revenues	January Actual	February Actual	March Actual	April Actual	May Budget	June Budget	July Budget	August Budget	September Budget	October Budget	November Budget	December Budget	Total Projected	Annual Budget	Variance Proj. vs Bud	
General Fund	$512,350	$619,993	$610,317	$489,212	$426,446	$599,325	$676,277	$493,600	$759,576	$581,014	$480,197	$667,230	$6,915,537	$6,899,967	$15,570	
Public Safety Fund	$232,003	$214,506	$243,488	$194,379	$165,048	$231,957	$261,740	$191,038	$293,979	$224,870	$185,851	$258,239	$2,697,098	$2,670,500	$26,598	
Park Sales Tax Fund	$594,364	$607,500	$592,994	$470,077	$423,908	$570,834	$642,908	$458,904	$670,194	$516,393	$444,394	$599,206	$6,591,676	$6,674,640	($82,964)	
Capital Improvements	$505,210	$516,375	$504,045	$399,566	$360,710	$485,698	$547,023	$390,466	$570,158	$439,401	$378,137	$509,837	$5,606,626	$5,679,178	($72,552)	
Total Sales Tax (Pre-Pandemic)	**$1,843,926**	**$1,958,374**	**$1,950,844**	**$1,553,234**	**$1,376,112**	**$1,887,814**	**$2,127,948**	**$1,534,008**	**$2,293,907**	**$1,761,678**	**$1,488,579**	**$2,034,512**	**$21,810,936**	**$21,924,285**	**($113,349)**	
Assumptions - Sales Taxes (2 month lag) - % of Budget expected:																
Scenario 1 (30 day Pandemic)	100%	100%	100%	*100%*	*60%*	*35%*	*50%*	*75%*	*90%*	*100%*	*100%*	*100%*	**$18,356,546**		**($3,567,739)**	**-16.3%**
Scenario 2 (60 day Pandemic)	100%	100%	100%	*100%*	*60%*	*35%*	*35%*	*50%*	*75%*	*90%*	*100%*	*100%*	**$17,133,598**		**($4,790,687)**	**-21.9%**
Scenario 3 (90 day Pandemic)	100%	100%	100%	*100%*	*60%*	*35%*	*35%*	*35%*	*50%*	*75%*	*90%*	*100%*	**$15,916,910**		**($6,007,375)**	**-27.4%**
Scenario 4 (120 day Pandemic)	100%	100%	100%	*100%*	*60%*	*35%*	*35%*	*35%*	*35%*	*50%*	*75%*	*90%*	**$14,705,667**		**($7,218,618)**	**-32.9%**
General Fund																
Scenario 1 (30 day Pandemic)	$512,350	$619,993	$610,317	$489,212	$255,868	$209,764	$338,139	$370,200	$683,618	$581,014	$480,197	$667,230	$5,817,901		($1,082,066)	-15.7%
Scenario 2 (60 day Pandemic)	$512,350	$619,993	$610,317	$489,212	$255,868	$209,764	$236,697	$246,800	$569,682	$522,913	$480,197	$667,230	$5,421,022		($1,478,945)	-21.4%
Scenario 3 (90 day Pandemic)	$512,350	$619,993	$610,317	$489,212	$255,868	$209,764	$236,697	$172,760	$379,788	$435,761	$432,177	$667,230	$5,021,916		($1,878,051)	-27.2%
Scenario 4 (120 day Pandemic)	$512,350	$619,993	$610,317	$489,212	$255,868	$209,764	$236,697	$172,760	$265,852	$290,507	$360,148	$600,507	$4,623,973		($2,275,994)	-33.0%
Public Safety Fund																
Scenario 1 (30 day Pandemic)	$232,003	$214,506	$243,488	$194,379	$99,029	$81,185	$130,870	$143,279	$264,581	$224,870	$185,851	$258,239	$2,272,279		($398,221)	-14.9%
Scenario 2 (60 day Pandemic)	$232,003	$214,506	$243,488	$194,379	$99,029	$81,185	$91,609	$95,519	$220,484	$202,383	$185,851	$258,239	$2,118,675		($551,825)	-20.7%
Scenario 3 (90 day Pandemic)	$232,003	$214,506	$243,488	$194,379	$99,029	$81,185	$91,609	$66,863	$146,990	$168,653	$167,266	$258,239	$1,964,209		($706,291)	-26.4%
Scenario 4 (120 day Pandemic)	$232,003	$214,506	$243,488	$194,379	$99,029	$81,185	$91,609	$66,863	$102,893	$112,435	$139,388	$232,415	$1,810,193		($860,307)	-32.2%
Park Sales Tax Fund																
Scenario 1 (30 day Pandemic)	$594,364	$607,500	$592,994	$470,077	$254,345	$199,792	$321,454	$344,178	$603,175	$516,393	$444,394	$599,206	$5,547,871		($1,126,769)	-16.9%
Scenario 2 (60 day Pandemic)	$594,364	$607,500	$592,994	$470,077	$254,345	$199,792	$225,018	$229,452	$502,646	$464,754	$444,394	$599,206	$5,184,541		($1,490,099)	-22.3%
Scenario 3 (90 day Pandemic)	$594,364	$607,500	$592,994	$470,077	$254,345	$199,792	$225,018	$160,616	$335,097	$387,295	$399,955	$599,206	$4,826,258		($1,848,382)	-27.7%
Scenario 4 (120 day Pandemic)	$594,364	$607,500	$592,994	$470,077	$254,345	$199,792	$225,018	$160,616	$234,568	$258,197	$333,296	$539,285	$4,470,051		($2,204,589)	-33.0%
Capital Improvements																
Scenario 1 (30 day Pandemic)	$505,210	$516,375	$504,045	$399,566	$216,426	$169,994	$273,512	$292,850	$513,142	$439,401	$378,137	$509,837	$4,718,494		($960,684)	-16.9%
Scenario 2 (60 day Pandemic)	$505,210	$516,375	$504,045	$399,566	$216,426	$169,994	$191,458	$195,233	$427,619	$395,461	$378,137	$509,837	$4,409,360		($1,269,818)	-22.4%
Scenario 3 (90 day Pandemic)	$505,210	$516,375	$504,045	$399,566	$216,426	$169,994	$191,458	$136,663	$285,079	$329,551	$340,323	$509,837	$4,104,527		($1,574,651)	-27.7%
Scenario 4 (120 day Pandemic)	$505,210	$516,375	$504,045	$399,566	$216,426	$169,994	$191,458	$136,663	$199,555	$219,701	$283,603	$458,853	$3,801,449		($1,877,729)	-33.1%
Utility Tax - Electric	$250,541	$252,710	$257,751	$0	$229,933	$245,158	$421,548	$510,653	$515,794	$472,284	$291,169	$238,509	$3,686,049	$3,963,825	($277,776)	
Utility Tax - Gas	$135,384	$158,810	$158,035	$0	$104,060	$63,203	$52,710	$48,360	$46,798	$51,055	$54,786	$106,819	$980,020	$1,200,929	($220,909)	
Utility Tax - Water	$36,464	$70,926	$0	$11,115	$100,095	$21,562	$16,053	$161,649	$38,846	$22,206	$214,416	$38,374	$731,706	$786,000	($54,294)	
Utility Tax - Telephone	$94,036	$68,611	$0	$118,508	$90,497	$94,418	$100,352	$92,489	$90,683	$98,702	$89,411	$85,287	$1,022,994	$1,166,000	($143,006)	
Total Utility Tax (Pre-Pandemic)	**$516,424**	**$551,057**	**$415,785**	**$129,622**	**$524,585**	**$424,341**	**$590,663**	**$813,151**	**$692,121**	**$644,247**	**$649,782**	**$468,989**	**$6,420,768**	**$7,116,754**	**($695,986)**	
Assumptions - Utility Taxes - % of Budget expected:																
Scenario 1	100%	100%	100%	*100%*	*75%*	*90%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	**$6,247,187**		**($869,567)**	**-12.2%**
Scenario 2	100%	100%	100%	*100%*	*75%*	*75%*	*90%*	*100%*	*100%*	*100%*	*100%*	*100%*	**$6,124,470**		**($992,284)**	**-13.9%**
Scenario 3	100%	100%	100%	*100%*	*75%*	*75%*	*75%*	*90%*	*100%*	*100%*	*100%*	*100%*	**$5,954,556**		**($1,162,198)**	**-16.3%**
Scenario 4	100%	100%	100%	*100%*	*75%*	*75%*	*75%*	*75%*	*90%*	*100%*	*100%*	*100%*	**$5,763,371**		**($1,353,383)**	**-19.0%**
Motor Fuel Tax	$104,544	$106,050	$0	$92,199	$105,662	$102,445	$106,669	$111,363	$110,565	$112,554	$103,085	$108,970	$1,164,105	$1,258,000	($93,895)	
Motor Vehicle Sales Tax	$50,465	$54,534	$0	$60,566	$59,025	$57,753	$53,531	$56,214	$59,075	$54,250	$53,342	$48,904	$607,660	$650,000	($42,340)	
Cigarette Tax	$9,404	$5,680	$0	$7,667	$8,538	$8,730	$9,098	$8,645	$8,946	$8,207	$9,087	$7,969	$91,972	$100,000	($8,028)	
County Road and Bridge	$0	$24,184	$14,125	$0	$249,212	$538	$871	$853	$549	$394,540	$797,433	$407,130	$1,889,434	$1,878,000	$11,434	
Total Intergov't Tax (Pre-Pandemic)	**$164,414**	**$190,448**	**$14,125**	**$160,432**	**$422,437**	**$169,466**	**$170,169**	**$177,075**	**$179,134**	**$569,550**	**$962,947**	**$572,973**	**$3,753,170**	**$3,886,000**	**($132,830)**	
Assumptions - Intergovernmental Taxes - % of Budget expected:																
Scenario 1 (30 day Pandemic)	100%	100%	100%	*100%*	*50%*	*75%*	*75%*	*100%*	*100%*	*100%*	*100%*	*100%*	**$3,582,001**		**($303,999)**	**-7.8%**
Scenario 2 (60 day Pandemic)	100%	100%	100%	*100%*	*50%*	*50%*	*75%*	*75%*	*100%*	*100%*	*100%*	*100%*	**$3,495,714**		**($390,286)**	**-10.0%**
Scenario 3 (90 day Pandemic)	100%	100%	100%	*100%*	*50%*	*50%*	*50%*	*75%*	*75%*	*100%*	*100%*	*100%*	**$3,408,742**		**($477,258)**	**-12.3%**
Scenario 4 (120 day Pandemic)	100%	100%	100%	*100%*	*50%*	*50%*	*50%*	*50%*	*75%*	*75%*	*100%*	*100%*	**$3,320,934**		**($565,066)**	**-14.5%**

Assumes no impact to County Road and Bridge since this is based on assesssed valuation

Assumptions - Totals

Scenario 1 (30 day Pandemic)	**($4,741,304)**
Scenario 2 (60 day Pandemic)	**($6,173,257)**
Scenario 3 (90 day Pandemic)	**($7,646,831)**
Scenario 4 (120 day Pandemic)	**($9,137,067)**

General Fund	Public Safety	Parks Fund	Capital	Total
($2,255,631)	***($398,221)***	***($1,126,769)***	***($960,684)***	***($4,741,304)***
($2,861,516)	***($551,825)***	***($1,490,099)***	***($1,269,818)***	***($6,173,257)***
($3,517,507)	***($706,291)***	***($1,848,382)***	***($1,574,651)***	***($7,646,831)***
($4,194,443)	***($860,307)***	***($2,204,589)***	***($1,877,729)***	***($9,137,067)***

Forecast	Budget	Variance $	Var%
$28,185,735	$32,927,039	**($4,741,304)**	**-14.4%**
$26,753,782	$32,927,039	**($6,173,257)**	**-18.7%**
$25,280,208	$32,927,039	**($7,646,831)**	**-23.2%**
$23,789,972	$32,927,039	**($9,137,067)**	**-27.7%**

GENERAL FUND - FUND BALANCE ESTIMATES

2019 End of year GF Fund Balance		$9,174,018				$19,464,472
2019 Transfer for turfed infields		($415,000)				
2020 Budgeted net activity		$1,656,896			40%	$7,785,789
			$10,415,914		30%	$5,839,342
Restricted funds		$133,830			20%	$3,892,894
Budget adjustments					10%	$1,946,447
Emerald Ash Borer		($560,000)			5%	$973,224
Snow Removal Reimbursement		($166,000)			1%	$194,645
Brandywine		($1,090,000)				
Clarkson Valley Court (net)		$15,931				
			$8,749,675			
NID reimbursements	$1,418,277	$85,634				
Broadmoor $1,270,589.05	$75,056					
Chesterfield Hills $147,688.33	$10,578					
	$85,634					
Brandywine financing (2020)		$1,090,000				
			$9,925,309	(does not include the non-liquid NID future reimbursements)		
Add back future reimburseables		$1,332,643				
			$11,257,952	(including the non-liquid NID future reimbursements)		
				This is the figure used with our 40% Fund Reserve Policy)		

	60 day loss		90 day loss		120 day loss	
	($6,173,257)		($7,646,831)		($9,137,067)	
Without Future NID Reimbursements	$3,752,051	19.28%	$2,278,478	11.71%	$788,242	4.05%
Including Future NID Reimbursements (non-liquid)	$5,084,695	26.12%	$3,611,122	18.55%	$2,120,885	10.90%
Including Pre-paid Debt	$10,615,241	54.54%	$9,141,668	46.97%	$7,651,431	39.31%
ANTICIPATED SAVINGS						
Add back in savings	$2,945,753		$2,945,753		$3,109,753	
Estimated Fund Balance after savings	$8,030,448	41.26%	$6,556,875	33.69%	$5,230,638	26.87%
Including Pre-paid Debt	$13,560,994	69.67%	$12,087,421	62.10%	$10,761,184	55.29%
Cash for land purchase	($4,000,000)		($4,000,000)		($4,000,000)	
Estimated Fund Balance after land purchase	$4,030,448	20.71%	$2,556,875	13.14%	$1,230,638	6.32%
Pre-paid debt						
City Hall Pre-paid debt only $2,574,719	$2,574,719		$2,574,719		$2,574,719	
stimated Fund Balance after land purchase W/CH pre-paid debt	$6,605,167	33.93%	$5,131,594	26.36%	$3,805,357	19.55%
City Hall and Parks Pre-paid debt $3,020,152	$3,020,152		$3,020,152		$3,020,152	
stimated Fund Balance after land purchase W/ALL pre-paid debt	$9,625,319	49.45%	$8,151,746	41.88%	$6,825,509	35.07%
w/o future NID reimbursements	$8,292,675	42.60%	$6,819,102	35.03%	$5,492,866	28.22%

General		$642,000	
			With hold raises
			furloughs (10 weeks)
General Fund			
	37	$67,000	
			Replacement Mgmt Server
			Desktop Computers - PD
			Desktop Computers CH
			Laptop PD Allocation
			ESRI Developer Training Conference
			ESRI GIS Training Conference
			Tyler Technologies Training
	71	$10,800	
			Save 10% non-salary costs
			Reduce training by 50%
	72	$248,000	
			Reduce training by 50%
			Hold purchase of saw, breaker, skid steer trailer, and truck mounted tank with pump
			Forego Eastern Missouri Pavement Consortium
			Save 5% non-salary costs
	73	$117,000	
			Tire Changer and lube hose reels
			One ton truck
			Save 5% non-salary costs
	76	$36,500	
			Part Time custodian
			Save 5% non-salary costs
119 Parks		$464,176	
			Do Not open aquatic facility for 2020 Season
			Cancel Independence Day celebration
			Delay water feature openings
			Selectively reduce programming
			Reduce Part-time staff
			Advertising
			Restrict travel and training

		Reduce grounds and beautification maintenance standard of care\appearance
		Temporarily reduce options, staffing and POS concession locations
120- Capital	$1,300,000	
		Cracksealing project
		Three truck purchases
		HVAC Piping Replacement
		Isolated Asphalt Overlay
		Wildhorse Parkway Bridge Concrete Overlay
		Public Works facility CNG feasibility study
		95% of budget goal
121-Public Safety	$60,277	
		Furniture Repair and Replacement
		CAPY funds
		CIT Conference
		CJIS Conference
		Dark Web/Cryptocurrency
		DRE Training
		IACP Conference
		LETSAC Training
		MO Crime Prevention Training
		Missouri DARE Training
		MO Police Chief's Training
		Missouri Police Clerk's Training
		Police Chaplain's Training
		Prosecuting Asst Training
		Street Crimes Conference
		Crime Prevention Supplies
		Portable Breath Testers
		Ballistic Shield
		Cargo Vault
		Gun Safe
		Laser Radar
		LED Flashlights
		Office Chairs
		Simunition Supplies
		Safety Town Vehicles
		ALPR Replacement
TOTAL	$2,945,753	

OTHER LEGISLATION

Bill No. 3301 - Installation of Fire Hydrant, West County Acres, Lots 21 and 22 Approves the installation of one fire hydrant in West County Acres located within the City of Chesterfield. **(First & Second Readings) Department of Public Works recommends approval.**

Bill No. 3302 - Suspension of Application or Enforcement of Ordinances An ordinance granting the City Administrator and Director of Planning the authority to suspend the application or enforcement of ordinances as necessary to support the reopening of businesses across the City of Chesterfield and protect the public health, safety, and general welfare during this period. **(First & Second Readings) Department of Planning recommends approval.**

UNFINISHED BUSINESS

There are no unfinished action items scheduled on the agenda for this meeting.

NEW BUSINESS

There are no new business action items on the agenda for this meeting.

BILL NO. 3301 **ORDINANCE NO.** _____

APPROVES THE INSTALLATION OF ONE FIRE HYDRANT IN WEST COUNTY ACRES LOCATED WITHIN THE CITY OF CHESTERFIELD.

WHEREAS, at a duly called meeting of the Board of Directors of the Monarch Fire Protection District, the placement of certain fire hydrants was approved; and,

WHEREAS, it is necessary for the authorization of the placement of said fire hydrant by ordinance.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. The placement of the following fire hydrant at such exact location as specified by the Insurance Services Office of Missouri and as approved by the Board of Directors of the Monarch Fire Protection District is hereby approved by the City of Chesterfield for installation:

One (1) fire hydrant at the following location:

1. On the north west portion of the cul-de-sac on Nardin Drive near the common lot line been lots 21 and 22.

Section 2. The Missouri American Water Company is authorized to install said fire hydrant at the aforesaid location.

Section 3. This Ordinance shall be in full force and effect from and after its passage and approval.

Passed and approved this _____ day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: _____

I, Cary Spiegel, Fire Chief of the Monarch Fire Protection District, Incorporated as a political subdivision under the laws of the STATE OF MISSOURI, DO HERE BY CERTIFY that at a meeting of the Board of Directors of said Fire District, duly called and held on the 21st day of April, 2020, at which a quorum was present, the following action was taken:

> "Upon motion duly made, seconded and carried, the following resolution was unanimously adopted."

WHEREAS, pursuant to MISSOURI PUBLIC SERVICE COMMISSION ORDER NO. 4, issued on November the 28th, 1969, Missouri-American Water Company has promulgated certain rules relating to the location of fire hydrants by incorporated Fire Districts: and,

WHEREAS, The Insurance Services Office of Missouri has specified the location of 1 public fire hydrant(s) in **West County Acres** (subdivision) as follows:

1. On Nardin Drive at the intersection of Lots 21 and 22.

WHEREAS, The Insurance Services Office of Missouri has specified the minimum fire flow for West County Acres (subdivision) to be the available flow from the existing 6-inch main:

WHEREAS, for the purpose of keeping fire insurance rated as low as possible, the MONARCH FIRE PROTECTION DISTRICT has always fixed the location of fire hydrants, and fire flows in accordance with the recommendations of the Insurance Service Office of Missouri:

NOW THEREFORE, BE IT RESOLVED, that the Missouri-American Water Company install said * public fire hydrant(s) at the aforesaid location(s),

IN WITNESS THEREOF, I have hereunto set my hand as Fire Chief of the Monarch Fire Protection District, and have caused the corporate seal of said Fire District to be affixed this 21st day of April, 2020.

Cary Spiegel
FIRE CHIEF

City Council Memorandum
Department of Planning

To: Michael O. Geisel, City Administrator

From: Justin Wyse, Director of Planning JW

Date: April 27, 2020

Bill No. 3302

CC Date: May 4, 2020

RE: **COVID-19 Ordinance**

Summary

As a result of the COVID-19 virus and recommendations from the President, Governor, and CDC, businesses across the City are placed in a situation where they are required to adapt quickly in order to conduct business while implementing measures to protect their employees and customers. This adaptability is often not permitted under the City's regulations pertaining to various land use regulations. For instance, many restaurants have adapted to a curbside pick-up model where additional signage is utilized to inform the public that they are offering service and instructions on how to navigate the site to promote safety.

In addition to the above scenario, it is also likely that many businesses will continue to adapt in response to health recommendations that may include inclusion of temporary structures (e.g. tents) on a site. Many commercial areas within the City of Chesterfield have restrictions on these types of facilities and will preclude the ability of businesses to offer services consistent with recommendations of health officials.

The attached ordinance authorizes the Director of Planning to temporarily permit deviations from UDC requirements to help protect the health, safety, and welfare of the citizens, businesses, and visitors of the City of Chesterfield.

Request

Given the unique circumstances that we are currently in, Council may want to consider two readings of the proposed ordinance in one night if they want to authorize temporary relief from these restrictions.

Attachments: Legislation

BILL NO. 3302 **ORDINANCE NO._____**

AN ORDINANCE GRANTING THE CITY ADMINISTRATOR AND DIRECTOR OF PLANNING THE AUTHORITY TO SUSPEND THE APPLICATION OR ENFORCEMENT OF ORDINANCES AS NECESSARY TO SUPPORT THE REOPENING OF BUSINESSES ACROSS THE CITY OF CHESTERFIELD AND PROTECT THE PUBLIC HEALTH, SAFETY, AND GENERAL WELFARE DURING THIS PERIOD.

WHEREAS, on March 11, 2020, the World Health Organization declared a pandemic due to Coronavirus 2019 ("COVID-19"), and on March 13, 2020, a State of Emergency was declared in the State of Missouri by Governor Michael L. Parson and in St. Louis County by County Executive Sam Page in response to the COVID-19 pandemic; and

WHEREAS, the COVID-19 pandemic will have a negative and potentially devastating impact on the economic viability of many residents and businesses due to business closures, stay at home orders, and other restrictions resulting from the response to the pandemic; and

WHEREAS, the City desires to allow reasonable, temporary situations that allow the Department of Planning and other City departments to respond to changing conditions that allow for mass testing and the phased re-opening of businesses within the City of Chesterfield in a rapidly changing time.

NOW THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI, AS FOLLOWS:

Section 1. The City Administrator and Director of Planning, or their designee, are granted the authority to suspend the enforcement and application of ordinances identified in this ordinance and any other ordinance as deemed necessary to protect the public health, safety, and general welfare and to assist local businesses and residents.

The due dates, fees, charges, requirements or processes related to the items identified below may be suspended, extended, or waived as may be necessary to protect the public health, safety, and general welfare and to assist residents, visitors, and businesses as deemed appropriate.

1. Temporary suspension of various development criteria, including but not limited to:
   a. Temporary Sign regulations;
   b. Temporary structure regulations;
   c. Parking requirements;

d. Other development criteria in Chapter 31 of the City Code (Unified Development Code) and/or site specific ordinances.

2. Acceptance of digital seal/signature requirements for guarantees (bonds and sureties).
3. Temporary suspension of business license renewal fees.
4. Temporary suspension of renewal of liquor license fees.

Section 2. The City Council retains the right to review and withdraw approval for any action authorized under this ordinance by vote of a majority of City Council members.

Section 3. Any applicant requesting temporary relief under this ordinance may appeal the decision of the Director of Planning to the City Council who may affirm, reverse, or modify the decision.

Section 4. This Ordinance is a temporary ordinance due to the State of Emergency declared in Missouri and St. Louis County as a result of the COVID-19 pandemic and the serious threat to the public health, safety, and general welfare the pandemic poses to residents, visitors, and businesses within the City of Chesterfield, Missouri.

Section 5. This Ordinance shall be in full force and effect from and after its passage and approval and shall remain in full force and effect until December 31, 2020 unless repealed or otherwise extended by the City Council of the City of Chesterfield.

Passed and approved this _____day of _____, 2020.

_____ _____

PRESIDING OFFICER Bob Nation, MAYOR

ATTEST:

_____

Vickie McGownd, CITY CLERK

FIRST READING HELD: 05/04/2020