

Code Connection

The customer newsletter for the construction and development community.

CITY OF FOUNTAINS
HEART OF THE NATION



KANSAS CITY

MARCH 2006

REPORT RELEASED SUMMARIZING RESIDENTIAL CONSTRUCTION

The Development Management Division of the department has recently published a document that summarizes residential construction for the first half of this decade. In addition to tabulating activity in Kansas City, Missouri, the report offers comparisons to longer term national and metropolitan trends. The executive summary highlights twelve significant observations which can be drawn from the detailed tables and charts included in the report. They are:

1. After steep declines in the late 1980s, national housing starts have been trending upward since 1992.
2. Within Kansas City, multi-family units represent a more significant portion of new units than for either the nation or the metropolitan area.
3. Since 1980, the single-family construction trend in Kansas City, Missouri, has been very strongly correlated with interest rates, with the number of units increasing as interest rates have fallen.
4. The Jackson County portion of Kansas City has dominated non-residential construction this decade.
5. Reinvestment in residential renovation (Additions, Alterations, and Repairs) remains strong.
6. Residential construction in the Kansas City, Missouri, school district has been remarkably strong during the current decade.
7. Downtown residential conversions—lofts and otherwise—have been one of the major success stories of the last fifteen years.
8. Housing construction in both the metropolitan area and Kansas City, Missouri, has closely paralleled the national market since 1990.

Holiday Schedule:

City Planning & Development offices will be closed on the following dates:

Monday, May 29, 2006

Memorial Day

Tuesday, July 4, 2006

Independence Day

In this issue:

- Report Summarizing Residential Construction
- Plan Review Turnaround Times
- Code Chat
- Sanitary Sewer Requirements
- Staff Changes
- Final Plat Application Update

(Continued on page 2)

**CODE CONNECTION
MARCH 2006**



Published by the City of Kansas City,
Missouri, City Planning & Development
Department, Development Services

Director

Tom Coyle, AICP
513-2865
FAX 513-2838
e-mail: tom_coyle@kcmo.org

Assistant to the Director

Donald N. Booth, P.E., C.B.O.
513-1478
FAX 513-1505
e-mail: donald_booth@kcmo.org

Division Manager of Business Services

José Portuguez
513-1465
FAX 513-1457
e-mail: jose_portuguez@kcmo.org

Division Manager of Inspections

Greg Franzen, P.E., M.C.P.
513-1538
FAX 513-1536
e-mail: greg_franzen@kcmo.org

Division Manager of Investigations

Wilson Winn, C.B.O.
513-1577
FAX 513-1536
e-mail: wilson_winn@kcmo.org

Division Manager of Permits

Rick Usher, C.B.O.
513-1468
FAX 513-1456
e-mail: richard_usher@kcmo.org

Division Manager of Plans Review

Gary Marker, R.A.
513-1493
FAX 513-1484
e-mail: gary_marker@kcmo.org

Division Manager of Land Development

Dion Waldon
513-2604
e-mail: dion_waldon@kcmo.org

E-mail Code Questions

e-mail: gary_marker@kcmo.org

(Continued from page 1)

9. Kansas City (North) has witnessed a significant increase in new housing market share over the last five years.
10. Within Kansas City (North), housing construction has progressively shifted towards the Clay county portion of the city over the last fifteen years.
11. Kansas City, Missouri, has been by a substantial margin the leading housing permitting city in the metropolitan area over the last fifteen years.
12. Housing construction continues to outpace household formation, thereby insuring a continuing loss of units from the housing stock through vacancy, abandonment, or demolition.

Two of the observations seem particularly relevant in light of their variation from conventional wisdom. These are the fact that Kansas City has been by far the lead metropolitan permitting city for new residential construction for the last fifteen years, and that for the last five years, the Kansas City, Missouri, School District has been the third most active school district for housing starts in Kansas City, Missouri. Parties interested in obtaining copies of the report may contact Bob Hurst at 513-2814 or by e-mail at Robert_Hurst@kcmo.org.

***PLANS REVIEW
AVERAGE TURNAROUND TIMES***

Four-Week Averages as of March 5, 2006

New Commercial Bldgs. & Additions	3.5 weeks
One- and Two-Family Dwellings	1 day/plan
All Other Projects	0.6 weeks/plan
Quality Control Review (QCR)	<2 days



CODE CHAT

by Gary Marker, R.A.
Division Manager of Plans Review

AUTOMATIC SPRINKLER PROVISIONS



The 2003 *International Building Code* (IBC), Section 903.2, enumerates the buildings and portions thereof that are required to be provided with an automatic sprinkler system. Generally, the requirements for sprinkler protection are based on the hazards associated with a given occupancy group or use based on size, number of occupants, location in the building or nature of contents. These parameters seem straightforward enough at first glance, however, careful review of the process and terminology employed are necessary for proper reading of the code.

Process

IBC Section 903.2 is arranged alphabetically, by occupancy group. Therefore, the first step in determining where automatic sprinklers are required is to determine the occupancy group or groups under consideration. When stating where automatic sprinklers are required, IBC Section 903.2 first generally states *the specific location* where such a system shall be installed. For instance, Section 903.2.1 states “For Group A-1, A-2, A-3 and A-4 occupancies, the automatic sprinkler system shall be provided throughout the floor area where the Group A-1, A-2, A-3 or A-4 occupancy is located, and all floors between the Group A occupancy and the level of exit discharge.”

Once the specific locations of required sprinkler protection have been established, the subsections list the conditions of the occupancy in question that will trigger the requirement for the installation of the sprinkler protection. For instance, Section 903.2.1.1 states that such protection “. . . shall be provided for Group A-1 occupancies where one of the following conditions exists . . .” The section then proceeds to state what specific conditions will trigger the requirement for sprinklers in the A-1 occupancy, i.e., the size of the fire area, the occupant load of the fire area, the location of the fire area being on other than the level of exit discharge and whether or not the fire area contains a multitheater complex.

Terminology

Floor Area vs Fire Area—When reading IBC Section 903.2, it is important to note the distinction between the terms “fire area” and “floor area,” and this requires a reference to the definitions in the code. Floor area is defined by Section 1002 as the area within the inside perimeter of the exterior walls of the building and the usable area under the horizontal projection of the roof or floor above. Since Section 705 states that portions of buildings separated by one or more fire walls are considered to be separate buildings, we can safely assume that such a wall could also be used to define and limit floor area. On the other hand, Section 702 defines a fire area as the aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or fire-resistance rated horizontal assemblies of a building. It should be apparent from comparison of these definitions that a floor area could contain multiple fire areas and that fire barriers do not limit floor area.

In the aforementioned example for Group A occupancies, IBC Section 903.2.1 states that the sprinkler system shall be provided throughout the floor area where the Group A occupancy is located. Therefore, even if the Group A occupancy in question does not extend throughout the floor area in question, dividing the area with fire barriers is not sufficient to limit the required sprinkler protection to only the portion of the floor area containing the Group A occupancy. The only way to limit the floor area to be protected by sprinklers would be to install a fire wall.

(Continued on page 4)

FROM THE FILES...
REAL CODE MODIFICATION REQUEST CASE HISTORIES

FIRE-RESISTIVE FLOOR CONSTRUCTION

**By Gary Marker, R.A.,
Division Manager of Plans Review**

The KCMO Code of Ordinances, Section 18-6, states that “The details and actions of granting modifications (to code requirements) shall be recorded and entered in the files of Development Services.” Doing so permits one to rationalize any apparent code discrepancies by investigating the files for the building in question. In order to facilitate this, CPD-DS employs the Code Modification Request process wherein the applicant submits a form stating the location of the property, the applicant name and the proposed code alternate. Once this form is submitted along with the required application fee, the request is reviewed and either approved, conditionally approved or denied. The Code Modification Request process is outlined in CPD-DS Information Bulletin Number 101 (available on the web at www.kcmo.org/codes). However, I am frequently asked, “What makes a “good” Code Modification Request?” This is another installment in a series of articles to attempt to answer that question by presenting actual case histories of CMR’s which have been APPROVED by CPD-DS.

The subject of this request is a complete interior tenant finish for a proposed new, 5-story, Type 1-B, Group B, M and S office/retail/parking building which is currently under construction. The project includes the construction of a stepped floor area to be used as an auditorium space. IBC Table 601 states that the floor of this space shall be a two-hour fire-resistive assembly. However, in lieu of a tested assembly as required by IBC Section 703.2, the applicant proposes to employ an assembly consisting of a non-rated steel and concrete floor protected by a listed horizontal shaft wall assembly with a two-hour fire-resistive rating suspended directly below the steel and concrete floor. This approach was found to meet the intent of the code and was approved.

This approval recognized that the intent of the code is to provide fire-resistive protection for the floor. While the entire assembly was not tested the horizontal shaftwall was found to provide adequate protection for this limited area where a complete tested assembly was impractical. Be sure to watch future editions of the *Code Connection* for more informative and interesting tales from the CMR files.

CODE CHAT (*Continued from page 3*)

Buildings, Occupancies, Stories and Basements – The various subsections of IBC Section 903 require automatic sprinkler protection to be installed variously throughout buildings (e.g. Section 903.2.3), throughout occupancies (RE: Section 903.2.4) and throughout stories and basements (e.g. 903.2.10.1). Once again, the definitions included in the IBC should be consulted when considering the meanings of these specific phrases as applied to this section of the code.

With regard to the requirement for sprinklers within an occupancy, it should be noted that sprinklers are only required within the portion of the building that is considered to be of that occupancy group which is specified. Therefore, other areas that are separated from the occupancy in question with an occupancy separation as described in Section 302.3.2 need not be provided with sprinkler protection. However, it should also be noted that Section 302.3.1 specifically states that the most restrictive provisions of Chapter 9 (including automatic sprinkler system, where applicable) shall be applied to entire buildings where the provisions for Nonseparated Uses have been applied.

Code requirements for automatic sprinkler systems are based on very specific criteria requiring careful study and interpretation of the wording and definitions. For questions regarding this subject or any other code requirements, feel free to call City Planning & Development – Development Services Code Question Hotline at (816) 513-1511, where a helpful associate stands ready to provide assistance in applying code interpretations to individual situations. E-mail answers to code questions may also be requested from gary_marker@kcmo.org.

LAND DEVELOPMENT DIVISION SANITARY SEWER SERVICE REQUIREMENTS!

The Land Development Division (LDD) is tasked with reviewing proposed public infrastructure sanitary sewer improvements associated with development projects for general compliance with adopted standards, codes, and policies and to ensure proper sewer service is provided to the anticipated building sites that will be constructed upon later in the development process. We consider this latter aspect a basic city service. These public improvements, after being reviewed for general compliance, are permitted by the development contractor as agent for the developer. The sewer improvement plans will typically show the “anticipated” lots, tracts, or parcels to be served by means of the individual service lines depicted on the plans. Typically, these plans will not show what building footprints, or type of buildings (i.e. single family, duplex, triple, etc.) are to be built since building permits are generally issued later in the process. We have typically seen triplex and quad building plans via separate building permit application submittals to the building official for review, since these designations are logged in as commercial projects by the building official, and are then routed to LDD for review. We also see subsequent lot splits that are many times done to further subdivide into for-sale lots once the building foundation is constructed regardless of building type or footprint. However, this is more common with the Townhome-type developments. Condominium developments typically involve a land plat and then a subsequent condominium plat instead of the minor subdivision lot split for creating the additional for-sale units.

Even though it has been common design practice to provide individual service lines for each building site, the City adopted specific design criteria statements in 1996 to this affect for sanitary sewer improvements with its adoption of the *American Public Works Association Design Criteria, Specifications and Standards*. The relevant adopted APWA 5500 section includes a specific subsection 5506.3 “New Development Building Services,” which states that “. . . a connection shall be provided for each building site in new development. The connection shall be extended with a service line to the property line of the building site.” The term “building site” was used since the purpose of the sewer service was to provide service to the site where the ultimate building would be constructed and placed. Further, the definition states that the sewer service is to be extended to the property line of the building site. This means that all building sites with distinct property lines must be provided with a separate sewer service. Does this mean a duplex rental needs two service lines? No, because the duplex is on one lot. For a triplex on one lot, only one service is needed, and so forth. However, if the duplex, or triplex, etc., were built with a two-hour fire rated common wall and later split via a certificate of survey into separate for-sale units or lots and then sold, the building would then be in non-compliance. Staff has attempted to monitor this situation in order to prevent two separate ownerships from sharing a common service line where maintenance responsibilities are not clear, known, or guaranteed, and where the actions of one party can negatively impact the rights of another. It has sometimes been suggested that private covenants or private entities (i.e. Covenant Restrictions, Home Associations, Townhome Maintenance Entities, etc.) can provide the needed assurance of maintenance. However, these self formed entities or private restrictions are private in nature and provide no public guarantee of perpetuity for the ongoing maintenance responsibility. The City can only ensure service by requiring services be provided at the time of construction of the sewer main extension or by requiring the additional service lines be constructed when needed due to further subdivision activities.

Additionally, in 1998 the City adopted changes to APWA 5502.4.1.c “Sewer Plan” to add the requirement to specifically show property lines, lot lines, lot numbers, block numbers, minimum finish floor elevations, building locations, and building designations to the sewer plan. This was done to further improve the information needed to ensure that proper sewer services were being installed with the sewer main extension improvements. Prior to both of the above adoptions, in 1992 the City formally adopted the sewer construction specifications, APWA 2506 “Installation.” Section 8 “Tees, Wyes and Building Service Lines” was included in this adoption to address the responsibilities and required records to be kept by the contractor during construction process pertaining to the location, elevation, and grades of the service stubs constructed with the sewer improvements.

(Continued on page 6)

(Continued from page 5)

Chapter 60 Code of Ordinances, Section 60-43, “Connecting building sewers and other private drains to public sewer” states that the City is authorized to adopt regulations governing the methods of connection to a public sewer, that a permit is required and that the connection will be inspected, subject to appropriate inspection and tapping fees for such City services.

The *International Residential Code* (IRC) also addresses the subject of shared service lines. Section P2602 “Individual Water Supply and Sewage Disposal” P2602.1 “General” states that “*The water-distribution and drainage system of any building or premises where plumbing fixtures are installed shall be connected to a public water-supply or sewer system, respectively, if available. When either a public water-supply or sewer system, or both are not available, or connection thereto is not feasible, an individual water-supply or individual (private) sewage-disposal system, or both, shall be provided.*” It has been our interpretation in the past that this adequately supports the need for individual sewage disposal service line connections to the sewer main. Additionally, the IRC only regulates the activities on private property and not the actual private connection to the public sewers in the public right-of-way.

And finally, note that the *Code of State Regulation* (CSR), Title 10, Division 20, Chapter 2, definition number (67) defines “Service connection” as “*A pipe which conveys wastewater from the point of origin on a tract of land to a sewer system which is operated and maintained by one of the continuing authorities listed in 10 CSR 20-6.010 (3) (B).*”

In short, staff believes the City’s policy over the years has been very clear in its intention to ensure that each building site is provided a separate sewer service, whether proposed initially with the new sewer infrastructure or when it needs to be created on the back end when subsequent platting activities create additional for-sale lots or units.

STAFF CHANGES

Marsha Gregg, Graduate Engineer, joined the Plans Review Division

Maxine McMullen, Customer Service Representative, joined the Land Development Division.

Daniel Weber, Graduate Engineer, joined the Land Development Division.

Matthew Huggins, Construction Code Inspector I, joined the Inspections Division.

Shanta King, Customer Service Representative, joined the Business Services Division.

Jeff Lee, CBO, MCO, was promoted from Development Specialist I to Graduate Engineer in the Plans Review Division.

Heath Perkins was promoted from Construction Code Inspector I to Development Specialist I and joined the Plans Review Division.

Ray Haydaripoor was promoted from Construction Code Inspector I to Graduate Engineer and joined the Land Development Division.

Nikki Dennis was promoted from Engineer Technician III to Graduate Engineer in the Land Development Division.

John Chumba, **Sara Hurst** and **Brian Weis** left to pursue other opportunities.

LAND DEVELOPMENT DIVISION UPDATE ON EFFORTS TO REVISE FINAL PLAT APPLICATION REQUIREMENTS!

Land Development Division staff met with development stakeholders on February 6 and with the Development Advisory Committee on February 16 to review and present changes beneficial to streamlining the Final Plat process from application entry to ordinance passage.

To streamline the Final Plat process, the stakeholders identified that the Final Plat Application Form would need to be modified as follows:

- 1) Amended Section 2 to separate the “Agent,” “Applicant,” “Owner,” and “Surveyor” contact information, and to identify an Agent acting on the Applicant’s or Owner’s behalf.
- 2) Add a Section 3 footnote to clarifying how the City can assist in obtaining the County’s Assessor Parcel Number (APN) information to use in filling in the application form. Applicants sometime acquire this information directly from the County Assessor’s Office. We have suggested using KivaNet to look up the information.
- 3) Change Section 6 to request 18 copies of Plat separated from the required 20 copies, and to request a copy of the approved Street Name Sign Plan be submitted at the time of application, if applicable, per the controlling ordinance.
- 4) Change Section 7 to eliminate the following requirements:
 - a. Three (3) Original signed copies of the private covenants, conditions and restrictions;
 - b. Release of any dedicated rights-of-way from and subordination of any deeds of trust to any building lines and easements shown on the plat;
 - c. Subordination of any existing utility easements where in conflict with proposed rights-of-way;
 - d. Apportionment of special assessments on land to be dedicated to public right-of-way;(Note: Items (a) through (d) will now become clearance memo items. Typical Final Plat ordinance language will be amended to reflect appropriate “subject to” clauses, which will allow the Council to approve the Final Plat Ordinance subject to receiving the required supplement information prior to releasing the Final Plat for Recording.)
and to add the following:
 - e. A copy of the Application Form in the separate envelope;
 - f. Two (2) Copies of the Final Plat Drawing in the separate envelope;
 - g. Information on the Park Board resolution number;

City staff intend to finalize discussions on internal application handling improvements in order to ensure the successful processing of Final Plat applications at the time of application entry through to final ordinance acceptance. Once these internal discussions are completed, an effective date will be announced indicating when all applications should begin using the new Final Plat Application Form. We appreciate everyone’s efforts and contributions in bringing us to this stage. We anticipate a May or June affective date. To view the new application, please see “Proposed Final Plat Application” link at <http://www.kcmo.org/planning.nsf/devmgt/dvmappli?opendocument>.

Code Connection

City Planning & Development Department
Development Services
5th Floor, City Hall
414 East 12th Street
Kansas City, Missouri 64106

ADDRESS CORRECTION REQUESTED

Visit CPD on the Internet at www.kcmo.org

Telephone Numbers: Area Code 816

Development Services Manager 513-1472
City Hall Permit Center 513-1500 (option 3)
Plans Review Permit Center 513-1500 (option 5)
Commercial Plans Review 513-1500 (option 5)
One- & Two-Family Plans Review 513-1500 (option 5)
Inspections Division 513-1500 (option 2)
Special Inspections 513-1500 (option 2)
Investigations Division 513-1500 (option 2)
Business Services Division 513-1500 (option 3)
Contractor Licensing & Registration 513-1500 (option 6)
Land Development 513-2593

FAX Services/Numbers:

FAX Permit Process 513-1456
FAX Inspection Requests 513-1536
FAX Publication Purchases 513-1456
FAX One- and Two-Family Plans Branch 513-1505
FAX Plans Review Comments
Call to request your comments 513-1500 (option 4)

Code Information:

Zoning, Floodplain, Airport Height Zone,
Permit Application Information 513-1500 (option 3)
Code Questions, Plans submittal Information,
Plans Review Status 513-1500 (option 5)

Publication Ordering Information:

The following publications are available at either CPD-DS office.

You may also call 513-1500 (option 3) and request a credit card authorization form and then place your order via Fax.

1. **Chapter 18, Kansas City Building and Rehabilitation Code** and related ordinances. (Chapter 18 adopts the model codes by reference and identifies local amendments to the model codes.) Price: \$6.00
2. **Special Inspections Program Manual.** Price: \$5.00
3. **Fee Schedule.** Price: \$2.50

The following publications are available from the City Planning and Development Department (513-2846).

1. **Chapter 80, Kansas City Zoning Ordinance** Price: \$25.00
2. **Chapter 66, Subdivision Regulations** Price: \$6.00

The following publications are available from the International Code Council Regional Office (455-3330).

1. **2003 International Building Code**
2. **2003 Uniform Plumbing Code**
3. **2003 International Mechanical Code**
4. **2002 National Electrical Code**
5. **2003 International Residential Code**