

**CITY PLANNING AND DEVELOPMENT DEPARTMENT
LAND DEVELOPMENT DIVISION
DEVELOPMENT SERVICES
CITY OF KANSAS CITY, MISSOURI**

**PLAN PRESENTATION CRITERIA AND PROCEDURE
FOR STREET, STORM AND SANITARY SEWER PROJECTS**

All plans and specifications for street, storm sewer, and sanitary sewer to be constructed under City Planning & Development permits shall be prepared by a professional engineer registered in the State of Missouri and submitted for review to:

Quality Control Review
CPD-DS Permits Division – Plans Management Branch (PMB)
5th Floor, City Hall
414 E. 12th Street
Kansas City, Missouri 64106

Two copies of public improvement plans shall be submitted for the initial review. Copies of the engineer’s supporting design calculations shall be submitted with the plans

After the initial review, the engineer will be notified as to the plans’ “general compliance” with adopted standards. Written plan review comments regarding deficiencies, requests for additional information and/or clarification will be provided and must be adequately addressed before the plans can be found in “general compliance”. Resubmitted plans shall contain a revision block with identifying notations, date and “clouding” to show the revisions. The final submittal shall include a wet-sealed engineer’s construction cost estimate reflecting all changes and required construction, administration and/or utility relocations, including an item for preparation of “as-built” drawings.

CPD-DS-LDD will require six (6) sets of in “general compliance” plans prior to issuing a construction permit. Six (6) sets of sanitary sewer plans and six (6) separate sets of street and storm sewer plans shall be submitted if the plans are submitted separately. For street and storm sewer plan sets where there will be more than three (3) contracts for the separate street and storm sewer permits, add one additional set of plans for each additional contractor in addition to the eight sets. Normal distribution is:

- 3-Contractors (one additional set for each contractor over three)
- 1-City Inspector
- 1-Archive File
- 1-For Scanning

The plans will be processed by Plan Review and, after temporary draft permits are created and scoped, the records will be delivered to the Permit Group on the 5th floor of City Hall to await issuance to a developer. To secure a permit, permittee must present their bond, fees and proof of insurance. The “general compliance” plans are held for one year after which time they will be discarded. Permits requested on plans older than one year are subject to a new review fee if they have not been permitted.

I. STREET, STORM SEWER AND SANITARY SEWER PLANS

- A. Plan presentation for street, storm sewer and sanitary sewer plans shall conform to APWA 5204 and/or APWA 5607 as appropriate. Following are additions and/or modifications to those criteria:

Title Sheet (5204.6) shall include:

1. The proper title of the plans including project designation and a complete list of the proposed construction included in the plans, city, county, state, 1/4 – 1/4 section, township and range.

For example:

Public and Private Grading, Street and Storm Sewer Plans
for
“Global Meadows – 2nd Plat”
Kansas City, Platte County, Missouri
SW ¼ - NW ¼ Sec 32 Twp 25 Rng 51

2. A City-established project control benchmark on NAVD 88 datum identifying the location and elevation. Obtain this information from the Chief of Surveys at 513-8700.

3. The responsible engineer shall sign the following statement:
“I certify that this project has been designed, and these plans prepared, to meet or exceed the design criteria of Kansas City, Missouri in current usage, except as indicated below:

Exceptions:

1. if none indicate “none”
2. _____
3. _____

4. The engineer shall make the following “as built” certification:
“I have/have not been retained to provide as-built drawings for this project”
_____ (enr sign)
_____ (date)

5. The plans shall contain the following “as built” statement:
“The Policy of the “Plan Preparation Criteria and Procedure” (Plans Criteria) and Policy Document No. 880544 “As Built Drawings for Sewer Built by Permit” stipulate the following regarding “as built” drawings:

1. Drawings are to be provided within thirty (30) calendar days after the date the “Request for As Builts” letter is issued by the City to the permittee/contractor.
2. Drawings must be accepted by the City before any service connections will be allowed.
3. Drawings are part of the permit obligations making them the responsibility of the permittee.
4. The cost of preparing “as built” drawings shall be included in the performance bond.”

6. The developer shall sign the following statement:
“I have reviewed these plans and understand what is proposed. The work will be accomplished in _____ contracts with a work breakdown as follows:

1. _____
2. _____
3. _____

Any incidental work not specifically permitted (i.e. final cleanup) will be completed by the _____ contractor.

_____ (owner sign)
_____ (date)

7. The plans shall contain the following shop drawing note:
Prior to ordering pre-cast structures, shop drawings are to be submitted to the design engineer for approval. The design engineer shall indicate approval of the shop drawings and add the permit type and number on them and then submit them to the City Planning & Development Dept., Land Development Division, Development Services on the 5th floor of City Hall, 414 E. 12th St. KCMO 64106.

Plans and Profile Sheets (5204.8 and 5607.4B & C) shall include:

1. A uniform and logical system of designating sewer mains, curb inlets and/or manholes, subject to the approval of CPD-LDD-DS.
2. Suitable horizontal control for each structure based either on street centerline stationing with left/right offsets or the Missouri State Plane Grid System, NAD 1983 West Zone.
3. Lettering shall be a minimum 0.16 inches in height.
4. Sewers located outside street right-of-way shall have at least one permanent land tie that agrees with the easement.
5. The first general note shall be:
“The construction covered by these plans shall conform to the current “City Standards” and specifications of the City Planning & Development and Public Works Departments, Kansas City, Missouri, except as noted.”
6. The distance between spot elevations on curb returns shall be a maximum of 15 feet (5204.8.12).
7. Curb return profiles are required when the through street grade is six (6) percent or steeper or as special circumstances require.
8. For projects involving a FEMA regulated floodplain, the limits of the floodway and the 100-year floodplain as determined by the adopted floodplain maps shall be delineated on the plan and profile sheets.
Note: Contact the Plans Review Branch of CPD to ascertain floodplain requirements.

Cross Sections (5204.9):

1. Cross sections shall typically be provided at scales of 1" = 20' horizontal and 1" = 5' vertical, which produces 100 sq. ft. of cut/fill per 1 sq. inch of paper.
2. Cross sections are required for projects having fills greater than three (3) feet.

Standard or Special Detail Sheets:

1. Detail sheets shall not duplicate standard construction details or items addressed by “City Standards”, except for typical street sections which shall be included. Typical sections shall show pavement, median, curb, sidewalk and parkway dimensions, type and thickness of pavement, curbs and sidewalks, street cross slopes, fill or cut slopes and any other information necessary to achieve the desired construction.
2. Intersection details will be required when joint locations and cross-slope transitions cannot be clearly depicted on the plan and profile sheets.

Easement Sheet:

If the project involves platting, easements are to be dedicated on the plat in accordance with Chapter 66 of the Code of General Ordinances of Kansas City, Missouri, except for surface drainage easements which must be dedicated by separate instrument (available at http://www.kcmo.org/codes/stds/esmt/surf_drain.pdf) and can be cross-referenced on the plat.

Executed and recorded offsite sewer and construction easements beyond the plat limits are to be included in the initial construction plans submittal. A scalable pictorial exhibit must accompany the easement. The City will accept the recorded easements.

Offsite easements sheets are required for pipe projects that cross through established subdivisions if the offsite easements cannot be shown on the plan layout sheet. The entire offsite property must be shown and not just that portion over which the easement is to be dedicated. The following should be included:

1. Layout of property lines within the area of the proposed sewer alignment showing only lot dimensions (scale 1" = 100' or larger).
2. All existing easements including widths.
3. All new or additional easements including widths.
4. Relationship of the proposed sewers to lot corners or lines, as measured perpendicular to lot lines.
5. Relationship of proposed sewer to right-of-way lines, if located in streets or alleys.
6. For projects that entail easement acquisition by the City through the condemnation process, a list of the names, addresses and telephone numbers of each affected property owner shall be shown on the upper left corner of the sheet.

B. Sanitary Sewer Plans

1. Plan presentation for sanitary sewer projects shall conform to APWA 5607 as amended above with title and layout sheets.
2. Accurate elevations of either the first floor surface or the basement floor surface shall be shown in profile, and identified by lot number or address, for all existing and/or proposed buildings to be served by the proposed sewer system.

II. STREET LIGHTING PLANS

As of January 1, 1990, developers are required to include design and installation of a street lighting system as a part of all new public roadway improvements. The City will review the plans and inspect the construction. After installation, the City will assume maintenance and energy cost, except as may be modified by a Covenant to Maintain Decorative Street Lights, which can be found at <http://www.kcmo.org/codes/stds/bul/Cov-DecStLts.doc>. The following information is required by the City to find the plans in "general compliance". A permit is required prior to beginning construction.

1. Contract specifications shall be submitted with every plan.
2. Plans shall have engineer's wet-seal and signature with contact information (phone number/e-mail/ mailing address)

3. An itemized construction estimate shall be submitted with each set of plans.
4. Itemized quantities shall be included on the construction plans
5. Street lighting plans must be a separate set of construction plans and cannot be incorporated into the street construction plans. For the initial review, submit two sets of paper prints to:

Electrical Design Section
Public Works Dept.
1301 Chouteau
414 E. 12th St.
Kansas City, Missouri 64120

Two sets of reproducible FINAL plans shall be submitted to the Electrical Design Section. They will retain one set and return one set, signed and indicated as found in “general compliance”, to the developer or the engineer.

6. To obtain the permit, the contractor shall bring six sets of paper prints made from the “general compliance” plans and a performance bond, based on the estimated construction cost, to the CP-LDD-DS permit group on the 5th floor of City Hall, or prior to obtaining the permit, the six sets of paper plans may be mailed to the attention of:

Permits Group
CPD-LDD-DS
5th Floor, City Hall
414 E. 12th Street
Kansas City, Missouri 64106

III. DRAINAGE STUDIES

The objective of a drainage study is to determine whether storm water detention or downstream improvements are necessary. A macro drainage plan will be prepared for phased projects.

The prescribed format and content for preparation and presentation of a stormwater study can be found at the following website:
http://www.kcmo.org/codes/LDD/stds/policy/sw_mgmt_plan.pdf

IV. “AS BUILT” DRAWINGS

“As built” drawings are required and shall be submitted to the City for all public storm and sanitary sewer projects. A policy of the Public Works Department, adopted July 11, 1988 states “As built drawings are considered part of the (sewer) permit work and are the responsibility of the permittee.

“As built” drawings shall consist of a full set of construction drawings acceptable to the City. Sheets not affected by the “as-built” revisions may be indicated as “No changes to this sheet”;

The cost of furnishing the drawings should be considered when contracting for permit work. The cost of furnishing “as built” drawings shall be included in the performance bond.

1. General: “As built” shall be sharp (blue or black line) reproducible drawings, suitable for scanning. Mylars are required for final acceptance.

Affected plan sheets shall be revised to reflect information as it was constructed. Elevations, grades, distances, bearings or angles, pipe sizes, materials and any

other information that differs from that shown on the construction drawings shall be corrected by drawing a single line through the design information and adding the "as built" information above it. Any of the above information which does not change from the design numbers shall have a (✓) mark placed by it. Quantity information will be shown in the summary of quantities table in the "AS BUILT" column. Land ties shall be shown, as required, to relate the sewers to the easements.

When sewers and/or appurtenances are constructed outside the accompanying easement or right-of-ways, or too close to the boundaries to allow for maintenance, additional easements shall be provided to the City prior to acceptance of the sewers.

2. Affected sheets shall be boldly marked "AS BUILT" and shall show the date revised. The following statement shall be signed by an engineer or surveyor, registered in the State of Missouri, supervising preparation of the "as-built" plans:

"I certify the conditions shown are correct and the sewers are acceptably located within an existing easement or right-of-way"

sign seal date

3. The following contractor supplied information shall be shown on the drawings:
 - a. Elevation and extent of rock encountered
 - b. Tee and wye locations
 - c. Station and perpendicular offset distance to the end of service stub lines.
4. "As built" drawings must be submitted within thirty (30) days after the date the City's "Request for As Builts" letter is sent to the permittee. Acceptance of the "as built" drawings is required before any service connections can be made to the sewer. Acceptance of the "as built" drawings is only one factor in the acceptance process and, in itself, does not constitute acceptance of the sewer or commencement of the maintenance bond period.

Authorized for Distribution

Tom Coyle, Director
City Planning & Development Department