



## Utility Code

### Section 700.010. Utility Facilities — Regulations for Location or Relocation on County Highways — Permit.

[Order adopted 10-16-1986 §§1 — 4]

#### A.

It is hereby provided that regulations for the location and relocation of any utility facilities along the highways maintained by Jefferson County, Missouri and located within the incorporated portion of Jefferson County, Missouri, are hereby established said regulations being in the following form.

#### 1.

##### *Application.*

#### a.

The following rules are established for the location or relocation of utility facilities on the right-of-way of highways in the Jefferson County Highway System. Any location of utility facilities contrary to this policy is declared to be an interference with the construction, maintenance or operation of County highways and their right-of-way and is prohibited. Relocation of existing utility facilities necessary to permit construction of a highway project shall be subject to the requirement of a hearing hereafter provided. Nothing in the rule shall permit non-compliance with the requirements of a regulatory agency regarding construction of utility facilities.

#### b.

Except as herein described, all work to be performed on right-of-way of the County highway system in connection with the location, relocation or maintenance of utilities, and where the roadway, shoulders or right-of-way will be affected by the work, must be done only under a permit or agreement to be issued by authority of Jefferson County. Application for such permits shall state specifically the location and nature of the work to be performed. A deposit may be required to ensure completion in accordance with the permit or easement issued. Replacement of individual poles and attachments or other existing utility facilities where only spot excavation is required and which excavation is not between the shoulder lines of the highway, may be considered as routine maintenance and a permit will not be required. Permits also will not be required for paralleling service connections from established distribution facilities where no pavement cut is involved. The policies prescribed in the documents, which are on file in the County Offices, are intended to reflect general policies of the County and specific application should be made and permit obtained for the completed work rather than to rely fully upon these rules.

#### c.

In the event that utility lines or facilities are so damaged as to constitute an emergency situation directly affecting or endangering traffic on the highway or public safety, access is permitted to the damaged facility by leaving the through roadways at such points as may be necessary to effect emergency repairs, provided immediate notice is given to the County Highway Superintendent, the County Council and the Jefferson County Sheriff's Office.

#### d.

This policy does not apply to utility lines for services to facilities required for operating a highway.

#### 2.

*Road classification.*

a.

*Paved roads.* Roadways with an aggregate surface, an asphalt wearing surface or other continuous surface.

b.

*Non-paved roads.* Roadway with a gravel or non-paved surface.

3.

*Definitions and general information.*

a.

*Vertical clearance for overhead crossings.* The vertical clearance of new or existing overhead installations shall not be less than the current minimum requirements of the National Electric Safety Code, but in no case less than eighteen (18) feet.

b.

*Minimum cover for new underground installations.* Underground water line installation shall have a minimum cover of forty-two (42) inches. All other underground direct buried cable may have a minimum of twenty-four (24) inches cover and buried service wires not crossing a roadway may have a minimum of twelve (12) inches cover.

c.

*Encasement.* "Encasement", as used in this policy, means the placing of an installation around and outside of an underground facility consisting of a larger conduit, which will permit the removal and replacement of the facility. An alternate to the conduit type encasement would be reinforced concrete poured around the facility.

4.

*Location and relocation of utility lines.*

a.

*Paved roads.*

(1)

*General policy.*

(a)

All new facilities shall be installed and maintained without cutting or damaging the roadway surface or paved shoulders except that in the event that underlying rock formations or other obstructions are encountered that prevent boring or pushing operations, special permission may be granted for pavement cuts when the need is established.

(b)

Pavement cuts may be made by permit only. Permits will be issued only when it is impractical to otherwise service and maintain the facility.

(2)

*Roadway crossings of utilities.*

(a)

Overhead main line and service crossings are permitted provided the supports are located near the right-of-way lines.

(b)

Underground facilities shall generally be continuously encased under the through roadways, median, ramps and shoulder areas with the casing extending to the toe of the fill slopes or to the ditch line. In curb sections, the encasement shall extend outside the outer curb of the roadway(s) a distance equal to the depth of the encasement at the curb line. Manholes or vent pipes for the casing where necessary shall be located at the right-of-way line or adjacent to an outer road. Exceptions for encasement may be made as follows:

(i)

Communication and electric cables installed in ducts.

(ii)

Welded steel pipelines carrying gaseous or liquid petroleum products need not be encased provided they are cathodically protected against corrosion, triple coated in accordance with accepted pipeline construction standards and meet the applicable material requirements.

(iii)

Gas service connections of steel or copper constructed and protected in accordance with and meeting the applicable material requirements.

(iv)

Water service connections and crossings of copper two (2) inches inside diameter or less and meeting the applicable material requirements.

(3)

Paralleled installations on the right-of-way will be permitted if poles are within two (2) feet of the normal right-of-way line and underground facilities are within six (6) feet of the normal right-of-way line except:

(a)

Existing poles, being relocated, shall be within five (5) feet of the normal right-of-way line.

(b)

Existing overhead facilities that parallel an existing roadway which will be incorporated into the completed roadway may remain in place if their existing location does not interfere with construction, maintenance or operation of the completed highway.

(c)

Existing underground facilities (other than sanitary sewers) that parallel an existing roadway which will be incorporated into the completed roadway may be left in place where it is impractical to relocate the facility provided that maintenance and service can be performed without cutting or damaging the pavement or interfering with the construction, maintenance and operation of the highway.

(d)

Except for multiple facilities at intersections and subject to the approval of the highway engineer, existing steel pipe transmission and distribution facilities for gaseous petroleum products that parallel an existing roadway which will be incorporated into the completed roadway may be left in place subject to an agreement by the utility company that maintenance, service and facility expansion will be performed without cutting or damaging the pavement or interfering with the construction, maintenance or operation of the highway and provided that the facility is cathodically protected against corrosion and meets the applicable material requirements.

(e)

Careful consideration shall be given to the location of guys, anchors, braces and other supports. Generally, good design procedure will provide that such appurtenances be located at right-of-way jogs, along intersecting road right-of-way or at other similar acceptable locations, so that encroachment is held to an absolute minimum.

(4)

Existing sanitary sewer mains shall be considered individually and removed or left in place contingent upon age, condition, feasibility of moving and whether service and maintenance can be performed without damaging the roadway surfacing. If an existing parallel main is left in place within the limits of the paved surface or curb lines, stub mains as required shall be laid between the sewer main and curb or shoulder lines for future service connections in each block. Manholes where necessary shall be relocated outside the traveled roadway wherever practical. Encasement for existing trunk sanitary sewer crossings may be required for questionable condition, protection during construction, heavy fills or installation under pressure.

(5)

Encasement is not required for new trunk sanitary sewer crossings of vitrified clay, reinforced concrete or cast iron except when installation procedures would produce voids in the roadbed, heavy fills or installations under pressure. Manholes are to be located as near the right-of-way line as practical.

(6)

*Structures.*

(a)

No utility facilities will be permitted in or on a grade separation structure except wires and then only where no other practical means exist for crossings.

(b)

No utility facilities shall be placed on any structure except by agreement and a charge will be made for the increased maintenance costs involved.

b.

*Non-paved roads.*

(1)

*Roadway.*

(a)

Existing paralleled surface installations interfering with construction, maintenance or operation shall be relocated to within five (5) feet of the normal right-of-way line. Poles for new parallel surface installations shall be located within two (2) feet of the normal right-of-way line. Careful consideration shall be given to the location of guys, anchors, braces and other supports. Generally, good design procedure will provide that such

appurtenances be located at right-of-way jogs, along intersecting road right-of-way or at other similar acceptable locations, so that encroachment is held to an absolute minimum.

(b)

Existing paralleled underground installations interfering with construction, maintenance or operation shall be relocated to as near the right-of-way line as practical. New paralleled underground installations shall be located within six (6) feet of the normal right-of-way line when practical.

(c)

Existing overhead crossings that interfere with construction, maintenance or operation shall be relocated with their supports as near the right-of-way line as is practical. New overhead crossing installations shall be located with their supports as near the right-of-way line as is practical.

(d)

Installation of underground crossings may be made by trenching one-half (½) of the roadway at a time. Encasement shall be required for pressure lines, sewers and drains when crossing under the roadway using PVC, thermoplastic, asbestos cement or ABS pipe material.

(2)

*Structures.*

(a)

No utility facilities will be permitted in or on a grade separation except wires and then only where no other practical means exists for crossings.

(b)

No utility facilities shall be placed on any structure except by agreement and a charge will be made for the increased maintenance costs involved.

5.

*Approved materials for underground utility facilities (other than cable).*

a.

*Water and sewer lines.*

(1)

Copper meeting the requirements of ASTM Specification B 88-76, Type K or latest revision thereof.

(2)

Cast iron meeting Specification ANSI 21.6-1970 (AWWA C106-70) or ASA 21.8-1970 (AWWA C108-70). Joints shall be mechanical or push on meeting Specification ANSI A 21.11-1972 (AWWA C111-72).

(3)

Ductile iron meeting Specification ANSI 21.51-1971 (AWWA C151.71). Joints shall be mechanical or push on meeting Specification ANSI A 21.11-1972 (AWWA C111-72).

(4)

Prestressed concrete cylinder pipe meeting AWWA Specification C301-64 for sizes sixteen (16) inches in diameter or larger.

(5)

Polyvinyl chloride (PVC) pipe for water transmission shall be of type PVC 1120 material and shall meet the requirements of ASTM D-2241-76 or the latest revision thereof. For sizes one (1) inch and larger, dimensions shall not be less than specified for SDR 26 pipe. For three-fourth ( $\frac{3}{4}$ ) inch size, dimensions shall not be less than specified for SDR 21 pipe. Pipe, fittings and couplings may have integral bell and ring type joint or solvent-weld type joint. The owner shall furnish to the highway engineer a certification by the manufacturer that the pipe supplied will conform to the specified requirements. Such certification shall include substantiating test results representative of the pipe to be furnished.

(6)

Asbestos cement pipe shall meet the requirements of AWWA C400-65 for Class 150 or Class 200 pipe or the latest revision thereof or ASTM C296-76, Type II, for Class 150 or Class 200 pipe or latest revision thereof. Uncombined calcium hydroxide shall not exceed one percent (1%). Couplings shall consist of an asbestos cement sleeve of the same composition as the pipe and two (2) rubber rings suitable in size and design for the pipe with which it is used. The rubber rings shall conform to the requirements of ASTM D1869-66 (1972) or the latest revision thereof. The owner shall furnish to the highway engineer a certification by the manufacturer that pipe, and rubber rings supplied will conform to the specified requirements. Such certification shall include substantiating test results, including crushing strength, representative of the pipe to be furnished.

(7)

Acrylonitrile butadiene styrene (ABS) composite sewer piping for gravity sewer parallel installations shall meet the requirements of AASHTO M264-771 (ASTM2680) or latest revision thereof. The owner shall furnish to the highway engineer a certification by the manufacturer that the pipe supplied will conform to the specified requirements. Such certification shall include substantiating test results representative of the pipe to be furnished.

b.

*Gas lines.*

(1)

Copper for gas shall meet with requirements of ASTM Specification B88-76 Type K or latest revision thereof or ANSI B31.8-1975 or latest revision thereof.

(2)

Thermoplastic pipe for gas transmission shall conform to all the requirements of the USA Standard Code for Pressure Piping, Gas Transmission and Distribution Piping System, ANSI B31.8-1975. Thermoplastic pipe shall conform to the requirements of ASTM D2513-76 or the latest revision thereof. Dimensions shall not be less than that specified in ASTM D2513-76. The owner shall furnish to the highway engineer a certification by the manufacturer that the pipe supplied will conform to the specified requirements. Such certification shall include substantiating test results representative of the pipe to be furnished.

(3)

Welded steel pipelines shall meet the requirement of ANSI B31.1-1977 and ANSI B31.8-1975 or ANSI B31.4-1974 or latest revision thereof.

c.

*Encasement.*

(1)

Conduit permitted for encasement shall be new material or equivalent and shall conform to the following:

(a)

The requirements of the latest revision of the Missouri State Highway Commission Standard Specifications for reinforced concrete culvert pipe; citified clay culvert pipe; cast iron pipe or ductile iron of the same class as used for carrier pipe. No corrugated pipe shall be allowed.

(b)

*Other encasement material.* Smooth wall, welded steel pipe with a minimum wall thickness as specified in American Petroleum Institute Code No. 1102 will be permitted. The provisions of this Code are listed as follows:

**Casing Diameter**

6 inches

8 inches

10 inches

12 inches

14 inches

16 inches

18 inches

29 inches

22 inches

24 inches

26 inches

28 inches

30 inches

32 inches

34 inches

36 inches

38 inches

40 inches

48 inches

Casing diameter under 6 inches

(2)

Encasement of facilities with reinforced concrete shall be with a minimum of six (6) inches of Class B reinforced concrete meeting Missouri State Highway Commission specifications. The steel reinforcing shall be in accordance with the requirements of the Missouri State Highway Commission Specifications for an equivalent size of reinforced concrete culvert pipe, which would be specified under like conditions. A permissible option

to this reinforcing steel requirement may be conventional deformed reinforcing bars placed as shown on the Missouri State Highway Commission standard drawings for box culverts of like size as a minimum.

d.

*General.* The type of material permitted for underground facilities other than that specified in this policy shall conform to that specified in the latest edition of the Missouri State Highway Commission Standard Specifications. Material for installations not covered in the Standard Specifications or in this policy shall be subject to approval by the highway engineer, taking into consideration the applicable industry code.

6.

*Installation requirements of water and sewer mains and service line.*

a.

All cast iron and ductile iron water mains shall be installed in accordance with Specification AWWA C600-64 or latest revision thereof.

b.

All asbestos cement water mains shall be installed in accordance with Specification C603-65 or latest revision thereof.

c.

All thermoplastic water mains shall be installed in accordance with Specification ASTM D2774-72 or latest revision thereof.

d.

All ABS composite sewer piping shall be installed in accordance with Specification ASTM D2321-74 or latest revision thereof.

7.

Protective equipment cables, wires, small diameter pipes and other such utility appurtenances extending from the surface of the ground shall be equipped with covers or guards to improve their visibility.

8.

Cutting pavements shall not be allowed without a special written permit issued. If permission is granted to cut an existing P.C.C. or A.C. pavement, all cuts, if possible, shall be made with a saw to a minimum depth of two and one-half (2½) inches. The width of cut shall be determined by the width of required trench plus twelve (12) inches on each side of the trench. If the distance to any adjacent longitudinal or transverse joint or crack is less than four (4) feet, the pavement shall be removed to that joint or crack.

9.

*Special conditions.* Special conditions at specific locations which make adherence to this policy impractical may be submitted to the highway engineer for consideration of an acceptable alternate.

10.

*Utility relocation hearings.*

a.



*Requirement of hearing.* The County Engineer has authority to order the location and relocation of utility improvements and facilities within the right-of-way of any County highway to prevent interference with the construction, maintenance and public use of County highways. Upon receipt of a formal objection in writing by the corporation, association or person owning or maintaining utilities within the right-of-way, the County shall provide an administrative hearing upon its proposed plan of utility location and other incidental matters.

b.

*Notice of hearing.* Upon request by the highway engineer, the County Executive or his/her designated hearing examiner shall prepare a notice of hearing. The notice shall be in writing; include a plan of drawing indicating the locations within the right-of-way in which utilities may be located and maintained; state when the County or its contractor is scheduled to begin work on the right-of-way; state the date by which work shall be completed on utilities within the right-of-way; fix the time and place of the administrative hearing; and advise that the purpose of the hearing is to consider the County's proposed plan of utility location and other incidental matters. The highway engineer shall cause the notice of hearing to be served upon each corporation, association or person owning or maintaining utilities within the right-of-way by personal service, with certificate of service or certified mail, with return receipt requested. The notice shall be delivered or mailed at least fifteen (15) days before the date of hearing.

c.

*Presiding officers.* The County Executive or his/her designated hearing examiner shall preside at the hearing.

d.

*Discovery.* The hearing examiner shall rule on all matters concerning discovery under Section 536.070, RSMo.

e.

*Evidence, arguments and briefs.* The hearing shall be conducted as provided by Chapter 536, RSMo. The County Engineer shall first present its evidence at the hearing. Then any party may present evidence in opposition. The County Executive or hearing examiner may require written briefs to be filed within the time set by the Executive Council or hearing examiner. The County Executive or hearing examiner may rule on all objections and motions.

f.

*Final decision.* As soon as practical after the hearing, the County Executive shall render a final decision in writing.

B.

It is hereby provided that each corporation, association or person owning or maintaining utilities within the right-of-way of the County highways shall utilize a uniform utility map to utilize in establishing the locations of all underground utilities along and across the highways of the County. Such uniform map shall have ground locations indicators for purpose of establishing location of such underground utilities on occasions when the County or other may desire to excavate areas within the County rights-of-way. The County highway engineer and the Jefferson County Highway Division shall establish the map to be so utilized. Upon request all utilities maintaining utility installation along the County highways may be required to provide access to their maps showing all locations of all utilities within County road rights-of-way and to update same as requested by the County highway engineer. The Jefferson County Council and the Jefferson County Highway Division shall provide to the utilities upon request access to its maps of the County highway system including all proposed improvements thereto.

C.

It is hereby provided and established that a fee of three dollars (\$3.00) for each and every permit or agreement for utilities to be installed along or across County highways shall be paid by the person, corporation or association requesting such easement, permit or agreement and as a condition precedent to the issuance of such permit or agreement such fees shall be paid.

D.

It is provided that any corporation, association or person maintaining an underground utility upon the right-of-way of the County's highway shall within forty-eight (48) hours or in case of an emergency within three (3) hours' notice establish the exact location of such underground utility by meeting representatives of the County at the site at an agreed to established time. No utility lines shall be run through County or private party culverts or within thirty-six (36) inches thereof. All expense incurred in showing the exact location to the County at such points as requested by the County shall be borne by the utility.