

**City of Houston**

**Design Manual**

**Chapter 5**

**EASEMENT REQUIREMENTS**

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**EASEMENT REQUIREMENTS**

## 5.01 CHAPTER INCLUDES

- A. Requirements for allocating and recording easements for water, wastewater, and storm drainage facilities located outside of public rights-of-way.

## 5.02 REFERENCES

- A. Utility Coordination Committee (UCC) for the Metropolitan Area-Typical utility location in 10-foot and 14-foot-wide easements, back-to-back lots, and perimeter lots.

## 5.03 DEFINITIONS

- A. Easements-Areas set aside for installation and maintenance of utilities by public and private utility operators.

## 5.04 DESIGN REQUIREMENTS

- A. Where public utilities are located in, along, across or adjacent to private drives, private streets or permanent access easements in platted single family residential lot subdivisions; such drives, streets or easements shall have an overlapping public utility easement to provide access and maintenance rights. Public utility easement rights shall be superior to permanent access easement rights allowing the City ingress and egress for maintenance of utilities.
- B. Easements for electrical and gas lines must comply with requirements of the UCC and are not covered under this Design Manual.
- C. Easements are to be defined and submitted as part of the recordable plat either shown on the plat or by metes and bounds description. The process for recording the plat is described in Chapter 4, Platting Requirements.

## 5.05 QUALITY ASSURANCE

- A. Recordable plats and metes-and-bounds descriptions of easements must be prepared under the direction of a Professional Surveyor. The surveyor must seal, sign, and date documents prepared under his supervision.

## 5.06 PLAT AND EASEMENT REQUIREMENTS

- A. Requirements for Platted Easements.

1. For construction inside city limits, submit a copy of the final plat accompanied by a CPC 101 Form together with the original engineering drawings for approval and signatures.
  2. For construction outside city limits but within Houston's ETJ.
    - a. Where no easements are required outside the plat boundary, follow the same requirements as for plats inside city limits given in Paragraph 5.06A.1.
    - b. Where easements are to be dedicated outside the plat boundary or through property under different ownership, follow the instructions in Paragraph 5.06A.1 for plats inside city limits and the additional requirements following:
      - (1) Submit a copy of the recorded instrument creating the easement or a metes-and-bounds description and a map of the easement, along with a letter from the Municipal Utility District Board or property owner stating the intent to obtain or dedicate necessary easements. The instrument shall be recorded prior to recordation of the plat.
      - (2) All off-site easements necessary to serve a proposed development must be shown on the face of the plat, or an acceptable reference tie between the plat and easements must be established between the two documents. Off-site easements must be recorded prior to recordation of the plat.
- B. Requirements for Easements Dedicated to the Public or to the City. Easements required for construction of a proposed project must be approved and accepted prior to approval of final design drawings or issuance of a permit for the proposed construction.
- C. Additional Requirements for Easements Dedicated to the City:
1. Easements shall be either a part of the dedication on the plat of a subdivision, dedicated to the City on standard forms provided by the City for that purpose, or on forms approved by the City Attorney.
  2. The person seeking to dedicate an easement to the City shall furnish the City with a Metes & Bounds description and map, signed and sealed by a Texas Registered Professional Land Surveyor, showing the easement and its location.
  3. A construction permit will be granted upon acceptance by the City of recordable instruments dedicating the easements.

## 5.07 DESIGN REQUIREMENTS

### A. Easements for Water Lines and Appurtenances.

1. Water Lines:

- a. When outside a public street right-of-way or permanent access easement with overlapping public utility easements, easements must be dedicated and restricted for water lines only.
- b. When possible, easements should be contiguous with public rights-of-way. For water line located not adjacent to public rights-of-way shall have a minimum water easement width equal to twice the water line diameter plus the depth of the water line from natural ground or final ground elevation, whichever is greater; but not less than 20 feet on water line across open country (acreage) or commercial reserve.
- c. Provide all-weather access for water line easements not contiguous with public right-of-way.
- d. For water lines located outside of the public right-of-way:
  - (1) The easement shall be contiguous to the street right-of-way, or contiguous to a public utility easement that is contiguous to the street right-of-way.
  - (2) The minimum width of easement for lines 12 inches in diameter and smaller shall be 10 feet, and for lines 16 inches in diameter and larger shall be 20 feet.
- e. For water lines located inside of public right-of-way, less than 5 feet from right-of-way lines, the outside edge of a water line easement shall be located from the right-of-way line as follows:
  - (1) 12-inch diameter and smaller - minimum 5 feet
  - (2) 16-inch diameter and larger - minimum 10 feet
- f. Water lines along State rights-of-way shall be installed outside of the right-of-way in a separate contiguous easement. Width of easements shall be as provided in Paragraph 5.07.A.1.d.
- g. No backlot easements will be allowed for the installation of water lines.
- h. Commercial developments inside the City and in the ETJ requiring on-site fire hydrants must provide a minimum 20-foot water line easement for the water lines and fire hydrants.
- i. Water Lines shall be located in the center of the easement, where feasible.
- j. When using side lot easements, such easements shall be a minimum of 20 feet in width, located on one lot or centered between two lots. If centered between two lots, the water line may be centered within the 10 feet of one lot, or centered in the easement.

2. Fire Hydrants:
    - a. Use a minimum 10-foot by 10-foot easement for fire hydrants located outside of public rights-of-way.
    - b. Do not locate fire hydrants in 10-foot-wide water line or water meter easements.
  3. Meters and Valves:
    - a. Two-inch and smaller meters and shut-off valves (stop boxes) shall be set within public rights-of-way or water line easement if possible. Otherwise, they shall be set in 5-foot by 5-foot water meter easements contiguous with public right-of-way.
    - b. The minimum size of water meter easements contiguous with public right-of-way for three-inch through six-inch meters shall be 10-feet by 20-feet and for eight-inch and larger meters shall be 15-feet by 25-feet.
    - c. Water meter easements shall be located contiguous with public rights-of-way unless approved by the City. Access easements a minimum of 15 feet wide will be required when not contiguous with a public right-of-way.
- B. Easements for Wastewater Lines and Appurtenances.
1. Wastewater Collection Lines:
    - a. Easements adjacent to public rights-of-way, easements, or fee strips, including those owned by HCFCD, CenterPoint Energy, and pipeline companies.
      - (1) Easements for sanitary sewers 10 inches or less in diameter shall have a minimum width of 15 feet or a minimum width equal to the depth of the proposed sewer, whichever is greater.
      - (2) Easements for sanitary sewers 12 inches or greater in diameter shall have minimum width of 20 feet or a minimum width equal to the depth of the proposed sewer, whichever is greater.
      - (3) Easements for sanitary sewers 24 inches or greater in diameter that are to be installed by trenchless method of construction shall have a minimum width of 20 feet.
    - b. Sanitary sewer easements or other combined easements for sanitary sewers which meet the conditions below shall have a minimum width equal to twice the sewer's diameter plus the flow line depth of the sewer from natural ground, proposed fill elevation, or 100-year Floodplain Fill Elevation, whichever is greater; but not less than 25 feet. The qualifying conditions are:
      - (1) Runs through commercial reserves or across open country (acreage);

- (2) Serves other existing or proposed platted commercial reserves or non-platted acreage tracts; and
    - (3) Is not immediately adjacent to public rights-of-way, easements, or fee strips, including those owned by HCFCFCD, CenterPoint Energy, and pipeline companies.
  - c. Sanitary sewers shall be located in the center of the easement, where feasible.
  - d. Sanitary sewers less than 20 feet deep, which cannot be located in the center of easements shall be located a minimum distance of half the depth from the nearest side of the easement.
  - e. Sanitary sewers or force mains, installed in easements separated from public or semi-public rights-of-way by other private or utility company easements, shall be extended along or across the private utility company easement to provide access for maintenance of the sewer or force main.
  - f. Easements described in Paragraphs 5.07B.1.a through 5.07B.1.e shall be open-ended easements in conformance with City Codes, Ordinances and Planning Requirements. Such open-ended sanitary sewer easements shall be extended if necessary and shall be fully connected at both ends to public facilities including existing or proposed:
    - (1) Public road rights-of-way
    - (2) Wastewater treatment plant sites
    - (3) Wastewater pump station sites
    - (4) Public utility easement of adequate size for maintenance access.
2. Force Mains:
  - a. Force mains of all sizes shall have a minimum easement width of 20 feet for single lines which are not located adjacent to public or semi-public rights-of-way.
  - b. Force mains located in easements adjacent to public or semi-public rights-of-way shall have a minimum easement width of 10 feet subject to location and depth of the force main.
3. Service Leads: The minimum easement for building service leads is 6 feet.

- C. Storm Drainage Lines and Appurtenances
1. Storm Sewer Lines:
    - a. To the extent practical, storm sewers shall be placed in public road rights-of-way or permanent access easements with overlapping public utility easements in accordance with Chapter 6, Utility Locations.
    - b. Storm sewers shall have a minimum 20-foot-wide easement. In the event of extreme depth or large sewers, additional width may be required to allow for proper maintenance operations.
      - (1) Maintenance operations require an easement width equal to the storm sewer width plus the depth rounded up to the nearest multiple of 5-feet.
    - c. Storm Sewers shall be centered within the limits of the easement.
  2. Storm Water Detention Basins:
    - a. Easements for storm water detention basins shall be dedicated by plat or by separate instrument filed in conjunction with plat approval. Such easements shall be dedicated to the developer, owner, or water district.
    - b. Such easements shall have a minimum 20-foot width for private basins surrounding the perimeter of the detention basin as measured from top of bank unless adjacent to a street right-of-way.
- D. Easements for Combined Storm and Sanitary Sewer
1. Combined storm and sanitary sewer easement widths shall be as specified in 5.07C.1.b for storm sewer lines. The centerlines of sanitary sewer mains, trunks, or force mains shall be located in at least half the width of the easements defined in Paragraph 5.07B.1, but not less than 10 feet from the edge of the easement.
  2. The centerline of sanitary sewers on the outside of combined storm and sanitary sewer easements adjacent to public or semi-public rights-of-way, shall be located in at least half the width of the easement defined in Paragraph 5.07B.1.d, but not less than 10 feet from the outside edge of the easement.
- E. No variances will be approved by the City Engineer unless there are extenuating circumstances.

END OF CHAPTER