

**Chapter 4**  
**Utility Locations and City Utility Easements**

**Chapter 4**  
**Utility Locations and City Utility Easements**

<b>Section</b>	<b>Topic</b>	<b>Page</b>
4.1	Purpose of Standard Locations	4.1
4.2	Plans Required	4.1
4.3	Location Requirements	4.1
4.4	Street Categories	4.2
4.5	City Utility Easements	4.2
4.6	City Utility in Private Streets	4.3

## Chapter 4

### Utility Locations and City Utility Easements

#### 4.1 Purpose of Standard Locations

**4.1.1 Conflicts.** It is necessary to provide adequate space for utilities in a manner that will minimize conflicts between using the public right-of-way for transportation purposes and utility purposes. When street grades, alignments, or widths are changed, utilities are usually required to relocate. Oftentimes standard locations are inapplicable and unobtainable in street areas where existing utilities are seriously crowded and where it would not be feasible to expect major or dramatic reorientation of the underground. The location criteria must be practical and applicable in new developments, in urban relocation work, and in cases where overhead facilities are being converted into underground structures and plans.

**4.1.2 Relocations.** Utilities are not expected to revise existing facilities as to location or depth solely or primarily for the purpose of creating uniformity. However, when new or relocation work is undertaken, uniformity should be sought. It is acknowledged that the present may be locked in because of the past, but there should be consideration for uniform utility locations for the future.

#### 4.2 Plans Required

**4.2.1 Construction Approval.** Any utility or other facility constructed in City right-of-way shall have construction plans submitted and approved in accordance with requirements in these Design Standards and Chapter 96.235–96.243 of the revised ordinances of Sioux Falls, SD. No construction permit shall be issued for construction of new utilities or extension of existing facilities (except service taps or laterals to individual properties) without prior construction plan approval by the City.

**4.2.2 Conformance.** The applicant's completed facility shall be in conformance with the drawings or sketches referred to above, unless a special variance has been requested and approved by the City.

#### 4.3 Location Requirements

All utilities located within the public right-of-way shall be in accordance with drawings based on width of right-of-way and pavement width. (See Figures 4.1 through 4.7.)

- (1) Utilities already existing in non-standard locations may be replaced in the same location when permitted by the City Engineer.
- (2) Gravity lines shall take preference as to horizontal and vertical alignment over non-gravity systems and pressure systems.
- (3) Consideration will be given to the use of utility easements adjacent to the public right-of-way and to the use of alleys and medians.

- (4) In the event of a conflict, or if a particular utility requires more than one system be installed in the right-of-way, the alternate location may be used when permitted by the City Engineer.
- (5) Utilities shown are primarily for local distribution and collection. Large diameter lines may make it necessary to modify utility locations.
- (6) Storm drainage pipe shall normally be located on the south or east side of the street. Any drainage pipe 48 inches or larger in diameter shall be reviewed on a case- by-case basis.
- (7) Street trees placed between the curb and street side of sidewalk must not interfere with underground or overhead utilities.
- (8) Normally streetlights will be placed on the same side of the street as the electric utility.
- (9) Streetlights shall not be located closer than fifteen (15) feet horizontally to fire hydrants.

#### **4.4 Street Categories**

The City of Sioux Falls has developed a list of arterial and major collector streets where approval is required prior to any construction. All utility permits where work will be done in the street pavement or in the right-of-way and would require a lane closure, must be approved by the City Engineer. All proposed permits shall be submitted a minimum of 48 hours prior to construction and be accompanied by a traffic control plan. The street category list shall be maintained and revised as needed by the City Engineer's office.

#### **4.5 City Utility Easements**

Easements for sanitary sewer, public drainage, water main, and light and power shall be provided when the utilities are to be constructed outside of the typical street right-of-way (ROW) on private property.

**4.5.1** Public Easements shall be labeled specifically for the utility in which it is describing; for example:

Sanitary Sewer Easement  
Drainage Easement  
Water Main Easement  
Light and Power Easement

**4.5.2** Sanitary sewer, drainage, and water main easements shall have a minimum width of 20 feet. Additional width may be required by the City Engineer to ensure proper access for City maintenance equipment. When City utilities are to be located adjacent to one another, the minimum separation distance between the utilities shall be 10 feet. Light and power shall have a minimum easement width of 10 feet.

**4.5.3** The current permanent easement form for sanitary sewer, public drainage, water main, and/or light and power shall be used where the City utility is to be constructed on private property when easements were not included in the original plat, are incomplete, or inadequate.

**4.5.4** The current temporary construction easement form for sanitary sewer, drainage, water main, and/or light and power shall be used with the appropriate description inserted when a temporary construction easement is required.

**4.5.5** City utilities located outside of the public ROW in private streets shall meet “City Utility in Private Streets” requirements outlined below unless otherwise approved by the City Engineer.

#### **4.6 City Utility in Private Streets.**

**4.6.1** Private street width shall be a minimum 29 feet wide from back of curb to back of curb (28 feet of paved drivable surface) with a 30 foot minimum Private Street Easement.

**4.6.2** Easements shall be provided for City sanitary sewer, drainage, water main, and light and power located in private streets. The total easement width shall be 20 feet per utility with a maximum overlap of 10 feet per utility. Easements are to be centered over the respective utility (water main may be offset to achieve 10 feet of separation between the edge of the water main and edge of the sanitary sewer and/storm drainage pipe). The sanitary sewer shall not be greater than 12 feet deep from the finished grade to the invert. Additional sanitary sewer easement width shall be provided per the Chapter 9 EDS for sanitary sewer over 10 feet in depth. Public drainage and light and power easement locations and width will be coordinated when necessary.

**4.6.3** 10 foot Utility Easements shall be placed outside city utility easements. Private utilities and sump pump collection systems may be placed in the (general) utility easements.

**4.6.4** Two access points to provide through access shall be provided as a means of ingress and egress to the development to facilitate operation, maintenance, repair and/or replacement.

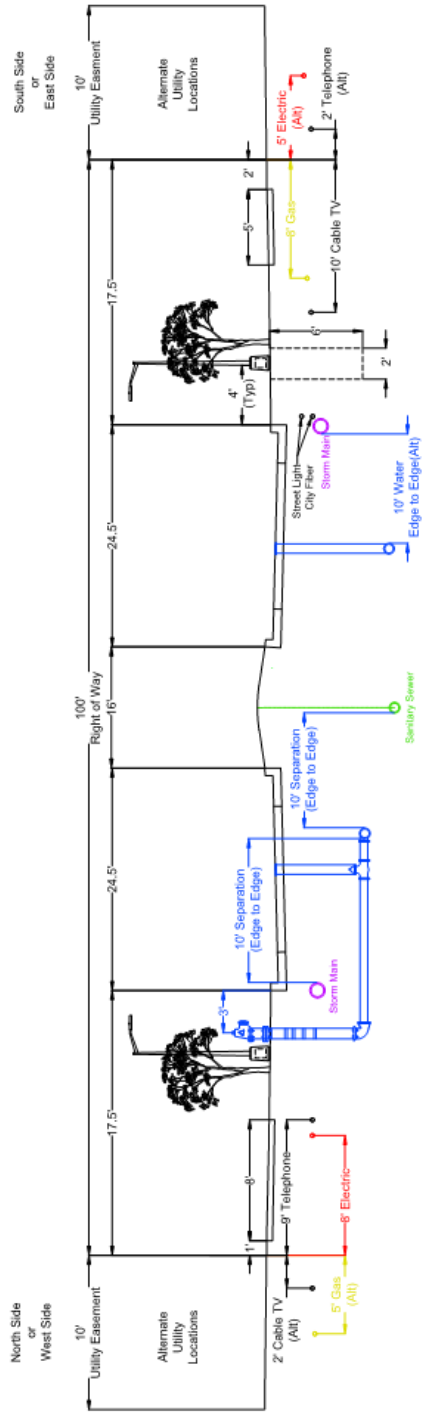
A cul-de-sac or hammerhead turn around meeting the minimum dimensions in Figure 4.8 shall be provided when two access points are not provided. Hammerheads shall not be combined with private driveways or parking places.

**4.6.5** Parking and parking spaces will not be allowed in fire lanes. Fire lane signs, unless otherwise specified by the Fire Marshall, shall be posted on one side of the fire apparatus access roads more than 26 feet wide and less than 32 feet wide. Fire lane signs shall be posted on the same side of the road as the sanitary sewer main.

**4.6.6** Gates to private streets with public utilities are prohibited.

**4.6.7** The City Engineer may approve the installation of private sanitary sewer, private drainage, and private water main when the utilities do not serve upstream properties or the developer would like to provide a gated development.

FIGURE 4.1



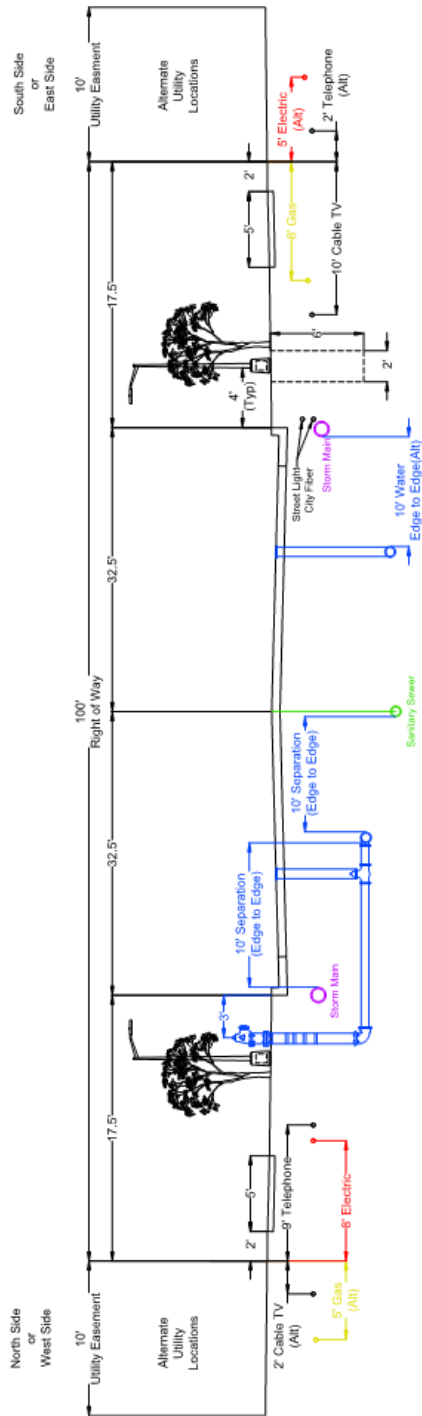
**100' Right of Way (with Median)**

No Scale

Normal Depth of Cover	
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

- Notes:**
- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
  - Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
  - Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
  - The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

FIGURE 4.2

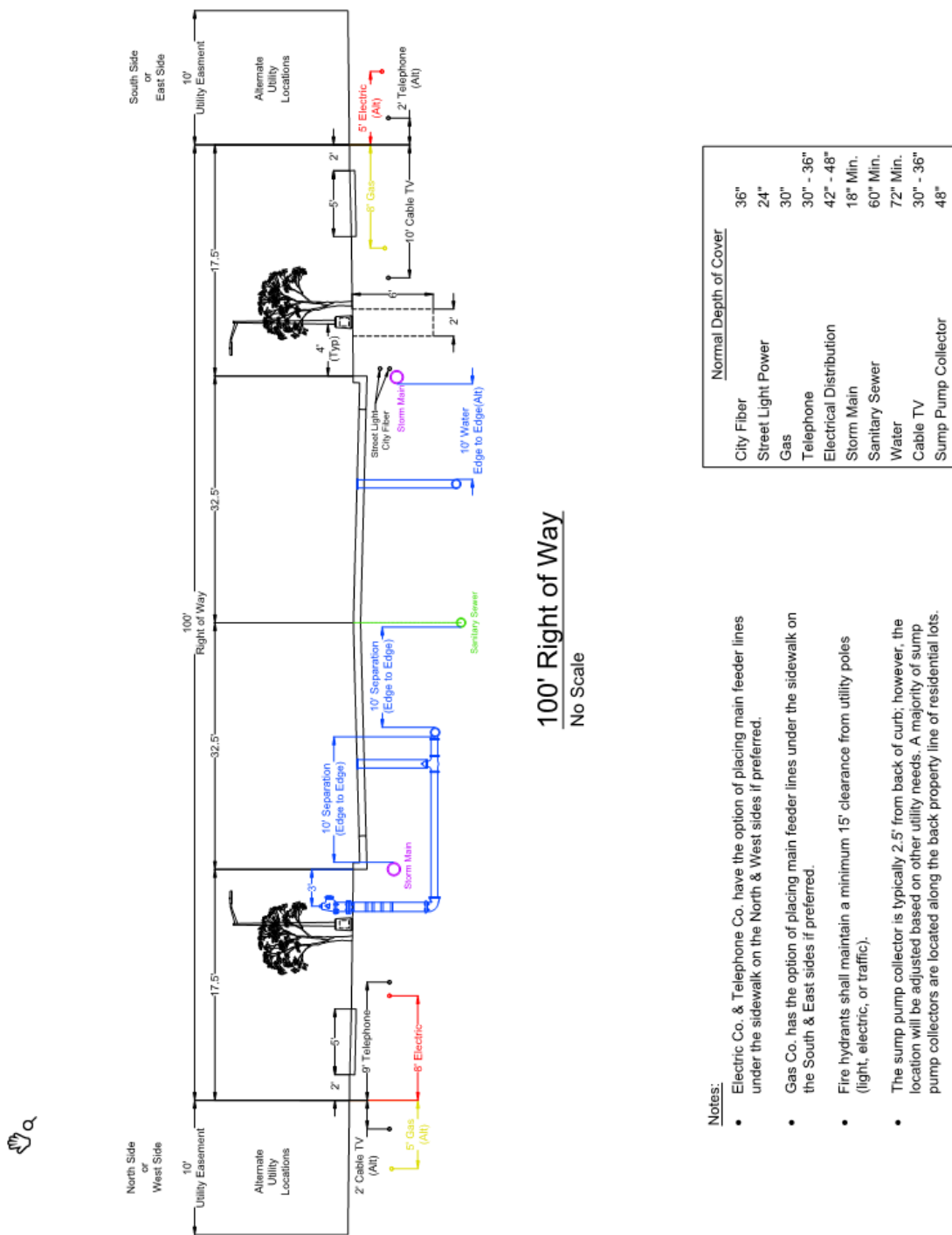


**100' Right of Way**  
No Scale

	Normal Depth of Cover
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

- Notes:**
- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
  - Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
  - Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
  - The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

FIGURE 4.2

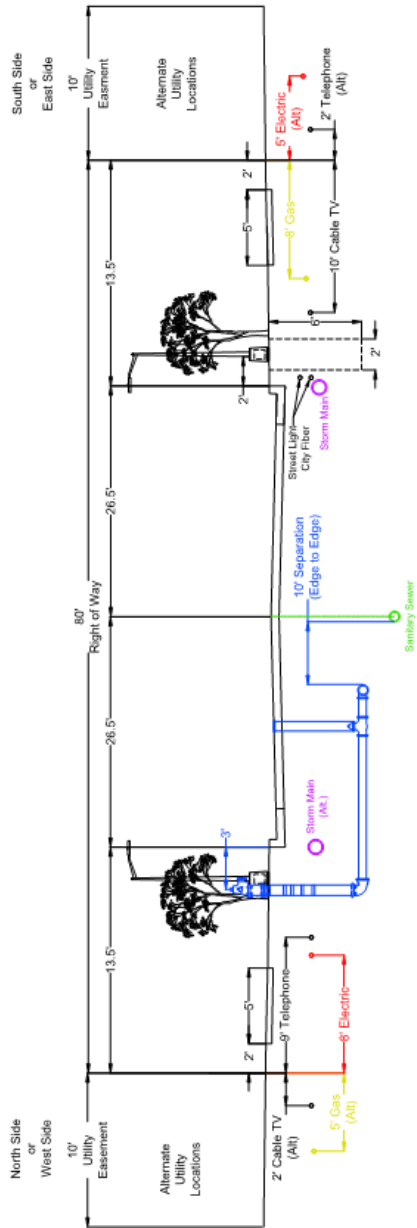


**100' Right of Way**  
No Scale

- Notes:
- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
  - Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
  - Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
  - The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.



FIGURE 4.3



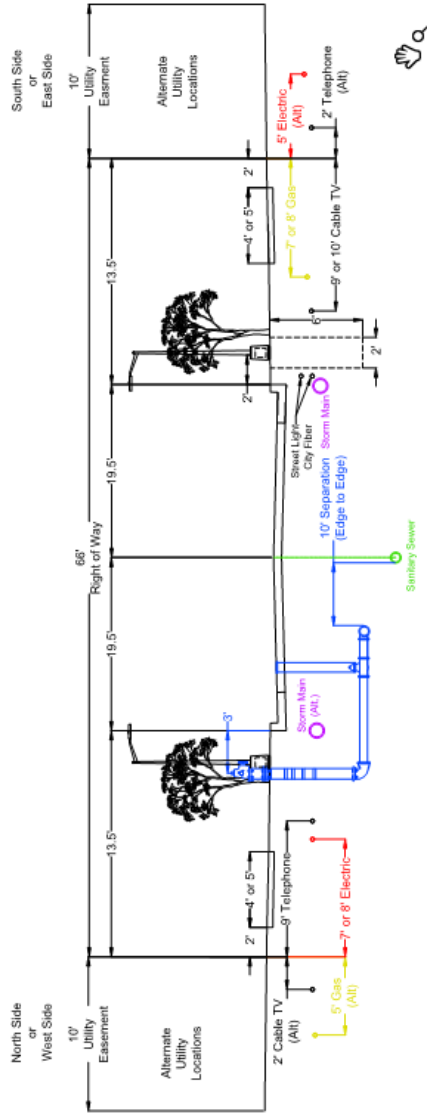
80' Right of Way  
No Scale

	Normal Depth of Cover
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

**Notes:**

- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
- Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
- Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
- The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

FIGURE 4.4



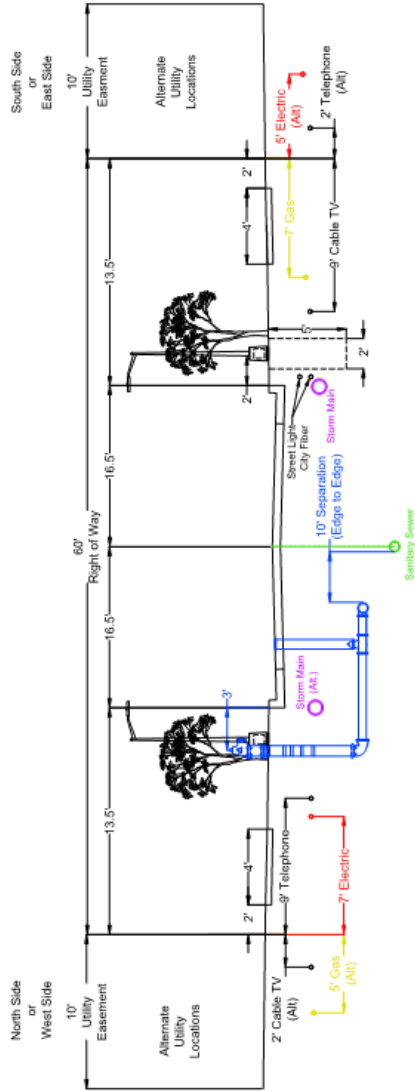
66' Right of Way  
No Scale

Normal Depth of Cover	
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

Notes:

- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
- Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
- Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
- The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

FIGURE 4.5



**60' Right of Way (33' back to back)**

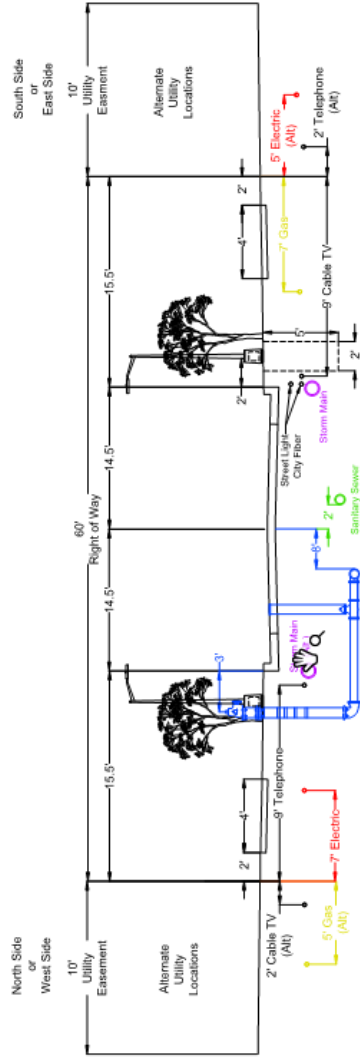
No Scale

**Notes:**

- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
- Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
- Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
- The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

	Normal Depth of Cover
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

FIGURE 4.6



**60' Right of Way (29' back to back)**

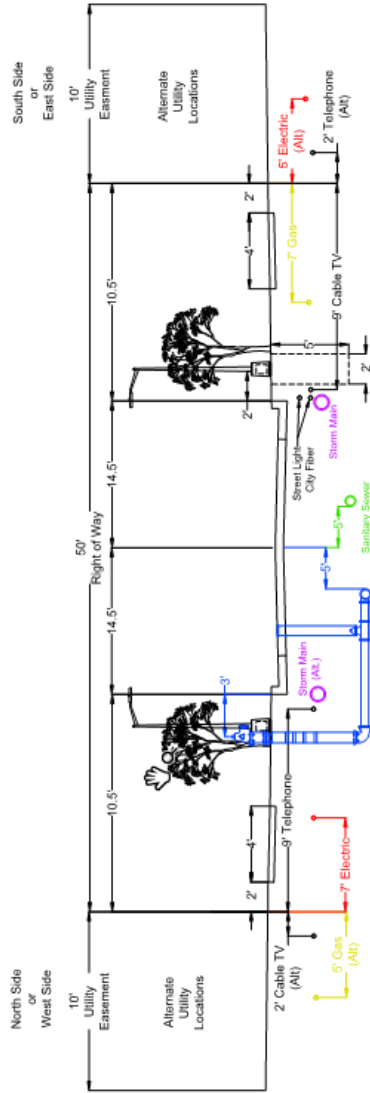
No Scale

**Notes:**

- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
- Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
- Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
- The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

	Normal Depth of Cover
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

FIGURE 4.7

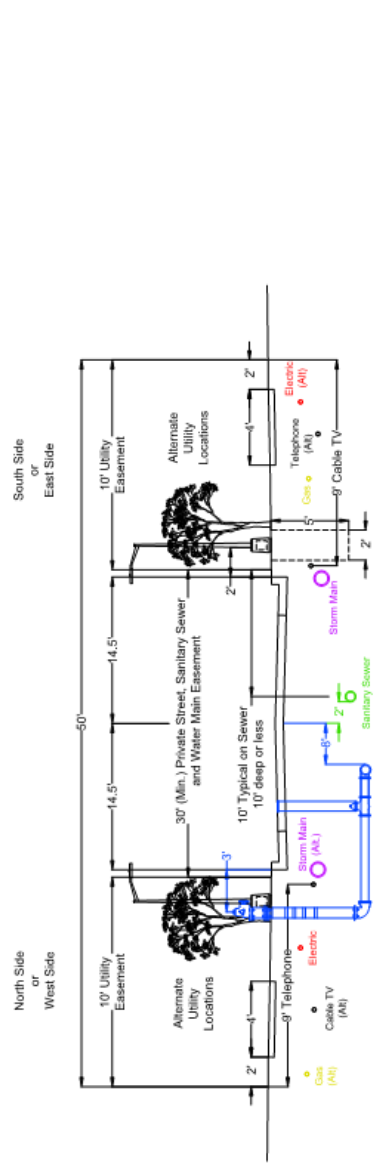


**50' Right of Way**  
No Scale

Normal Depth of Cover	
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"

**Notes:**

- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
- Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
- Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic).
- The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.

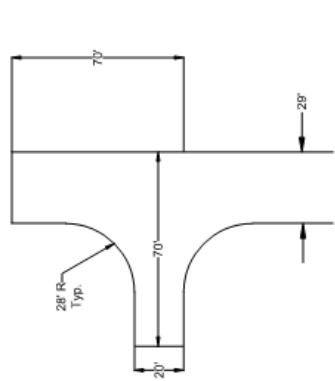


### City Utility in Private Streets

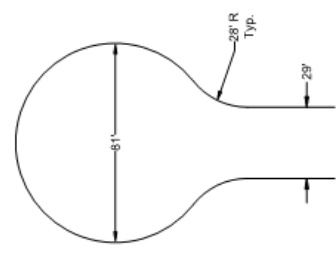
No Scale

- Notes:**
- Electric Co. & Telephone Co. have the option of placing main feeder lines under the sidewalk on the North & West sides if preferred.
  - Gas Co. has the option of placing main feeder lines under the sidewalk on the South & East sides if preferred.
  - Fire hydrants shall maintain a minimum 15' clearance from utility poles (light, electric, or traffic)
  - The sump pump collector is typically 2.5' from back of curb; however, the location will be adjusted based on other utility needs. A majority of sump pump collectors are located along the back property line of residential lots.
  - Additional easement required when sanitary is over 10' deep and when public storm drainage and light and power lines are required.
  - Private utilities including private storm drainage collection shall not encroach public sanitary sewer, water, storm drainage and light and power.

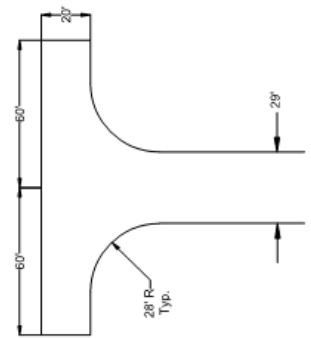
FIGURE 4.8



Acceptable Alternative to 120' Hammerhead



81' Back of Curb Diameter Cul-De-Sac



120' Hammerhead

Normal Depth of Cover	
City Fiber	36"
Street Light Power	24"
Gas	30"
Telephone	30" - 36"
Electrical Distribution	42" - 48"
Storm Main	18" Min.
Sanitary Sewer	60" Min.
Water	72" Min.
Cable TV	30" - 36"
Sump Pump Collector	48"