

that crossings are made at planned locations.

(4) The Plan Commission may approve overhead placement of distribution feeder and lateral lines if it is demonstrated that placement underground would be an undue financial hardship and that measures will be taken to minimize the visual impact of overhead utilities. Such measures shall include:

- (a) Construction alternatives.
- (b) Coordination and sharing of facilities and easements among all utilities with overhead lines.
- (c) Placement of overhead lines behind structures in alleys and easements rather than in the street.
- (d) Auxiliary equipment for underground utility service such as transformers, connection enclosures, switching devices and amplifiers may be pad mounted on grade or placed underground.

(B) Additional utility requirements.

- (1) All electrical distribution service lines shall be placed underground.
- (2) All utility companies and City departments which provide utility service within the SH 190 development corridor shall share facilities and easements where possible to minimize the visual impact of overhead utilities.
- (3) Any utility lines in place prior to the effective date of this article that are contrary to same are nonconforming. However, relocation or substantial improvement of existing utility lines shall occur in accordance with the standards set forth herein. Substantial improvement shall mean any improvement which results in an increase in the capacity of existing lines, such as the addition of lines or upgrading the size of lines.
- (4) Nothing contained herein is intended to alter the intent of any electrical franchise agreement ordinance.

(C) Spring Creek Preserve. Utilities within the ecological boundary of the Spring Creek Forest Preserve shall meet the following requirements:

- (1) Utilities shall only be allowed to cross the Spring Creek Forest Preserve in those areas designated as suitable crossing channels.
 - (a) Overhead utilities. Crossings shall be made only along existing roads. The lines should be situated such that no tree pruning will be necessary. Any tree pruning that does occur shall be performed by a recognized arborist. Alignments through the Spring Creek Forest Preserve shall be approved by the Plan Commission.
 - (b) Underground utilities. Utility lines that function independently of gravity shall be routed such that they cross the preserve along Holford Road and North Garland Avenue. All construction activity shall be confined to the road right-of-way. Gravity-powered lines needing access to the creek shall cross through the preserve only in the areas so designated in the Spring Creek Forest Preserve Master Development Study, 1991. Each collector line easement shall contain a collector capable of having connections from multiple sources to ensure service to all properties.
- (2) In addition to being restricted to designated crossing points, construction activities shall be subject to the following conditions:
 - (a) Under the observation of the Parks and Recreation Department the exact path shall be surveyed, marked and photographed in order to establish a record of preconstruction conditions. A tree survey shall be performed as part of the final design to locate each tree in the easement, determining size, species and location. Final design of the utility line should be based on minimizing impact to existing vegetation.
 - (b) No tree six inches “diameter at breast height” or larger is to be removed during construction without prior written approval of the Parks and Recreation Department.

- (c) The easement shall not exceed 15 feet with a maximum working width during construction of 20 feet.
- (d) Top soil shall be saved and replaced following construction activities. Creek beds, channel banks and all ground surfaces shall be restored to original contours. Temporary erosion control plans shall be developed for activities during construction and engineering plans shall incorporate permanent erosion control measures.
- (e) The surface shall be revegetated with native vegetation saved from the construction site and replanted following construction. The Parks and Recreation Department shall observe the removal and replacement of top soil and vegetation.
- (f) Underground utilities shall be constructed so as to prevent ground water from seeping into the filled trench and flowing to the creek.

(D) Technical Utility Coordination Committee. A Technical Utility Coordination Committee is hereby established. The purpose of this committee shall be to review and coordinate utility placement, both overhead and underground, utility construction plans, and long-range planning for utility demand and facilities.

(1) The committee shall be composed of representatives of all companies and City departments which provide utility service within the SH 190 corridor, including:

- (a) Garland Power and Light.
- (b) TU Electric.
- (c) GTE Southwest.
- (d) TCI Cablevision of the Metroplex, Inc.
- (e) Lone Star Gas Company.
- (f) City of Garland Department of Water Utilities.

(2) The Director of Engineering shall serve as chairman. He shall be responsible for establishing meeting times and coordinating the committee's activities. The Director of Planning shall serve in an advisory capacity.

(Ordinance 4719, sec. 1, adopted 10/19/93; Ordinance 4825, sec. 1, adopted 12/6/94; Ordinance 5565, sec. 1, adopted 5/15/01)

Sec. 34.25 Watershed management (this section shall apply only to the SH 190 Corridor)

(A) Site drainage. Site drainage is the responsibility of each developer and shall be in accordance with [chapter 31](#) of this Code, the Garland Storm Drainage Study 1976, the Rowlett and Spring Creek Floodplain Management Study 1988, and any subsequent studies implemented by the City.

- (1) Each site developer shall take measures to mitigate impacts to downstream and adjoining property from stormwater runoff and sedimentation.
- (2) Building sites shall require, to some degree, on-site detention as determined by the Engineering Department, to insure the needed mitigation.

(B) Alteration of the floodplain. No alteration of the floodplain of Spring Creek and Rowlett Creek shall take place unless in compliance with the provisions of the November 1988 Rowlett and Spring Creek Floodplain Management Study as adopted by the City [chapter 31, article VII](#) of this Code, as amended.

(C) Continuous greenbelt established. A continuous greenbelt shall be established along the creek corridors of Rowlett Creek and Spring Creek. Each development adjacent to the greenbelt shall handle stormwater runoff as to minimize negative impacts.

(D) Buffer zone established. A buffer zone consisting of an open space buffer strip, street, alley, or 15 foot minimum access easement (exclusive of the Spring Creek Forest Preserve) along the edge of the fully developed 100-year floodplain boundary shall be established to assure access for maintenance and provide for separation of the flood zones/greenbelt and development. Where the flood fringe slope is greater than 5 percent, the access easement shall be measured from the edge of the floodplain.

(E) Spring Creek Forest Preserve Requirements. Special precautions shall be taken when developing within the drainage area abutting the ecological boundary of the Spring Creek Forest Preserve. A demonstrated effort shall be made, including submittal of information for evaluation, to provide for the following:

- (1) No alteration or channelization of Spring Creek within the ecological boundary of the Spring Creek Forest Preserve shall be permitted except where required for public safety and welfare as approved by City Council.
- (2) Existing surface drainage patterns from properties adjoining the Spring Creek Forest Preserve are to be maintained. Changes of more than + 10 percent to the current calculated volume and velocity shall be prohibited as it leaves the site.
- (3) Drainage channels shall not be altered or moved.
- (4) Soil absorption and runoff rates shall closely approximate predevelopment rates through the use of such methods as stormwater retention/detention, diffused stormwater discharges, and similar measures.
- (5) Preservation of existing trees, especially oak, pecan, walnut, cedar, ash and elm species, shall be accomplished to the maximum extent possible.
- (6) Utility construction shall take place in pre-determined utility corridors identified in the Spring Creek Forest Preserve Master Development Study. Construction shall follow standards outlined in [section 34.24\(C\)](#) and shall include revegetation with native plant materials.
- (7) A street shall function as the primary buffer between the Spring Creek Forest and adjacent property. This buffer street shall be 27 feet wide, curvilinear in design and discontinuous across major thoroughfares, and shall have no direct driveway access.

(F) Temporary erosion, sediment and water pollution control. Contractors performing site work shall meet the provisions of "Temporary Erosion, Sediment and Water Pollution Control," Item 3.12 of the Standard Specifications for Public Works Construction–North Central Texas.

(Ordinance 4719, sec. 1, adopted 10/19/93; Ordinance 4825, sec. 1, adopted 12/6/94; Ordinance 5565, sec. 1, adopted 5/15/01)

Sec. 34.26 Water quality protection

(A) Outside storage of chemicals. All outside storage of chemicals or chemical wastes which exist as liquids at ambient temperatures must be conducted in a manner which will prevent the leakage or spillage of those chemicals or chemical wastes to the storm sewer or any appurtenance to the storm sewer. The following spill prevention requirements shall be met:

- (1) Drum storage. Drum storage shall be on an impervious surface, surrounded by an impervious dike or containment curb with no direct connections to the sanitary sewer or storm sewer. The diked enclosure shall be of sufficient volume to contain 10 percent of the total volume of drums stored or 100 gallons, whichever is greater.
- (2) Bulk storage tanks. Bulk storage tanks shall be installed on an impervious surface and surrounded by an impervious dike, containment curb, or pit with no direct connection to the sanitary sewer or storm sewer. The containment enclosure shall be of sufficient volume to contain the total volume of the single largest tank plus 5 percent of the volume of the single largest tank to account for impounded rainwater.

(B) Railroad tank car and tank truck unloading/loading facilities.