

DIVISION 5. - DRAINAGE

Sec. 35-26. - Drainage channel improvements required; exceptions.

In all instances, save and except where the width and/or size of the drainage channel renders it uneconomical and/or impractical as determined by the city council, it is the policy of the city to have improved all drainage channels by owner installation of reinforced concrete pipe or concrete lining. The final decision as to the size and/or type of channel improvements shall reside in the city council.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-27. - Design criteria.

(a) The design criteria for storm drainage improvements shall be as follows:

Drainage Area	Design Storm Frequency
Less than 100 acres	25-year frequency design
100 acres to 640 acres	50-year frequency design
Over 640 acres	100-year frequency design

- (b) Computations to determine whether such lots or land will be flooded by rainfall and the sizes of drainage facilities adequate to prevent flooding shall be based upon the appropriate criteria required by the city.
- (c) Enclosed storm sewers, open drainage ditches, bridges and culverts of a permanent design, adequate to carry off such rainfall, shall be installed by the subdivider throughout the entire length of the drainage area within the subdivision in accordance with plans and specifications approved by the city engineer and constructed under his supervision.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-28. - Responsibility for drainage—On-site.

Parties other than the city shall be responsible for all drainage improvements of whatever size required to adequately handle drainage originating within a subdivision or lot.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-29. - Same—Originating off-site.

- (a) Where drainage originates upstream and passes through a subdivision or lot, parties other than the city shall be responsible for all drainage improvements within said subdivision or lot required to handle off-site drainage up to but not exceeding the carrying capacity of a sixty-inch reinforced concrete pipe.
- (b) The city shall be responsible for the expense of all drainage improvements in excess of the carrying capacity of a sixty-inch reinforced concrete pipe required to handle drainage originating off-site. When the city is responsible for the expense of drainage improvements, the city shall be responsible for the cost differential between the drainage improvements required and the subdividers' responsibility for on-site and off-site drainage.
- (c) When a concrete-lined channel with a carrying capacity in excess of a sixty-inch reinforced concrete pipe is required for off-site drainage, the city shall be responsible for the expense of the bottom portion of the channel improvements and parties other than the city shall be responsible for the expense of the two (2) side slopes and the installation of the total channel.
- (d) The city's responsibility for contribution to required drainage improvements shall be based upon the rational engineering design most economical to construct, as chosen by the city engineer.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-30. - Same—Adjacent to subdivision or lot.

- (a) In an area where a subdivision or lot is adjacent to a drainage channel, responsibility for drainage originating on-site and off-site, shall be identical to the requirements of sections 35-28 and 35-29 with the following exceptions:
 - (1) When a concrete-lined channel with a carrying capacity in excess of a sixty-inch reinforced concrete pipe is required for off-site drainage, the city shall be responsible for the expense of the bottom portion of the drainage channel and the side slope opposite the subdivision or lot being developed; parties other than the city shall be responsible for improving the side slope adjacent to the subdivision being developed.
 - (2) The city retains the option of waiting until the property across the channel and adjacent to the subdivision or lot being developed is improved before the city participates in the cost of the drainage improvements. However, if the developer wishes to proceed with the installation of both sides of the channel improvements, he may do so at his expense. If the city exercises its option of waiting until the property across the channel is improved, the owner or developer of the property being developed shall make financial arrangements with the city in accordance with section 35-32 for the estimated cost of improvements for which he is responsible. When the adjacent property is improved, the owner or developer of said adjacent subdivision shall install the entire channel (two (2) sides and bottom) and the city shall pay out of escrow funds the expense of the bottom and of one side.
 - (3) In the event improvements to property are to be located upon property through which an unimproved storm sewer or drainage channel flows, the city engineer shall determine whether the improvements are located with such close proximity to the unimproved storm sewer or drainage channel that a possible danger exists if the wall of the drainage channel nearest the improvements is not constructed prior to issuance of a building permit and/or certificate of occupancy for the improvements to the property. If the city engineer determines a danger does exist, the property owner shall be required to construct the storm sewer improvement as a condition precedent to receiving a building permit and/or certificate of occupancy. In the event the owner does not agree with the decision of the city engineer he may appeal to the city council.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-31. - Cost of equivalent drainage structure.

When parties other than the city would be responsible for the slopes of drainage channels and choose to install multiple storm sewers in lieu of a concrete channel, the city reserves the option to participate in an amount equivalent to that it would pay for the bottom of a concrete-lined drainage channel.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-32. - Financial arrangements by persons responsible for improvements.

The person, firm or corporation responsible for participating in the storm sewer or drainage channel improvements with the city shall use one of the following methods for insuring payment to the city of said improvements, and same shall be accomplished prior to the issuance of a building permit and/or certificate of occupancy:

- (a) Place the share of the cost estimated by the department of public works in escrow with the city. The party responsible for a share of a storm sewer or drainage channel improvement shall be liable for the entire cost of its share of said improvement even though final cost exceeds the engineer's estimate; or
- (b) Secure a fidelity and surety bond pledging payment of the share of the actual cost of the improvements with payment to be made to the city when the city lets the contract for the improvement. The party responsible for a share of the improvements shall be liable for the entire cost of its share of said improvement even though final cost exceeds the engineer's estimate.
- (c) However, if the drainage channel, including the bottom and both sides, lies solely upon the land being improved, the owner or developer responsible for participating with the city shall construct the improvement prior to the time final inspections are performed and completed and said owner or developer shall construct the entire drainage channel improvement and the city shall participate in the cost of such improvement pursuant to the following:
 - (1) City shall participate only in the construction costs of those projects which so qualify as set forth in sections 35-29 and 35-30.
 - (2) The storm sewer or drainage channel project must be officially approved by city council resolution and the project must be bid by the city pursuant to Articles 2368a V.A.T.C.S. and 2368a.3 V.A.T.C.S.; and
 - (3) Either city must have sufficient current funds on hand appropriate for the purpose of funding the entire project prior to the award of the contract or the lowest responsible bidder must agree to look to developer for total payment prior to award of contract and the contractor must execute waiving any lien or other security interest in the project; and
 - (4) If city does not have sufficient current funds appropriated for the specific project and developer advances the necessary funds to permit city to bid and award contract or the contractor agrees to look to developer for city's participation costs, the debt to be incurred by city shall not become a debt until October 1 of the succeeding fiscal year in order that a sinking fund may be established and developer must so agree; and
 - (5) Any debt owed to developer resulting from an oversize storm sewer or drainage channel project pursuant to city's policy shall only be due and payable fifty (50) years from and after developer makes final payment to contractor for construction of the project. Said debt shall be noninterest bearing and city at its discretion may retire said debt prior to the expiration of the fiftieth year.
 - (6) Prior to city advertising for bids for the project, developer shall show city evidence of his financial ability to fund the entire project and at time contractor executes project contract, developer shall file a surety bond in favor of city and contractor to cover whatever may be the ultimate cost of the project or an irrevocable letter of credit in lieu thereof in an amount determined by contractor and director of public works to adequately cover the construction costs and contingencies of the project.

- (7) Developer must execute a contract prepared by the city attorney and approved by the city council evidencing agreement with requirements set forth in this participation policy.
- (8) Contractor must post performance, payment and maintenance bonds satisfactory to city naming city as the beneficiary and secure a liability insurance policy in an amount satisfactory to city for the purpose of insuring city from all property or bodily injury claims.
- (9) Contractor must execute a contract entitled "storm sewer participation contract," prepared by the city attorney and approved by the city council which requires contractor to look solely to developer for remuneration for any and all of the costs of construction and waive any and all liens upon the storm sewer and/or drainage channel improvements.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-33. - Responsibility of city to appropriate funding for city's participation.

The city shall not be required to participate in the expenses of the improvements required in any of the above sections until such time as the city council approves payment and appropriates funds for the project.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-34. - Overburden prohibited.

All storm sewer systems shall be installed in accordance with the plans and specifications approved by the department of public works and after acceptance of the drainage system by the city, no additional till shall be placed above the system nor shall structural alterations be made to the system.

(Ord. No. 5740, § 2, 1-18-90)

Sec. 35-35. - Erosion control.

It is a developers responsibility to control erosion during and associated with the installation of subdivision improvements. The city engineer may require a developer to submit an erosion control plan for approval by the city prior to installation of and acceptance by the City of Irving of paving and drainage improvements.

(Ord. No. 5740, § 2, 1-18-90)