

**COMMUNITY FACILITIES
AGREEMENT (CFA) POLICY,
RELATED ORDINANCE
AND STREET DESIGN CRITERIA**

**Policy Revisions Approved by:
M&C G-13181, March 20, 2001**

**TRANSPORTATION AND
PUBLIC WORKS DEPARTMENT**

A GUIDE TO LAND DEVELOPMENT

The following outline is prescribed as a guide for developing land in Fort Worth.

1. Make contact with the Development Department for guidance as to what steps are needed before land can be developed and used. It may also be advisable to contact the Transportation and Public Works Department, Water Department, Parks and Community Services Department, Planning Department and the Applications Division of the Development Department. The Development Department will give advice as to how much of the following outline will need to be followed for a particular piece of property.
2. Make formal request for annexation if area is not totally within the City, but is contiguous to the City limits.
3. File a concept plan with the Applications Division (Lower Level, Municipal Building) if you are not submitting a subdivision plat for the entire parcel.
4. File an application to amend Master Thoroughfare Plan with the Applications Division, if required.
5. File preliminary or short form plat with Applications Division.
6. File an application to vacate streets, alleys, easements and/or plats and applications for zoning changes with Applications Division.
7. After approval of preliminary plat, make request by letter to the Department of Transportation and Public Works for a community facilities agreement. Please include with the letter cost estimates and exhibits. (Community facilities include streets, street lights, street name signs, storm drains, water, sewer and park facilities, see page A-1.)
8. The City will participate in the costs of oversizing road, street, street lights, street name signs, traffic control devices, and drainage improvements. Subject to the exceptions listed in Section II, paragraph 7.C, the developer has the option to competitively bid the project and base City participation on the unit prices contained in the bid or to calculate City participation based on unit costs adopted by the City from time to time.
9. Execute community facilities agreement and provide the developer's financial guarantee. The Community Facilities Agreement is then presented to the City Council for approval.
10. File final plat or short form plat (see #5 above) with Applications Division. Upon approval of plat and submittal of a tax certificate reflecting that no taxes on the property are delinquent, the City will file the plat in the county plat records.
11. Construct community facilities as agreed to in the community facilities agreement and provide utilities as needed.

12. Land is now ready for a building permit.

NOTE: The above outline is intended to be used as a guide, and is not meant to be a complete list of requirements. Additional requirements may be imposed.

REQUIREMENTS FOR A COMMUNITY FACILITIES AGREEMENT REQUEST

The following must be submitted to the Director of Transportation and Public Works Department in accordance with the “Policy for Installation of Community Facilities”:

1. Name, mailing address/(local), telephone and fax numbers of developer and whether developer is an individual, corporation, partnership, joint venture, limited liability company or other entity.
2. Exact name and title of person(s) authorized to sign Community Facilities Agreement (CFA).
3. Filing fee of \$500.00 made payable to City of Fort Worth.
4. If developer is not an individual, copy of partnership or joint venture agreement, limited liability company regulations, corporate resolution or other documentation satisfactory to the City to establish authorization to sign the Community Facilities Agreement on behalf of the developer.
5. Submissions as per “Policy for Installation of Community Facilities” below:

COST ESTIMATE	Estimate for Developer’s Share of Cots	Estimate for City’s Share of Costs	Estimate for Total Costs of Project	MYLARS* Exhibit Showing Configuration of Development Size 8 ½” 11 ”
WATER LINES (if required)	REQUIRED	REQUIRED	REQUIRED	EXHIBIT “A”
SANITARY SEWER (if required)	REQUIRED	REQUIRED	REQUIRED	EXHIBIT “A-1”
STREETS OR ASSESS-MENT PAVING (if required)	REQUIRED	REQUIRED	REQUIRED	EXHIBIT “B”
STORM DRAINAGE (if required)	REQUIRED	REQUIRED	REQUIRED	EXHIBIT “B-1”
STREET LIGHTS (if required)	REQUIRED	REQUIRED	REQUIRED	EXHIBIT “C”
PARKS (if required)	REQUIRED	REQUIRED	REQUIRED	EXHIBIT “D”
TOTAL PROJECT	REQUIRED	REQUIRED	REQUIRED	LOCATION MAP <u>REQUIRED</u> – Show development’s Relationship to City

- * Exhibit letters should always be in alphabetical order beginning with A, no matter what facilities are required. EXAMPLE: No Water of Street Lights required; Exhibit “A” – SANITARY SEWER; “Exhibit B – STREETS; Exhibit “B-1” – STORM DRAINS; Exhibit “C” – PARKS, and LOCATION MAP.

DEFINITIONS

APPROACH STREET:

A new route or an open street not adjacent to a subdivision being platted, but which provides access or improved access to such subdivision.

APPROACH MAIN OR BOUNDARY FACILITY SERVICE CONNECTIONS:

Service connections located outside the development for which the “approach main” or “boundary facility” is constructed, and connected directly to the “approach main” or “boundary facility”.

APPROACH MAINS:

- a. Water
The offsite main required to connect a development to a source of ample supply, which shall not be less than eight inches in diameter.
- b. Sewer
The sanitary sewer required by the Water Department to serve the entire drainage area in which it is to be constructed, both inside and outside of a developer’s property, under ultimate development conditions, to connect sanitary sewer facilities in the development to the City sanitary sewerage system.

ARTERIAL ROADWAY:

Part of the roadway system that serves as a principal network for through traffic flow. Such roadways connect areas of principal traffic generation and include major thoroughfares and highways entering the City.

ASSESSMENT ADMINISTRATION:

Assessment administration costs includes advertising, filing fees, salaries, and all other associated costs in the City’s efforts in administering the assessment paving program.

BACK LOT:

Residential lot abutting two streets, but facing on the street not being improved.

BORDER DRAINAGEWAY:

A creek, channel, or low area which, in its natural state, conveys storm water runoff generally along the boundary of two properties which are under separate ownership; or a drainageway formed or excavated along such a boundary by work such as fill, berms, retaining walls, excavation, or features such as railroads, pipelines, or private roadways.

BORDER STREET:

A street that divides properties under a separate ownership, one side of which is adjacent to property being platted for development.

BOUNDARY STREET:

A street that forms a boundary between two municipalities.

BRIDGE:

A structure that supports a public street where it passes over a drainage way or street.

CCN:

The Certificate of Convenience and Necessity for water or sewer utility service issued by the Texas Natural Resource Conservation Commission to a public or private organization to provide exclusive water or wastewater service to a defined area.

CFA:

Community Facilities Agreement

CITY:

City of Fort Worth, Texas

CITY CODE:

The City Code of the City of Fort Worth (1986), as amended.

COLLECTOR STREET:

A distribution and collection roadway serving traffic between major arterials and local roadways that is used mainly for traffic movements within residential, commercial and industrial areas

COMMERCIAL DEVELOPMENT/COMMERCIAL PROPERTY:

All properties, other than one- and two-family residentially zoned properties, that require extensions of community facilities due to new construction or expansion of existing improvements on the property

COMMERCIAL ESTABLISHMENT:

Any establishment other than a one- or two-family residence

COMMUNITY FACILITIES:

Streets, storm drains, water and sanitary sewer facilities, bridge, culverts, and such other public facilities that are constructed under a community facilities agreement.

COMMUNITY FACILITIES AGREEMENT OR CONTRACT:

A contract between the developer and the City for the construction of one or more of the following public facilities within City public right-of-way or easement: water, sanitary sewer, street, storm drain, street light, and street name signs. A contract may include private facilities within right-of-way dedicated as private right-of-way or easement on a recorded plat.

CONSTRUCTION ENGINEERING shall consist of the following:

- a. Review and approval of plans and specifications and contract documents.
- b. Advertising and receipt of bids and award of contracts (if required).
- c. The setting of line and grade stakes from the approved plans.
- d. Necessary laboratory tests to assure compliance with plans and specifications except those specified in the project specification documents.
- e. Field inspection to assure compliance with plans and specifications.
- f. Review and approval of change orders submitted by developer's design engineer.

- g. Preparation of monthly estimates and final payments to the construction contractor.
- h. Final inspection for acceptance of project by City.

COUNCIL:

The duly elected and qualified governing body of the City of Fort Worth, Texas.

CURBLINE:

An imaginary vertical line that intersects the back of the curb of an existing or proposed street

CULVERT:

A conduit that carries storm water underneath a street

DEDICATED STREET OR ALLEY:

Any street or alley for which the right-of-way has become public property through platting, deed, or public usage as defined by law.

DEPARTMENT:

The department having jurisdiction over work being performed, including the Water Department, Department of Transportation and Public Works, or the Department of Engineering.

DESIGN ENGINEERING:

All necessary studies, tests, preliminary plans, and other documents necessary for the preparation of complete plans, specifications and contract documents meeting the approval of the department having jurisdiction over the work

DEVELOPER:

- a. Any type of new water or sewer customer other than a “single customer”.
- b. The owner or its agent of a tract of land that has been subdivided or is being subdivided.

DEVELOPMENT:

A tract of land to which a developer is extending street, storm drainage, water and/or wastewater facilities to provide service to one or more existing or proposed lots within the tract

DIRECTOR:

The director of the Water Department, the director of the Department of Transportation and Public Works, or the director of the Department of Engineering, as the case may be, or his or her designee.

DRAINAGE PLAN:

A general plan for handling the storm water affecting property proposed for development. The drainage plan shall show how and where water will be received from adjacent higher areas; how and where it will be collected and handled within the property; and how and where it will be discharged to a recognized drainageway in a lower area. The plan shall deal with individual watershed areas as necessary; show the proposed phasing of development and attendant phasing of drainage improvements; describe any unusual water features anticipated; provide topographic, physical and geographical information as required for concept plans per the Plan Commission Rules and Regulations; and form the basis for subsequent review of design plans submitted for property to be final platted.

EARTHWORK:

In regard to assessment paving, shall mean excavation, grading, borrow, embankment, clearing and grubbing, and preparation of right-of-way.

ENHANCED COMMUNITY FACILITIES AGREEMENT:

Any CFA that varies from this “Policy for Installation of Community Facilities”

EXISTING DEVELOPED RESIDENTIAL AREA:

A defined area in which at least fifty-one percent (51%) of the lots of record already have existing improvements and in which a community facility is required for the benefit of the area as a whole.

FIRELINE:

A private line for fire protection purposes connected to the Fort Worth water system that connects to a fire extinguishing system with an automatic sprinkler system, a standpipe system, a combined system, basement pipe inlet, and/or private fire hydrants.

FRONT FOOT CHARGES:

a. Water

The charge made for a connection to a water main, in addition to the regular tap or service connection fee, based on the front footage measurement of the property to be served. The amount of the front foot charge shall be established by ordinance.

b. Sewer

The charge made for a connection to a sanitary sewer, in addition to the regular service connection charge, based on the front footage of the property served. The amount of the front footage charge shall be established by ordinance.

FRONT FOOTAGE:

The number of linear feet in that portion of a property boundary abutting a street, alley, or easement containing a sanitary sewer or water facility for which front foot charges are collected for connection.

In the case of an easement containing a sanitary sewer for which front foot charges are collected for connection, which sewer crosses through the property to be served, the "boundary" on which the front foot charge is to be based shall be the length of the sewer within the limits of such property, measured along the center line of such sewer.

Front footage to be used in application of front foot charges shall be determined as follows:

- a. The front foot charge shall apply directly to property platted into the usual rectangular lots or tracts of land, except that the minimum front footage to be used in determining a charge to be made for connection of a one unit or a two unit residence shall be 100 feet.
- b. Where the property served is irregular in shape, the front footage shall be computed as one-sixth of the perimeter of such property, except that in no case shall the charge for a one unit or a two unit residence on such property be based on a front footage in excess of 100 feet. A front foot charge will be due each time a connection is made to a different water or sewer facility from such irregularly shaped lot or tract.
- c. On property which is rectangular in shape and has more than one boundary abutting a street, alley or easement containing a sanitary sewer or water facility servicing the property, only that boundary across which a connection is effected will be used in determining front foot charges, except as provided under a, b, and c.
- d. Where one or more residences are located on an unsubdivided tract, each such residence shall be charged for a front footage of 100 feet, with the provision that if the property is later subdivided into lots, each requiring additional connection to a sanitary sewer or water facility will be charged for front footage in the usual manner. Commercial property will be charged on the basis of actual front footage as defined above under a, b, and c.

INTERIOR STREET:

A street that is located within a development and is being platted, a street that has been platted and is not open on the ground, and/or an open street that bisects property under a single ownership.

IRREGULARLY SHAPED LOT:

A lot, either residential or commercial that has an irregular shape, such as triangular.

LOCAL OR MINOR STREET:

A roadway used primarily for direct access to residential, commercial, industrial, or other abutting property. Does not include roadways carrying through traffic.

MAJOR THOROUGHFARE:

See "Arterial Roadway"

NEW DEVELOPMENT:

The construction or installation of community facilities (including without limitation streets, storm drains, water, and sewer) in an undeveloped area

NEW STREET CONSTRUCTION:

Paving of a street that has not previously been paved, or that has been surfaced, but is not on City grade.

NON-CONFORMING USE:

A use of property that was legal when established but that no longer conforms to the zoning ordinance.

NON-PROFIT PROPERTY:

Any property such as churches or schools that is carried as exempt on City tax rolls.

ON-SITE MAINS:

a. Water

An on-site water main is one that provides service within a development or subdivision

b. Sewer

An on-site sanitary sewer main is one designed to serve the entire drainage area in which it is to be constructed both inside and upstream from all or part of a developer's property, under ultimate development conditions, but which is located entirely within the limits of the development.

OPEN STREET OR ALLEY:

Any street or alley for which the right-of-way has become public property through platting, deed, or public usage as defined by law, and which is presently being used by vehicular traffic.

ORDINANCE:

City of Fort Worth Ordinance No. 7234, as it may be amended from time to time, amending the Code by adding Appendix H, which Appendix shall constitute the "Subdivision Ordinance of the City of Fort Worth".

OWNER-OCCUPIED RESIDENCE:

A building used as the actual residence of the owner, with the only commercial enterprise being rental of one part of a duplex or one room of the building for residential purposes.

PUBLIC WATER:

The concentration of surface water flowing through or from public land, right-of-way or easements. Public water must be contained within a drainage easement until these waters return to a natural flow condition.

REDEVELOPMENT:

The reconstruction or the improvement of an area within a built-up area with existing community facilities.

RESIDENTIAL DEVELOPMENT:

Any platted residential property along a street where the greater portion of the property footage between two intersecting streets is owned by the individual or firm developing all or any part of the lots, or any new residential platting.

In the case of storm drain policy, this designation shall apply to all residential subdivisions in which houses are not constructed on at least 51 percent of the lots of record within the area defined as requiring community facilities.

RESIDENTIAL PROPERTY:

Property zoned "A-43", "A-21", "A-10", "A-7.5" or "A-5" one-family, "B" two-family, "R-1" or "R-2" Residential or "AR" residential and used for either one-family or two-family dwellings.

SERVICE CONNECTIONS:

- a. Water
The connection between a water main and the water meter through which a given property is supplied with water.
- b. Sewer
That portion of the house sewer located in the roadway of a public street between the main or lateral sanitary sewer in such street and a point approximately three feet behind the curb line of such public street nearest to the site to be served, or to that portion of the house sewer located in a public alley, or to the tap and test tee installed for connection to a sanitary sewer located in the parkway of a public street or in an easement.

SHORT FORM COMMUNITY FACILITIES AGREEMENT:

A letter agreement between a Developer and the City for the installation of storm drainage, street, water or sanitary sewer improvements involving no City cost participation.

SIDE LOT:

Residential property abutting two streets at their intersection, with the longer street frontage being the side of the lot.

SINGLE CUSTOMER:

An existing occupied residential establishment or an existing commercial establishment not presently connected to the City's water and/or sanitary sewerage systems.

STORM DRAIN PIPE:

A continuous pipe that carries storm water beneath the surface of the ground.

STREET:

Property dedicated for the public's use for vehicular and/or pedestrian traffic, including a street dedicated as a private street.

STREET RECONSTRUCTION:

The widening and/or complete rebuilding (including base rehabilitation and new surface construction) of an existing street that has asphalt, concrete or brick surface built on City grade.

UNOPENED STREET OR ALLEY:

Any dedicated street or alley that is not being used by vehicular traffic.

**PROCEDURES FOR OBTAINING A CONTRACT
FOR THE INSTALLATION OF COMMUNITY FACILITIES**

1. Contracts for the Installation of Community Facilities Required:

A contract for the installation of community facilities is required when community facilities are needed and whenever any new construction is planned. The life of a standard Community Facilities Agreement (CFA) shall be two (2) years. The City's obligation to participate (exclusive of front foot charges) in the cost of the community facilities shall terminate if the facilities are not completed within two (2) years; provided, however, if construction of the community facilities has started within the two year period, the developer may request that the CFA be extended for one year. If the community facilities are not completed within such extension period, there will be no further obligation of the City to participate.

City participation in a CFA shall be subject to the availability of City funds and approval by the Fort Worth City Council.

2. Information Regarding Proposed Contracts:

Information concerning proposed contracts for installation of community facilities can be obtained from the Transportation and Public Works, Water or Development Departments.

3. Requests for Preparation of Community Facilities Agreements:

- A. The developer shall request in writing a formal CFA with the City providing for the installation of all streets, storm drainage, street lights, electronic traffic signals, water and/or wastewater facilities within the development along with all required approach facilities and provide the appropriate department with plans and specifications for the proposed community facilities.
- B. The plans and specifications in a format acceptable to the City for the construction of the community facilities shall be prepared by an engineer licensed to practice in the State of Texas. For water or sewer extension projects of less than 600 feet using pipe sizes of 12 inches or smaller, the developer may request the City to design the project at a cost of 10% of the total construction cost. If the plans and specifications meet the applicable policies, regulations and design criteria, they shall be approved by the City. The determination as to compliance of the plans and specifications with applicable policies, regulations and design criteria shall be the sole responsibility of the Director.

1. Approval by the City of the plans and specifications shall not constitute or be deemed to be a release of the responsibility and liability of the developer and its engineer, their officers, agents, employees and subcontractors, for the accuracy and competency of the plans and specifications, including but not limited to surveys, location of subsurface investigations, design, working drawings and specifications and other engineering documents.
 2. Such approval shall not be deemed to be an assumption of such responsibility and liability by the City for any negligent act, error or omission in the conduct or preparation of the subsurface investigation, surveys, designs, working drawings and specifications and other engineering documents by the developer and its engineer, their officers, agents, employees and subcontractors, it being the intent of the parties that approval by the City signifies the city's approval of only the format of the plans and specifications and the general design concept of the improvements to the constructed.
- C. Before a developer may award a contract for the construction of community facilities:
1. For water and wastewater facilities, the contractor must be prequalified in accordance with the requirements of the Water Department.
 2. For street and storm drainage facilities, the contractor must be licensed and bonded to do work in the public streets in accordance with the City Code.
4. Early Construction of Water and Sewer Facilities:

If the developer desires that work be started on water and/or sanitary sewer facilities in advance of execution of the contract covering installation of all facilities, such work may be initiated in the following manner:

- a. Submit a written request to the Water Department that construction work on water and/or sewer facilities be initiated at the earliest possible time, even if before the requested contract providing for these and other facilities is executed, and stating his understanding that such facilities will not be connected and placed in service until the contract is executed.
- b. As determined below, deposit funds for the developer's share of the cost of such water and/or sewer facilities prior to award of a construction contract, if work is to be done by a private construction firm, or prior to issuance of a project authorization, if construction is to be done by City forces.
- c. It is necessary that the subdivision plats be recorded prior to water and sewer facilities construction and that street profiles and storm sewer design grades be established before the water and sanitary sewer facilities are designed.

5. Approval of Community Facilities Agreements With City Participation:

After the CFA has been signed by the developer and returned to the appropriate City department, together with the financial guaranty, it will be submitted to the City Manager for review. If the provisions of the CFA conform with, or exceed minimum requirements of City Council policies for the installation of community facilities, the City Manager will submit the CFA to the City Council for authorization to execute it. If any special provisions or deviations from established policies are included in the CFA, specific approval of those provisions by the City Council is required. Approximately three weeks are normally required before the CFA can be scheduled on the agenda of the City Council meeting.

6. Developer's Financial Guaranty:

A. Time for Providing Financial Guaranty

At the time a CFA is executed, the developer shall provide the City with adequate financial security to guaranty the developer's obligations under the CFA, which include but are not limited to the developer's obligations to construct all the community facilities contemplated by the CFA and the payment by the developer to all contractors with whom the developer has a contract. No construction work shall ever begin until the financial guaranty has been accepted and approved by the City.

B. Form and Amount of Financial Guaranty

1. The developer shall provide its financial guaranty in one of the following forms:

a. Developer Bond

A developer bond in the total amount of the developer's share of each or all contracts for the construction of the community facilities contemplated by the CFA shall be provided to the City. The developer and a surety company acceptable to the City on forms provided by the City shall execute the bonds. The bond must meet the requirements of Chapter 2253, Texas Government Code and must be executed by a corporate surety in accordance with Article 7.19-1, Vernon's Texas Insurance Code, as same may be amended from time to time.

b. Escrow Pledge Agreement

An Escrow Pledge Agreement in the amount of 125% of the developer's share of each or all contracts for the construction of the community facilities contemplated by the community facilities agreement shall be provided to the City. The Escrow Pledge Agreement shall be forms provided by the City.

The addition 25% above the actual the developer's share shall be considered the developer's change order fund.

With City approval, the developer may make timely withdrawals from the escrow account to pay its contractor(s) based upon the amount of construction work completed as approved and verified by the Director of the department having jurisdiction over the work.

c. Completion Agreement

A Completion Agreement in the amount of 100% of the developer's share of each or all contracts for the construction of the community facilities contemplated by the CFA shall be provided to the City. The Completion Agreement shall be on forms provided by the City. With City approval, the developer may make withdrawals timely from the funds deposited as required by the Completion Agreement to pay its contractor(s) based upon the amount of construction work completed as approved and verified by the Director of the department having jurisdiction over the work.

If a Completion Agreement is used to guaranty the developer's obligations under the CFA, the plat shall not be filed until the community facilities are substantially completed and all Hard Costs (as defined in the Completion Agreement) contractors have been paid, less retainage.

d. Letter of Credit

A letter of credit in the amount of 125% of the total amount of the of the developer's share of each or all contracts for the construction of the community facilities contemplated by the CFA shall be provided to the City. The letter of credit shall be issued by a financial institution having a net worth of at least \$500,000,000.00 and shall otherwise be acceptable to the City in its sole discretion. The financial institution shall be located in Tarrant County, Texas and the letter of credit shall be presentable and drawable at such location. The additional 25% above the actual developer's share shall be considered the developer's change order fund.

e. Cash Deposit

A cash deposit in the amount of 125% of the total amount of each or all contracts for the construction of the community facilities contemplated by the CFA shall be provided to the City. The additional 25% above the developer's share shall be considered the developer's change order fund.

With City approval, the developer may make timely withdrawals from the cash deposit to pay its contractor(s) based upon the amount of construction work completed as approved and verified by the Director of the department having jurisdiction over the work.

2. Estimate of financial guaranty

In the event the financial guaranty provided by the developer is based upon estimates of construction that are less than the actual amount of the construction contract(s), additional financial security shall be provided to equal the total amount of the construction contract(s).

7. Award of Contracts for the Construction of Community Facilities:

- A. If the City is not to participate in the cost of the community facilities, the developer, at its sole option, may either negotiate its contract for the construction of the community facilities or competitively bid the contract.
- B. Except as provided for herein, where there is City participation, the developer may either negotiate or competitively bid contracts for the construction of community facilities contemplated by the CFA.

1. Negotiation of Construction Contracts

If the developer elects to negotiate the construction contract(s), City participation shall be made in accordance with unit prices contained in ordinances adopted by the City Council in the manner provided for herein.

2. Competitive Bids

If the developer elects to competitively bid the construction contract(s), the process shall be in accordance with state law. The contract shall be awarded to the lowest responsible bidder. An award of contract to any bidder other than the lowest responsible bidder shall waive the developer's right to City participation. City participation, if any, shall be determined from the actual construction costs based upon the unit prices contained within the bid proposal of the construction contract awarded for the community facilities contemplated by the CFA.

3. Time for Making Election

At the time of the execution of the CFA, the developer shall advise the City in writing the manner in which it will award a contract for the construction of the community facilities contemplated by the agreement. If the developer elects to competitively bid the construction contract(s), the bid process shall be in accordance Section II, Paragraph 7.D. Upon the advertisement for the solicitation for competitive bids, the developer's election to competitively bid the construction contract(s) shall become final and irrevocable.

C. Competitive Bidding Required for the Construction of Certain Community Facilities

Competitive bidding shall be required in the following instances:

1. Construction of water mains greater than sixteen (16) inches.
 2. Construction of wastewater mains greater than twenty-four (24) inches.
 3. Construction of pump stations, lift stations and storage tanks.
 4. All community facilities contemplated by an Enhanced Community Facilities Agreement.
 5. All other community facilities for which unit prices are not included in City ordinances adopted for the purpose of calculating City participation.
- D. Where competitive bidding is required herein or where the developer elects to competitively bid the project, in order to be entitled to City participation, the following is required:
1. Compliance with State Law and City Ordinances

The developer shall comply with all competitive bid requirements, both state and local.
 2. Notice to City.

The Director shall be informed not less than seven (7) days prior to bid opening and will be provided two copies of the bid documents.
 3. Bid Opening.

All bids shall be opened in City Hall at a time and location therein to be designated by the City. The developer or his representative shall provide a list of all prospective bidders to the Director at least 24 hours prior to the bid opening.
 4. Prequalification.

All prospective bidders must be prequalified to bid on the project in the same manner as prospective bidders must prequalified for City awarded water and wastewater.
 5. Award to Lowest Prequalified Bidder.

The developer shall let the contract for the project to the lowest responsible prequalified bidder on the work to be done. If the developer elects to award the contract to any contractor other than the lowest responsible prequalified bidder, the developer waives its right to City participation. In the event the developer wishes to award one contract for all community facilities, City participation will be limited to the amount the City would pay if separate contracts were awarded to the lowest possible combination of bidders.

6. Confirmation of Award of Contract.

Before the Department issues a confirmation of award of contract, the following items are required to be submitted or deposited with the Department:

- (a) The executed CFA must show the estimated amount of City participation. For water and sewer projects, the developer may start work in advance of the execution of the CFA by complying with Section II, Paragraph 4 of this Policy, provided that the water and/or sewer portion of the CFA showing the estimated City participation has been approved by the Director.
- (b) A bid tabulation showing the bid proposals of all the prospective bidders.
- (c) Publisher's affidavit from the official newspaper of the City.
- (d) A letter of recommendation from the developer for contract award to the lowest responsible prequalified bidder.
- (e) A breakdown of developer cost and City participation based upon the bid items contained in the lowest responsible prequalified bid.

E. If the City is to award the construction contract:

- 1. Prior to the award of the contract, the developer shall deposit in cash with the City 125% of the developer's share of the total construction cost as calculated herein above, plus ten percent (10%) for engineering and miscellaneous cost, if the City prepares the plans, together with construction inspection and material testing fees, and all required fees and charges in accordance with City ordinances and policies.
- 2. Within a reasonable time after receipt of one hundred percent (100%) of the developer's cost, the Director may release all or a portion of the initial developer's financial guaranty.

8. Administration of the Construction Contract:

- A. The developer shall be responsible for the construction of all community facilities required to provide facilities or service to the development.

- B. No facilities shall be installed in a public right-of-way or easement until such right-of-way or easement has been excavated to the appropriate subgrade elevation.
- C. Prior to the issuance a notice to proceed allowing construction to start, the following are required:
 - 1. The CFA between the developer and the City shall be completed and executed. The developer may elect to use an Informal Developer's Agreement in accordance with Section II, Paragraph 4, "Early Construction of Water and Wastewater Facilities".
 - 2. Signed easement instruments or recorded final plat(s) showing all required easements for water and/or wastewater facilities which are not to be installed in proposed rights-of-way, or existing utility easements and executed railroad, state, county or such other permits as may be required.
 - 3. Adequate financial security to guaranty the developer's obligations as required by paragraph 5, Form and Amount of Financial Guaranty, above.
 - 4. Payment to the City in cash for the construction inspection and material testing fee equal to four percent (2%) of the developer's share of the construction cost of street, storm drainage, water and sewer facilities as stated in the construction contract.

At the same time that City participation is due to the developer, the construction inspection fee will be recalculated using the actual construction contract cost based upon the actual quantities as reflected in the final payment estimate. In the event the difference in the construction inspection fee paid to the Department and the recalculated construction fee based upon the final payment estimate of the construction contract varies by more than \$25.00, the developer shall pay the City under any underpayment which the adjustment might indicate as being due, and the City shall pay the developer any overpayment.

- 5. Payment of required fees and charges in accordance with the City Code.
- 6. Delivery to the City and contractor of the required number of street, storm plans and executed construction contracts between the developer and its contractor, which shall include the following:
 - a. A performance and payment bond in the amount of the construction contract executed by the developer's contractor and a surety acceptable to the City in the name of the developer and the City covering the construction of the community facilities.

- b. Regardless of the amount of the contract, a maintenance bond in the amount of the construction contract executed by a surety acceptable to the City in the name of the City covering the community facilities to be constructed against defects in materials and/or workmanship for a period of one year after completion and acceptance of the facility by the City.
 - c. Insurance certificates in the amounts required by the contract documents. The City shall be added as an additional insured under all insurance policies.
 - 7. The developer shall require its contractor to give at least 48 hours notice to the Department of Engineering prior to work beginning in order for City inspection personnel to be available
- D. All construction of community facilities shall be subject to inspection at any and all times by the City inspection personnel, and in no case shall any community facilities be installed unless the responsible City of Fort Worth inspector is present or gives consent to proceed. The developer shall be responsible for all laboratory tests of materials being used as may be required by City inspectors, such tests to be performed by an independent laboratory.
- E. The developer shall be responsible for all surveying, including but not limited to control points, and centerline stakes, together with cut stakes in accordance with City surveying guidelines.
- F. All estimates for partial and final payments shall be approved by the Director prior to payment by the developer to the contractor. The approval of any partial payment shall in no way constitute acceptance of the work, nor in any way affect the obligations of the developer under this Policy or the community facilities agreement.
 - 1. If the contract cost is \$400,000 or greater, such release from the financial guaranty shall equal the percentage of work completed for that period multiplied by ninety-five percent (95%). This percentage shall be applied to the actual current total contract cost to determine the amount that may be reduced upon request of developer.
 - 2. If the contract cost is less than \$400,000, such release from the financial guaranty shall equal the percentage of work completed for that period multiplied by ninety percent (90%). This percentage shall then be applied to the actual current total contract cost to determine the amount of security that may be reduced upon request of developer.

WATER AND WASTEWATER INSTALLATION POLICY

Except as otherwise noted herein, Director as used in this section shall mean the Director of the Fort Worth Water Department.

The following policy shall govern the installation of all water and/or wastewater facilities within the corporate limits of the City of Fort Worth, Texas and its extraterritorial jurisdiction.

A. WATER AND WASTEWATER FACILITIES – NEW DEVELOPMENT.

1. GENERAL REQUIREMENTS FOR NEW DEVELOPMENT.

(a) EXTENSIONS.

In accordance with Section 104.303 of the Ordinance, except for property lying within the service area of a CCN owned by an entity other than the City, all platted lots (either existing or proposed) or tracts of every subdivision shall have a City water and wastewater facility extended to it to provide service. The developer shall inform the Director, in writing, of all lots and blocks within the subdivision/development to be served.

(b) DESIGN.

In accordance with Section 104.302 of the Ordinance, all water and/or wastewater systems shall be designed to meet the City design requirements, including providing for fire protection.

To determine the water and/or wastewater facilities required to provide service to the proposed development and the surrounding properties, a comprehensive water and/or wastewater facilities study is required to evaluate the adequacy of the planned water and/or wastewater facilities for the present and future needs. The study shall include a hydraulic study for water distribution systems and/or a drainage study for the wastewater collection system. The developer's engineer shall recommend the size of on-site and approach water and sewer facilities. The Director shall determine the final sizes of such facilities based upon the recommendation of the developer's engineer, City design criteria, the City Fire Code and other applicable criteria.

(c) MATERIAL/CONSTRUCTION REQUIREMENTS.

In accordance with Section 103.500, Section 104.200, and Section 104.302 of the Ordinance, all community water/wastewater systems shall be constructed utilizing materials and construction methods meeting Department specifications.

(d) APPROVAL.

In accordance with Section 103.500, all construction plans and specifications for the construction of community water/wastewater facilities shall be reviewed and approved by the Director in writing.

(e) COMMUNITY FACILITIES AGREEMENT.

In accordance with Section 104.100 of the Ordinance, a community facilities agreement, together with the acceptable financial guarantee required therein, will be required for the construction of any community water/wastewater system. No building permit shall be issued and no work shall be started for the installation of such community facilities unless and until the developer has contracted with the City to provide for the installation of such improvements.

(f) FRONT FOOT CHARGE REFUNDS.

In accordance with Section 35-58 of the City Code, front foot charges will be collected for any service connection or any extension to adjacent property from an approach water and/or wastewater main constructed by a developer or single customer property owner. These front foot charges will be refunded to the developer or single customer property owner who initiated construction of the approach facility in accordance with Section F.2 of this Policy.

(g) WATER AND SEWER PARTICIPATION ON MAINS ADJACENT TO PARK PROPERTY

The Water Department shall participate in the cost of water or sewer facilities located in the public right of way adjacent to a park to the extent such facilities exceed the minimum street frontage required by the Park and Community Services Department. Water Department participation will be calculated by multiplying the excess length times the applicable front foot charge divided by two (2). If park property is located on both sides of the public right of way, Water Department participation shall be calculated by multiplying the excess length times the applicable front foot charge.

Payment of this participation shall be made when the community facilities have been completed and accepted and the park property has been deeded to and accepted by the City.

2. STANDARD POLICY.

The developer shall cause to be constructed all water and/or wastewater facilities required to provide service to the development, subdivision or lot/tract. The division of costs of such construction shall be as follows:

(a) APPROACH FACILITIES.

(i) Standard Approach Water and Wastewater Facilities.

The developer shall be responsible for one hundred percent (100%) of the cost of the approach water and/or wastewater facility sized in accordance with the Department design criteria and the City Fire Code. The approach main and appurtenances must be capable of providing water and/or wastewater service to the development from a point in the existing water and/or wastewater system that has adequate capacity as determined by previous studies as required in Section A.1.b. Standard water pipe size shall be eight (8) inches in residential and commercial development and twelve (12) inches in industrial development, or such larger size as may be necessary to properly serve the proposed development. Standard wastewater pipe size shall be eight (8) inches, or such larger size as may be necessary to properly serve the proposed development.

(ii) Larger Approach Water and Wastewater Facilities.

Should the City's Master Water/Wastewater Plan, Capital Improvement Plan or the City approved developer's comprehensive water and/or wastewater facilities study indicate that a larger water and/or wastewater approach facility is required for ultimate growth considerations than the water and/or wastewater approach facility required to provide service to the development, the developer shall be responsible for one hundred percent (100%) of the cost for water and/or wastewater approach facilities designed to provide service to the proposed development. Should the City elect to install approach facilities larger than those required by subsection (i) above, the additional cost of pipe and appurtenances shall be borne by the City, subject to the availability of funds. In the event City funds are not available, the developer shall install those facilities required by subsection (i) above. City participation, if any, will be calculated in accordance with the ordinance establishing unit prices for city participation in community facilities agreements or based upon unit prices contained within competitive bids.

(b) ON-SITE FACILITIES.

(i) Standard Size Water/Wastewater Facilities.

The developer shall be responsible for one hundred percent (100%) of the cost of all standard water/wastewater facilities required by the City design criteria and the City Fire Code. Standard water pipe size shall be eight (8) inches in residential and commercial development and twelve (12) inches for industrial development, or such larger size as may be necessary to properly serve the proposed development. Standard wastewater pipe size shall be eight (8) inches, or such larger size as may be necessary to properly serve the proposed development.

(ii) Larger Than Standard Water and Wastewater Facilities.

In the event that the City's Master Water/Wastewater Plan, Capital Improvement Plan or the City approved developer's comprehensive water and/or wastewater facilities study indicate that a larger water and/or wastewater facility than the water and/or wastewater facility required to provide exclusive service to the development is required for ultimate growth considerations, the developer shall be responsible for one hundred percent (100%) of the cost for the water and/or wastewater facilities designed to provide exclusive service to the proposed development. Should the City elect to install larger facilities than indicated to be necessary for the exclusive service to the development, the additional incremental cost shall be borne by the City, calculated in accordance with the ordinance establishing unit prices for city participation in community facilities agreements or based upon unit prices contained within competitive bids.

(iii) Service Connections.

The developer shall be responsible for one hundred percent (100%) of the cost of installation of water and/or wastewater service to each proposed or existing lot or tract within the development. Residential service connections shall be installed at the same time as the water and/or wastewater facilities are constructed.

(c) SPECIAL FACILITIES.

In those situations where the construction of water main transmission facilities or wastewater collector main facilities are not economically feasible, the developer may petition the Director to construct water supply facilities and/or package wastewater treatment facilities or water/wastewater pumping facilities, and, subject to the approval of the City Manager and the City Council, construct same.

(i) Facilities for Single Customer Properties.

The City Council may authorize the construction of special facilities to serve single customer properties.

(ii) Developer Cost.

When the special facilities are designed to provide service exclusively to the development, the developer shall be responsible for one hundred percent (100%) of the cost of such facilities. In the event that the City requires larger facilities be constructed to provide service to other areas, the developer shall be responsible for that portion which represents the cost of constructing facilities to provide exclusive service to the proposed development and the City shall be responsible for the remainder of the cost, provided funds are available. In the event City funds are not available, the developer shall install those special facilities as are required to provide service to the proposed development.

(iii) Best Interest of City.

The special facilities statement of this policy shall not be construed as requiring the City to provide water and/or wastewater service to areas where normal service, as defined in this policy, is not immediately or economically available. Rather, it is intended to permit an equitable method of providing such water and/or wastewater service where the best interests of the City will be served by the use of such facilities.

(d) RELOCATION/REPLACEMENT OF EXISTING FACILITIES FOR NEW DEVELOPMENT.

(i) Developer Responsibilities.

Any replacement or relocation of an existing water and/or wastewater facility required by the developer to accommodate a contemplated or projected use of a property shall be the responsibility of the developer. In the event that the City requests that a larger line be substituted for the existing line, the City shall be responsible for the incremental installation cost calculated in accordance with the ordinance establishing unit prices for city participation in community facilities agreements or based upon unit prices contained within competitive bids. If the increase in size is necessary to properly serve the proposed development or to provide capacity at least equivalent to that of the existing water or wastewater facility to be replaced or relocated, the developer shall be responsible for 100% of the cost of such water and/or wastewater facility. The plans for such replacement or relocation shall be approved in writing by the Director prior to initiation of construction.

(ii) Construction of Improvements Over Existing Facilities.

No permanent structures shall be constructed over an existing wastewater main or lateral or an existing water main. In the event that the developer desires to construct a permanent structure over an existing water or wastewater facility, the developer shall be responsible for the cost of relocating the existing facility.

3. EASEMENT REQUIREMENTS.

The developer shall be responsible for the acquisition of the following easements:

(a) MINIMUM EASEMENT WIDTH.

- (i) For both water pipe less than 16" and wastewater pipe less than 18", at a maximum depth of 10 feet, the width of the required easement is 15 feet.

- (ii) For larger pipe sizes, where the maximum depth is 10 feet, the following table shall apply:

<u>Size</u>	<u>Width of Easement</u>
Water pipe between 16” and 20”	20 feet
Water pipe between 24” and 30”	25 feet
Water pipe 36” and above	30 feet
Wastewater pipe between 18” and 24”	20 feet
Wastewater pipe between 27” and 48”	25 feet
Wastewater pipe 54” and above	30 feet

- (iii) For all mains with depths
 - Depth of Pipe Times 2.0, plus the width of the pipe plus two feet, rounded up to the nearest 5 ft. width of easement shall not exceed 50 feet unless required by special circumstances.

(b) EASEMENTS WITHIN DEVELOPMENT.

Within the development the developer shall be responsible for providing the following easements:

- (i) All easements required for water or wastewater facilities installed within the development.
- (ii) All easements that are required for larger water transmission mains or wastewater mains that are not installed as part of the initial construction of the development.

(c) EASEMENTS FOR APPROACH MAINS.

- (i) The developer shall be responsible for 100% of the cost to acquire easements for all approach mains sized solely to properly serve the proposed development (no over-sizing required).
- (ii) Where facilities are over-sized (greater than that which the developer needs to properly serve the proposed development) where the City desires to acquire a larger easement for future facilities, the City shall acquire all easements for approach mains through negotiation and/or condemnation. The developer shall be responsible for the cost of that

portion of the easement required to properly serve the proposed development and the City shall be responsible for that portion of the easement required for over-sizing, or for future facilities. (See table, section B.3.a).

- (iii) The City shall not be responsible to the developer for any delays, costs, expenses, or damages of any kind or nature caused to the developer during the time that the City is in the process of acquiring any easements through negotiation and/or condemnation.
- (iv) In the event the developer desires to acquire the easements required in (ii) above, the developer shall notify the City in writing. In such case, the developer shall be responsible for 100% of the cost of the entire easement.

(d) EASEMENTS REQUIRED FOR RELOCATION/REPLACEMENT.

The developer shall dedicate such easements or right-of-ways within the development as may be required to permit construction of the relocation/replacement. Responsibility for the acquisition of easements outside of the development shall be as provided for easements for approach facilities.

(e) FORMAT.

All easements instruments shall be in a standard City format and otherwise acceptable to the City. For each permanent easement submitted, a minimum of three easement instruments with original signature(s) of the property owner(s) and notary signature/seal are required. For each temporary construction easement submitted, a minimum of two easement instruments with original signature(s) of the property owner(s) and notary signature and seal are required.

B. EXTENSIONS FOR EXISTING SINGLE CUSTOMER PROPERTY.

The following policy shall govern the installation of water and/or wastewater facilities to property that has existing occupied residential or commercial establishments that are currently not connected to and served by the City's water and/or wastewater system:

1. EXTENSIONS TO ONE SINGLE CUSTOMER PROPERTY.

(a) LESS THAN 200 FEET.

When it is necessary to extend a water and/or a wastewater facility to serve an existing single customer property, the City, at its expense, will extend the required water and/or wastewater facility up to 200 feet to the closest property line of the lot involved. The property owner will be responsible for all other costs, as required by the City Code.

(b) GREATER THAN 200 FEET.

If the extension to the nearest property corner of the existing single customer property should exceed 200 feet, the property owner shall pay to the City the actual cost of extending the water and/or wastewater facility in excess of 200 feet, together with such other costs as required by the City Code.

(c) PAYMENT.

Payment shall be made prior to the beginning of construction. In the event payment cannot be in full, the property owner may execute a mechanic's lien and note to guarantee payments of the extension cost. In the event the Director agrees to the execution of the mechanic's lien and note, the note shall be for a term not to exceed five years and shall bear interest at the highest rate permitted by law. All cost of filing of the mechanic's lien shall be the responsibility of the property owner. Any refund of front foot charges which may become due to a single customer property owner making payments on such a mechanic's lien will be credited against the lien until such lien is satisfied.

2. EXTENSIONS TO MULTIPLE EXISTING SINGLE CUSTOMER PROPERTIES.

(a) ADDITIONAL CREDITS FOR ONE EXISTING SINGLE CUSTOMER PROPERTY.

If more than one existing single customer property is to be served by the extension of water and/or wastewater facilities, a credit from the City of up to the actual water and/or wastewater construction costs for a length of 200 linear feet will be allowed for each existing single customer property connected as of the time of construction, and any excess length will be paid for at the actual cost of the total excess length. The actual number of single customer properties connected to such extension at the time of construction shall be responsible pro rata for payment to the City for such excess length. Properties connecting to such extension after completion of construction shall be subject to front-foot charges, such charges to be refunded as provided elsewhere herein.

(b) NUMEROUS SINGLE CUSTOMER PROPERTIES–BUILT-UP AREA.

In the case of a built-up area where there are numerous prospective existing single customer properties without existing water and/or wastewater facilities to provide service, such facilities can be extended with each existing single customer property receiving a credit of 200 linear feet of extension per existing single customer property. To receive this credit, petition must be submitted to the Director with the names signed and printed, addresses, legal description of the property, telephone numbers, and appointing a committee of not more than five property owners of the area to be served. All property owners included in the area must authorize the committee to act in their behalf in negotiating with the City on all matters pertaining to the water and/or

wastewater installation. Committee representatives shall be designated in writing as the contact person to coordinate with Water Department staff.

(i) Department Responsibilities.

The Department at its cost will furnish the necessary maps and plans and perform the engineering work connected with the water and/or wastewater facility extensions.

(ii) Committee Responsibilities.

The committee shall be responsible for all contact with the other property owners in the area to be served and for collecting and depositing with the Department all required funds to be paid by the existing single customer property owners.

(iii) City Cost.

The City at its expense shall extend water and/or wastewater facilities up to 200 linear feet for each existing single customer property that has met the requirements of this section.

(iv) Payment.

The actual number of single customer properties connected to the extension shall be responsible pro rata for payment to the City for any excess length. Payment for the extension and such other costs as may be required by the City Code will be made in advance of the construction, unless other arrangements are made in advance, including the execution of a mechanic's lien and note.

(v) Limit of Extension.

The City will not extend the water and/or wastewater facility beyond the point of extension to serve the last existing single customer property represented by the committee.

(c) MAXIMUM NUMBER OF 200 FOOT CREDITS.

No more than one extension credit of 200 feet will be allowed for each separate existing single customer property lot or tract of record to be served, regardless of the number of buildings, occupied or otherwise, which might be located on said lot or tract.

3. SERVICE AVAILABILITY.

The existing single customer property shall not be connected for service until the appropriate extension costs along with any associated connection charges have been paid to the City, or arrangements have been completed for payment of such charges in a manner set forth herein.

4. FRONT FOOT CHARGE REFUNDS.

Any property owner connecting to a water/wastewater facility constructed by the City and paid for by a single customer property owner(s) will be charged front foot charges, such charges to be refunded to the single customer property owner(s) who paid for the excess length. Front foot charges shall be in addition to such costs, expenses and fees as provided for by the City Code. The single customer property owner(s) who participates in the cost of water or wastewater extensions will be eligible for refunds equal to, but not greater than, the amount of their participation in the cost of excess length in the facility constructed. Any refund of front foot charges which may become due to a single customer property owner(s) making payments on a mechanic's lien note will be credited against the note until such lien is satisfied.

5. EXTENSION OF WASTEWATER FACILITIES TO PROTECT THE PUBLIC HEALTH.

(a) REQUIREMENTS FOR EXTENSION.

After notification by the Director of Public Health of a public health hazard, the Director shall request approval of the City Council to extend wastewater facilities to serve residents within the public health hazard area.

(b) CONNECTION TO EXTENSION.

Within 90 days after the completion of the extension of the wastewater facility, all single customer properties within one hundred feet of said facility shall be required to make connection. The single customer property owner shall pay all fees and charges, other than the cost of the extension.

C. OTHER REQUIREMENTS FOR WATER/WASTEWATER CONSTRUCTION.

1. SERVICE CONNECTIONS.

Service lines shall not be connected to a water and/or wastewater facility until a CFA has been executed and the water/wastewater facilities to which they connect have been completed and accepted by the City.

2. SERVICE CONNECTIONS TO LARGE MAINS.

Water transmission mains greater than 16" in diameter or wastewater mains greater than 24" in diameter shall not be tapped for service connections. When circumstances deem that such a connection is in the best interests of the City as determined by the Director, then the connection shall be made by the developer in accordance with City Policies and procedures. The developer may request in writing that the City install the service connection and the developer shall be responsible for the cost of connection.

3. SERVICE CONNECTIONS ACROSS STREETS.

Service connections to property adjacent to a street containing water and/or wastewater facilities will not be allowed in the following cases unless it is determined by the Director to be in the best interest of the City:

(a) DIVIDED STREETS WITH A MEDIAN.

A service connection shall not be made to a water/wastewater facility located in the parkway on the opposite side from the property requesting service. In addition, a service connection shall not be made to a water/wastewater facility located under the street pavement on the opposite side of the median from the property requesting service.

(b) WIDE STREETS.

A service connection shall not be made to an existing water/wastewater facility located more than 54 feet from the nearest curb line to the property for which service has been requested.

(c) STREET CUTS.

In no case shall a street be excavated for a water or wastewater service for more than 40 feet.

(d) EXTENSIONS.

In those cases where service connections are prohibited, the property owner shall install water/wastewater main extensions to a point behind the nearest curb line to the property to be served, where a service connection can be installed. In the case of a divided street or wide street, a developer owning property on both sides of the street shall be responsible for 100% of the cost of the required main along each side of the street.

4. METER LOCATION.

Water meters shall be located at the front of the property to be served in the street right-of-way behind the curb, except when the Director shall determine that it is in the best interest of the City to do otherwise.

5. COMMERCIAL/INDUSTRIAL/APARTMENT DEVELOPMENT.

In the case of a single platted tract being developed as a commercial, industrial, or apartment complex, water and/or wastewater service will be provided as follows:

(a) WATER.

Water service will be provided to the property boundary and along the entire frontage of the property in the usual manner with City participation in the cost of extending such service as provided elsewhere in this policy. The property owner may petition the Director to extend water facilities within the single platted tract. When it is in the best interest of the City, such extensions may be made for the purpose of providing fire protection, provided that such extensions are made within easements dedicated to the City for such purpose. The developer shall be responsible for 100% of the cost for extending such service, including the cost of any required easements.

(b) WASTEWATER.

Wastewater service will be provided to the property boundary and along or across the entire property in the usual manner, with the City participating in the cost of extending such service as provided elsewhere in this policy. The owner of the single property shall be responsible for 100% of the cost for the connection to the wastewater main and for any easements that may be required.

6. SUBSTANDARD WATER MAINS.

(a) SERVICE CONNECTIONS.

Where water service can be provided by an existing substandard water main, connection will be permitted in accordance with City policies and procedures provided that the Director approves the connection. The property owner requesting service shall be responsible for the appropriate fees and charges required by the City Code.

(b) RECONNECTION OF EXISTING WATER SERVICES.

All existing water service connections to a substandard water main replaced by an improved or new main will be reconnected without charge.

7. STORM DRAINS INCLUDED IN WATER/WASTEWATER CONTRACTS.

Storm drain facilities may be included in a bid proposal for the water and/or wastewater facilities, provided the Director and the Director of the Transportation and Public Works Department approve its inclusion. Any participation by the Water Department will be calculated in accordance with the ordinance establishing unit prices for city participation in community facilities agreements or based upon unit prices contained within competitive bids.

D. SPECIAL ASSESSMENT FOR CONSTRUCTION OF WATER AND/OR WASTEWATER FACILITIES.

1. ELIGIBILITY CRITERIA.

The following is the criteria for establishing eligibility of a water or wastewater facility for construction under the special assessment policy:

(a) PETITION.

The owners of at least fifty percent (50%) of the benefited and assessable areas must sign a petition requesting that the City Council certify that there is necessity for the improvements to be considered for construction under the Assessment Utility Construction Policy, and such a petition must be filed with the Director.

(b) STATE LAW.

State law shall control a water and/or wastewater construction project to be assessed against abutting property owners.

E. OWNERSHIP AND MAINTENANCE.

1. TITLE TO ALL WATER AND WASTEWATER MAINS.

Title to all water and wastewater mains constructed under this policy that have been completed and accepted by the Director, except title to wastewater service connections, shall be vested in the City.

2. TITLE TO ALL WATER AND WASTEWATER SERVICE CONNECTIONS.

(a) WATER SERVICE CONNECTIONS.

(i) Domestic/Irrigation Service Connection.

Upon completion and acceptance by the Director, title to all water service connections for domestic/irrigation service from the water main to the meter, to include the meter and meter box or vault, shall be vested in the City.

(ii) Fire Line Connection.

Upon completion and acceptance by the Director, title to all fire line connections from the water main to the gate valve on the City side of the double detector check shall be vested in the City. Installation of the double detector check shall be in accordance with the Water Department's Backflow Prevention Policy. If the gate valve is located in the street, title to the fire line connection will be from the water main to the curblin adjacent to the property served.

(b) WASTEWATER SERVICE CONNECTIONS.

Upon completion and acceptance by the Director, title to all wastewater service connections constructed under this policy by the developer or the City shall be vested in the developer or single customer property owner, and the City shall have no responsibility for the maintenance or operation of such service connections. The developer or single customer property owner shall be responsible for the operation and maintenance of the service connection to the wastewater main, even if said main is under existing paving in City right-of-way.

3. CITY RESPONSIBILITIES FOR WATER AND WASTEWATER FACILITIES.

The City shall operate and maintain only those water and wastewater facilities, whose titles are vested in the City.

F. FRONT FOOT CHARGES.

1. FRONT FOOT CHARGE COLLECTIONS.

A front foot charge of \$10.50* per linear foot for water and \$9.00* per linear foot for wastewater, shall be paid in the following cases:

- (a) Service connections made to an approach facility constructed by a developer or single customer property owner before December 31, 1983.
- (b) Service connections or extensions made to serve adjacent property from an approach facility constructed by a developer or single customer property owner after December 31, 1983.
- (c) Service connections or extensions made to vacant lots from a water main that has been replaced at developer or single customer property owner cost.
- (d) Service connections or extensions made to vacant lots from a facility installed by multiple single customer property owners.

NOTE: * Front foot charges are subject to change on an annual basis by City Ordinance.

2. FRONT FOOT CHARGE REFUNDS.

Front foot charges will be collected by the City and refunded to the developer/single customer property owner when the following conditions are met:

(a) Eligibility.

A developer or a single customer property owner who constructs an approach main under a community facilities agreement is eligible for front foot charge refunds.

(b) Maximum Refund.

The developer/single customer property owner who constructs the approach facility shall be entitled to receive refunds equal to, but not greater than, 100% of the cost of the approach facility incurred by such developer/owner.

(c) Time Limit.

Front foot charges will be assessed for a period of ten (10) years, commencing on the date that the Director accepts the approach main. If less than 70% of the eligible collections due to the developer/single customer property owner have been collected, the developer/owner may request in writing an extension of up to an additional 10 years for collection of front foot charges. In no event will front foot charges be assessed for longer than 20 year.

(d) Refunds Source.

Refunds shall be made solely from front foot charges collected by the City during the period that front foot charges are assessed for service connections to or extensions from the approach main.

(e) Refund Procedure.

Upon written request, refunds will be made annually during the last two months of the calendar year from front foot charges paid to the City. It is the responsibility of the developer/single customer property owner requesting the refund to prove their eligibility to receive the refund due. In the event the developer/single customer property owner fails to request a refund of front foot charges within 6 months after the expiration of the eligibility to receive funds, such unrefunded front foot charges shall become the property of the City.

(f) Assignment.

The Director must approve assignment of refunds of front foot charges.

(g) Expiration of Eligibility.

Collections for front charges will cease when the developer/single customer property owner has been fully reimbursed or the time period for assessment of front foot charges has lapsed, whichever occurs first.

(h) Previous Policy.

Existing community facilities agreements with approach mains or other facilities eligible for front foot charge collections will continue under the policy that was in effect at the time the agreement was executed.

3. ADMINISTRATION.

The refund limit, together with the project number, date construction was completed, permanent record number of main, limits of portion of the facility upon which front foot charges are collectible, and name of the entity entitled to the refund.

G. VARIANCES.

1. REQUEST FOR VARIANCE.

All requests for variances must be in writing and submitted to the Director and shall include all pertinent information on the facilities involved or to be involved. The request shall state specifically the portion of the policy for which a variance is sought and the grounds for which the variance is requested.

2. CRITERIA FOR GRANTING OF VARIANCE.

- (a) In order to grant a variance, the Director shall determine that the failure to grant the variance will result in the exceptional hardship on the developer/single customer property owner. The burden of proof shall be on the developer/single property owner to show such hardship.
- (b) The developer/single property customer owner shall provide evidence that the granting of the variance will have no detrimental effect upon water and/or wastewater facilities for which the variance is requested.

3. ADDITIONAL REQUIREMENTS FOR APPROVAL OF VARIANCE.

In the event the Director determines the variance should be granted, the Director may also require:

- (a) The execution of an indemnity agreement by the developer/single customer property owner. The form of the indemnity agreement shall be determined by the Director, and at a minimum, shall be recordable so as to run with the property;
- (b) A written agreement that the City will not be responsible for any damages arising out of the granting of the variance. The form of the agreement shall be determined by the Director, and at a minimum, shall be recordable so as to run with the property; and
- (c) Such other documents; in the discretion of the Director, deemed to be required.

POLICY FOR STORM DRAINAGE FACILITIES

Except as otherwise noted herein, Director as used in this section shall mean the Director of the Transportation and Public Works Department or his/her designee.

The following policy shall govern the installation of all drainage facilities within the corporate limits of the City of Fort Worth, Texas:

1. ENGINEERING AND SUPERVISION:
 - A. The plans and specifications for the construction of all storm drainage facilities shall be in compliance with the Subdivision Ordinance, Plan Commission Rules and Regulations, and criteria of the Transportation and Public Works Department that shall include but not be limited to the following:
 - (1) The “Storm Drainage Criteria and Design Manual”, as amended; and
 - (2) Chapter 7, Article VIII, Floodplain Provisions of the Code, as same may be amended from time to time.
 - B. The developer shall employ an engineer proficient in civil engineering and registered in the State of Texas for preparation of the plans and specifications subject to approval of the Director. If the estimated construction cost is less than \$10,000, the developer may request the City prepare the plans and specifications for improvements. If the City agrees to prepare the plans and specifications, the developer shall pay the City ten percent (10%) of the actual construction cost as compensation for such design work.
 - C. The determination as to compliance of the plans and specifications with applicable policies, regulations and criteria shall be the sole responsibility of the Director. Where there is a question as to the justification or size of facilities required, doubt will be resolved in favor of additional drainage capacity.
 - D. The plans and specifications shall be prepared in accordance with the adopted procedures of the Transportation and Public Works Department. The Director shall establish a standard checklist to be used by Transportation and Public Works staff in the review of plans and specifications. Said checklist shall be made available to consultants, developers and developer representatives. While the list will be as comprehensive as possible, it must be recognized that the staff cannot be limited to review of only those items listed in all cases. Staff will:
 - (1) Review plans for compliance with established City policy and accepted engineering design.

- (2) Avoid commenting on items because of personal preference unless plans are unclear as prepared or the item is part of established policy.
 - (3) Thoroughly review items at the “Concept Review” and “Design Plan” review levels so as to minimize new comments concerning items previously submitted. This does not mean that potential problems should be ignored simply because they were previously overlooked.
- E. If the plans and specifications are prepared by the developer’s engineer, then these plans and specifications shall be submitted to the Director for the review and approval of the appropriate officials of the City. This review and approval process shall proceed as follows:
- (1) It is recommended that during the review of the preliminary plat a Drainage Plan and Concept Review of Engineering Problems be submitted to the Transportation and Public Works Department for review and comment. This will permit the City staff to better review the preliminary plat and encourage early resolution of difficulties, thereby minimizing time and work by the developer’s engineer. If these items are submitted at least ten (10) City working days prior to the Development Review Committee meeting, the City Staff should be able to reply in writing by the time that the Plan Commission considers the plat.
 - (2) If the drainage plan is not submitted in advance as recommended in paragraph (1) above, it must be submitted along with or before the design plan submittal. The drainage plan shall include all drainage areas that affect the area to be preliminary or final platted both in the natural state and in the ultimate development.
 - (3) A minimum of three (3) of design plans and specifications shall be submitted to the Transportation and Public Works Department for review. Additional sets may be required for other departments and/or agencies.
 - (4) If the design plans and specifications are incomplete, a letter stating the necessary changes to the plans and specifications and a set of the design plans and specifications marked with the necessary changes and/or comments shall be returned to the developer’s engineer for his use in the correction of the plans and specifications.

The Transportation and Public Works Department will attempt to complete each review within the number of City working days listed below:

<u>Review Stage</u>	<u>City Working Days</u>
Drainage Plan and Concept Review of Engineering Problems	* *
Design Plans and Specifications/ Contract Documents	15***
Final Plans	15

**If submitted according to Paragraph E(1) above, this review will run concurrently with the review of the preliminary plat.

***The first time design plans are submitted they shall be fully reviewed as final construction plans. When the plans and specifications are sufficiently complete, the cover sheet will be requested of the developer's engineer for issuing final approval.

Any of the following items may cause the review time to be suspended until a satisfactory resolution is made. It should be noted that some of the items below may be resolved concurrently with Plan Commission review of the preliminary plat.

- Request for (or implied) deviation from established minimum design standards;
- Specific request for deviation from established Development Policy;
- Design decisions or proposals yielding higher City costs than would result with minimum City standards;
- When the project includes unconstructed street and/or storm drainage facilities common to (or shared with) adjacent property for which a CFA has been executed or for which earlier design plans have been approved or
- For Preliminary Plans or Final Plans, lack of a preliminary plat approved by the Plan Commission, or an approved site plan in case of Unified Residential Developmental.

The Director shall determine the adequacy of the construction proposed by the developer's engineer.

- (5) The final plans shall be submitted when all comments, changes and corrections to the design plans and specifications have been made. The final plans shall be signed and dated by the Director and Director of Water Department upon approval. The developer's engineer shall be notified upon plan approval.
 - (6) The expiration of any CFA as provided for in Section II hereof shall result in the expiration of the City's approval of all plans and specifications for the proposed development. Future use of the plans and specifications shall require a new submittal, review and approval.
- F. All coordination required with public and/or private utility agencies to eliminate conflicts with proposed storm drainage facilities shall be the responsibility of the developer and/or his engineer. Coordination with agencies requiring special conditions (i.e., railroads and the Texas Department of Transportation) shall be the responsibility of the developer and/or his engineer.

2. CONSTRUCTION REQUIREMENTS:

- A. "Standard Specifications for Street and Storm Drain Construction" of the City of Fort Worth Transportation and Public Works Department will govern on all projects. A copy of the Standard Specifications may be purchased from the Transportation and Public Works Department.
- B. Construction of storm drainage facilities shall be by a contractor employed by the City or by a contractor employed by the developer.
- C. Storm drainage facilities and appurtenances shall be constructed to the line and grade established in the approved final plans.
- D. Drainage easements shall be provided by the developer along the entire length of the system for all storm drainage facilities and to an adequate outfall condition acceptable to the Director outside a public right-of-way.
- E. Under circumstances that would preclude an adequate outfall condition, an on-site detention system may be allowed. In this case, the design of the detention system shall be such that the additional runoff generated by the proposed development will be detained on site until it can be safely discharged off-site, and will not increase the amount of original discharge nor change the time of concentration downstream. The provision of either an adequate outfall condition or an on-site detention system shall be subject to the approval of the Director. Drainage easements along a required outfall channel or ditch shall be provided until the flowline "day lights" on natural grade. The minimum grade allowed on an outfall channel or ditch will be 0.2 foot per 100 feet. Drainage easements will generally extend at least twenty-five (25) feet past an outfall headwall to provide an area for maintenance operation.

- F. Each project and/or development phase shall provide a drainage system, which is fully functional and readily maintained.
- G. Border channels shall be improved as per the City of Fort Worth “Storm Drainageway Criteria and Design Manual” at the time of development unless conditions preclude improvements at that time as determined by the Director. In no case shall property adjacent to a recognized drainageway be final platted unless provisions are made for making it conform with all City drainageway and flood plain criteria. The drainage design must be in accordance with City design criteria to protect all platted property, shall not adversely affect property owned by others and the developing party is responsible to construct, if necessary, a reasonable portion of the drainageway applicable to the property being developed. In no case shall any segment or portion of the drainageway be neglected by the present or future development. This may consist of platting an easement capable of containing the 100-year flood and entering into a maintenance agreement for the land to be final platted.
- H. Storm flow resulting from a one hundred (100) year frequency storm once contained in a public drainage easement and/or right-of-way shall continue to be retained within public easements or rights-of-way, unless approved by the Director under a strictly controlled set of criteria.

3. DISTRIBUTION OF COST.

- A. For existing developments, the City shall bear the cost of drainage facilities where the drainage conditions, overall existing development, or planned improvement projects (e.g. street reconstruction) justify the installation of drainage facilities. Such financing of drainage facilities in these areas shall be limited to the availability of City funds and subject to the following exceptions:

Individual property owners may request the extension of an existing enclosed drainage facility across their property. Such an extension will be installed provided the benefited property owner supplies a drainage easement to the City free of cost and furnishes the required and necessary storm drainage pipe. Drainage facilities installed in conjunction with paving projects adjacent to platted property shall be at City expense, except portions of systems which are adjacent to undeveloped, newly developing or redeveloping (replatting) property or which extend out of the street right-of-way into new developments where it shall be financed in accordance with Paragraph 3(b) below.

- B. For new developments, redeveloping property and park property, the City shall participate in the cost of the storm drainage facilities located within a public right-of-way or easement that are 60 inch or greater in diameter and that will be accepted for maintenance by the City and become public facilities, based on the following:

- (1) For storm drain pipe larger than sixty (60) inches that crosses a public street, the City shall pay the difference between the material cost of the sixty 60 inch pipe and the larger pipe.
- (2) For all other storm drain pipes other than those crossing a public street larger than sixty (60) inches in diameter, the City shall pay twenty-five percent (25%) of the difference between the material cost of the sixty (60) inch pipe and the larger pipe.
- (3) There shall be no City participation in the cost of any trench and/or channel excavation, manholes, inlets, lead lines, headwalls, rip rap and/or any other items required to complete the system.
- (4) Channels: Where a channel is constructed, the City's participation shall be as follows:
 - a. Twenty-five percent (25%) of the cost of concrete lining in place provided the bottom of the channel is lined with concrete, rip-rap, or consists of natural solid rock.
 - b. Twenty-five percent (25%) of the cost of gabion lining provided that the channel bottom is lined either with concrete, rip-rap, or gabion; or the bottom of the channel consists of natural solid rock.
 - c. There shall be no City participation in the cost of any trench excavation, right-of-way, inlets, manholes, guard rail, seeding, sodding and/or any other appurtenances necessary to complete the drainage facilities.
- (5) Bridges and/or Culverts: Where a bridge or culvert is constructed, the City's participation shall be as follows:

Storm Draining Facilities

 - a) For structures smaller in area than or equal to a pipe size of sixty (60) inch (19.6 square feet) in diameter, area-wise, there shall be no City participation.
 - b) Where the structure is larger than a pipe of sixty (60") inches in diameter or is of some other shape with a cross sectional area of more than 19.6 square feet, the City shall base its share of the cost on the water shed area to be drained and will calculate its share according to the table below for any bridge and/or culvert for roadway in excess of fifty-four feet:

<u>Watershed Area</u> Acres	<u>City's Participation</u> (% of Cost)
Up to – 1,000	25
1,001 – 1,500	30
1,501 – 2,000	35
2,001 – 2,500	40
2,501 – 3,000	45
3,001 – 3,600	50
3,601 – 4,200	55
4,201 – 4,800	60
4,801 – 5,400	65
5,401 – 6,100	70
6,101 – 6,800	75
6,801 – 7,500	80
7,501 – 8,300	85
8,301 – 9,100	90
9,101 – 10,000	95
Over 10,000	100

- c. Except as noted above, there shall be no City participation in the cost of parkway improvements, including but not limited to pedestrian ways and guardrails.
 - d. If the City requires a roadway width greater than fifty-four (54) feet, one hundred percent (100%) of the additional cost of the drainage facility necessary for that excess width will be paid by the City in accordance with ordinances adopted by the City or based upon unit prices contained in competitive bids.
 - e. If the developer desires a roadway wider than determined necessary by the Director, there shall be no City participation for the additional cost of the drainage facility necessary for the excess width.
- (6) Storm flow shall not be diverted from its natural drainage course to a border street unless approved by the Director. At a minimum, in order for approval to be granted, there must be no increase in volume or velocity of the storm flow. When the Director approves the diversion of storm flow, there shall be no City participation for the additional cost of constructing and/or over sizing any drainage facility or appurtenance required to handle such diverted storm flow and the City's participation shall stay the same as if the diversion did not occur. No diversion shall occur unless the developer provides such studies as the Director may require.
- (7) The City shall pay engineering costs in the amount of six percent (6%) of the actual cost of the City's share of construction as calculated in accordance with ordinances adopted by the City or based upon unit prices contained in competitive bids.

4. GENERAL ARRANGEMENTS AND FINANCING:

- A. Subsequent to approval of the drainage plan, the preliminary subdivision plat, adequate plans and specifications, and cost estimates, the developer shall request a CFA to provide for the installation of the storm drainage improvements. Such request and accompanying information shall be in writing and addressed to the Director. No construction shall begin until developer and the City have executed a contract. See Section 104.100 of the Subdivision Ordinance, as amended.
- B. The Director shall review and may approve the drainage facilities deemed necessary by the developer's engineer.
- C. The award of contract shall be made in accordance with Section II.
- D. In the event that no funds are available for City participation, the developer may provide its financial guaranty (plus ten percent (10%) for engineering and miscellaneous costs if the City prepares the plans) and award the contract.
- E. The Director may require a developer to begin and complete construction of any storm drainage facility included in a developer contract when, in the judgment of the Director, the facility is needed for the proper and orderly development of the area.
- F. When the Director determines that a storm drainage facility should be constructed, he shall notify the developer in writing to make arrangements for construction of the facility. Within 15 calendar days after receiving the notice, the developer shall make arrangements for constructing the facility, including making the necessary payment to the City in accordance with this policy.
- G. Construction must be completed within 90 days from the date on which the developer receives notice from the City to proceed with construction. If construction has not been completed within the 90 day period, the City may take whatever action is required to insure prompt completion of the improvements, including, but not limited to, awarding a construction contract for the improvements and forfeiting the developer's financial guaranty to pay all costs resulting from failure of the developer to complete the improvements. Such costs shall include, but not be limited to, construction costs, engineering costs, administrative and legal expenses, and damages.

- H. Easements necessary to provide drainage for the development, together with access to the drainage ways, shall be provided to the City by the developer free of cost. There shall be no City participation for public drainage unless the developer provides access easements or rights-of-way. Where a public or community necessity for such easement(s) has been determined by the City Council, and the requesting developer provides written evidence including affidavits as appropriate, that he is unable to negotiate the purchase of the necessary easement(s) at a fair price, the City may expeditiously undertake to acquire same using its powers, provided the requesting developer agrees to pay the actual cost of the easement and any and all other costs connected with such attempted acquisition.

5. OWNERSHIP AND MAINTENANCE:

- A. All storm drainage facilities installed in connection with a development project and which is in a public easement and/or right-of-way shall be and shall remain the property of the City, and shall be operated and maintained by the City unless special agreements to the contrary are entered into by the developer and the City.
- B. The developer may choose to construct either a concrete or gabion lined channel or an improved earthen channel under the condition that current City standards are fully satisfied. When all City standards including special design criteria, are satisfied, the City shall operate and maintain the channel.
- C. The developer may request the Director to leave a “Natural Creek” in its natural state in accordance with current policy. A separate agreement regarding maintenance of the “natural creek” shall be required prior to approval of any such request and, if the developer is to maintain the “natural creek”, the plat shall contain a perpetual maintenance statement. The developer shall also be required to enter into an indemnification agreement to indemnify the City from any harm that may come to person or property. Proper easements must be dedicated to the City for access and inspection by City personnel. All work, including but not limited to filling, on the creek must conform to criteria established in the City’s “Storm Drainage Criteria and Design Manual” in which “Natural Creek” is defined.
- D. Drainageways adjacent to single family or duplex residential property shall be handled as a lined channel, improved earthen channel or “Natural Creek” as required in the City’s “Storm Drainage Criteria and Design Manual”.
- E. Should the Director determine that property zoned or used other than single family or duplex residential has special design limitations that make adherence to normal requirements for lined channels, improved earthen channels or “natural creeks” unreasonable, the property owner may enter into agreement with the City whereby the property owner accepts perpetual maintenance responsibilities for the drainage facility. Such an agreement shall be noted on the final plat and recorded in such a manner as to clearly run with the land.

POLICY FOR STREET IMPROVEMENTS

Except as otherwise noted herein, Director as used in this section shall mean the Director of Transportation and Public Works or his/her designee.

The following policy shall govern the installation of all street, alley and parkway improvements within the corporate limits of the City of Fort Worth, Texas:

1. ENGINEERING AND SUPERVISION:
 - A. All street, alley and parkway improvements shall be in accordance with the Subdivision Ordinance, City Plan Commission Rules and Regulations and with design criteria of the Transportation and Public Works Department. Sections VII and VIII of the City Plan Commission Rules and Regulations are specifically applicable to engineering criteria and construction plans.
 - B. The plans and specifications shall be prepared in accordance with the adopted procedures of the Transportation and Public Works Department of the City. The Director shall establish a standard check list to be used by Transportation and Public Works Staff in the review of plans and specifications. Said check list shall be made available to consultants, developers and developer representatives. While the list will be as comprehensive as possible, it must be recognized that the staff cannot be limited to review of only those items listed in all cases. Staff will:
 - (1) Review plans for compliance with established City policy and good engineering design.
 - (2) Avoid commenting on items because of personal preference unless plans are unclear as prepared or the item is part of established policy.
 - (3) Thoroughly review items at the "Concept Review" and "Design Plan" review levels so as to minimize new comments concerning items previously submitted. This does not mean that potential problems should be ignored simply because they were previously overlooked.
 - C. In the event the plans and specifications are prepared by the developer's engineer, the plans and specifications shall be submitted to the Director for the review and approval of the appropriate officials of the City. This review and approval process shall take place through the Department of Transportation and Public Works and shall proceed as follows:
 - (1) If the design plans and specifications are incomplete, a letter stating the necessary changes to the plans and specifications and a set of the design plans and specifications marked with the necessary changes and/or comments shall be returned to the developer's engineer for use in the correction of the plans and specifications.

- (2) The marked plans and specifications must be returned to the Transportation and Public Works Department with the revised plans and specifications. The Transportation and Public Works Department will attempt to complete each review within the number of City working days listed below:

<u>Review State</u>	<u>City Working Days</u>
Drainage Plan and Concept Review of Engineering Problems	* *
Design Plans and Specifications/Contract Documents ***	15
Final Plans	15

**If submitted according to Paragraph C (1) above, this review will run concurrently with the review of the preliminary plat.

***The first time design plans are submitted they shall be fully reviewed as final construction plans. When the plans and specifications are sufficiently complete, the cover sheet will be requested of the developer's engineer for issuing final approval.

- (3) Any of the following matters will be cause for time to be suspended until a satisfactory resolution is made. It should be noted that some of the items below may be resolved concurrently with Plan Commission review of preliminary plat.
- Request for (or implied) deviation from established minimum design standards;
 - Specific request for deviation from established Development Policy;
 - Design decisions or proposals yielding higher City costs than would result with minimum City standards;
 - When the project includes unconstructed street and/or storm drainage facilities common to (or shared with) adjacent property for which a CFA has been executed or for which earlier design plans have been approved; or
 - For Preliminary plans or Final Plans, lack of a preliminary plat approved by the Plan Commission, or an approved site plan in case of Unified Residential Development.
- (4) The adequacy of the construction proposed by the developer's engineer shall be determined by the affected Director or his authorized representative.

- D. "Standard Specifications for Street and Storm Drain Construction" of the Transportation and Public Works Department will govern on all projects. A copy of the Standard Specifications may be purchased at the office of the Transportation and Public Works Department. Upon approval of the Director, the "NCTCOG Uniform Specifications" may be used in lieu of or in conjunction with the City of Fort Worth Standard Specifications for Street and Storm Drain Construction.
- E. Border streets shall be improved at the time of development unless conditions preclude improvements at that time as determined by the Director of Transportation and Public Works.

2. DISTRIBUTION OF COST:

A. Interior Streets:

- (1) Except as provided in Item (c), Page V-5, the City shall bear all of the excess cost of street improvements for widths greater than fifty-four (54) feet.
- (2) The City shall not use standard assessment paving provisions for interior streets, even if there is more than one (1) property owner adjacent to the street, but will require a standard CFA with the adjacent property owners and all right-of-way shall be dedicated free of charge to the City during the platting process.

B. Border Streets:

- (1) Except as provided in Item (c), Page V-5, the City shall bear all of the excess cost of street improvements for widths greater than fifty-four (54) feet.
- (2) On border streets adjacent to a development, the developer shall either construct or provide a financial guaranty for one-half (1/2) the cost of the street construction (not to exceed 27 feet), including one-half (1/2) the cost of drainage improvements in accordance with the "Policy for the Installation of Community Facilities" just as if the project were an Interior Street at the time of execution of the Community Facilities Agreement.
- (3) The developer shall dedicate the right-of-way free of charge to the City during the platting process one-half of the street adjacent to its property. For the other half of the street the following shall apply:
 - Where property adjacent to a border street is platted, the property owner shall be assessed in accordance with VI-1 and/or VI-2, Assessment Paving Policy as applicable.

- Where property adjacent to a border street is unplatted, the property owner shall be assessed for one-half of the construction cost, including the cost of the drainage improvements adjacent to his property in accordance with the policy for the “policy for Installation of Community Facilities” just as if the property were that of a developer on an interior street. The assessments are to be paid in five (5) equal payments, the first 20% due 30 days after completion of the project and additional payments of 20% annually for four (4) additional payments at eight percent (8%) interest. If the adjacent property owner dedicates additional right-of-way at no cost to the City, the assessment may be paid in ten (10) equally payments over a nine year period, with 8% interest on the unpaid balance.
 - Where there is an existing farmhouse or similar dwelling on property adjacent to an open border street, the property owner shall be assessed at the residential rate in accordance with the Assessment Paving Policy as applicable for up to one hundred (100) feet of frontage. Furthermore, the property owner shall be assessed for one-half of the construction cost, including the cost of the drainage improvements adjacent to his property for the remainder of his frontage (if any) in accordance with the “Policy for Installation of Community Facilities” just as if the property were that of a developer on an interior street. The assessments would be paid in five (5) equal payments, the first 20% due 30 days after completion of the project and additional payments of 20% annually for four (4) additional payments at eight percent (8%) interest. If the adjacent property owner dedicates additional right-of-way at no cost to the City, the assessment may be paid in ten (10) equal payments over a nine-year period, with eight percent (8%) interest on the unpaid balance.
 - Anytime unplatted property is platted, all assessment liens shall become due and payable prior to final platting. If actual cost figures are unavailable, estimated costs shall be used to determine the payment required.
- C. If the developer constructs a wider street than requested by the City, there shall be no City participation for the cost of the extra width. However, in the event a street wider than fifty-four (54) is constructed at the request of the City, the City will participate in the cost of construction calculated in accordance with ordinances adopted by the City or based upon process contained in competitive bids upon completion of the entire length of street included in the CFA.
- D. The Developer will pay the cost of one-half of any street abutting a City park, up to a maximum cost of twenty-seven (27) feet.

- E. All Railroad Crossings shall be of the “Concrete or Rubber Railroad Crossing” type, as determined in the Director’s sole discretion. The City’s participation in railroad crossings shall be in accordance with this Section. Furthermore, if it is necessary for the City to condemn railroad property, the developer shall reimburse the City the entire cost of the condemnation process including attorney fees plus any other costs associated with the right-of-way and/or easement acquisition.
- F. The City shall pay engineering costs in the amount of six percent (6%) of the actual cost of the City’s share of construction as calculated in accordance with ordinances adopted by the City or based upon unit prices contained in competitive bids.

3. GENERAL ARRANGEMENTS AND FINANCING:

- A. Subsequent to approval of adequate subdivision plans and specifications, cost estimates, and the preliminary subdivision plat, the developer shall request a CFA to provide for the installation of the street improvements. Such request and accompanying information shall be in writing and addressed to the Director. No construction shall begin until the developer and the City have executed a CFA. See Subdivision Ordinance Section 104.100 for further details.
- B. The City shall assume a share of the cost of the street improvements and engineering only if funds are available for such participation. In the event that no funds are available for City participation, the developer may award the contract and deposit with the City its financial guaranty.
- C. The Director may require a developer to begin and complete construction of any street included in a developer contract when, in the judgment of the Director, the facility is needed for the proper and orderly development of the area. In addition, installation of all underground utilities will be required before the paving in accordance with the procedure established by this policy. The developer’s financial guaranty shall be released when all of the developer’s obligations under the CFA have been completed.
- D. When the Director determines that a street or streets, including underground utilities, should be constructed, he shall notify the developer in writing to make arrangements for construction of the facilities. Within fifteen (15) calendar days after receiving the notice, the developer shall make arrangements for constructing the streets and utilities including making the necessary payment to the City if accordance with this policy. Within ninety (90) calendar days after receiving the notice, the developer shall have completed construction of the utilities and streets.
- E. In the event the developer fails to complete the required street and/or utilities improvements within the ninety (90) day period, as required by the Director, the City may take whatever action is required to insure prompt completion of the improvements, including, but not limited to, awarding a construction contract for

the street and/or utilities improvements or the incompleting portions of such improvements, and forfeiting developer's financial guaranty. The cost to complete shall include, but not be limited to, street and/or utilities construction costs, engineering costs, administrative and legal expenses, and damages.

4. OWNERSHIP AND MAINTENANCE:

All street and alley paving installed in connection with the development within dedicated streets or alleys shall be and shall remain the property of the City, and after expiration of the maintenance bonds, shall be maintained by the City.

SECTION VIII: STREET LIGHT POLICY

The following policy shall govern all street light installations within the city limits of Fort Worth, Texas.

1. GENERAL:
 - (a) The Director of Transportation and Public Works or his designated representative, hereinafter referred to as the "Director" shall specify the equipment and material that will be acceptable for all street lighting projects.
 - (b) All designs, plans, and specifications for street light installations shall be reviewed and approved by the Director. Requests for approval of designs other than the City's minimum standard design must include calculations of average, maximum, and minimum light levels demonstrating that the proposed design equals or exceeds the City's minimum standard design.
2. STREET LIGHTING ON LIMITED LOCAL, LOCAL AND LOCAL COLLECTOR STREETS.
 - (a) Street lighting shall be installed:
 - (1) At all intersections.
 - (2) At the end of all cul-de-sac and dead-end streets longer than 200 feet.
 - (3) At all significant changes in direction of the roadway, defined as those where, when standing in the center of the roadway at one street light, you cannot see the next street light due to horizontal or vertical changes in the roadway.
 - (4) As necessary to achieve an approximate spacing between lights of 300 feet, except that along a City park where the spacing will be reduced to 200 feet.
 - (b) The minimum standard design for local streets shall consist of a 100 watt high pressure sodium vapor luminaire, mounted at a minimum 25 foot height above the roadway surface on a galvanized steel pole, using underground wiring.
 - (c) Existing utility poles may be used when available at the proper locations. Steel poles and underground wiring shall be used at all new developments.
 - (d) Post top lighting is allowed provided that a complete neighborhood is installed in the same manner and the number of lights is increased to compensate for the lower light levels. Two (2) post top lights are required at each intersection, and mid block lights will be placed approximately 150 feet apart.

3. STREET LIGHTING ON COLLECTOR STREETS.

- (a) Street lighting shall be installed:
 - (1) At all intersections.
 - (2) At all significant changes in directions, defined as those where, when standing in the center of the roadway at one street light, you can not see the next street light due to horizontal or vertical changes in the roadway.
- (b) The minimum standard design for collector streets shall consist of a 100 watt high pressure sodium vapor luminaire, mounted at a minimum 30 foot height above the roadway surface, on a galvanized steel pole using underground wiring.
- (c) Existing utility poles may be used when available at the proper locations. Steel poles and underground wiring shall be used at all new developments.

4. STREET LIGHTING ON ARTERIAL STREETS.

- (a) Street lighting shall be installed on arterial streets to meet the lighting criteria of the American National Standards Institute (ANSI) for major roadways.
- (b) The minimum standard design for arterial streets shall consist of a 200 watt high pressure sodium vapor luminaire, mounted at a 38 foot height above the roadway surface on a steel pole, using underground wiring at an approximate spacing of 200 feet apart.

5. STREET LIGHTING ON FRONTAGE/SERVICE ROADS.

Street light installation on any frontage road, service road, or other roadway adjacent to an Interstate Highway, U.S. Highway, or State Highway, will be determined by the Director subject to the approval of the Texas Department of Transportation on an individual basis according to current standards for collector roadways.

6. ENGINEERING AND INSPECTION.

- (a) All street lighting installations shall be in accordance with design criteria developed by the Director. The Director shall determine street classifications, essential street lighting equipment, and construction requirements. Where there is a question as to equipment required, it shall be resolved in favor of additional street lighting.
- (b) Existing utility poles, where available at specific locations, and overhead wiring may be used under certain circumstances, subject to approval of the Director.

- (c) The developer shall furnish, at his sole expense, an exhibit plat at a standard engineering scale and a cost estimate together with his submittal of the request for a developer's contract. For developments scheduled to be done in phases, the developer shall submit an exhibit plat at a standard engineering scale showing the total development.
- (d) The developer shall provide all necessary utility easements required for the street lighting system on the final plat.

7. CONSTRUCTION.

- (a) Street light conduit and footings shall be installed by the developer's contractor as part of and at the time of street construction. The City will obtain electric service and complete the street light construction in accordance with approved plans.
- (b) At the option of the City, an electric utility may be requested by the City to install all of the street light system including conduit and footings, in which case the developer will be responsible for paying the first twenty-four (24) months of service under special service rates agreed to by the City and the utility company.
- (c) Street lights along private streets shall be installed by a contractor employed by the developer.

8. FINANCIAL RESPONSIBILITY.

- (a) Availability of Funds: Allocation of available funds shall be as specified below.
- (b) Unlighted Existing Developments:
 - (1) In existing developments where lighting has not been installed, the City will pay 100% of the costs to install the minimum standard light poles and fixtures if:
 - (a) A majority of the adjacent property owners petition the Department of Transportation and Public Works for a street lights.
 - (b) The property owners shall provide the necessary utility easements for electrical service to the lights at no cost to the City.
 - (2) Property owners shall pay the additional costs involved if other than the minimum standard street light poles and fixtures are requested by the petitioning citizens.
 - (c) In-fill and upgrade projects:

- (1) Where an existing neighborhood or developed area already has street lighting and there is a desire to increase the level of lighting to provide a special, historic, or neighborhood environment, or to upgrade the street light hardware, the City will pay 100% of the cost to install standard light poles and fixtures or light poles and fixtures of the types already in use, in accordance with the spacing standard currently adopted, subject to:
 - (a) A majority of the adjacent property owners petition the Department of Transportation and Public Works for street lights.
 - (b) The property owners shall provide the necessary utility easements for electrical service to the light at no cost to the City.
- (2) The property owners shall pay the additional costs associated with any type of poles and luminaires requested which are not standard or already in use in the area.

9. OWNERSHIP AND MAINTENANCE.

All street lights installed in a dedicated public right-of-way under this policy shall be, and shall remain, the property of the City, and shall be operated and maintained by City.

ELECTRONIC TRAFFIC SIGNALS POLICY

1. PURPOSE:

The following policy shall govern the installation of traffic signals that are approved by an engineering investigation conducted by the City of Fort Worth and/or the Texas Department of Transportation and determined to be in the best interest of the citizens.

2. DEFINITIONS:

A traffic signal installation shall include the traffic signal and all auxiliary material and equipment located on public right-of-way and on secured easements necessary to control vehicular and pedestrian traffic in the manner intended by the City and/or Texas Department of Highways and Public Transportation.

3. GENERAL:

The Director of Transportation and Public Works or his designated representative, hereafter referred to as the "Director", shall approve the design and installation of all traffic signals within the City with the following exceptions:

- A. The installation of traffic signals on freeway frontage roads which are financed and installed by the Texas Department of Transportation; and
- B. The installation or revision of traffic signals in connection with the improvement of streets and highways under a Federal-aid and/or State-aid program.

4. POLICY AND PROCEDURES:

Traffic signals may be constructed by the City or by the developer by executing a traffic signal construction contract or by including the cost in the Community Facilities Agreement. The City will inspect the construction of the signal. Materials for the signal shall conform to City specifications. Specialized electronic hardware such as the controller, cabinet, and communication equipment shall be purchased from the City inventory for use on the project.

A traffic signal installation shall include the traffic signal and related equipment including signage, pavement markings, sidewalks and pedestrian ramps, geometric changes such as turn lanes, and electronic communications and surveillance equipment.

5. DISTRIBUTION OF COST:

The responsibility for financing the installation of an approved traffic signal for specific developments shall be as follows:

1. If the traffic signal is installed based on traffic generated by a development, the developer shall fund all costs.
2. If the traffic signal is installed based on traffic generated from several developments, the developers shall pay a pro rata share of the projects' traffic flow through the intersection based on a Traffic Impact Study.
3. If traffic signal equipment is needed for one or more approaches, driveways or private streets of a development, then the developer shall fund all improvement costs.

POLICY FOR STREET NAME SIGN INSTALLATIONS

1. STREET NAME SIGN REQUIREMENT:

It is the policy of the City to install street name signs at all intersecting public streets.

Intersections created by streets within a subdivision that intersect border streets shall also be considered intersections within a subdivision.

2. INSTALLATION AND PAYMENT:

The City will install standard City of Fort Worth street names on all public streets at the City's cost.

3. ENGINEERING AND INSTALLATION:

In order to remain uniform and consistent with materials and workmanship throughout the City, the Department of Transportation and Public Works shall prepare, locate and install all street name signs for public streets within the City. The signs will be installed by the City when street construction has met final approval.

4. OWNERSHIP AND MAINTENANCE:

All street name signs installed within the dedicated streets shall be and remain the property of the City, and shall be maintained by the City.

ORDINANCE NO. 14552

AN ORDINANCE ESTABLISHING UNIT PRICES FOR CITY PARTICIPATION IN COMMUNITY FACILITIES AGREEMENTS; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Fort Worth participates in the cost of certain paving, storm drainage, water and wastewater projects in accordance with the "Policy for Installation of Community Facilities";

WHEREAS, the "Policy for Installation of Community Facilities" has been amended to repeal the requirement that certain paving, storm drainage, water and wastewater projects with City participation be competitively bid;

WHEREAS, it is necessary to establish unit prices for paving, storm drainage, water and wastewater projects for calculation of the City's participation in such projects;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, TEXAS, AS FOLLOWS:

SECTION 1.

The following unit prices are established for City participation in the construction of paving and storm drainage projects in accordance with the "Policy for Installation of Community Facilities". When the City requires "upsizing" of street or drainage facilities beyond developer's requirements, the City will pay the difference at the prices noted below.

**STREET PAVING AND STORM DRAINAGE
CITY PARTICIPATION CFA UNIT PRICES**

PAVING ITEMS			
Pay Item	Unit	Description	Unit Price
1	CY	Unclassified Street Excavation	\$ 3.50
2	TONS	Lime (27lbs./SY)	\$ 105.00
3	SY	6" Lime Stabilized Subgrade	\$ 2.25
4	SY	6" Cement Stabilized Subgrade	\$ 2.25
5	SY	5" Reinforced Concrete Pavement	\$ 21.00
6	SY	6" Reinforced Concrete Pavement	\$ 22.00
7	SY	7" Reinforced Concrete Pavement	\$ 25.00
8	LF	6" Concrete Curb	\$ 2.00
9	LF	6" Concrete Curb and 18" Gutter	\$ 7.50
10	SY	6" HMAC Pavement (2" Type D Surface on 4" Type B Surface)	\$ 20.00
11	LF	4' Sidewalk	\$ 14.00
12	LF	5' Sidewalk	\$ 17.00
13	EA	Type I Sidewalk Ramp	\$ 350.00
14	EA	Type III Sidewalk Ramp	\$ 450.00
15	SY	6" Concrete Valley Gutter	\$ 35.00
STORM DRAINAGE ITEMS			
Pay Item	Unit	Description	Unit Price
1	LF	21" RCP	\$ 40.00
2	LF	24" RCP	\$ 44.00
3	LF	27" RCP	\$ 48.00
4	LF	30" RCP	\$ 52.00
5	LF	33" RCP	\$ 58.00
6	LF	36" RCP	\$ 64.00
7	LF	39" RCP	\$ 74.00
8	LF	42" RCP	\$ 84.00
9	LF	48" RCP	\$ 110.00
10	LF	54" RCP	\$ 135.00
11	LF	60" RCP	\$ 160.00
12	LF	66" RCP	\$ 180.00
13	LF	72" RCP	\$ 220.00
14	LF	78" RCP	\$ 250.00
15	EA	21" Headwall	\$ 2,200.00

16	EA	24" Headwall	\$ 2,300.00
17	EA	27" Headwall	\$ 2,400.00
18	EA	30" Headwall	\$ 2,500.00
19	EA	33" Headwall	\$ 2,600.00
20	EA	36" Headwall	\$ 2,700.00
21	EA	39" Headwall	\$ 2,800.00
22	EA	42" Headwall	\$ 2,900.00
23	EA	48" Headwall	\$ 3,000.00
24	EA	54" Headwall	\$ 3,200.00
25	EA	60" Headwall	\$ 3,900.00
26	EA	66" Headwall	\$ 4,600.00
27	EA	72" Headwall	\$ 5,500.00
28	LY	Trench Safety	\$ 1.00
29	SY	Rock Riprap	\$ 35.00
30	EA	10' Recessed Inlet	\$ 2,200.00
31	EA	15' Recessed Inlet	\$ 3,200.00
32	EA	20' Recessed Inlet	\$ 3,600.00
33	EA	4' Storm Drain Manhole	\$ 2,500.00
34	EA	5' Storm Drain Manhole	\$ 3,300.00

SECTION 2.

The following unit prices are established for City participation in the construction of water and wastewater projects in accordance with the "Policy for Installation of Community Facilities". When the City requires "upsizing" of water or wastewater facilities beyond developer's requirements, the City will pay the difference at the prices noted below.

WATER AND WASTEWATER CITY PARTICIPATION CFA UNIT PRICES

WATER

Pay Item	Unit	Description	Unit Price
1	LF	6" Water Pipe	\$ 15.00
2	LF	8" Water Pipe	\$ 17.00
3	LF	10" Water Pipe	\$ 24.00
4	LF	12" Water Pipe	\$ 26.00
5	LF	16" Water Pipe	\$ 40.00

6	EA	8" Gate Valve w/Cast Iron box & Lid	\$ 676.00
7	EA	10" Gate Valve w/Cast Iron box & Lid	\$ 1,182.00
8	EA	12" Gate Valve w/Cast Iron box & Lid	\$ 1,223.00
9	EA	16" Gate Valve w/Cast Iron box & Lid	\$ 6,587.00
10	TN	Cast Iron/Ductile Iron Fittings	\$ 2,969.00
11	EA	Install 1" Air & Vacuum Release Valve w/Vault	\$ 3,534.00
12	EA	Install 4" blow-Off w/4" Gate Valve & Sump Manhole	\$ 3,624.00

WASTEWATER

Pay Item	Unit	Description	Unit Price
1	LF	6" Sanitary Sewer Pipe	\$ 24.00
2	LF	8" Sanitary Sewer Pipe	\$ 25.00
3	LF	10" Sanitary Sewer Pipe	\$ 26.00
4	LF	12" Sanitary Sewer Pipe	\$ 27.00
5	LF	15" Sanitary Sewer Pipe	\$ 28.00
6	LF	18" Sanitary Sewer Pipe	\$ 38.00
7	LF	21" Sanitary Sewer Pipe	\$ 45.00
8	LF	24" Sanitary Sewer Pipe	\$ 48.00
9	EA	Standard 4' Diameter Manhole	\$ 1,293.00
10	EA	Standard 5' Diameter Manhole	\$ 3,125.00

SECTION 3.

This ordinance shall be cumulative of all provisions of ordinances and of the Code of the City of Fort Worth, Texas (1986), as amended, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances and such Code, in which event conflicting provisions of such ordinances and such Code are hereby repealed.

SECTION 4.

It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and, if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the

6	EA	8" Gate Valve w/Cast Iron box & Lid	\$ 676.00
7	EA	10" Gate Valve w/Cast Iron box & Lid	\$ 1,182.00
8	EA	12" Gate Valve w/Cast Iron box & Lid	\$ 1,223.00
9	EA	16" Gate Valve w/Cast Iron box & Lid	\$ 6,587.00
10	TN	Cast Iron/Ductile Iron Fittings	\$ 2,969.00
11	EA	Install 1" Air & Vacuum Release Valve w/Vault	\$ 3,534.00
12	EA	Install 4" blow-Off w/4" Gate Valve & Sump Manhole	\$ 3,624.00

WASTEWATER

Pay Item	Unit	Description	Unit Price
1	LF	6" Sanitary Sewer Pipe	\$ 24.00
2	LF	8" Sanitary Sewer Pipe	\$ 25.00
3	LF	10" Sanitary Sewer Pipe	\$ 26.00
4	LF	12" Sanitary Sewer Pipe	\$ 27.00
5	LF	15" Sanitary Sewer Pipe	\$ 28.00
6	LF	18" Sanitary Sewer Pipe	\$ 38.00
7	LF	21" Sanitary Sewer Pipe	\$ 45.00
8	LF	24" Sanitary Sewer Pipe	\$ 48.00
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It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses and phrases of this ordinance are severable, and, if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the

remaining phrases, clauses, sentences, paragraphs and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such unconstitutional phrase, clause, sentence, paragraph or section.

SECTION 5.

This ordinance shall take effect on March 21, 2001, and shall remain in effect until the City Council repeals this ordinance or establishes new unit prices for City participation in water and sewer projects.

APPROVED AS TO FORM AND LEGALITY:

Marella Olson
Assistant City Attorney

ADOPTED: 3-20-01

EFFECTIVE: 3-21-01

SECTION 16
STREET DESIGN CRITERIA

16-1 GENERAL

Except as otherwise noted herein, Director as used in this section shall mean the Director of the Transportation and Public Works Department or his/her designee.

The following policy shall govern the installation of all street, alley and parkway improvements within the corporate limits of the City of Fort Worth, Texas, and its extraterritorial jurisdictional area:

16-2 ENGINEERING AND SUPERVISION:

- (a) All street, alley and parkway improvements shall be in accordance with the City of Fort Worth Subdivision Ordinance, City Plan Commission Rules and Regulations and with "Design Standards and Policy Guidelines" of the Transportation and Public Works Department. Sections VII and VIII of the City Plan Commission Rules and Regulations are specifically applicable to engineering criteria and construction plans.
- (b) The developer shall employ an engineer proficient in civil engineering and registered in the State of Texas for preparation of the plans and specifications subject to approval of the Director. In the event the estimated construction cost is less than \$10,000, the developer may request that the City prepare the plans and specifications for improvements. If the City agrees to prepare the plans, and specifications, the developer shall pay the City ten percent (10%) of the actual construction cost as compensation for such design work.
- (c) The determination as to compliance of the plans and specifications with applicable policies, regulations and criteria shall be the sole responsibility of the Director. Approval of the plans and specifications by the Director signifies the City's acceptance of the general design concept and that the minimum criteria appears to be satisfied. Such approval shall not be deemed to be an assumption of responsibility or liability by the City for any negligent act, or omission in the performance of developer's engineer or in his preparation of such plans and specifications.
- (d) The Director will review plans submitted by the developer's engineer and approve those plans if they are in compliance with adopted city and departmental policies and procedures and recommended engineering/industry practices. If requested, the developer shall furnish the results of soils tests performed by an approved independent soils laboratory and a pavement analysis design performed by the developer's engineer under specific loading conditions.

- (e) Soil samples to determine the Plasticity Index (PI) of the soil at the ultimate level of the pavement base course, shall be taken at least once per block or every 400', whichever is less, with a minimum of two (2) samples per project. Should the PI vary considerably from one sample to another additional samples will be taken as determined by the Director.

Soil stabilization under concrete pavements will not be required if the PI of the soil is less than 10.

If the PI of the soil is less than 20 and the pavement is asphaltic concrete or the PI is between 10 and 20 and the pavement is Portland cement concrete the base shall be stabilized to a depth of at least 6 inches with the application of 4% by weight of Portland cement or 6% by weight of lime.

If the PI exceeds 20, soil stabilization to a depth of at least 6"; will be required utilizing either 6% by weight of Portland cement or 6% by weight of lime.

Local residential streets (usually 28' to 35' wide) shall be designed to be equivalent to a Structural Number of at least 3.12. Due to the lack of better information, the Structural Number Layer Coefficients that are to be assumed for asphalt pavement design until January of 1987 are as follows:

HMAC Surface Course 0.44
HMAC Base Course 0.34
Stabilized Base 0.11

Local residential cul-de-sacs constructed of asphalt shall be designed according to the 3.12 structural number requirement stated above, plus one additional inch of pavement thickness.

Portland cement concrete streets built of 5" of reinforced concrete on a compacted base, stabilized as required above, shall be considered to meet the Structural Number criteria for both local residential streets and local residential cul-de-sacs.

Commercial/Industrial local streets and residential collector streets shall be constructed with a minimum of 6" Portland cement reinforced concrete on a compacted base, stabilized as required above.

All other roadways will be constructed with a minimum of 4" of Portland cement concrete on a compacted base, stabilized as required above.

When an asphalt street is built, concrete valley gutters shall be constructed at all points where storm water is expected to cross the roadway.

Under the above policies the Director shall retain the authority to:

- (1) Require the design engineer to design a greater pavement thickness based on American Concrete Institute or Asphalt Institute design criteria, whichever is appropriate, if the Director determines that the anticipated loading characteristics warrant a greater pavement strength.
- (2) Waive written paving requirements and authorize other paving materials when it is in the City's best interest. This would allow the Director to approve plans that include paving materials and techniques that are not specifically mentioned in the policy, but would stand the test of good engineering practice. Examples might include such things as using brick accents on streets to improve aesthetics or using HMA on streets where long term settlement is anticipated and good engineering design would indicate the construction of a flexible base street.
- (3) Determine the base-stabilizing agent to be used.
- (4) Experiment with various paving sections.
- (5) Determine the width of base to be stabilized.
- (6) Reject a thin paving section on a thick base, i.e., 2" of asphalt on 21 " of lime stabilized base, 5" of asphalt on 11" of lime stabilized base or 4" of concrete on 10.5" of stabilized base. Unless the developer's engineer can otherwise satisfy the Director, a 6" thick HMA pavement on an 8" compacted and stabilized base will be the minimum section allowed for a local residential street. As stated above, cul-de-sacs will require an additional one-inch of HMA.

The Structural Number Layer Coefficients used to meet the Structural Number requirement. (Minimum 3.12) shall be periodically reviewed by the Director and, annually during the month of January, the Director shall recommend changes, if necessary.

Any changes of the Structural Number Layer Coefficients must be approved by the City Council.

- (e) In the event the plans and specifications are prepared by the developer's engineer, then these plans and specifications shall be submitted to the Director for the review and approval of the appropriate officials of the City of Fort Worth. This review and approval process shall proceed as follows:

- (I) It is recommended that during the review of the preliminary plat that a drainage plan be submitted to the Transportation and Public Works Department for review and comment. This will permit the City staff to better review the preliminary plat and encourage early resolution of difficulties, thereby minimizing time and work by the Developer's engineer. If these items are submitted at least ten (10) City working days prior to the Development Review Committee meeting, the City staff should be able to reply in writing by the time that the Plan Commission considers the plat.
- (2) If the drainage plan is not submitted in advance as recommended in paragraph (1) above, it must be submitted along with or before the design plan submittal. The drainage plan shall include all drainage areas that affect the area to be preliminary or final platted both in the natural state and in the ultimate development.
- (3) A minimum of three (3) sets of design plans and specifications shall be submitted to the Transportation and Public Works Department for review. Additional sets may be required for other departments and/or agencies.
- (f) All coordination required with public and/or private utility agencies to eliminate conflicts with proposed storm drainage facilities shall be the responsibility of the developer and/or his engineer. Likewise, coordination with agencies requiring special conditions (i.e., railroads and the Texas department of Transportation) shall be the responsibility of the developer and/or his engineer.

16-3 CONSTRUCTION REQUIREMENTS

- (a) "Standard Specifications for Street and Storm Drain Construction" of the Transportation and Public Works Department will govern on all projects. A copy of the standard specifications may be purchased at the Transportation and Public Works Department. Upon approval of the Director, the "NCTCOG Uniform Specifications" may be used in lieu of or in conjunction with the "Standard Specifications for Street and Storm Drain Construction."
- (b) The streets, including parkways, shall be constructed to the line and grade established in the approved plans.
- (c) All necessary storm drainage facilities shall be installed in accordance with the "Policy for Storm Drainage Facilities".
- (d) All utilities and services to be located in the streets shall be installed at least two feet back of the curb line prior to the construction of the curb and gutter and paving of the streets. All trenches shall be backfilled in accordance with standard City specifications.

- (e) Concrete curb and gutter shall be constructed on both sides of the street, unless the community facilities agreement specifies otherwise, including intersections (on the line and grade established in the approved plans). Concrete driveways shall be constructed to the back of the walk line for each lot fronting on the street in accordance with standard specifications of the Transportation and Public Works Department.
- (f) Concrete driveways and sidewalks may be constructed at the time of the street improvements or at the time of site development and building construction.
- (g) Pavement, including concrete valleys and subdrains determined to be required by the City inspector during construction shall be constructed on all streets in accordance with the approved plans and/or specifications.
- (h) Border streets shall be improved at the time of development unless conditions preclude improvements at that time as determined by the Director.