

City of Riverside Development Code and Subdivision Regulations

Adopted: September 8, 2023

CONTENTS

1	ARTICLE ONE.....	4
	GENERAL PROVISIONS	4
	1-2 Authority and Purpose	4
	1-3 Reserved.....	4
	1-4 Jurisdiction and Applicability.....	4
	1-5 Amendment.....	5
	1-6 Fees	5
	1-7 Reserved.....	5
	1-8 Penalties	5
	1-9 Interpretation, Conflict, and Severability.....	5
2	ARTICLE TWO.....	7
	DEFINITIONS	7
	2-1 Purpose.....	7
3	ARTICLE THREE.....	14
	PROCEDURES AND ADMINISTRATION	14
	3-1 Purpose.....	14
	3-2 Administrative Subdivisions	14
	3-3 Minor Subdivisions	15
	3-4 Major Subdivisions	16
	Table 3-1: Application Requirements	23
4	ARTICLE FOUR.....	26
	SUBDIVISION DESIGN CATEGORIES AND GENERAL STANDARDS	26
	4-1 Purpose.....	26
	4-2 Site Design and Constraints.....	26
	Table 4-1: Tree Replacement Schedule	27
	4-3 Subdivision Design Categories and Rules.....	28
5	ARTICLE FIVE.....	31
	5-1 Purpose.....	31
	5-2 General Standards	32
	5-3 Street Hierarchy and Design	32
	1. Pavement	34
	2. Cul-de-sacs	34
	3. Street Grades.....	34
	4. Street Intersections	34
	5. Block Size	35
	6. Other design standards shall be as set forth in table 5-4	35
	5-4 Lighting and Wiring	35
	Table 5-1: Street Hierarchy.....	36
	Table 5-2: Cartway Width, Grade, and Intersection Standards.....	37
	Table 5-3: Curbs, Sidewalks, and Rights-of-Way Requirements.....	37
	Table 5-4: Street Design Requirements	38

6	ARTICLE 6	39
	PUBLIC IMPROVEMENTS AND INFRASTRUCTURE	39
	6-1 Purpose.....	39
	6-2 Water.....	39
	6-3 Sanitary Sewers	39
	6-4 Storm Water Management	53
	6-5 Reserved.....	55
	6-6 Reserved.....	55
	6-7 Reserved.....	55
	6-8 Topography and Grading.....	55
	6-9 Timing and Conveyance	55
	6-10 Timing of Payment	55
	6-11 Developer Agreements.....	56
	6-12 Easements	56
	6-13 Dedications.....	58
	6-14 Street Trees	58
7	ARTICLE SEVEN.....	61
	IMPROVEMENT FINANCING AND GUARANTEES	61
	7-1 Purpose.....	61
	7-2 Application	61
	7-3 Responsibility of Subdivider	61
	7-4 Subdivision Agreement	61
	7-5 Subdivisions Contiguous with City	62
	7-6 Performance Guarantees	62
	7-7 Notification of Completion and Acceptance by City	63
	7-8 Notice of Violation and Penalty Enforcement.....	63

1 ARTICLE ONE

GENERAL PROVISIONS

1-1 Title

This Ordinance shall be known as the Subdivision Chapter of the Land Development Ordinance of the City of Riverside.

1-2 Authority and Purpose

a. Authority

This Ordinance is adopted pursuant to the authority granted the City of Riverside under Chapter 17, Texas State Statutes, enabling cities to regulate the development of land within their jurisdictions and to promote good planning practice.

b. Purposes

The purposes of this Chapter are to:

1. Serve the public health, safety, and general welfare of the city and residents of Riverside and its surrounding jurisdiction.
2. Provide for the orderly development and growth of the city by prescribing rules and standards insuring the functional arrangement of streets, public improvements, open spaces, community facilities, and utilities.
3. Promote the creation of well-planned and attractive residential, commercial, and industrial developments within the city and its jurisdiction.
4. Avoid excessive costs to the taxpayers of Riverside or the residents of the jurisdiction of the city for the provision of public services and utilities, while maintaining high standards for these services.
5. Protect the unique environment of the City of Riverside by avoiding environmental damage whenever feasible and appropriate; and by encouraging flexibility in the design of subdivisions.
6. Provide the City of Riverside with the ability to grow incrementally through the eventual annexation of new developments.

1-3 Reserved

1-4 Jurisdiction and Applicability

- a. The provisions of this chapter shall be applicable to all property within the corporate limits of the City of Riverside and its one-mile extraterritorial jurisdiction as provided by Texas State Statutes.
- b. No owner of real property within the City of Riverside and its jurisdiction may subdivide or plat such property into lots for buildings or any other use, streets, or other forms of dedication for public use without gaining approval pursuant to this Ordinance. In addition, no individual may sell, offer to

sell, or construct buildings on any lots or parts of real property that are not subdivided as required by State law or this Ordinance.

1-5 Amendment

When necessary, this Ordinance may be amended by the City Council, who shall hold a public hearing and action on amendments.

1-6 Fees

The City Council of the City of Riverside shall establish fees sufficient to recover costs incurred for the processing and review of subdivision applications and other procedures included within this Ordinance. These fees shall be considered partially refundable less all costs associated with the review and processing of the application, including but not limited to: City Engineer, City Attorney, Public Works, and/or City Staff.

1-7 Reserved

1-8 Penalties

a. Violation and Penalty

1. Violation of the provisions of this ordinance or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or special exceptions) shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than \$500 or be imprisoned for not more than six months, or both, and in addition shall pay all costs and expenses involved in the case.
2. An owner, developer, or subdivider of property may each be found guilty of a separate offense and suffer the penalties provided in this section.
3. Notwithstanding this section, the City and the City Secretary shall have the right to take any lawful action necessary to prevent or remedy any violation of this Ordinance or any agreement pursuant to or other condition of an approval of a subdivision application.

1-9 Interpretation, Conflict, and Severability

- a. The Subdivision Chapter of the Land Development Ordinance shall be held to provide the minimum requirements necessary for the promotion of public health, safety, and welfare. If any provision of the Subdivision Chapter conflicts with any other provision of the Land Development Ordinance, any other Ordinance of the City of Riverside, or any applicable State or Federal law, the more restrictive provision shall apply.
- b. Nothing in these provisions shall relieve any property owner or user from satisfying any condition or requirement associated with a previous approval, special permit, variance, development permit, or other permit issued under any local, State, or Federal ordinance or statute.

- c. If any chapter, section, subsection, clause, or phrase of this Subdivision Chapter is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this Ordinance or any other section of the City of Riverside's Land Development Ordinance.

2 ARTICLE TWO

DEFINITIONS

2-1 Purpose

Article Two shall be known as the Definitions. The purpose of these provisions is to promote consistency and precision in the interpretation of the Subdivision Ordinance. The meaning and construction of words as set forth shall apply throughout the Subdivision Ordinance, unless where modified in a specific section or where the context of such words or phrases clearly indicates a different meaning or construction.

2-2 Definitions of Terms

For the purposes of this Subdivision Ordinance, certain terms and words are hereby defined. Certain sections contain definitions which are additional to those listed here. Where terms are not specifically defined, their ordinarily accepted meanings or meanings implied by their context shall apply.

2-3 A

1. ADT or Average Daily Traffic: The average number of motor vehicles per day that pass over a given point or segment of street.
2. Alley: A public or private right-of-way generally designed to provide secondary access to the side or rear of a property whose principal frontage is on another street.
3. Applicant: An owner, developer, or subdivider submitting an application to divide property pursuant to this Ordinance.
4. Approving Authority: The City Council of the City of Riverside or its designee.
5. ASCE: The American Society of Civil Engineers.

2-4 B

1. Bicycle Lane and Path: A designated lane on a roadway or an exclusive path separated from a roadway, designed specifically to accommodate the physical requirements of bicycling. Bicycle paths are ordinarily designed to accommodate other forms of pedestrian recreation.
2. Block: A tract of land entirely surrounded by public streets.
3. Buffer: A landscaped area intended to separate and partially obstruct visual or other sensory effects of two adjacent land uses or properties from one another.
4. Building Inspector: The designee of the City of Riverside is responsible for the supervision and administration of the Uniform Building Code or any other locally adopted building code.
5. Building Line: Each individual lot shall have a building line 25-foot offset from the front ROW line; a 5-foot building line along any side lot lines; and a 10-foot building line at the rear lot line. Individual lots that front knuckles, curves, or cul-de-sacs may have a 20-foot building line. No

habitable structure may be constructed between the building line and the property and/or ROW line.

2-5 C

1. Cartway: The actual surface area of a road used to accommodate motor vehicles, including moving traffic lanes, acceleration and deceleration lanes, and parking lanes. On a street with curbs, the cartway is measured from curb line to curb line. On streets without curbs, the cartway is measured from paving edge to paving edge.
2. Centerline Offset: The distance between the centerline of roads intersecting a common road from the same or opposite sides.
3. Channel: The bed or banks of a natural stream or drainage way which convey the constant or intermittent flow of water, including storm run-off.
4. Common Open Space: Land within or related to a development that is not individually owned or dedicated for public use, designed, and generally intended for the common use of the residents of the development.
5. Compensating Open Space: Compensating open spaces are necessary to provide some space for children to play outdoors within their immediate neighborhood. The compensating open space may include basketball, playground equipment, or any other space that promotes outdoor play. If the proposed single family residential lot has a gross area of less than 7,000 square feet, compensating common space must be established and provided within the plat boundary and based on the following schedule:

Average Lot Size	Compensating Open Space Required Per Lot (Sq. Ft)
1400-2000	720 SF
2001-2500	600 SF
2501-3000	500 SF
3001-3500	400 SF
3501-4000	300 SF
4001-4500	200 SF
4501-6999	100 SF

However, the minimum size for compensating open space shall be a total of 21,780 SF or shall the compensating open space required be in excess of 25% of the gross area of the property within the plat exclusive of any public street right-of-way.

6. Concept Plan: A preliminary presentation which includes the minimum information necessary, as determined by the City Secretary, to be used for the purpose of discussion or classification of a proposed plat prior to formal application.
7. Conservation Development: A development design technique that concentrates buildings in specific areas on a site to allow remaining land to be used for recreation, common open space, or the preservation of historically or environmentally sensitive features.
8. Conservation Subdivision: Wholly or in majority, a residential subdivision that permits a reduction in lot area, setback, or other site development regulations, provided 1) there is no increase in the overall density permitted for a conventional subdivision in a given zoning district, and 2) the remaining land area is used for common space.

9. Conventional Subdivision: A subdivision which literally meets all nominal standards of the Land Development Ordinance for lot dimensions, setbacks, street frontage, and other site development regulations.
10. Creative Subdivision: A subdivision which, while complying with the Subdivision Ordinance, diverges from nominal compliance with site development regulations in the Land Development Ordinance. Creative subdivisions imply a higher level of pre-planning than conventional subdivisions. They may be employed for the purpose of environmental protection or the creation of superior community design. Types of Creative Subdivisions include Conservation Subdivisions and Traditional Neighborhood Districts.
11. Cul-de-sac: A local street with only one outlet and with an opposite end providing for the reversal of traffic.
12. Curb: A vertical or sloping edge of a roadway, intended to define the edge of the cartway and to channel or control drainage.

2-6 D

1. Dedication: A grant of land to the city or another public agency for a public purpose.
2. Design standards: Standards that set forth specific improvement requirements.
3. Detention basin: An artificial or natural water collection facility, designed to collect surface or subsurface water and to control its rate of discharge, in order to prevent a net increase in the rate of water flow that existed prior to a development.
4. Developer: The legal owner(s) or authorized agent of any land included in a proposed development.
5. Development: A planning or construction project involving substantial improvement or change in the character and/or land use of a property.
6. Divided street: A street with opposing lanes separated by a median strip, center island, or other form of physical barrier, which cannot be crossed except at designated locations.
7. Drainage: The removal of surface or ground water from land by drains, grading, or other means.
8. Drainage system: The system through which water flows from the land.

2-7 E

1. Easement: A grant of one or more of the property rights by the property owner to and/or for use by the public, a corporation, or another person or entity.
2. Erosion: The wearing away of a land surface by water, wind, ice, or gravity.

2-8 F

1. Final Approval: The final official action of the City Council, upon a recommendation by the City, permitting the filing of a subdivision with the Walker County Register of Deeds and the

conveyance of individual parcels and lots to subsequent owners. Final Approval follows the completion of detailed engineering plans, negotiation of subdivision agreements, posting of required guarantees, and other requirements of this Ordinance.

2. Flag Lots: Flag lots are prohibited
3. Frontage: The length of a property line of anyone premises abutting and parallel to a public street, private way, or court. On a curve, knuckle, or cul-d-sac lot, the frontage is measured at the building line.

2-9 G

1. Grade: The slope of a street or other public way, defined as a percentage or ratio of vertical change in elevation to horizontal change in distance.

2-10 H

2-11 I

2-12 J

2-13 K

2-14 L

1. Lot: A parcel of property with a separate and distinct number or other identifying designation which has been created, assigned and recorded in the Office of the Walker County Register of Deeds. Each individual lot shall have a minimum frontage of 40 feet and all corner lots shall have a minimum width of 50 feet, except as provided in an approved Planned Unit Development and/or Creative Subdivision. Individual lots located on knuckles, curves, or cul-de-sacs shall have a minimum lot width of 40 feet at the building line. The minimum lot depth, for all lots, is 100 feet. When a lot is used together with one or more contiguous lots in a common development, all the lots used, including any lots used for off-street parking, shall be considered a single lot for purposes of these Zoning Regulations.

- (a) Corner Lot: A lot located at the junction of at least two streets, private ways or courts or of at least two segments of a curved street, private way or court, at which the angle of intersection is no greater than 135 degrees.
- (b) Interior Lot: A lot other than a corner lot.
- (c) Common Development Lot: When two or more contiguous lots are developed as part of a Planned Unit Development, these lots may be considered a single lot for purposes of this ordinance.
- (d) Flag type lots are prohibited.

2. Lot Area: The total horizontal area within the lot lines of a lot.
3. Lot Depth: The mean horizontal distance measured between the front and rear lot lines (minimum of 100 feet).
4. Lot Line: A property boundary line(s) of record that divides one lot from another lot or a lot from the public or private street rights-of-way or easement.

- (a) Front Lot Line: The lot line separating a lot and a public or private street right-of-way or easement.
 - i. For an interior lot, the lot line separating the lot from the right-of-way or easement.
 - ii. For a corner lot, the shorter lot line abutting a public or private street or easement. In instances of equal line dimension, the front lot line shall be determined by the City Secretary, or as may be noted on a final plat.
 - iii. For a double frontage lot, the lot lines separating the lot from the right-of-way or easement of the more minor street. In cases where each street has the same classification, the front lot line shall be determined by the City Secretary, or as may be noted on a final plat.
 - (b) Rear Lot Line: The lot line which is opposite and most distant from the front lot line.
 - (c) Side Lot Line: Any lot line that is neither a front or rear lot line. A side lot line separating a lot from a street, private way or court is a street side lot line. A side lot line separating a lot from another lot or lots is an interior side lot line.
5. Lot Width: The horizontal distance measured between the side lot lines of a lot, at right angles to its depth along a straight line parallel to the front lot line at the minimum required setback line. Minimum lot width of 40 feet.
 6. All single-family homes must include, at a minimum, a garage sized to hold one vehicle (minimum 12 feet wide and 20 feet long)
 7. Two off-street parking spaces must be provided on or adjacent to each lot with the width of such spaces being not less than 8.5 feet each.

2-15 M

1. Main: The principal artery of a system of continuous piping which conveys fluids and to which branches may be connected.
2. Major subdivision: Any subdivision not defined and approved as a minor subdivision.
3. Minor subdivision: A subdivision of land which creates no more than four lots from any single parcel of land; requires no extensions of streets, sewers, utilities, or other municipal facilities; and complies with all pre-existing zoning requirements following.
4. Monument: An identification marker established by a registered land surveyor at each section corner, block corner, lot corner, or other point as required by this Chapter.
5. Moving lane: Any traffic lane within a cartway where traffic movement is the primary or sole function.

2-16 N

2-17 O

1. Off-site: Located outside the boundaries of the parcel that is the subject of an application.

2. Open space: Any parcel or area of land or water that is essentially retained in an open state and set aside for public or private use.

2-18 P

1. Parking Lane: A lane located on the sides of streets, designated, or allowing on-street parking of motor vehicles.
2. Pavement: An impermeable, hard surface, typically asphalt, asphaltic concrete, concrete, or brick or other masonry paver units.
3. Performance Bond: A surety bond or cash deposit posted by a contractor or developer made out to the city in an amount equal to the full cost of the improvements. The bond amount shall be that of the contract price and shall be legally sufficient to assure the City that said improvements will be constructed in accordance with the terms of the contract documents within the period specified by this Chapter.
4. Plat: A document, usually a map or maps, expressing the division of land into two or more lots or parcels, any one of which is ten acres or less. Plats include preliminary and final plats.
 - (a) Assessors Plat: A plat prepared at the request of the County Assessor to clarify property descriptions for the purposes of assessment and taxation.
 - (b) Preliminary Plat: A plat indicating the proposed layout of a development and related information, intended for the purpose of preliminary approval by approving authorities but not for filing with the Walker County Register of Deeds.
 - (c) Final Plat: The final map of the subdivision which is presented for Final Approval. The Final Plat contains detailed information and documentation and is designed to be filed with the Register of Deeds.

2-19 R

1. Right-of-way: A strip of land, generally linear, occupied or intended to be occupied by a system that conveys people, traffic, fluids, utilities, or energy from one point to another. Rights-of-way may include streets and roads, crosswalks, bicycle paths, recreational trails, railroads or fixed guideway transit, electric transmission lines, gas pipelines, water mains, or sewer mains.

2-20 S

1. Sanitary Sewer: A sewer that conducts sanitary waste from a point of origin to a treatment or disposal facility. In developing areas, sanitary sewers normally include interceptors, outfall, and lateral sewers.
 - (a) Interceptor: A sanitary sewer that serves as a trunk, collecting sewage generated by a number of individual developments.
 - (b) Outfall: A sanitary sewer that may be developed to connect an individual subdivision or development to an interceptor sewer.
 - (c) Lateral or local: A pipe that connects individual buildings or groups of buildings to an outfall or interceptor sewer.

2. Septic system: An underground system, utilizing a watertight receptacle to receive the discharge of sewage, which provides for the decomposition of waste produced by development on a single lot.
3. Sidewalk: A paved path provided for pedestrian use, usually located at the side of and detached from a road, but within the right-of-way.
4. Storm Sewer: A conduit which conducts storm drainage from a development or subdivision, ultimately to a drainage way or stream.
5. Street: A right-of-way, dedicated to public use, which provides a primary means of access to an abutting lot or parcel.
6. Street hierarchy: The conceptual arrangement of streets based on function. The hierarchical approach classifies streets from courts or lanes, which provide private access to a limited number of lots, to arterials, which accommodate large volumes of high-speed, regional traffic. Street types contained within the hierarchy include:
 - (a) Court or Private Drive
 - (b) Local
 - (c) Collector
 - (d) Minor Arterial
 - (e) Major Arterial
7. Subdivision: The division of a lot, tract, or parcel into two or more lots, tracts, parcels, or other units of land for title transfer or development, when one of the resultant lots is equal to ten acres or less.

2-21 T

2-22 U

2-23 V

2-24 W

2-25 X

2-26 Y, Z

3 ARTICLE THREE

PROCEDURES AND ADMINISTRATION

3-1 Purpose

The purpose of this Article is to establish procedures for subdivision applications and for review and action on applications by the City and the City Council. The procedures are designed to assure adequate review and consideration of subdivision applications, while providing for an orderly and expeditious approval process. The Article provides procedures for the approval of three types of subdivisions: Administrative Subdivisions, Minor Subdivisions, and Major Subdivisions.

3-2 Administrative Subdivisions

a. Scope

The Administrative Subdivision procedure may be used to adjust an interior lot line or combine two or more lots without replatting providing the following conditions are met:

1. In the case of an Administrative Lot Line Adjustment:
 - (a) The lots involved must be designated within the same zoning district and the proposed adjustment will not create or result in a violation of the zoning ordinance.
 - (b) The lots involved must be existing platted lots.
 - (c) The adjustment alters lot lines of no more than four lots without creating additional lots.
2. In the case of an Administrative Platting or Lot Consolidation:
 - (a) The lots involved must be designated within the same zoning district and the proposed platting or lot consolidation will not create or result in a violation of the zoning ordinance.
 - (b) The lots involved must be existing platted lots.
 - (c) The lots must be under unified ownership.
 - (d) The proposed platting creates no more than four lots, or the proposed consolidation consolidates no more than four lots into a lesser number of lots.
3. A lot is limited to only one instance an administrative adjustment, platting and/or consolidation.
4. The subdivision is served by existing utilities and does not require the extension of streets, utilities, or public improvements.
5. Each lot resulting from the subdivision procedure will conform fully to all requirements of the zoning district that pertain to the lots; and each lot is developable according to the site development regulations of the zoning ordinance.

b. Application and Approval Procedure

An application for an Administrative Subdivision may be approved under the following procedure:

1. The applicant submits an application on a form established by the City and includes the supporting documents required for Administrative Subdivisions in Table 3- 1. These documents

shall include a plat of all lots and parcels that are affected by the action, prepared by a Licensed Surveyor or registered Professional Engineer.

2. Following submission, the City Secretary shall review each application according to the following criteria:
 - (a) Compliance with the conditions contained in Section 3-2(a) above.
 - (b) Potential adverse environmental effects or effects on neighboring properties.
3. Following such a review, the city may approve the Administrative Subdivision. Such approval shall be denoted by a signed certificate of approval which must be filed along with the plat at the County Courthouse.
4. The City retains the right to disapprove or not act on the Administrative Subdivision application. In the event of such an action, the application may proceed through the Minor or Major Subdivision process. If the subdivision complies with the conditions of a Minor Subdivision application, it may be directed to that approval process. Otherwise, the proposed subdivision shall be deemed a Major Subdivision and proceed through the appropriate review and action process.
5. If the approved plat is not filed within 90 days of approval by the City Secretary, such approval shall be null and void.
6. The City shall keep a complete and accurate record of all administrative subdivision approvals.

3-3 Minor Subdivisions

a. Scope

The Minor Subdivision procedure may be used when a proposed subdivision meets all of the following conditions:

1. The subdivision adjusts the lot lines of no more than four lots without creating additional lots; or creates no more than four lots from any single parcel, tract, or lot
2. The subdivision is served by existing utilities and does not require the extension of streets, utilities, or public improvements.
3. Each lot resulting from the subdivision procedure will conform fully to all requirements of the zoning district that pertain to the lots; and each lot is developable according to the site development regulations of the zoning ordinance.
4. No part of the parcel has been the subject of a previous Minor Subdivision or Minor Subdivision approval.

b. Application and Approval Procedure

An application for a Minor Subdivision may be approved under the following procedure:

1. The applicant submits an application on a form established by the City Secretary and includes the supporting documents required for Administrative Subdivisions in Table 3-1. These

documents shall include a plat of all lots and parcels that are affected by the action, prepared by a Licensed Surveyor or registered Professional Engineer.

2. Following submission, the City shall review each application according to the following criteria:
 - (a) Compliance with the conditions contained in Section 3-3(a) above.
 - (b) Potential adverse environmental effects or effects on neighboring properties.
 - (c) Effects of the subdivision on public services. In order to determine this effect, the City Secretary may submit the application to relevant school districts, utilities, and public safety agencies as required.
3. Following such review, the City Secretary shall forward the application along with his/her recommendation, to the City Council.
4. The City, following proper notice, shall hold a public hearing on each Minor Subdivision and, following such public hearing, shall take action on the application. If the subdivision is approved by the City, the approval shall be documented by a certificate of approval, executed by the City Secretary and the Mayor of the City. This certificate shall be filed along with the approved plat with the Walker County Register of Deeds. A record of all subdivisions and certificates of approval shall also be maintained by the City Clerk.
5. The City retains the right to disapprove or not act on the Minor Subdivision application. In the event of such an action, the application may proceed through the Major Subdivision process.
6. Following approval of a Minor Subdivision, the subdivider must file the plat and certificate of approval with the Walker County Register of Deeds. If the approved plat is not filed within 180 days of approval by the City, such approval shall be null and void.
7. The City Secretary shall keep a complete and accurate record of all Minor Subdivision approvals.

3-4 Major Subdivisions

a. Applicability

The Major Subdivision procedures apply to all subdivisions which are not approved or eligible for approval under the Administrative or Minor Subdivision procedures. In general, these include subdivisions that: 1) are not approved under the Administrative or Minor Subdivision procedure; 2) create more than four lots; 3) require development or extension of public improvements.

b. Stages in the Approval Process

The approval process for Major Subdivisions consists of three stages: the pre-application stage, the preliminary plat approval stage, and the final plat approval stage.

c. Pre-application Procedures

1. Before filing an application for preliminary plat approval, the applicant shall meet with the City Secretary or his/her designee, regarding general requirements and issues relating to the proposed subdivision.

2. At the pre-application conference, the applicant shall submit a concept plan. The concept plan shall include:
 - (a) A location map showing the relationship of the proposed subdivision to existing and proposed streets and public facilities.
 - (b) A schematic plan illustrating the proposed layout of streets, lots, and other features and their relationship to existing and proposed site topography.
3. The pre-application conference does not require a formal application or payment of a fee.

d. Preliminary Plat Application

1. Application Requirements

- (a) After the pre-application conference, the applicant shall prepare and submit an application for preliminary plat approval. The applicant shall prepare and file 10 copies of a proposed preliminary plat. The application for preliminary plat approval shall be submitted to the City Clerk at least 21 calendar days before the City Council meeting at which the application will be considered. The application shall consist of a form established by the City Secretary; the supporting documents required for Major Subdivisions in Table 3-1; and payment of a fee, the amount of which shall be determined by the City Council.

2. Preliminary Plat Requirements:

- (a) A preliminary plat shall be based on a legal description of the property as shown by the land records in the office of the Register of Deeds. A preliminary plat shall meet the design standards set forth in the subdivision regulations. Plats shall be drawn at a scale to clearly show all necessary information. This sheet is provided as a checklist of information required to be submitted, along with the Application form and Retainer Fee.
- (b) The preliminary plat of a subdivision shall show, or be accompanied by, the following information:
 - i. Copies of the plat to include three (3) full size mylar copies, five (5) 11" x 17" copies and one (1) reduced copy of the plat which is 8 1/2" x 11", as well as a PDF of the Preliminary Plat.
 - ii. Name of the subdivision, legal description, and owners of property.
 - iii. Name of the subdivider, engineer, landscape architect, and surveyor.
 - iv. Scale specified and graphic scale depicted.
 - v. North arrow and date.
 - vi. Names of adjoining property owners or subdivisions within 200 feet of proposed project.
 - vii. The locations and dimensions in feet (and hundredths of feet) for the property lines, lot lines, and building setback lines.
 - viii. Soils and geology information provided to show soil types identified, with hydrologic, permeability, and percolation information and analyses information detailed by a qualified soils engineer. If the preliminary soils report indicates the presence of critically expansive soils or other soil problems which could lead to structural defects if not corrected, final soils report must contain corrective information for the project.
 - ix. Names and dimensions of all existing and proposed street rights-of-way and pavement widths, proposed street grades and paving design analysis.

- x. The locations and sizes of existing and proposed utility lines, including water and sewer lines, and any other utility installations, including underground natural gas, electrical, or telephone lines adjacent to or within the proposed subdivision, or the locations of the nearest available such utilities. Profiles detailing design information of grades, proposed flow lines, locations of manholes, etc. of the proposed sewer utilities must be shown on the preliminary plat.
- xi. Existing and proposed topographic contours (preliminary grading plan) at two (2) foot intervals if the average slope is less than five (5) percent and at five (5) foot intervals if the average slope is five (5) percent or more.
- xii. The location of existing trees with trunks twelve (12) inches in diameter or greater, measured two (2) feet above the ground. Clumps of trees may be identified as groups of trees without precisely locating each tree.
- xiii. A preliminary drainage report, complying with the Walker County Master Watershed Plan & Drainage Criteria Manual, including calculations of the quantity of storm water runoff of the proposed tract before development and a preliminary estimate of the location and amount of storm water runoff after full development of the site, including the location and direction of proposed surface water drainage shown on the preliminary grading plan, as well as the size and capacity of any proposed detention or retention areas.
- xiv. An indication of any area subject to flooding as determined by the flood hazard insurance maps of the jurisdiction.
- xv. Requests for waivers of design standards.
- xvi. Proposed and existing easements, dedications, and reservations of land.
- xvii. A legend stating the total acreage, the number of lots, a computation of lot density, and the total lineal feet of streets and alleys.
- xviii. A map indicating plans for the development of the entire area if the proposed plat is a portion of a larger holding intended for subsequent development, including preliminary engineering plans for all improvements for the entire holding.
- xix. A vicinity map included on the preliminary plat showing the geographic relationship of the proposed subdivision to the surrounding street system, prepared at a scale of no less than one (1) inch equals two thousand (2,000) feet.
- xx. Application & Consulting Fee Agreement forms and applicable fees payable to the City of Riverside.

3. Preliminary Plat Approval Procedure

- (a) After submission of a complete application for a preliminary plat, the City Secretary and his/her staff shall review the application. As part of the review, the City Secretary will circulate the application to the City Engineer, local utilities, the school district in which the subdivision is located, public safety agencies, and any other applicable provider of public services deemed necessary. Each reviewing agency shall submit written comments to the City Secretary within the period which he/she establishes.
- (b) Following the comment period, the City Secretary shall submit a written recommendation for action to the City Council.
- (c) The City Council, following proper notice, shall hold a public hearing on each Major Subdivision and, following such public hearing, shall take action on the application. The City Council may recommend approval, conditional approval, or denial of the preliminary plat. In addition, the Council may delay action on the application in order to resolve outstanding issues.
- (d) Following action by the City Council, the City Engineer or City designee, shall transmit a written recommendation summarizing the Council's action to the Developer

- (e) Approval of a preliminary plat by the City Council shall not constitute approval of a final plat. The approval shall be considered an expression of conditional approval to guide the preparation of a final plat, to be considered subsequently by approving authorities. The preliminary approval shall confer upon the applicant the following rights:
 - i. The general terms and conditions under which the plat was approved will not change.
 - ii. The applicant may submit for approval a final plat for the whole or a part of the preliminary plat on or before the expiration date of the preliminary approval.
 - iii. The preliminary plat approval shall stay in force for a period of one year from the date of approval by the City Council. The City Council may, at its discretion, establish a longer effective date for the preliminary plat approval. The City Council also may grant extensions to the effective period of a preliminary plat.
 - iv. Phased Subdivisions: The final plat may be submitted in phases, provided that no phase represents the lesser of 10 lots or 20% of the total number of lots in the entire approved preliminary plat. The initial phase of the final plat must be submitted according to the effective dates established in Section (3) above. In the event of a phased subdivision, the initial preliminary plat approval remains effective for a period not to exceed five years, unless otherwise extended by the City Council.

e. Final Plat Application Process

1. Application Requirements

- (a) The applicant shall prepare and submit an application for final plat approval within one year of the preliminary plat approval unless an extension has been granted by the City Council. The application for final plat approval shall be submitted to the City Clerk at least 21 calendar days before the City Council meeting at which the application will be considered. The application shall consist of a form established by the City Secretary; the supporting documents required for Final Plat Approval of Major Subdivisions in Table 3-1; and payment of a fee, the amount of which shall be determined by the City Council.

2. Final Plat Requirements

- (a) A final plat shall be based on a legal description of the property as shown by the land records in the office of the Register of Deeds. A final plat shall meet the design standards set forth in the subdivision regulations. Plats shall be drawn at a scale to clearly show all necessary information. This sheet is provided as a checklist of information required to be submitted, along with the Application form and any applicable fees. The applicable fees are required to cover the City's costs to have the engineering plans/construction plans reviewed by the City's Consulting Engineer.
- (b) The final plat of a subdivision shall show, or be accompanied by, the following information:
 - i. Copies of the plat to include three (3) full size mylar copies, three (3) 11" x 17" copies and one (1) reduced copy of the plat which is 8 1/2" x 11", as well as a PDF of the Final Plat.
 - ii. Name of the subdivision, legal description, and owners of property.
 - iii. Name of the subdivider, engineer, landscape architect, and surveyor.
 - iv. Scale specified and graphic scale depicted.
 - v. North arrow and date.
 - vi. Names of adjoining property owners or subdivisions within 200 feet of proposed project.

- vii. The locations and dimensions in feet (and hundredths of feet) for the property lines, lot lines, and building setback lines.
- viii. If the preliminary soils report indicates the presence of critically expansive soils or other soil problems which could lead to structural defects if not corrected, the final soils report must contain corrective information for the project.
- ix. Names and dimensions of all existing and proposed street rights-of-way and pavement widths, proposed street grades and paving design analysis.
- x. The locations and sizes of existing and proposed utility lines, including water and sewer lines, and any other utility installations, including underground natural gas, electrical, or telephone lines adjacent to or within the proposed subdivision, or the locations of the nearest available such utilities. Profiles detailing design information of grades, proposed flow lines, locations of manholes, etc. of the proposed sewer utilities must be shown on the final plat.
- xi. Existing and proposed topographic contours (final grading plan) at two (2) foot intervals if the average slope is less than five (5) percent and at five (5) foot intervals if the average slope is five (5) percent or more.
- xii. The location of existing trees with trunks twelve (12) inches in diameter or greater, measured two (2) feet above the ground. Clumps of trees may be identified as groups of trees without precisely locating each tree.
- xiii. A final drainage report, including calculations of the quantity of storm water runoff of the proposed tract before development and a final estimate of the location and amount of storm water runoff after full development of the site, including the location and direction of proposed surface water drainage shown on the final grading plan, as well as the size and capacity of any proposed detention or retention areas.
- xiv. An indication of any area subject to flooding as determined by the flood hazard insurance maps of the jurisdiction.
- xv. Requests for waivers of design standards.
- xvi. Proposed and existing easements, dedications, and reservations of land.
- xvii. A legend stating the total acreage, the number of lots, a computation of lot density, and the total lineal feet of streets and alleys.
- xviii. A map indicating plans for the development of the entire area if the proposed plat is a portion of a larger holding intended for subsequent development, including final engineering plans for all improvements for the entire holding.
- xix. A vicinity map included on the final plat showing the geographic relationship of the proposed subdivision to the surrounding street system, prepared at a scale of no less than one (1) inch equals two thousand (2,000) feet.
- xx. Completed Subdivision Agreement with amounts for the construction improvements itemized before the City Council will approve the final plat. The City will provide the cost for improvement item 10, which is the contract with the City's Consulting Engineer for Construction Observation and Testing Services during the construction of the required improvements.
- xxi. Application form and any applicable fees payable to the City of Riverside.

3. Final Subdivision Agreement

- (a) The final plat application shall include the final subdivision agreement to be executed between the City and the applicant. The terms of this agreement shall be acted upon along with action on the Final Plat.

4. Performance Bond, Letter of Credit, Cash Escrow or other guarantee in a form acceptable to the city.

- (a) The subdivision agreement shall specify the amount of the performance bond, letter of credit, cash escrow or other guarantee in a form acceptable to the City for public improvements to be filed prior to receiving final plat approval or, alternately, shall contain a statement that required improvements have been satisfactorily completed. The performance bond, letter of credit, cash escrow or other guarantee, if required, must be presented in a form satisfactory to the City Attorney prior to final approval of the subdivision.

5. Final Plat Approval

- (a) The City Secretary and City shall review the final plat for consistency with the approved preliminary plat and for compliance with the Land Development Ordinance and other applicable local, state, or federal statutes and regulations. If the final plat meets all conditions of the ordinance and is substantially consistent with the terms of the preliminary plat approval, the City Council shall have no recourse but to approve the final plat.
- (b) If the City finds in its review that the submitted final plat is inconsistent with the preliminary plat, does not comply with the conditions of relevant ordinances and statutes, or requires a waiver of any section of the Subdivision Chapter, it shall hold a public hearing on the final plat.
- (c) The City Council, following proper notice, shall hold a public hearing on each final plat and subdivision agreement and, following such public hearing shall take final action on the application. The City Council is further empowered to grant waivers of a section of the Subdivision Chapter after a waiver request has received a recommendation from the City .

f. Filing the Final Plat

1. Following City Council approval of a final plat, Mayor of the City of Riverside shall sign a certificate of approval, which shall be a part of the reproducible documents of the subdivision plat required with submission of the final plat. Prior to the certificate of approval being issued, the applicant shall submit the final approved plat GIS Shape Files to the City in order to be issued the signed certificate of approval.
2. The passage of a resolution by the City Council accepting the plat shall constitute final approval of the platting of the area shown on the final plat. The applicant shall record the plat in the office of the Register of Deeds of Walker County and shall file satisfactory evidence of such recording in the office of the County Clerk before the City shall recognize the plat as being in force.
3. The subdivider must file the plat along with all applicable covenants and other documentation within 180 days of the execution of the plat by the Mayor.

g. Plats Outside of Corporate Limits

1. Authority Within 1/2 Mile of City Limits
 - (a) Pursuant to the authority contained in Section 17-1001 through 1004 of the Texas Revised Statutes, 1943, the subdivision provisions of the Land Development Ordinance, and the provisions of the Municipal Code of the City shall govern all territory outside the corporate limits of the City but within 1/2 mile of such corporate limits, except to the extent that

ordinances or resolutions of the City Council shall limit their application to an area less than 1/2 mile of such corporate limits.

2. Procedures

(a) Procedures for the approval of plats outside the corporate limits of Riverside shall be the same as set forth in this section, except for the following provisions:

- i. Two additional copies of the preliminary and final plat documents shall be submitted with the application for plat approval. The City Secretary shall refer one copy each to the County Engineer and request their recommendations to be submitted to the City.
- ii. The County shall submit a recommendation to the City within fourteen days after referral of the plat to the County Engineer.

TABLE 3-1: Application Requirements

	ADMINISTRATIVE SUBDIVISION	MINOR SUBDIVISION	MAJOR SUBDIVISION	
			Preliminary	Final
PLAT INFORMATION				
Name, address of owner and applicant.	X	X	X	X
Name, signature, license number, seal and address of engineer, land surveyor, architect, planner, and/or landscape architect, as applicable, involved in preparation of plat.	X	X	X	X
Title block, denoting type of application, tax map sheet, legal description, and general location.	X	X	X	X
Key map, showing location with reference to surrounding property, streets, current street names, city limits, and other features within 1/4 mile of the subdivision boundary.	X	X	X	X
Present and proposed zoning.			X	X
North arrow, date, and graphic scale.	X	X	X	X
Proof that taxes are current.	X	X		X
Signature blocks for City Chairman, Administrative Official, and Mayor.	X	X	X	X
Appropriate certification blocks.	X	X	X	X
Monumentation.	X	X		X
Metes and bounds description, including dimensions, bearings, curb data, tangent length, radii, arcs, chords, and central angles for all centerlines and Row's, and centerline curves on streets.				X
Acreage of tract.	X	X	X	X
Date of original and all revisions.	X	X	X	X
Dimensioning of setbacks.		X	X	X
Location, dimensions, and names of existing and proposed streets.	X	X	X	X
All proposed lot lines, lot dimensions, and lot areas in square feet.	X	X	X	X

TABLE 3-1: Application Requirements

	ADMINISTRATIVE SUBDIVISION	MINOR SUBDIVISION	MAJOR SUBDIVISION	
			Preliminary	Final
PLAT INFORMATION (cont.)				
Copy of any existing or proposed deed restriction or covenants.		X		X
Existing and proposed easements or land reserved for or dedicated to public use.	X	X	X	X
Phasing plan.			X	X
Payment of application fees.	X	X	X	X
<hr/>				
ENVIRONMENTAL INFORMATION				
Property owners and lines within 200 feet.		X	X	
All existing water courses, flood-plains, wetlands, habitat areas or other environmentally sensitive features within 200 feet.	X	X	X	X
Survey of trees and wooded areas, (noting size and location of trees) and mature or environmentally sensitive vegetation.		X	X	
Existing ROWs and easements within 200 feet.	X	X	X	X
Topography at five-foot contours including areas up to 200 feet of the plat boundaries.		X	X	X
Existing site drainage system.	X	X	X	X
Drainage calculations and percolation tests.			X	X
<hr/>				
IMPROVEMENTS AND CONSTRUCTION INFORMATION			General	Detailed
Proposed utility infrastructure plans including water, sanitary sewer, and storm water management.				
Sediment/Soil Erosion Control Plan.			X	X
Spot and finished elevations at all property corners.				X
Construction details as required.				X
Road and paving cross-sections.			X	X
Proposed street names.			X	X
New block and lot numbers.	X	X	X	X

TABLE 3-1: Application Requirements

	ADMINISTRATIVE SUBDIVISION	MINOR SUBDIVISION	MAJOR SUBDIVISION	
			Preliminary	Final
Lighting plan and details.				X
Pedestrian circulation patterns and sidewalk or trail locations.			X	X
Certifications and seals from licensed Professional Engineer, as required by Ordinance.		X		X
Improvement financing plan, including sources of funding (Private, assessments, public, Sanitary and Improvement Districts, and other sources).			X	X
<hr/>				
Draft subdivision agreement.				X
Final subdivision agreement.				X
Required Number of Copies of Plat Document	6	6	16	10
Required Minimum Scale of Plat Documents	1"=100 feet	1"=100 feet	1"=100 feet	1"=100 feet
Certificate of Approval of the Final Plat, prior to signing, the applicant shall provide the City final approved plat GIS Shape Files				X

4 ARTICLE FOUR

SUBDIVISION DESIGN CATEGORIES AND GENERAL STANDARDS

4-1 Purpose

The purpose of this Article is to provide flexible design alternatives in order to assure that subdivisions in the Riverside area create functional and attractive environments, minimize adverse effects, and become assets to the city's rural and natural setting. The Article defines specific types of subdivisions that have varying design characteristics, applicable to various settings within the City of Riverside and jurisdiction.

4-2 Site Design and Constraints

a. Consideration of Plans

The design of subdivisions shall consider all existing local and regional plans for Riverside and its Jurisdiction.

b. Grading Permit Required

1. A Grading Permit is required for erosion and sediment control on all construction sites greater than 5 acres in size. Prior to grading or site disturbing activity, the developer shall apply to the City Secretary for a grading permit. The application for a grading permit shall include:

- (a) A location map showing the location and extent of grading activity.
- (b) A Sediment and Erosion Control Plan.

2. After submission of a complete application for a grading permit, the City Secretary and his/her staff shall review the application. As part of the review, the City Secretary shall circulate the petition to any agency with statutory authority for the management of drainage ways and storm water management.

3. A grading permit shall be issued within ten working days if the City Secretary has received assurances from applicable state agencies that the Sediment and Erosion Control Plan is compatible with statute and Land Development Ordinance. If the submitted Sediment and Erosion Control Plan is deemed inadequate, the applicant will be given a list of mitigation measures that must be included to ensure conformance. The City Secretary shall issue a grading permit to the applicant upon certification that mitigation measures will be taken as prescribed, consistent with applicable state and federal regulations regarding soil and sediment erosion, and environmental water quality.

c. Preservation of Natural Features and Drainage Patterns

1. To the maximum extent possible, development shall be located to preserve natural features of the site, to avoid areas of environmental sensitivity, and to minimize negative impact and alteration of natural features and drainage patterns.

2. The subdivider shall give maximum consideration to the preservation of the following areas as open space, to the extent consistent with reasonable utilization of land:

- (a) Wetlands and other unique environmental areas, as defined in Section 404, Federal Water Pollution Control Act of 1972 and delineated on wetlands maps prepared by the US Fish and Wildlife Service. Construction and fill activity shall be prohibited on wetlands in excess of one acre in size. Development and fill upon wetlands smaller than one acre in size should be avoided whenever possible but regulated by permit authority of applicable state and federal agencies.
- (b) Significant stands or mature specimens of trees shall be designated by required tree surveys.
 - i. Non-Residential and Attached Residential: No tree taller than 20 feet or larger than 4 inches in diameter (measured six inches above the ground) shall be removed except when approved by the City Secretary or his/her designee. Trees removed subject to City approval shall be replaced as noted in Table 4-1. The owner of a site with natural landscaping that is unhealthful (i.e. spaced too closely) may be permitted to plant replacement trees in the parkway or elsewhere in the City, if approved by the City Secretary.
 - ii. Single-Family Residential: Placement of the building must avoid trees taller than 20 feet or larger than four inches in diameter, measured six inches above the ground. Any such tree removed or damaged should be replaced by a species compatible with existing trees, on a one-to-one basis. The number of replacement trees will be limited by what can be reasonably accommodated within the available lot area. On lots less than ½ acre 2 trees must be planted per lot. All trees must be native to the State of Texas and shall not be considered “invasive”

Table 4-1: Tree Replacement Schedule

Diameter of Removed Tree	Number of Replacement Trees
4" to 12"	2 trees at 2" or 1 tree at 4"
13" to 25"	4 trees at 2" or 2 trees at 4"
26" or Greater	6 trees at 2" or 3 trees at 4"

- (c) Flood plain lands, other than areas that have already experienced substantial development.
 - (d) Slopes in excess of 15% as measured over a 10-foot interval. Development on slopes over 15% may be permitted only if an erosion and slope stabilization plan is submitted and approved with the development and if appropriate measures are taken in compliance with this approved plan. The City may, at its discretion, require the review and certification of such a plan by a licensed Professional Engineer.
 - (e) Habitats of endangered species. Development shall avoid fill or disturbance of habitat sites as identified on federal, or state lists administered by the US Fish and Wildlife Service of the US Department of the Interior, and applicable state environmental regulatory agencies. Developers are encouraged to preserve habitat areas as a connected open space.
- d. General Guidelines for Subdivision Layout

Subdivisions shall be designed to comply with the following overall performance objectives:

1. Avoidance of adverse effects on ground water and aquifer recharge.
2. Reduction and minimizing of cut and fill.

3. Avoidance or reduction of unnecessary impervious surfaces.
 4. Prevention of flooding and encroachment of water onto other properties.
 5. Provision of adequate access to lots, including alternative routes to lots and sites within the subdivision and minimizing cul-de-sacs over 300 feet.
 6. Mitigation of negative environmental effects on surrounding properties, including effects of shadow, noise, odor, traffic, drainage, and utilities.
 7. Respect for the rural character and traditional layout of Riverside, including providing continuity to established street and community facility networks; establishing linkages and connections between new development and existing parts of the city; and preserving historically and architecturally significant sites and buildings, determined as those sites or districts either listed on or determined to be eligible for listing on the National Register of Historic Places, as determined by the State Historic Preservation Officer.
- e. Sodding and Seeding of Lawns for all Administrative, Minor, and Major Subdivisions

All non-impervious areas should be turf-grass that does not grow in clumps but, rather, spreads naturally to form a continuous sod made within nine months from the issuance of the certificate of occupancy. Grasses permitted are those grasses customarily used in lawn applications, typically available commercially in sod form, being tolerant of foot traffic, and presenting a finished, maintained appearance with proper care.

- f. Site Design Objectives and Approval

The City and City Council shall take the above Site Design objectives into account during their review and approval of subdivision applications.

4-3 Subdivision Design Categories and Rules

- a. Purpose

The purpose of this section is to establish design alternatives that provide greater flexibility in subdivision design and make potential development more consistent with the City's site design objectives and the special features of the natural and built environment of the City of Riverside and its planning jurisdiction.

- b. Subdivision Design Categories

1. Definition and Application: A conventional subdivision literally meets all nominal standards of the Land Development Ordinance for lot dimensions, setbacks, street frontage, and other site development regulations. Conventional subdivisions generally develop in areas relatively free of environmental constraints.
2. Creative Subdivision: A creative subdivision complies with the overall density requirements of a zoning district but allows internal variations of such standards as lot size, setbacks, and street width in order to encourage innovative or economic development or protect natural features and open space without loss of economic yield to developer.

c. Creative Subdivisions: Types and Special Regulations

Creative Subdivisions are divided into two types: Conservation Subdivisions and Traditional Neighborhood Districts

1. Conservation Subdivisions

- (a) Conservation subdivisions allow the clustering or grouping of residential lots in order to provide common open space. All subdivisions in the Rural Residential District shall follow conservation subdivision guidelines.
- (b) Conservation Subdivisions may be developed and approved subject to the following standards and variations:
 - i. The overall density of subdivision complies with the zoning district that contains the final subdivision. A subdivider may apply for a rezoning simultaneously with the plat approval process.
 - ii. Individual lot size dimensions, including lot width, may be reduced up to 60% of requirement of zoning district. Any savings on lot size shall be devoted to common open space or other approved community facilities.
 - iii. Lot setbacks may be varied from those otherwise specified for the zoning district. Setback limits must be established on the preliminary and final plat. The setback from any garage entrance to any circulation way must be at least 20 feet.
 - iv. Street or right-of-way widths set forth in Article Five may be varied within local streets within Conservation Subdivisions, subject to the sole discretion of the approving authorities.
 - v. Articles of incorporation or covenants for a homeowners' association or other provision assuring maintenance or operation of all common spaces shall be submitted with subdivision application.

2. Traditional Neighborhood Districts

- (a) Traditional Neighborhood District (TND) Subdivisions allow the development of rural neighborhoods that produce new development consistent with the patterns of historic or traditional parts of Riverside, with appropriate civic space; or provide for the recreation of neighborhoods that follow the patterns of other traditional towns. Approval of a Traditional Neighborhood District subdivision requires submission of a specific district plan.
- (b) TND Subdivisions may be developed and approved subject to the following standards and variations:
 - i. The minimum size parcel to be covered by the TND Subdivision is 5 acres.
 - ii. The overall density of subdivision complies with the zoning district that contains the final subdivision. A subdivider may apply for a rezoning simultaneously with the plat approval process.
 - iii. Individual lot size dimensions, including minimum width, may be reduced to 80% of the requirement of the underlying zoning district. Any savings on lot size shall be devoted to public space, including but not limited to town squares, small parks, greenways, and community facilities.
 - iv. All streets within a TND Subdivision connect to other streets within the district, forming a continuous network. The internal street system connects to other streets on the edge of the district.

- v. Lot setbacks may vary from those otherwise specified for the zoning district. Setback limits must be established on the preliminary and final plat. The setback from any garage entrance to any circulation way, including an alley, must be at least 20 feet. Garage access from the rear of lots by way of an alley is encouraged.
- vi. Retail, service, civic, office, and various types of residential land uses may be combined within a TND subdivision, notwithstanding the use regulations of the underlying zoning district. The distribution and location of land uses shall be consistent with the TND Plan submitted for the subdivision.
- vii. Street or right-of-way widths set forth in Article Five may be varied within for local streets within TND Subdivisions, subject to the sole discretion of the approving authorities.
- viii. Overall density permitted by the underlying zoning district of the TND Subdivision may be increased as follows for specific amenities: 10% for the provision of a centrally located town square of at least one acre for each 25 acres of developed area; 10% for the provision of approved ornamental lighting throughout the TND Subdivision; and 10% for the development of a central community street, as defined in Article Five. Cumulative density bonuses shall not exceed 25% of the density permitted by the underlying zoning district.
- ix. All applications for a TND Subdivision must be accompanied by a TND Subdivision Plan, in addition to other documents required by this Ordinance. This plan shall illustrate the distribution of land uses throughout the subdivision; the location and design of public spaces, streets, and alleys; the location and nature of special design features; architectural controls; and other information necessary to communicate the concept of the TND subdivision. The TND Subdivision Plan shall be a part of the approved subdivision. Subsequent building and development permits shall be issued by the City only in consistency with the TND Subdivision Plan.
- x. Articles of incorporation and/or covenants for a homeowners' association or other provision assuring maintenance or operation of all common spaces shall be submitted with subdivision application.

5 ARTICLE FIVE

CIRCULATION SYSTEM DESIGN

5-1 Purpose

The purpose of this Article is to assure the development of functional and safe circulation patterns within new subdivisions, in order to encourage economical and effective movement of motor vehicles, bicycles, and pedestrians; provide access for public safety vehicles; and encourage the development of circulation systems that enhance the quality of life within new and existing neighborhoods in the City of Riverside and its planning jurisdiction.

5-2 General Standards

The design of circulation systems should conform to the following general standards and requirements:

a. Roadway System Design

1. The road system shall be designed to permit safe and orderly movement of traffic, to meet but not exceed needs of the present and future served population; to be simple and logical; to respect natural features, topography, and landscape, and to present an attractive streetscape.
2. The system shall provide for the logical extension of existing streets.
3. The street network of a subdivision should provide for logical, continuous extensions of streets to subsequent later developments. Such extensions shall make provision, when necessary, with a temporary turnaround with a radius of at least 50 feet.
4. The system shall provide adequate traffic flow through a subdivision and provide at least two routes from each lot within the subdivision to the rest of the City, except as explicitly permitted by the approving authorities. Additionally, the system should be designed to discourage traffic from using local streets.

b. Street Names

Street names shall conform to the City of Riverside's official street name list.

c. Pedestrian and Bicycle Systems

1. A continuous pedestrian system shall be provided within each non-industrial subdivision, designed to conduct pedestrians between every point in the subdivision in a safe manner.
2. In conventional subdivisions, the pedestrian system will ordinarily be provided by sidewalks placed parallel to and on both sides of each street, with exceptions permitted to preserve natural features, create visual interest.
3. In creative subdivisions, the pedestrian system may be an independent network diverging from streets but providing continuous pedestrian access between all points.
4. All aspects of the pedestrian system, including sidewalks and intersection crossings, must be designed to comply with the Americans with Disabilities Act.

5-3 Street Hierarchy and Design

a. Characteristics of the Hierarchy

1. Streets shall be classified according to a street hierarchy with a design tailored to function.
2. The street hierarchy shall be defined by road function and projected average daily traffic (ADT), as calculated by trip generation rates prepared by the Institute of Transportation Engineers or other generally accepted standards.
3. Each residential street shall be classified and designed to meet appropriate standards for its entire length.
4. The applicant shall demonstrate to the satisfaction of the approving agencies that the distribution of traffic created by the subdivision will not exceed the design capacity of the proposed street system and its individual segments.
5. The categories, functions, and projected traffic loads of the street hierarchy are set forth in Table 5- 1.

b. Cartway Width

1. Cartway width for each street classification is determined by parking and curbing requirements based on form or intensity of adjacent development.
2. To promote economic development of streets, minimum cartway width should be used. Minimum cartway widths are set forth in Table 5-2.

c. Curbs, Gutters, and Shoulders

1. Curbing shall be required for the purposes of safety, drainage, and protection of the pavement edge, as set forth in Table 5-3.
2. Requirements for curbs vary according to street function and the nature of adjacent development. Adjacent development is defined as urban or rural as follows:
 - (a) Rural: Residential or predominately agricultural land use where average lot frontage exceeds 150 feet.
 - (b) Urban: Residential land use where average lot frontage is less than or equal to 150 feet; or adjacent land uses include commercial, office, industrial, or civic use types.
3. Where curbing is not required, edge definition and stabilization shall be provided.
4. Where curbing is required, shoulders and drainage swales may be used only if soils or topography make the provision of shoulders preferable to curbs; or where the character of an area is preserved by the use of shoulders and drainage swales.
5. Shoulders, when developed, shall be at least eight feet in width on each side for all streets; and located within right-of-way. Swale width is site-specific. Shoulders shall consist of stabilized turf or other acceptable material.

6. All curbs shall provide ramps for accessibility by handicapped people consistent with the requirements of the Americans with Disabilities Act.
7. Curb construction shall follow standards established by the City of Riverside.

d. Sidewalks

1. Sidewalk requirements are determined by road classification and intensity of development, as set forth in Table 5-3.
2. Where sidewalks are not otherwise required by Table 5-3, the City may require their installation if necessary to provide access to generators of pedestrian traffic or major community features; to continue a walk on an adjacent street; to link parts of the city; or to accommodate future development.
3. In conventional development, sidewalks shall be placed generally parallel to streets within right-of-way. Exceptions are possible to preserve important natural features or to accommodate topography or vegetation; when applicant shows an alternative for a safe and convenient pedestrian system; or in creative subdivisions.
4. In commercial areas, sidewalks may abut curb.
5. Pedestrian rights-of-way at least 15 feet in width may be required through the center of blocks over 600 feet in length if deemed necessary by the approving authorities to provide access to schools or community facilities; or to maintain a continuous pedestrian network within and between subdivisions and districts of the City of Riverside and its jurisdiction. Such rights-of-way shall be dedicated to the public in the same manner as streets.
6. Sidewalks shall provide a clear path of at least four feet in width, free of any obstructions.
7. All sidewalks shall be constructed according to current standards in use by the City of Riverside. Sidewalks shall be of concrete construction four inches thick except at points of vehicular crossing where they shall be five inches thick.
8. All sidewalks, crossings, and other segments of a continuous pedestrian system must comply with standards of the Americans with Disabilities Act. This requirement includes, but is not limited to, curb cuts and ADA ramps at all intersections, and where sidewalks enter public Right-of-Ways.

e. Bikeways and Recreational Trails

1. All off-street recreational trails shall be a minimum of eight feet in width for two-way traffic and comply with the Americans with Disabilities Act. Surfacing of trails shall be acceptable to the City of Riverside. Gradients for bikeways and recreational trails should not exceed five percent, except for short distances.
2. Recreational trails may satisfy part of the requirements of this ordinance for sidewalks or open space.
3. All residential streets shall utilize bicycle safe drainage grates at storm sewer inlets.

f. Right-of-Way

1. Measurement: The right-of-way of a street shall be measured from lot line to lot line, and shall be wide enough to contain the cartway, curbs or shoulder, sidewalks and sidewalk setbacks, other necessary graded areas, and utilities.
2. Any right-of-way that continues on an existing street shall be no less than that of the existing street.
3. The requirements for rights-of-way for functional categories of roads are set forth in Table 5-3.

g. Street Design Standards

1. Pavement

- (a) All streets shall be paved per the design standards set forth in Table 5-4. Higher design standards may be required by the city to provide for unusual soil conditions, extraordinary traffic volumes or other abnormal characteristics. A paving design analysis shall be provided with the preliminary plat submittal.

2. Cul-de-sacs

- (a) Cul-de-sac streets in residential subdivisions designed to have one end permanently closed shall not exceed 700 feet in length and shall be designed so that vision from entrance to end is not restricted.
- (b) The closed end of a cul-de-sac within a conventional subdivision shall have a turnaround with a street property line diameter of at least 120 feet in residential subdivisions. This diameter may be increased by the City if deemed necessary in the case of a commercial or industrial subdivision.

3. Street Grades

- (a) Maximum permitted street grades are set forth in Table 5-2. In typical circumstances, the minimum permitted street gradient shall be 0.5%. In exceptional circumstances, the City Engineer may permit street gradients of less than 0.5%; however, under no circumstances may the gradient be less than 0.25%.

4. Street Intersections

- (a) Streets shall intersect as nearly at right angles as possible, unless limited by topography, existing street alignments, or other clearly defined constraints.
- (b) In most cases, no more than two streets should intersect at a single intersection.
- (c) Local streets shall not provide intersections with major arterials.
- (d) New intersections along one side of an existing or proposed street shall, if possible, align with intersections on the other side of the street. Offsets between adjacent intersections shall measure at least 150 feet between centerlines. The use of T-intersections is encouraged on local streets within the interior of a subdivision.
- (e) Intersection design standards are set forth in Table 5-2.

5. Block Size

- (a) The length, widths, and shapes of blocks shall be suited to the proposed land use and design of the proposed subdivision. Blocks within urban subdivisions shall not exceed 600 feet in length, unless necessitated by exceptional topography or other demonstrable constraints. Blocks within rural subdivisions shall not exceed 1,320 feet.

6. Other design standards shall be as set forth in Table 5-4.

5-4 Lighting and Wiring

a. Underground Wiring

- 1. All electric, telephone, television, cable TV, and other communication lines shall be provided by underground wiring within easements or public right-of-way, except where in the opinion of the approving authorities, such a location is not feasible. Poles for permitted overhead lines shall be placed in rear lot line easements; or in other locations designed to lessen their visual impact.
- 2. New lots adjacent to existing overhead service may utilize that service; however, new local service connections shall be underground.

TABLE 5-1: Street Hierarchy

Residential Street Type	Function	Guideline Maximum ADT
Court or Cul-de-sac	Street providing private or controlled access to no more than twelve housing units.	120-150
Local	Provides frontage to lots and carries traffic with origin or destination on street itself. Carries least traffic at lowest speed. East-west orientation provides best solar access. Local residential streets usually do not interconnect with adjoining neighborhoods or subdivisions.	250-1,000
Collector	Conducts and distributes traffic between local streets and major streets in the community. Carries a larger volume of traffic. Residential collectors interconnect and provide access between residential neighborhoods. Collector streets should preserve one through traffic lane in each direction, without encroachment by parking. Collectors may be included in the city's Surface Transportation Program system for federal aid.	1,000-2,500
Minor Arterials	Provides community wide access between residential neighborhoods and to other activity centers in Riverside, including downtown and major commercial facilities. Direct access may be provided to other arterial streets. Parking should generally be prohibited on other arterials. Other arterials should be excluded from residential areas. These streets are part of the Surface Transportation Program system for federal aid.	2,500-7,500
Major Arterials	Inter-regional road in the street hierarchy. Conveys traffic between activity centers, often at high speeds and with limited access. Should be excluded from residential areas. These streets are part of the Surface Transportation Program system for federal aid.	7,500+

TABLE 5-2: Cartway Width, Grade, and Intersection Standards

Residential Street Type		Parking Restrictions	Maximum Grade	Cartway Width	Minimum Curb Radii
Court	-	No restriction	8% (5%)*	22 feet	25 feet (Note 1)
Cul-de-sac	-	No restriction	8% (5%)*	25 feet	25 feet (Note 1)
Local	-	No Restriction	8% (5%)*	27 feet	25 feet (Note 1)
Collector					
No parking	-	No parking	All Types:	27 feet	All Types:
One-side parking	-	One side only	8% (5%)	33 feet	35 feet
Two-side parking	-	No restriction		36 feet	(Note 1)
Arterials		Note 2	5%	Note 2	Note 2

* Denotes Maximum Street Grade Within 50 Feet of an Intersection

Note 1: Intersections shall be rounded at the curb line, with the street having the highest radius requirement as shown in Table 5-2 determining the minimum standard for all curb lines.

Note 2: Arterial street width, grade, and curb radii are determined by state standards and the designation of individual street or roadway segments.

TABLE 5-3: Curb, Sidewalk, and Rights-Of-Way Requirements

Street Type	Cartway Width	Curb/Shoulder	Sidewalk	Sidewalk Setback	Total ROW
Lane or Court	22 feet	Not Required	Required	NA	50 feet
Cul-de-sac	25 feet	Required	Required	6 feet	50 feet at approach 120 feet diameter
Local	27 feet	Curb	Both sides	6 feet	60 feet
Collector					
No parking	27 feet	Curb	Both Sides	8 feet	70 feet *
One-side parking	33 feet	Curb	Both Sides	8 feet	70 feet*
Two-side parking	36 feet	Curb	Both Sides	8 feet	70 feet*
Arterials	45 feet (Note 1)	Note 1	Note 1	8 feet	100 feet minimum

* Right-of-way widths for these classes of street may be modified within the Creative Subdivisions.

Note 1: Arterial street width, grade, and curb radii are determined by state standards and the designation of individual street or roadway segments.

TABLE 5-4 : Street Design Requirements

Street Type	Minimum horizontal radius at centerline	Minimum distance on vertical curves	sight	Maximum Slope	Minimum PCC Pavement Thickness
Court	100 feet	75 feet		10%	7 inches
Local	200 feet	200 feet		10%	7 inches
Collector	380 feet	300 feet		8%	7 inches*
Arterials	510 feet	350 feet		5%	7 inches*

*Per Engineer's paving design analysis and review.

6 ARTICLE SIX

PUBLIC IMPROVEMENTS AND INFRASTRUCTURE

6-1 Purpose

The purpose of this Article is to assure that all subdivisions developed in the City of Riverside and its jurisdiction is adequately furnished with necessary public services. These services include adequate water, waste management, and storm water drainage utilities, and park and open space resources.

6-2 Water

Water inside the City Limits is provided by either Riverside Special Utility District, Shorewood Water Supply, or Lake Livingston Heights Water Supply (depending upon the location of the development).

6-3 Sanitary Sewer

a. SECTION 1: For the purpose of this ordinance, the following words and terms as used herein are defined to mean the following:

1. "Sanitary Sewage" is hereby defined as the waste from water closets, laboratories, sinks, bathtubs, shower baths, urinals, household laundries, cellar floor drains, garage floor drains, storerooms, soda fountains, cuspidors, refrigerator drips, drinking fountains, dish washing machines and other fixture or appliance connections.
2. "Domestic Service Connection" is hereby defined as service to any dwelling unit occupied as living quarters for one or more persons, which establishment or unit has water or sewage facilities.
3. The term "House Sewer" is hereby defined as being that part of the main drain or sewer extending from a point outside of the outer wall or floor line to a connection with the public sewer.
4. The term "House Drain" is hereby defined as being that part of the main horizontal drain and its branches inside the wall of the building and extending to and connecting with the House Sewer.
5. "Fixture Connection" is hereby defined as being either kitchen sink, bath tub or shower, commode, washing machine, dish washing machine or vats, floor drains, and any other plumbing fixture from which waste water or sewage passes through and into the House Drain and into the House Sewer, not including wash racks in garages and filling stations, providing that when three or less dish washing vats are connected as one unit, with one drain same shall be considered as one fixture connection.
6. "City" is hereby defined as being the City of Riverside, Walker County, Texas.

b. SECTION 2:

1. For the purpose of providing for the efficient operation of the Sewage Collection and Disposal System situated in the City, there is hereby created within the City a Department to be known and identified as the Sewer Department, which department shall be under the supervision of a superintendent who shall be the administrative

officer of said Department, and may have such other employees as the City Council may direct. The superintendent of the Sewer Department shall be appointed by the City Council for such terms as may be fixed by the Governing Body and is to be paid such salary as the City Council may provide. The Superintendent of the Sewer Department shall have general supervision over all the employees of such Department and shall make frequent trips of inspection over all the pipe lines and other property used in or connected with the sewer system, including the sewage disposal plant, and shall make all repairs deemed necessary and consistent with his duties; provided that the City Council, when it deems expedient, shall have the right to consolidate the Department and/or position hereinabove created, and assign all of the duties provided for the Sewer Superintendent and authority herein conferred upon such officer to the officer in charge of the office with which such consolidation is had.

2. The superintendent shall also report all violations of this ordinance to the Mayor and shall forthwith proceed to have prosecuted offenders as set forth in this ordinance, or any amendment thereof.
3. In the performance of his duties as required by this section, the superintendent shall be subject to all City Ordinances, rules and regulations made pursuant thereto, at all times.

c. SECTION 3:

1. No person, persons, firm, or corporation shall have the right to connect any property with the sewer system of the City, and no connection with the sanitary sewer system of the City shall be made, until the owner of the property, or his agent duly authorized, shall have received from the City a permit to do so, after having met the requirements herein specified to obtain such permit. The owner of any property desired to be connected with the sewer system of the City, or his authorized agent, shall first make an application in writing signed by such owner, or agent, upon blanks furnished by the City and delivered to the officer in charge of the Sewer Department of the City, for a permit to connect any such property with the City Sewer System; such application shall contain the precise location of the property to be drained; the type of the structure and the purpose for which same is to be used; give the name of the owner of the property, the number and class of plumbing to be contained within the private system or property to be drained; the name of the person or firm employed to do the plumbing work contemplated to be done and connected with the sewer system. Such application shall further contain an agreement on the part of such applicant owner of the property sought to be connected and drained by the sewer system of the City that he will promptly pay to the City, the rental charges then or thereafter to be prescribed by the City for the use of the sewer system, at the times and in the manner prescribed now or hereafter by the ordinance of the City; that he will abide by and observe the rules and regulations governing the use of the City Sewer System and that he will be responsible for the rental charges accruing up to the time that he gives actual notice to the City of a change in the ownership of said property, or to discontinue service thereto.
2. Any such permit issued shall remain in force only so long as the owner of the property, and the applicant therefor, shall comply with the rules and regulations now or hereafter prescribed for the use of the sewer system, and shall pay the rental charges as provided and upon failure of such property owner in either respect to fully comply with the

provisions hereof, said permit shall be subject to cancellation, and the City through such means as it may elect, shall have the right to discontinue sewer service to such property, this stipulation shall also be contained in the application for a permit.

3. Before any application for a permit shall be received and permit granted there must be paid to the City connection fees and one month rental for sewer service in advance; said advance payment to be applied in payment of the rental and service charge for the first month following commencement of service if the permit is issued following the 15th day of any calendar month. If the permit is issued on or prior to such 15th day, the charge for sewer service shall commence on the first day of the month in which permit is issued.
4. Whenever any property for which a permit has been issued and sewer service is being furnished changes ownership, the new owner shall make application for a continuance of sewer service to such property, and such application shall be made upon the same blanks and be subject to the same terms and conditions, and to contain the same stipulations as an original application, and such application shall be marked "application for continuation of sewer service."
5. When any person owning any property served by the sewer system in the City, shall change the plumbing in the premises, other than single family dwellings, used exclusively as such, connected with the sewer system so as to increase the number of plumbing fixtures connected with the City Sewer System, such person shall make a new application, upon the same blanks, terms and conditions as an original application as herein set out.
6. When sewer service for any property has been discontinued for any reason same shall not again be resumed until the owner of such property shall have made application as is set out herein for an original application.
7. No permit shall be deemed to authorize anything not stated in the application.
8. A permit to make a connection with the sewer system or for a continuation of sewer service will be issued only when the plumbing in the structure or property to be connected and drained, accords with generally accepted plumbing standards and has been inspected and approved by the duly appointed City Plumbing Inspector.
9. There shall be no reduction or abatement of sewer rental charge for any property so long as said property is connected with the sewer system of the City.

d. SECTION 4:

1. Every application for permit filed to connect property situated in the City, with the sewer system shall be accompanied by a cash deposit in an amount sufficient to cover costs of making the connection and inspection, which sum shall be paid direct to the City Secretary, and no permit shall be issued unless said deposit is made.
2. Provided however, that all owners of property situated within the City who apply for sewer connection to their respective premises prior to the initial construction and installation of sewer mains in the immediate area wherein such property is situated, and the property is then connected to the water system of the City as a regular

user, permit will be issued upon application and the deposit shown on the City's Fee Schedule (most updated version), to cover the cost of inspection and establish connection deposit. Those applying for connection under this sub-section must agree to make connection with the sewer system during the period beginning with the date that the owner is notified that sewer service will be available to his property and extending to sixty days after construction of the system and commencement of service. Should the owner not make connection within this period, beginning with the first day of the next succeeding month he will be required to pay the regular monthly service charge notwithstanding that the available sewer service is not being utilized by said owner, until the total sum of deposit has been paid. When application has been filed and deposit made, as herein provided, the City will install necessary wye connection to the main sewer line, and construct a 4-inch service line from the main to street curb line or alley property line, depending on the location of the sewer main, without additional cost to the owner.

3. Provided further, that all owners of vacant lots or unoccupied structures situated within the City who apply for sewer connection to their respective property prior to initial construction and installation of sewer mains in the immediate area wherein such property is situated, and the property is not connected to a water system or that the structures or building on the property are unoccupied and the water connection is dormant at the time application for sewer service is made, permit will be issued upon application and the deposit (in accordance with City's latest fee schedule). The wye and service line will be constructed as provided in this sub-section.

e. SECTION 5:

1. In that the cost of installation of the City Sewer System is for the most part, being paid out of funds derived from the sale of Sewer System Revenue Bonds, it is hereby determined and declared to be necessary that the City fix and collect charges for use of the sewer system of said City, and the charges shall be in accordance with the latest City Fee Schedule.
2. All accounts for sewer services rendered shall be payable each month in advance at the office of the City Secretary in the City, upon the date as provided in the invoice for such service.
3. Bills for sewer service shall be rendered monthly, and any person, firm or corporation who shall fail to pay the sewer rental and charge due by him as herein stipulated, within ten (10) days after the same shall have become due, shall be subject to legal action.

f. SECTION 6:

1. Before any residential garage may be connected to the City Sewer, same shall be equipped with a cast iron sand trap, provided with removable receptacle inside of trap to remove mud, sand and other refuse washed into same. This provision does not apply where such drain is located in such a manner as to receive drainage exclusively from a washing machine used for laundry purposes.
2. Before any wash racks at commercial garages and filling stations may be connected to the Sewer System, some shall be equipped so that wastewater therefrom shall discharge into a two-compartment sand and grease trap made of concrete.

g. SECTION 7:

1. On and after the effective date of this ordinance, it shall be unlawful for any person, firm or corporation owning, renting, leasing or controlling in whole or in part, any premises situated within any section of the City- where sanitary sewer shall exist and where the property line of such premises approaches or extends to within 100 feet of any such sewer, to construct, use or maintain, or permit to be constructed, used or maintained, on such premises, any septic tank, privy, cesspool, water closet, urinal basin, slop sink, slop drain, bath tub, or waste water drain from dwellings, laundries, garages, filling stations or other places, or any receptacle whatever used or to be used for the purpose of receiving sewer matter, or slop of any kind, unless the same shall be connected with the sanitary sewer system of the City.
2. All defective septic tanks, cesspools and other structures, devices or other class of outdoor facilities used for the purpose of receiving human sewage that may be on any premises, as of the effective date of this ordinance, the property line of which, at any point, extends to within 100 feet of the City sanitary Sewer shall be removed or abated after the giving of notice as herein provided for removal and abatement of same.
3. The owners of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes, situated within the City and butting on any street, alley, or right-of-way in which there is now or may in the future be located a public sanitary sewer of the City, are hereby required at their expense to install suitable toilet facilities therein and to connect such facilities directly with the sanitary sewer, within 90 days after official notice to do so has been given, provided said public sewer is within 100 feet of the property line. All connections to the public sewer system shall be made under the supervision of the City or its representative.

h. SECTION 8: It shall be unlawful:

1. To uncover the public sewer or branches thereof unless by consent and under the supervision of the officer in charge of the sewer department.
2. For the owner or occupant of any building, located on any lot within 100 feet of any sanitary sewer line, in which food is cooked or clothing washed, to fail to have a suitable sink or hopper for the reception of water and connected to the sewer system.
3. To throw or allow to be thrown or deposited upon the surface of the ground, or any hole or vault in or under the surface of the ground of any lot within 100 feet of any sewer line, any water which has been used for domestic or manufacturing purposes, or any liquid or solid filth, feces or urine.
4. To throw or deposit, or cause to be thrown or deposited, in any vessel or receptacle connected to the sewer system, any newspaper, garbage, hair, fruit, ashes, vegetable peelings or refuse, rags, cotton, cinders, or any matter whatsoever, except feces, urine, the necessary paper or liquid slops.

5. To fail or refuse to connect with the sewer system all washstands or slop stands in house or yard where a City Sewer is within 100 feet of the property line or allow any slops, wash, or wastewater of any kind to flow over, under or into any street, gutter, or gully.
6. To enter in or upon the premises of the sewage treatment plant site and to in anywise tamper with, or injure in any manner whatsoever, the buildings, fixtures, lagoons, settling basins, equipment or supplies used or stored in said site.
7. To discharge any natural outlet within the City or in any area under the jurisdiction of the City, any sanitary sewerage, industrial waste, or other polluted waters, except where suitable treatment has been provided.
8. To construct or maintain within the City any septic tank, privy, privy vault, cesspool, or other facility intended for the disposal of sewerage.
9. To maliciously, willfully, or negligently break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance or equipment which is a part of the City sewer system.
10. To discharge or cause to be discharged into any public sewer any of the following described waters or wastes:
 - (a) Any water or waste which contains more than 75 parts per million by weight of fats, oil, or grease.
 - (b) Any gasoline, benzine, fuel oil, or other inflammable or explosive liquid, solid or gas.
 - (c) Any garbage that has not been properly shredded.
 - (d) Any solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage system.
 - (e) Any waters or waste containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant.
 - (f) Any waters or waste, containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.
- i. Section 9: The property owner, or plumber, or both, shall be held responsible for any injuries the plumber shall cause to the sewer or street in making connections.
- j. Section 10: No person, firm or corporation shall connect any open gutter, septic tank, cess pool, privy, vault or cistern with any public sewer or any private sewer connected with the public sewer.
- k. Section 11: No person, firm or corporation shall deposit any garbage, offal, dead animals, filth, or any substance having a tendency to obstruct the flow of sewage in any manhole, flush tank, or sewer opening.
- l. SECTION 12: It shall be unlawful to connect any old house plumbing to the City sewer system unless same has been inspected and found to conform to generally accepted plumbing standards. All connections of house sewer lines into the main and lateral sewer lines shall be in accordance with the specifications hereinafter set forth.

- m. SECTION 13: No rainwater, or down spout pipes, range broiler pipe, or other pipe used to convey water or other substance of like character except the pipes necessary to plumbing systems shall be connected to the sewer system. No surface water drain shall be connected to the sewer system.
- n. SECTION 14: No permit for a basement drain shall be granted until the owner of the building has executed a written agreement releasing the City from any damage that may result from basement being flooded by the stoppage of sewers, which agreement shall be filed with the City Clerk.
- o. SECTION 15: All drains from four feet outside of building to main sewer must be of acceptable type pipe and properly joined, and at least 12 inches underground, extra- heavy cast iron pipe shall be used where the depth of such pipes is less than 12 inches underground.
- p. SECTION 16: All sewer, soil and waste pipe drains shall have a continuous fall of not less than one-quarter of an inch to the foot if obtainable. A service cleanout shall be installed in all house lines as close to the building as may be expedient.
- q. SECTION 17: Any person, firm or corporation desiring to lay pipes for water, gas, steam, or any purpose, in any street or alley in which sewer lines are laid, shall give at least twenty four hours' notice to the City officer in charge of sewers before opening the street or alley, and the manner of excavating the trenches and laying the pipe and back filling over the same shall be subject to the approval of such officer. All such work shall be planned and executed in accordance with normal practices so that no injury shall occur to any street, alley, public sewer or drain to any house or building.
- r. SECTION 18: Proper barriers and lights must be maintained on the banks of the house or other sewer trenches to guard the public against accidents during the progress of the work. In back filling, no stone shall be used, and the earth shall be carefully rammed or flooded so as to keep the pipe in proper position and to avoid settling.
- s. SECTION 19: It shall be the duty of the officer in charge of the sewer department, or his authorized agent, to enter all premises as may be necessary in the enforcement of this ordinance and he is hereby so empowered; and it shall be unlawful for any person, firm, or corporation to interfere with any inspection being made by the City plumbing inspector, or the officer in charge of sewers in carrying out the provisions of this ordinance.
- t. SECTION 20: Any person, firm or corporation desiring to construct or extend or make any extensions of any main or sublateral lines to be attached to any of the main sewer lines or manholes installed, shall be required to file an application with and secure a permit from the officer in charge of the City sewer system, authorizing said extensions and shall be required before receiving said permit to file with the City four copies of plans and specifications of the proposed extensions and any subsequent changes thereto, and before any action is taken thereon, shall be submitted to the State Health Department for its approval and upon receiving same, said plans and specifications shall be approved by the Consulting Engineer or the City; said application shall contain the provisions that said applicant agrees that permission is thereby given to the State Health Department, and the City, to inspect all the work during its progress as often as may be desired, and applicant further shall agree that the plumbing work installed in all structures to be connected to said extensions shall comply with all or any applicable ordinances of the City and State Laws and that the extensions or lines being constructed, and all easements therewith shall after the completion thereof be conveyed to the City, without cost and without reservations of any kind.

All plans and specifications for sewer improvements and extensions shall include the following:

1. Profiles of all sewers proposed.
 2. Details of construction of manholes, flush tanks, and substructure.
 3. Shall be drawn to a scale of not greater than 100' to the inch nor less than 300' to the inch.
 4. Lines and figures shall be clearly and distinctly made. New and extensions to be built to be shown by solid lines; existing sanitary sewer shall be shown by dotted lines.
 5. Elevations of the surface of the streets to be shown graphically. The elevations of sewer inverts should be shown at manholes, ends of lines and wherever a change of grade occurs. The elevations of surface shall be shown to the nearest 1/10th foot those of the sewer invert to the nearest 1/100th foot. The sizes and gradients of all proposed and existing sewers shall be marked along the line of the sewer.
 6. All sewer appurtenances and unusual features, such as manholes, lamp holes, flush tanks, siphons, pumps, etc., shall be designated on the plans by suitable symbols and referenced by a legend near the title.
 7. Profiles of sewer lines shall be prepared and drawn to such a scale as to show clearly the structural features of the sewer. For ordinary use the following scales are suggested: vertically 10 feet to 1 inch; horizontally, 100 feet to 1 inch. Both scales must be clearly shown upon each sheet. Upon these profiles shall be shown all manholes, flush tanks, lamp holes, siphons, and stream crossings, with elevations of stream bed and normal water. Figures showing the sizes and gradients of sewers, sewer inverts, etc., should be shown with the same frequency as required for the map.
 8. When grades lower than those given in the recommended practice are used, an explanation and reasons for the use of such grades should be included in the Engineer's report. On each sheet of profile must be given, under the title, and index of the streets appearing on that sheet. Profile sheets shall be numbered consecutively.
 9. The detail plans should be drawn to such a scale as to show suitably and clearly the nature of the design and all details, such as manholes, frames, covers, iron pipes, valves, gates, etc.
 10. Title: each drawing shall have legibly printed the name of the town or persons for whom the drawing is made, the name of the engineer in charge, the date, the scale and such references and the title as are necessary for the complete understanding of each drawing.
 11. Applicant shall furnish built-in Drawings in two or more copies as may be required by the City when the work is completed.
- u. SECTION 21: All new extensions to the City Sewer System, and appurtenances thereto, shall be inspected and approved by the officer in charge of the sewer system, and the Consulting Engineer of the City, or his duly authorized representative, before back filling any part thereof. Any person,

firm or corporation violating this provision shall be subject to the penalty provided for herein, and shall be compelled to uncover said extension or any part thereof so that same may be fully inspected as provided herein.

- v. SECTION 22: Should the Courts declare any section or any part of a section of this ordinance invalid or unconstitutional, or in conflict with any other section or part of a section, then such decision shall affect only that section or part of a section of this ordinance. It is further expressly provided that each section and part of the section herein, so far as an inducement for the passage of this ordinance is concerned, is independent of every other section.
- w. SECTION 23: This ordinance is cumulative of any other ordinance, or ordinances on the subject herein provided, and does not repeal any present ordinance or ordinances unless this ordinance is in direct conflict, in which case, this ordinance shall govern.
- x. SECTION 24:
 - 1. That from and after the date of publication of this ordinance in the manner required by law, any person, firm or corporation, partnership, association, or any agent or employee thereof, who shall violate any of the rules, regulations or provisions of this ordinance, or any part of it, or any portion thereof, by any act, either of omission or commission or cause the same to be done, will be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than \$500.00 or more than \$963.00, for each and every such violation. Each violation of each part of this ordinance shall be and constitute a separate offense, and where such violation is continuing act, each day such violation is continued or permitted to continue, shall be and constitute a separate offense and punishable accordingly.
 - 2. But in any case of any willful or continued violation of the terms, conditions and provisions of this ordinance, the City, in addition to imposing the penalties above provided, may institute any appropriate action or proceedings in any Court having jurisdiction to restrain, correct or abate such violation; and the definition of any violation of the terms, conditions and provisions of this ordinance as a misdemeanor shall not preclude the City, from invoking the civil remedies given it by laws of the State of Texas, but same shall be cumulative and subject to the prosecution as hereinabove prescribed for such violation.
- y. SECTION 25: Sanitary Sewer Design Requirements
 - 1. DIVISION VII INCLUDES
 - (a) 1.01 REFERENCES
 - (b) 1.02 DEFINITIONS
 - (c) 1.03 DESIGN REQUIREMENTS
 - (d) 1.04 SUBMITTALS
 - (e) 1.05 QUALITY ASSURANCE
 - (f) 2.00 CONSTRUCTION NOTES AND DETAILS
 - 1.01 REFERENCES
 - (a) Texas Commission on Environmental Quality (TCEQ) Sewage Collection System Rules.
 - (b) City of Riverside Standard Details.
 - (c) City of Riverside Standard Specifications.

1.02 DEFINITIONS

Where used in these regulations the following terms shall be construed to carry the meanings given below:

- (a) Sewer Main – A sewer which receives the flow from one or more lateral sewers.
- (b) Lateral Sewer – A sewer running laterally down a street, alley or easement which receives only the flow from the abutting property.
- (c) Service Lead – This term, as used in these regulations, shall be construed as having reference to a public sewer branching off from a main or lateral sewer to serve two or more houses, single family lots, or other types of small land tracts situated in the same block with the said main or lateral sewer, but not directly adjacent thereto. Such a line, when constructed under the special provisions of those regulations covering such service leads, shall never exceed 150 feet in length. If the sewer is designed to serve more than two houses, or the equivalent of two single family residences along a street, a lateral sewer as defined above shall be constructed.
- (d) Service Connection – A sewer from a single source to the main or lateral sewer in the street, alley, or easement adjacent thereto. Service connections shall be applied for and inspected by the permit division and shall comply with the requirement of the plumbing code.

1.03 DESIGN REQUIREMENTS

- (a) Drawings to be Furnished:
Before any main or lateral sewer is constructed and before a permit will be issued for the construction of the sewer, plans and profiles of the proposed sewer shall be prepared and submitted to the City for approval. On projects within the City limits or the E.T.J., the tracing shall become the property of the City and shall remain on file in the city for the use of any person who may be interested in the same.
- (b) Details to be shown on Drawings:
The detailed plan view will show the exact location of the proposed line in the street, alley, or easement with respect to the edge of the particular right-of-way, the transit base line, and any nearby utilities, major landscaping and other structures affecting construction.
- (c) Main and Lateral Sewers:
 - i. In straight easements with parallel boundaries, sewers may be shown in profile only provided that both the sewer's location and the width and type of easements (that they are located within) are shown on the sanitary sewer layout. Sewers shall be identified by number, letter, or other identification as shown on the sanitary sewer layout and manholes identified by letter or number.
 - ii. In curved easements the easements defined by property lines, combined easements containing other public utilities must be shown both in detailed plan and profile views.
 - iii. The profile should show other underground and surface utilities and facilities, both in parallel and at crossings; the size, grade, type of pipe and type of bedding of the proposed line, the elevations of same to hundredths of a foot at all manholes, changes of grade and dead ends; and the proposed finished grade of the project over the sewer. It should show the actual ground line as it existed prior to construction of the sewer. Where the proposed fill or cut is contemplated, the proposed new ground line shall be shown as a separate line from the actual ground line.
 - iv. Where sewers are to be placed between existing pavement and the street right-of-way line (or interior easement line) or under existing pavement or topping, show the

existing ground line at both sides (or the closet side for sewers near the edge) of the right-of-way or adjacent sewer easement.

- v. Any service lead extension of more than 50 feet parallel to the street right-of-way shall be treated as a lateral sewer.
- vi. Service stubs for six inch or larger shall discharge into a proposed or existing manhole. Where the flow line of the service is 24 inch or greater above the flow line of the manhole, provide a standard City of Riverside drop to manhole.

(d) Sewer Mains – Plan and Profile Required:

- i. Show the area in the acres which the lines are designed to serve and include a small skeleton map, which a scale of not more than 600' = 1". Outline the whole area which the main sewer is designed to serve in the future by consulting the City Engineer. This work shall be made on a copy of the City's 1:600 sewer map. If the future area is very large, the SSGS map can be used to identify the water shed and the future service area of the proposed extensions. After this map is approved and the basics of extending the service is covered with the City Engineer, the engineer shall prepare the plans and profiles required.
- ii. Sanitary sewer layouts for single family residential subdivisions should use a scale of 100-feet or less per inch. Provide the following information on the layout.
 - 1. All easements containing or buffering sanitary sewers are shown and labeled both as to width and type; sewer sizes are shown at points of size changes; all manhole locations are shown.
 - 2. The sewer alignment shall accurately reflect the relative location of the sewer as shown on the detailed plan view.
 - 3. All service leads that cross-street pavement or serve adjacent property are to be shown on the layout. The detailed plans and profiles shall show the flow lines of all service leads at the street or easement right-of-way.
 - 4. Lots on the layout and plan views shall match the lots on the final plat after recordation for both outside and inside the City limits.
- iii. Commercial subdivision sanitary sewer layouts for large areas and with a scale of 400 feet or more per inch must have an additional set of layouts at not more than 200 feet per inch, with match lines and a small index map showing which portion of the overall layout that each sheet's layout represents.
- iv. Acceptable horizontal scales for the detailed plan and profile views are 10 feet, 20 feet, 40 feet and not more than 50 feet maximum per inch. The horizontal scale for major thoroughfares and boulevard streets shall be 1" = 20' or less.
- v. Acceptable vertical scales for detailed profile views are 2 feet, 4 feet, and not more than 5 feet maximum per inch unless otherwise approved. The vertical scale for major thoroughfares and boulevards shall be 1" = 2' or less.

(e) General Requirements:

- i. Place stacks and wyes or tees as shown. Where no stacks are shown, it is the responsibility of the license plumber to place a City approved saddle for connection to the line and the responsibility of the City Inspector to determine that such saddle is watertight and properly installed.

- ii. Locate sewers in utility easements as indicated by the latest Utility Coordinating Committee's standards unless otherwise indicated in plan views and when approved due to a hardship.
- iii. The materials and construction conform to the latest City of Riverside specifications. Standard air test and mandrel test shall be performed.
- iv. Backfill all excavated areas/trenches under or within 1 foot of existing or proposed pavement with cement stabilized sand up to 1 foot below paving subgrade. Cement stabilized sand shall be two sacks cement per ton.
- v. The actual location of proposed stacks shall be shown by stations on the drawings.
- vi. Drawings for single family residential subdivisions inside the City limits and within the E.T.J. shall show the proposed location, by sewer or transit base line stations, of service leads, stacks, wyes, tees and other connection points to all lots. The sewer station transit line or stub station relative to the nearest downstream manhole shall be shown on detailed plan or profile views, or on an additional sanitary sewer layout with a scale of not more than 100 feet per inch.
- vii. Separate connections extend to the property lines must be provided at the center of each lot or along one of the side lot lines to be served with a separate tap within the street right-of-way, alley or easement, where necessary, to avoid conflict between neighbors.
- viii. Construction notes shall designate the kind and class of pipe and the class of bedding with exceptions to the construction notes to be shown on the plan and profile sheets (use City standard construction drawings).
- ix. All public sewers and appurtenances shall be constructed in public streets, alleys, or easements.
- x. Non sanitary sewer Municipal Utility District (M.U.D.) easements or fee strips such as pipeline, Gulf States Utilities (GSU) districts, railroad, etc. are in and of themselves insufficient and unacceptable to permit laying of sanitary sewers and/or force mains across or along the underlying private property or restricted non-sanitary use type of public property.
- xi. The final determination as to whether portion of a street, alley, or easement to be occupied by a proposed sewer rests within the City. The director will take into consideration existing, planned, and proposed facilities such as manholes, pavement, pipes/conduits, along with existing trees, shrubs, or other unique surfaces conditions when arriving at a decision.
- xii. The engineer making the drawings for the sewer should show on his drawings the location of any existing known pipe or duct that might interfere with the construction of the sewer and call to the attention of the City and known obstacles that might be encountered in construction the sewer in any location under consideration. The engineer shall determine the existence of pipes, ducts, and/or obstacles from a visual survey on the ground plus research of all public records and private records when available.

(f) Line Size:

- i. Four-inch service leads shall be confined to the limits of the lot which they serve and shall serve only the equivalent of one single family lot. Four-inch sewer shall not be laid in any street, alley or right-of-way.
- ii. Six-inch service leads shall not serve more than the equivalent of two single family lots or other types of small land tracts.
- iii. Four inch and Six-inch service lead for single family residential lots shall have a minimum grade of 0.07 percent.

- iv. Four commercial services lead such as street bores, submit a copy of the approved plumbing drawings to establish the required size of the line.
- v. All main and lateral sewers will end in manholes, except for special and/or unusual situations and subject to specific approval of same.
- vi. Where a lateral sewer ends near a street right-of-way, the end manhole shall be extended into the street right-of-way, a minimum of 2 feet off of the property line or as close to the street right-of-way as possible subject to normal clearances required from other utilities (i.e., water line – 12 feet minimum from manhole center, storm sewer – 7 to 15 feet between manhole and storm sewer centers, subject to relative depths and sizes). Where street cuts in flood plain areas would put the manhole rim below the flood plain elevation, keep the end manhole inside the easement.
- vii. All sewer lines shall be laid at a size and depth to conform to the designs permitting an orderly expansion of the sewer system of the City and so as to avoid duplication of lines in the future. The minimum diameter for lateral sewers shall be 8 inches.
- viii. The city shall be the final judge as to sizes and depths required and exceptions to “lateral service leads” as previously defined.

(g) Lien Depth:

- i. The sewer shall be laid with the top of the pipe a minimum of 3 feet below the surface of the ground (at the end where there will be no need for that sewer line to ever be extended).
- ii. Sewers laid in the street rights-of-way with crowned roads and side ditches shall have a minimum cover of 4 feet from the top of the pipe to top of the curb to anticipate future sewer extension.
- iii. Sewers laid in street rights-of-way with crowned roads and side ditches shall have a minimum cover of 6 feet from the average ground line at the adjacent street rights-of-way to the top of pipe.
- iv. Where the minimum cover as specified in Paragraphs G1, 2, and 3 above is not possible, the sewer shall be laid with Class 150 (150 psi) pressure pipe or rigid factory-made pipe with cement stabilized sand backfill material.
- v. The maximum depth for 8-inch, 10 inches, and 12-inch collection lines shall be 20 feet from average ground surface to pipe invert. Depths greater than 20 feet are subject to approval by the City Engineer if justified for site specific reasons during the preliminary engineering phase of the project design.

(h) Line Grades:

- i. Texas Commission on Environmental Quality minimum and maximum slopes shall be used for sewer lines.

(i) Manholes

- i. On main or lateral sewers, manholes shall be placed at all changes in alignment, changes in grade, junction points and either at street, alley, or easement intersections as designs may require.
 - 1. Sewers laid in easements shall have a manhole in each street right-of-way crossed by the sewer.

2. The maximum distance between manholes shall be determined from the following table for various pipe sizes. Spacings for large diameter mains installed by tunneling methods shall be determined on an individual project basis.

Pipe Diameter (I.D.) in Inches	Manhole Maximum Spacing in Feet
6-15	400
18-30	800
33-48	1,000

3. Manholes shall be placed at the end of mains for future continuation. Clean outs may be used at the dead end of smaller size lines.
4. Where the entering sewer enters the manhole at or about the same elevation as the existing sewer, one or more manholes shall be located to maintain a minimum angle of 80 degrees between the entering sewer and the existing sewer. When the entering sewer is on the upstream side of the manhole, the minimum angle between the lines may be reduced to 45 degrees, provided the pipes are small enough to allow a distinct flow channel to be maintained within the manhole when the pipe flow lines are at or within one pipe diameter of the smaller pipe, or when the entering pipe grade is located above the top of the primary line and clearance can be provided between the pipes.

(j) Service Leads (Greater than 4 inches)

- i. Sewer lines servicing more than one customer are considered to be public lines. They shall be constructed with manholes and easements. Service lines 6 inch or larger shall start with a manhole at the main line.

(k) Unsewered Building Sites

- i. Lot Size and Requirements:
 1. All lot sizes shall be determined by the projected use of the property considering people density, sewage requirements, soil tests (percolation tests performed and certified to by a Registered Professional Engineering of the State of Texas) and public or private water supply, all in accordance with the requirement of the latest publication titled "Construction standards for Private Sewage Facilities," adopted by the TCEQ.
 2. The location of individual lot sewage treatment facilities and the location of the private water well, if required, shall be shown on the individual building drawings.
 3. Platted subdivisions served by a public water and sewer system shall provide taps for all individual lots at the time of subdividing.
 4. Platted subdivisions served by a private water and sewer system shall have their designs in accordance with City Standards to be eligible for future annexation and financial compensation.
- ii. Where a City sewer service cannot be made available, a septic system design prepared by a Registered Professional Engineer in accordance with the latest publication titles "Construction Standards for Private Sewage Facilities", adopted by the Texas Commission on Environmental Quality (TCEQ) is required. Lots where a gravity sewer service is not available, shall require a sewer availability letter approving a septic

system designed and sealed by a Registered Professional Engineer and the TCEQ approval of such septic system.

1.04 SUBMITTALS

(a) Preliminary Design – Submit the following for review and comment:

- i. Copies of any documents which show approval of exception to the City criteria.
- ii. Design calculations for line sizes and grades.
- iii. Contour map for overall area showing the ultimate service area.
- iv. Plan and profile sheets showing proposed improvements.
- v. Geotechnical soils report for the project.

(b) Final Design – Submit the following for approval:

- i. Final documents of the above, plus plan and profile sheets (as revised, including City comments) and geotechnical soils report.
- ii. Review prints.
- iii. Original drawings.

1.05 QUALITY ASSURANCE

(a) Prepare calculations and construction drawings under the supervision of a currently Registered Professional Engineer trained and licensed under the disciplines required by the drawings. The final construction drawings must be sealed, signed, and dated by the Professional Engineer responsible for the development of drawings.

6-4 Storm Water Management

a. Design

1. All subdivisions shall have a storm water management system that is adequate to prevent the undue or unplanned retention of storm water on the site. Undue retention does not include:
 - (a) Retention through planned facilities.
 - (b) Retention not substantially different from pre-existing conditions.
2. The design of the storm water management system shall be consistent with general and specific concerns and standards of the City and the drainage control programs of applicable public agencies. Design shall be based on environmentally sound site planning and engineering techniques.
3. To the maximum degree possible, drainage from subdivisions shall conform to natural contours of land and not disturb pre-existing drainage ways.
4. Adjacent properties shall not be unduly burdened with surface water from the subdivision. Specifically:
 - (a) There may be no unreasonable impediment of water from higher adjacent properties across the subdivision, causing damage to lower properties.

- (b) No action shall unreasonably collect and channel storm water onto lower properties. The volume or rate of post-development runoff shall not exceed the amount of pre-development runoff and is to be managed in a manner consistent with Texas statutes and existing case law regarding such flows.
5. Design shall use the best available technology to minimize off-site runoff, encourage natural filtration, simulate natural drainage, and minimize discharge of pollutants. Best available technology may include retention basins, swales, porous paving, and terracing.
 6. No surface water may be channeled into a sanitary sewer system.
 7. Where possible, a subdivision's drainage system shall coordinate with that of surrounding properties or streets.
 8. All storm water design shall be reviewed and approved by the City Engineer. The preliminary plat submission must include preliminary drainage computations and demonstrations that the proposed storm water management system meets the requirements of this Section. A certification from a registered Professional Engineer shall be filed with the City of Riverside certifying that the storm water management system of the subdivision is designed and constructed in accordance with the requirements of this Section, and all applicable standards of the State of Texas. This certification shall be affixed to an accurate set of "as-built" system plans.
- b. Erosion Control
1. With the submission of the preliminary plat, the subdivider shall submit an erosion control plan, prepared and certified by a licensed Professional Engineer, for any land disturbing activity. All grading activities must be carried out consistent with this approved erosion control plan.
 2. Any single lot or development under construction shall have erosion control devices installed along the back side of the curb once the street is completed to reduce sediment into or upon such street. The erosion control devices shall remain in working condition, be repaired or replaced if damaged and shall not be removed from the lot or development until construction of any structure is completed on such lot or development and such lot or development vegetation has been established to 75%.
- c. Sediment in Public Right-of-Way or Storm Drainage System; Notice to Remove; Penalty
1. No person shall deposit sediment into or upon any street, alley, sidewalk, public way, storm drainage system, or public ground as a result of tracking, runoff or other erosion and sedimentation from a building or development site. In addition to the penalty provided in Section 7-8 of this Ordinance, the responsible person shall remove the same within a reasonable period of time as required by the City. Whenever the person responsible for sediment deposited into or upon any street, alley, sidewalk, public way, storm drainage system, or public ground refuses or neglects to remove the same, the City may elect to remove the sediment and the expense of such removal shall be recoverable in an action at law. The remedy provided in this section shall be in addition to the penalty hereinafter provided cumulative therewith.

2. If the City or the Lower Platte South Natural Resources District determines that the conditions described above constitute an immediate nuisance and hazard to public safety, the City shall issue a written notice to abate and remove such nuisance or hazard within twenty-four hours. If such person responsible shall have failed or refused to abate and remove such nuisance at the expiration of twenty-four hours from delivery of notice, the City may remove such nuisance and the expense of such removal shall be recoverable in an action at law against the person responsible.

6-5 Reserved

6-6 Reserved

6-7 Reserved

6-8 Topography and Grading

The slope, topography and geology of the dedicated site and its surroundings must be suitable for its intended purposes. A subdivider shall allow the City to have access to the proposed sites for the purpose of conducting soil boring tests.

6-9 Timing and Conveyance

Unless otherwise determined through a Subdivision Agreement, a subdivider shall convey to the City (or such other governmental body, corporation or such owner as determined by the City) the land required under this Section at the time of final approval by the City Council of the subdivision or re-subdivision plat or final development plan, by the delivery of the following documents:

- a. A good and sufficient Trustee's or Warranty Deed conveying fee simple title free and clear of all liens and encumbrances (except liens or encumbrances dischargeable by cash accompanying said deed) except for current real estate taxes.
- b. A deposit of money equal to 100% of the most ascertainable taxes for the year, pro-rated to the date that the deed is delivered.
- c. A plat of survey containing thereon the legal description of the property to be conveyed and any other matters which may be required by the City Administrator, under as advised by the City Secretary, City Attorney, and the consulting City Engineer.

6-10 Timing of Payment

Cash contributions required under this Section shall be paid as follows:

a. Fees Paid Prior to Final Plat

Unless otherwise provided by the terms of a developer agreement entered into between the City and the subdivider, all fees required pursuant to this Section, including fees arising from the development of land located in the City's one-mile planning jurisdiction that may be subject of an intergovernmental agreement, shall be due and owing prior to the final plat approval by the City Council.

However, if the subdivider's lands are the subject of an annexation agreement, payment shall be made at the times and in the manner provided in said annexation agreement.

b. Procedures for Fee Collection and Administration

It shall be the duty of the Finance Director, or other official designated by the City Council to establish regulations and procedures for the collection and administration of the cash contributions required under this Section.

6-11 Developer Agreements

a. Developer Agreements May Establish Time and Manner of Compliance

The City may enter into a Developer Agreement with any subdivider which sets forth the time and manner of compliance with the terms of this Section and implementation of any other provisions of these regulations.

b. Prior Development Agreements

If any developer agreement has previously been entered into between the City and a subdivider, and that Agreement remains in full force and effect, the provisions of that agreement shall control, and this Section shall have no force and effect, provided that the subdivider complies with the terms of such Agreement. However, if such subdivider is not complying with the terms of that Agreement, then the provisions of this Section shall apply and the City shall utilize the criteria set forth herein to determine the appropriate exaction amount, less credits, if any.

Further, if the development contemplated by a subdivider has either increased in number of units or has otherwise increased the demand for park and recreation facilities, then the developer Agreement previously entered into between the subdivider and the City shall be amended and the subdivider shall provide additional land, or a pro-rata fee, based on the provisions of this Section, less credits, if any.

6-12 Easements

a. Utility Easements

1. Easements for utilities shall be provided for in the subdivision dedication allowing for the construction, maintenance, repair, replacement of utilities, and drainage. Such easements shall be at least 10 feet in width, centered on the lot lines, and shall be provided along:

- (a) All rear property lines.
- (b) Side property lines where necessary to provide a continuous easement.

2. Easements of greater width may be required along lot lines or across lots. Easements of lesser width may be approved if accepted by utility providers. Easements shall connect with easements on adjoining properties.

3. Easements shall be approved in writing by any appropriate public or private utility provider intending to use such an easement for their facilities. Such approval shall be submitted prior to final plat approval.

b. Drainageway Easements

Where a subdivision is crossed by a watercourse, drainage way, channel, or stream, a storm water easement or drainage right-of-way shall be provided. It shall correspond generally with the extent of such watercourse, together with any additional construction or expansion necessary to allow it to conduct storm water adequately. Easements shall extend not less than 20 feet on each side from the centerline of the waterway. The total width of any easement shall be sufficient to cover the 100-year flood plain calculated for a fully developed upstream drainage basin. Parallel streets or parkways may be utilized to preserve such drainageways.

c. Setback Requirements for Structures Adjacent to Creeks and Drainageways

1. In addition to other applicable provisions of city ordinances, no persons shall be granted a permit for the construction of any structure, exclusive of fences, bank stabilization structures, poles signs, and non-related parking areas adjacent to any creek or stream unless such structure is located so that no portion whereof is any closer to the stream than will allow a maximum 3:1 slope between the water's edge (during normal flow conditions) of the stream and the closest point of the structure at-grade.
2. An exemption from the provisions of Sub-section (1) above may be granted if all of the following conditions are met and required certification is filed with the City of Riverside:
 - (a) Certification by a registered professional engineer or architect that adequate bank stabilization structures or slope protection will be installed in the construction of said structure, having an estimated useful life equal to that of the structure, which will provide adequate lateral support so that no portion of the structure adjacent to the stream will be endangered by erosion or lack of lateral support.
 - (b) Certification shall be affixed to an accurate set of "as-built" construction plans for the structure, as well as "as- built" plans depicting any bank stabilization or slope protection measures or structures.
 - (c) In the event that the structure is adjacent to any stream that has been channelized or otherwise improved by any agency of government, then such certification providing this exemption must take the form of a certification as to the adequacy and protection of the improvements installed by such governmental unit.

d. Other Easements

The subdivision shall provide easements for other public utilities that cross through it, in a form acceptable to the City or appropriate public agency.

e. Requirements

1. The minimum multi-use easement width for underground facilities shall be 16' or as approved by the City Engineer.
2. Sanitary Sewer easements, not adjacent to a public ROW, shall have a minimum width equal to twice the sewers diameter plus the flowline depth of the sewer from proposed natural ground, but not less than 16 feet provided sewer is located in center of the easement.
3. Storm Sewers less than 60-inch diameter, the minimum easement width shall be 25 feet if not adjacent to a public ROW, or as approved by the City Engineer.

4. For Storm Sewers greater than 60-inch diameter, the minimum easement width shall be determined by the City Engineer.

6-13 Dedications

Before final plat approval is granted to the subdivision, dedications to public use of all streets, alleys, other public rights-of-way, or other parks and public lands shall be completed as required by this Ordinance.

6-14 Street Trees

a. Purpose

The selection, planting, maintenance and removal of trees, shrubs and hedges along the public ways within the City of Riverside substantially affect such matters as pedestrians and vehicle safety, the location and maintenance of utility services, tree maintenance costs, the incidence of tree diseases, and the general appearance of the cityscape; therefore, it is hereby found and determined that such selection, planting, maintenance and removal are matters of city-wide concern over which the city must exercise the control set forth in the following standards and specifications. All trees planted shall be native to the State of Texas and shall not be considered invasive.

b. General Requirements

The following requirements govern the planting and selection of street trees:

1. Street trees planted on City right-of-way shall generally be located as follows to avoid conflicts with traffic control signs, sight triangles, above- and below-ground utilities, and existing trees:
 - (a) Street trees on corner lots shall be located 25 feet from the property corner adjacent to the street intersection.
 - (b) Twenty-five (25) feet from stop signs.
 - (c) Fifteen (15) feet from streetlight poles.
 - (d) Ten (10) feet from fire hydrants.
 - (e) Five (5) feet from driveways.
 - (f) Five (5) feet from storm sewer inlets
 - (g) Five (5) feet from manholes
 - (h) Four (4) feet from water shut-off boxes.
 - (i) Three (3) feet from gas shut-off valves.
 - (j) Five (5) feet from underground utility service lines going from utility mains to homes/buildings. The location of the service lines shall be considered, for distance purposes, to be the surface of the ground above the service line.
 - (k) Five (5) feet from traffic control signs
 - (l) Four (4) feet from sidewalks where parking areas are greater than eight (8) feet wide.
2. If the street tree cannot be planted in compliance with the above requirements, an alternative location for the street tree may be approved by the City of Riverside.
3. Spacing between street trees to be determined by the City of Riverside.
4. The sub-divider shall contact the City of Riverside for the species of street trees for

each street.

5. All street trees, when planted, shall not be less than one inch in caliper.
6. There shall be at least one (1) street tree per lot unless the lot is less than 50 feet in width in which case the trees would be spaced for major streets according to Traffic Sight Distance Standards and Street Design Speed as follows:

Major Street Tree Spacing

Design Speed	Feet
25 mph	35-40
30 mph	40-45
35 mph	45-50
40 mph	55-60
45 mph	60-70
50 mph	70-75
55 mph	80+

7. For non-major streets, the trees would be spaced as follows:
 - (a) Small Trees: Thirty (30) to thirty-five (35) feet from the nearest existing trees, public or private and spaced forty (40) feet from each other, unless otherwise approved by the City.
 - (b) Medium Trees: Forty (40) to forty-five (45) feet from the nearest existing trees, public or private, and spaced forty (40) to forty-five (45) feet from each other, unless otherwise approved by the City.
 - (c) Large Trees: Forty-Five (45) to fifty-five (55) feet from nearest existing trees, public or private, and spaced fifty (50) to fifty-five (55) feet from each other, unless otherwise approved by the City.
8. Corner lots shall require two or more street trees depending on the length of frontage on each street for such lots.
9. Lots with 100 to 150 feet of frontage shall require two (2) street trees and for each additional 50 feet of frontage one (1) additional street tree.
10. The same species of tree should not be used on streets which are generally parallel and within five (5) blocks apart, unless otherwise approved by the City.
11. More than one species of tree may be allowed to be planted on the same street provided the designated street tree and other compatible species are those identified as an approved grouping of street trees from the most current approved trees for streets for the City of Riverside.
12. In order to encourage solar access, where subdivision or community unit plans have easements, covenants, or other controlling regulatory measure to protect solar access to building envelopes then the design standards may be modified to allow approved smaller or dwarf variety trees of the same genus on the north side of east-west streets, provided however that trees of the same species be used if possible.

13. Plants shall be nursery grown, first class material, straight single stemmed and must meet the standards set forth in "American Standard for Nursery Stock" (ANSI Z60.1-2004 or most current edition) and as further specified herein. Plant Material shall be obtained from established commercial licensed nursery growers and installed by licensed nursery and/or landscape contractors.
14. Refer to tree planting guides provided by the City for any more information.

7 ARTICLE SEVEN

IMPROVEMENT FINANCING AND GUARANTEES

7-1 Purpose

The purpose of this Article is to ensure the equitable financing and proper installation and maintenance of required streets, utilities, and other improvements. The guarantee shall be structured to provide adequate assurances to the City while not adding unnecessary costs to the developer.

7-2 Application

This article applies to subdivisions which require the installation of streets, utilities, or other public improvements by the City or developer.

7-3 Responsibility of Subdivider

The subdivider shall be responsible for the installation and/or construction of all improvements required by this Ordinance and shall warrant the design, materials, workmanship, construction, and performance of such improvements for two years after the date of completion.

7-4 Subdivision Agreement

a. Condition for Approval of Plat

As a condition for final approval, each subdivision plat must include a subdivision agreement entered into between the City of Riverside and the subdivider. Additionally, no contract for the construction of public improvements involving a subdivision within the extraterritorial jurisdiction but outside the corporate limits of Riverside shall be awarded without the approval of such an agreement.

b. Components of the Agreement

The agreement shall include provisions for the financing and distribution of responsibilities among the City and the subdivider for land acquisition, design, and installation of public improvements. The agreement shall also state specifically how public services will be provided in the subdivision prior to annexation by the City.

c. Rules for Distributing Improvement Costs

Generally, the following rules shall be followed in distributing costs for public improvements:

1. Private Costs

Allowable special assessment costs will be those items that have direct benefit primarily to adjacent properties. These items include, but are not limited to:

- (a) The entire cost of grading street rights-of-way, including intersections.
- (b) All water distribution and sanitary sewer lines serving the subdivision.
- (c) All paving and street construction, including curbs and gutters.
- (d) A storm water management system adequate to provide for the collection, retention, and removal of surface runoff, extending to the boundaries of the subdivision.

- (e) Sidewalks as required by this Ordinance. Construction of sidewalks may be delayed until after completion of site grading and construction but must be completed prior to occupancy of the structure.
 - (f) The contract charges for underground electrical and gas service.
 - (g) An iron rod not less than one-half inch in diameter and 24 inches in length as follows:
 - i. Set in concrete three feet deep at the intersection of all lines forming angles in the boundary of the subdivision and at all street intersections.
 - ii. At lot corners and changes in direction of block and lot boundaries.
 - (h) All costs for extension of water and sewer lines other than those the City agrees to pay pursuant to the Subdivision Agreement.
 - (i) The entire cost of street lighting within the subdivision.
2. The subdivider in lieu of installing and constructing said improvements at his/her expense, may, along with all owners of property to be affected by such improvements and all perfected lien holders, petition the Council to cause the construction of such improvements. This petition shall waive any required resolution of necessity, any applicable limitations of the amount which could be assessed against subdivision property owners including intersection costs, and other costs normally paid by the City in special assessment projects.

7-5 Subdivisions Contiguous with City

Unless otherwise provided as a specific part of the subdivision approval by the city, all subdivisions now or hereafter laid out adjoining or contiguous to the corporate limits of the city shall be included within such corporate limits and becomes a part of the City of Riverside. The residents of the subdivision shall be entitled to all the rights and privileges and subject to all laws, ordinances, rules, and regulations of the City of Riverside.

7-6 Performance Guarantees

- a. As a condition of the final approval of the plat and prior to its recording with Walker County, the City Council shall require and accept the following:
 - 1. The furnishing of a performance bond, letter of credit, cash escrow, or other guarantee in a form acceptable to the city, in an amount not to exceed 100% of the estimated cost of the improvement installation, with the exception of Street Trees.
 - 2. A specification of the time allowed for the installation of improvements. This period may be extended by the City Council.
 - 3. A cash contribution shall be furnished to the City in the amount equal to the cost of planting Street Trees upon approval of the Final Plat, as per Section 3-4(f) (1) of these Regulations.
 - 4. The performance guarantee amount and requirement, along with the permitted time for installation, shall be included within the Subdivision Agreement negotiated between the City and the Developer and approved with the Final Plat.

7-7 Notification of Completion and Acceptance by City

a. Notification

Upon substantial completion of all required improvements, the developer shall notify the City in writing, as well as submitting a certification from a registered Professional Engineer, attesting to the adequacy of the installation.

b. Inspection and Acceptance

1. The City's Consulting Firm providing oversight and testing shall inspect all installations, and shall approve, partially approve, or disapprove the installation. Partial approval may be given at the discretion of the City Council upon completion of twenty-five (25) percent, fifty (50) percent, and seventy-five (75) percent of the installation process. Upon completion of improvements, he/she shall file a statement with the City Council and City Secretary certifying that the improvements have been completed satisfactorily or listing the defects in the improvements.
2. If the installation is approved, the City Building Inspector shall notify the Developer of acceptance in writing. Such acceptance shall release the developer from liability pursuant to the performance guarantee for the installation. The City has the right to retain up to 5% of the value of the performance guarantee for a period of up to two years from the date of acceptance to remedy any deficiencies or terms of the Subdivision Agreement which are not met or completed during that period.
3. If improvements are not accepted or not completed within the specified time, the performance guarantee shall be forfeited and used by the City to complete satisfactory installation of improvements.
4. No residential occupancy permits shall be issued for a subdivision unless the installation of improvements has been inspected and approved in full by the Building Inspector.

7-8 Notice of Violation and Penalty Enforcement

Any person who receives a Notice of Violation from the City and has violated this chapter shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished by a fine in the sum of not less than \$100.00 and not more than \$500.00 per day. In the case of a continuing violation, each day shall constitute a separate offense.