

ORDINANCE NO. 2022-01

AN ORDINANCE OF THE CITY OF TOM BEAN, TEXAS ADOPTING ADDITIONAL STANDARDS AND REQUIREMENT FOR PROPOSED STREETS AND ROADS; REQUIRING CURB AND GUTTER SERVING NEW DEVELOPMENT; ESTABLISHING ADDITIONAL REGULATIONS AND CRITERIA FOR STREETS AND ROADS FOR A SAFE, CONVENIENT AND FUNCTIONAL SYSTEM FOR VEHICULAR, BICYCLE AND PEDESTRIAN CIRCULATION THROUGHOUT THE CITY OF TOM BEAN, GRAYSON COUNTY TEXAS; A REPEALER CLAUSE; A PENALTY CLAUSE; AND AN EFFECTIVE DATE CLAUSE.

WHEREAS, the City of Tom Bean, Grayson County, Texas (the "City") desires to provide the citizens of Tom Bean, Texas with safe, well-constructed and durable streets and roads; and

WHEREAS, the City Council of the City of Tom Bean deems it necessary to provide regulations for development and the construction of the City streets and roads with curbs and gutter; and

WHEREAS, the City Council of the City of Tom Bean desires to prevent premature wear, erosion and/or damage to the City streets and roads due to substandard material being used for the development and construction of streets and roads in new developments; and

WHEREAS, the City Council recognizes the need to have such construction monitored and regulated to preserve the safety and welfare of its citizens; and

WHEREAS, orderly development and the proper provision of streets and roads are necessary for the health and safety of citizens.

WHEREAS, this ordinance shall not relieve any developer or owner of any existing duties or requirement or waive any requirements of statutes or the City's Subdivision Ordinance or other ordinances of the City.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOM BEAN, TEXAS:

Section 1. Safety of Patrons Generally

Proposed roads serving new development shall provide a safe, convenient and functional system for vehicular, bicycle and pedestrian circulation and shall be properly related to the applicable Subdivision Ordinance and any amendments thereto and shall be appropriate for the particular traffic characteristics of each proposed subdivision or development. New developments shall be supported by a thoroughfare network having adequate capacity, and safe and efficient traffic circulation. Each development shall have adequate access to the thoroughfare network. Additional standards and requirements are defined in this ordinance.

Section 2. Street Arrangements

- 1. Unless otherwise approved by the Planning and Zoning Commission and the City Council, provisions shall be made for the extension of arterial streets. Collector streets shall be provided for the circulation of traffic through the subdivision and the connection thereof to the arterial streets. Adequate local streets shall be provided to accommodate the subdivision.
- 2. Off-center street intersections shall, in general, not be approved. All arterial and collector streets shall be continuous or in alignment with existing streets, unless variations are deemed advisable by the Commission and Council due to topography and requirements of traffic circulation.
- 3. Proposed public or private streets for all future developments and subdivisions of land in the city and its extraterritorial jurisdiction, regardless of whether they are included on the City's master thoroughfare plan, shall be aligned and constructed to connect to as many existing public streets that border the future development or subdivision as are necessary to provide for a minimum of two points of emergency access. Where development phasing or constraints of the land prevent the provision of a second, separate means of access, the City may accept a temporary street connection, or a median divided street or divided entry to satisfy this requirement. Any such street or entry must be reviewed and approved by the City Engineer.
- 4. In circumstances where existing public street right-of-way within an existing development abuts a future development or subdivision, and said right-of-way is unpaved or otherwise unimproved in a manner to allow normal use by vehicular traffic including emergency vehicle[s] and apparatus, the developer of the future development or subdivision may be required, in rough proportion to the impact of the future development or subdivision, to construct all or part of an improved street surface on said right-of-way in accordance with the city's street design standards.
- 5. <u>Boundary Streets</u>. In cases where the land proposed to be subdivided is partially or totally bounded on one or more sides by an existing street, way, or artery having a width less than that specified in this ordinance, the subdivision shall be laid out so as to provide the street width required.

A half street along adjoining property which has not been subdivided may be approved; however, if it is deemed necessary by the City that the full width of the street be obtained, then the developer of the first tract to be subdivided may be required to obtain the additional or remaining rights-of-way from the adjacent tract.

6. <u>Street Intersections</u>. More than two (2) streets intersecting at a single point shall be avoided, except where it is impractical to secure a proper street system otherwise. Where several streets converge at one point, or acute intersection angles are present, setback lines, special rounding or cut off corners, and/or a traffic circle may be required to ensure safety and facilitation of orderly traffic movements.

Intersections shall be at 90-degree angles unless otherwise approved by the City Engineer.

- 7. The City shall have the authority to require proposed developments and subdivisions to extend proposed residential streets and residential street right-of-way to adjacent properties where future development or redevelopment is projected to occur.
- 8. Dead-end streets shall not be approved unless:
 - a. Such dead-end streets are designed to connect with future streets in adjacent land not yet developed, in which case the streets shall extend to the boundaries of the land being subdivided.
 - b. In very unusual circumstances, a street may dead-end for topographical reasons or in order to develop a desirable residential plan, in which case the dead-end street shall have a cul-de-sac with a minimum ROW width (diameter) of one hundred twenty feet (120') and a minimum pavement diameter of one hundred feet (100'). The maximum length of a dead-end street with a turn-around (cul-de-sac) shall be six hundred feet (600').
- 9. Relation of Adjoining Streets and Land. The system of streets designated for the subdivision, except in unusual cases, must connect with streets already dedicated in adjacent subdivisions, and where adjacent connections are not platted, must in general be the reasonable projection of streets in the nearest subdivided tracts, and must be continued to the boundaries of the tract subdivided, so that other subdividers may connect therewith. Reserve strips of land controlling access to or egress from other property or to or from any street or alley or having the effect of restricting or damaging the adjoining property for subdivision purposes or which will not be taxable or accessible for special improvements shall not be permitted in any subdivision.
- 10. Street Grades. The minimum grade for all streets shall be five-tenths (0.5) of one (1) percent. The maximum grade for arterial streets shall be five (5) percent; for collector streets it shall be eight (8) percent; for local streets it shall be ten (10) percent. If natural topography is such as to require steeper grades, the above maximum grade shall be increased by twenty-five (25) percent for a maximum continuous distance of two hundred (200) feet. Centerline grade changes with an algebraic difference of more than three (3) percent, and less than five (5) percent, shall be connected with at least a two hundred

(200) foot vertical curve. For every additional percent of algebraic difference over five (5) percent, there shall be an additional fifty (50) feet of vertical curve. All algebraic differences in grade below three (3) percent shall have a vertical curve of not less than one hundred (100) feet. Where a cross slope is necessary or desirable from one curb to the opposite curb, such cross slope shall not be more than nine (9) inches on a twenty-eight (28) foot street, or more than twelve (12) inches on a thirty-nine (39) foot street, or more than eighteen (18) inches on a sixty (60) foot street, except where new streets connect to existing streets that require a greater cross slope to connect, and then the grade change will be consumed within one hundred fifty (150) feet of the connecting point.

The grade requirements for alleys shall conform to those of streets.

- 11. <u>Street and Alley Crowns</u>. The crown of all streets shall be based on one-sixth (1/6) of an inch per foot of paved street width, but in no case less than four (4) inches, nor more than ten (10) inches. All alleys shall have an invert crown of one-sixth (1/6) of an inch per foot of alley width, but in no case less than three (3) inches nor more than five (5) inches.
- 12. <u>Curve Requirements</u>. (Other than intersections.) Arterial streets shall have a minimum radii at the centerline of 1,920 feet; collector streets shall have a minimum radii at the centerline of 955 feet; and local streets and alleys shall have a minimum radii at the centerline of 150 feet.
- 13. <u>Block Length and Width</u>. In general, intersecting streets, determining the block lengths and widths shall be provided at such intervals as to serve cross traffic adequately and to meet existing streets or customary subdivision practices. Where no existing subdivision controls, the blocks shall not exceed nine hundred (900) feet in length, nor be less than four hundred (400) feet in length. Where no existing subdivision controls, the block width or depth shall not exceed three hundred and fifty (350) feet, nor be less than two hundred and twenty (220) feet. When possible, the block widths and lengths shall be such as to allow two (2) tiers of lots, back to back.
- 14. <u>Street Widths</u>. Arterial streets shall have a minimum width of right-of-way of eighty (80) feet and a minimum paving width of sixty (60) feet, back of curb to back of curb. Collector streets shall have a minimum width of right-of-way of sixty (60) feet and a minimum paving width of thirty-nine (39) feet, back of curb to back of curb. Local streets shall have a minimum width of right-of-way of fifty (50) feet and a minimum paving width of twenty-eight (28) feet back of curb to back of curb, except that in the case of curvilinear streets, where the centerline radii are less than 500 feet, such paving widths shall be increased to thirty-two (32) feet, back of curb to back of curb, along the curvilinear portion of the street. Estate streets shall have a minimum width of right-of-way of sixty (60) feet and a minimum paving width of eighteen (18) feet with drainage ditches of no greater depth of one and one-half (1-1/2) feet; however, when drainage ditches are required to exceed one and one-half (1-1/2) feet in depth, minimum right-of-way width must be increased in accordance with approved plans for street and related drainage system.
- 15. Required Improvements. The developer shall place these improvements in all new subdivisions that are subject to this ordinance. The satisfactory installation of these

improvements shall be a precedent to the final approval and acceptance of the subdivision by the City.

- a. Streets and alleys
- b. Sewage collection and treatment system
- c. Water supply and distribution system
- d. Storm drainage systems
- e. Other improvements as determined by the City Engineer.
- 16. <u>Street Names & Signs</u>. New streets shall be so named so as to provide continuity of names with existing streets. Similar or identical street names to streets already existing in other parts of the City shall be avoided. Prior to the acceptance of the streets, the Developer shall install street signs, at the developer's expense, at all intersections at and within the subdivision. Said sign(s) shall be of a style, size, location and construction approved by the City Engineer. By written agreement, the City may charge a fee for this service, and all fees shall be paid prior to the acceptance of the streets and utilities.
- 17. Alleys. Alleys or loading and unloading courts shall be provided in blocks to be used for any purpose other than residential. The minimum right-of-way width for such alleys shall be thirty (30) feet and shall be paved in their entirety. Should alleys be platted in residential areas they shall have a minimum right-of-way width of twenty (20) feet and paved to a minimum of twelve (12) feet. Alleys shall be provided where existing alleys of adjacent subdivisions would be closed or shut off so as to deny said existing alleys of separate ingress and egress.

No lot shall be platted in such manner as to force or render desirable the building thereon of any improvements which face, front or have the main entrance on an alley.

Section 3. Minimum Improvements

The following improvements shall be placed within all new subdivisions by the subdivider and these improvements or guarantee thereof, as set forth herein, shall be a condition precedent to the final approval and acceptance of the subdivision:

- a. Standard curb and gutter with concrete roadway, except as specifically exempted by ordinance or by variance. A Subdivider may request a curb and gutter variance from City by submitting the request in writing to the City Engineer prior to Plat Approval. The City Engineer may grant a curb and gutter variance administratively upon finding of special circumstances or unnecessary hardship.
- b. Street subgrade (with lime stabilization as required).
- c. Concrete street or road surface.

- d. Valley or dips, where essential for drainage purposes.
- e. Street signs.

All street improvements, including private streets, shall be done in accordance with the design standards of this ordinance and at the time of submission of the plat.

Section 4. Construction Plans

After the Commission's approval of the preliminary plat, and before or upon the submission of the final plat, the following information shall be supplied to the City Engineer:

Plan-profile sheets of all proposed streets. These sheets are to be 22" x 36" in size and plotted to scale of one inch to one hundred (100) feet horizontal and one inch to five (5) feet vertical. These plan-profiles shall show the right-of-way of the street, portions of the right-of-way of intersecting streets, location of curb and gutter with respect to monuments, curb return radii, dips or valleys, soil type, liquid limit and plasticity index for each major soil type encountered at the subgrade level, test locations and estimated boundaries between soil types in the plan portion. Accompanying the plan portion must be the certified test results performed by an independent testing laboratory approved by the City of Tom Bean which verifies the information required and furnished. The profile shall show the existing ground on each side of the street at the right-of-way line, the proposed grade of the top of the curb for each side of the street, and the reference benchmark with its elevation. These plan-profiles shall show or be accompanied by a typical cross-section of the proposed street or streets to be constructed.

Section 5. Design of Improvements

A. <u>Curb and Gutter</u>. Curb and gutter shall be constructed monolithic with the concrete pavement in accordance with specifications provided by the City Engineer. It shall be constructed along both sides of all streets and avenues within the subdivision and along the subdivision's side of all boundary streets. The cost of this work will not be subject to any participating aid by the City.

The thickness of the gutter section shall be six (6) inches and the thickness of the curb section shall be six (6) inches from the point where the gutter line tangent intersects the curb face tangent to the back of the curb section. The curb face shall have a one-inch batter, so that the top of the curb shall measure five (5) inches from the point where the curb face tangent meets the top plane of the curb to the back of the curb section. The height of the curb section shall be twelve (12) inches at the back. The face of the curb section shall have an arc at the top, the radius of which is two and one-half (2-1/2) inches, and an arc with a three-inch radius shall be constructed at the point where the curb face meets the top of the gutter section. The bottom of the curb and gutter section shall be constructed perpendicular to the bottom of the curb section for a distance of six (6) inches and the remaining portion of the bottom of such section shall be tilted so that the lip of the gutter section will be one (1) inch higher than the point where the gutter line tangent intersects the curb face tangent. The overall width of the curb and gutter section shall be twenty-four (24) inches. If the gutter is poured separately from driveways, the overall width will also be twenty-four (24) inches. If curbs are poured separately, the overall width will be eight (8) inches at the base and six (6) inches at the top. In the construction of curbs and gutters, if the subgrade is composed of clay, a one and one-half (1-1/2) inch sand cushion shall be used if, in the opinion of the city engineer, it is necessary.

For curbs, gutters, and driveways, the concrete mixture shall be a minimum of three thousand (3,000) pounds per square inch at twenty-eight (28) days (or a 1.2.4 mix). The mixing time for all concrete shall be a minimum of one (1) minute after all ingredients have been placed in the mixer.

The maximum slump for concrete for curbs shall be four (4) inches, and for gutters, sidewalks and driveways, three (3) inches, unless suitable admixtures are incorporated and approved by the city engineer.

Forms used in the construction of sidewalks, drives, curbs and gutters under the provisions of this division shall be made of wood or metal, of a section satisfactory to the city engineer, straight, free from warp, and of a depth equal to the thickness of the finished product. The forms shall be securely staked to the alignment and grade, and maintained in a true position during the depositing of the concrete. Forms shall be clean and oiled before the pouring of the concrete, and before the pouring of any concrete, the forms will be checked for alignment and grade by the city engineer. The concrete will be placed between the forms to the depth specified, spaded and tamped until thoroughly compacted and until the mortar entirely covers the exposed surface. Expansion joints will be placed where new concrete connects to any old concrete surface or curb. Spacing of expansion joints shall be at points not exceeding twenty (20) feet and shall not extend above the final grade of the finished structure. Expansion joint filler shall be pre-molded material, of a thickness of one-half inch, and of such character that it will not be deformed or damaged by ordinary handling during hot or cold weather. Material shall be pre-formed bituminous fiber material, ASSHO designation M59-42, latest revisions, or equal.

Finishing of the poured concrete in the construction of sidewalks, drives, curbs and gutters shall either be by hand or machine. Hand finishing shall include the floating with a wooden float on the top of the surface until a slight excess of sand appears. Sidewalks shall be marked off in four-foot sections by the use of a jointing tool. On curbs, gutters, and curb and gutters, a trowel finish shall be made, followed by a brush finish. Expansion joints shall be cut to the grade of the finished product, and an edger run on both sides. Sidewalks or driveways shall not be finished where the surface will be slick.

B. <u>Valleys and Dips</u>. Where surface water drains across street intersections, said crossing shall be reinforced concrete pavement for a distance of not less than four (4) feet in each direction from the centerline of said crossing and said crossing shall extend from curb to curb. The design of these valleys or dips shall be the same as that for concrete pavement.

C. Street Subgrade.

- (1) All local and collector streets within a subdivision shall have the subgrade prepared in accordance with Item 360 of TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges to a depth of six (6) inches extending to one foot behind the back of curb and shall be stabilized as follows:
 - (a) Plasticity index of 0 through 15 shall require no stabilization.
 - (b) Plasticity index of 15 through 25 shall be stabilized with four (4) percent lime by weight.

- (c) Plasticity index of 25 through 35 shall be stabilized with five (5) percent lime by weight.
- (d) Plasticity index of 35 or above shall be stabilized with six (6) percent lime by weight.
- (2) In the event the subgrade is to be removed to the depth of six (6) inches below the pavement of the street and filled with select fill of a plasticity index of 0 through 15, no stabilization shall be required.
- (3) All plasticity indexes to be determined by an independent testing laboratory approved by the City of Tom Bean with the certified results of same being furnished by the city engineer with construction plans. All arterial streets subgrade shall be as required by the city engineer and shall meet or exceed the subgrade required for local and collector streets. All subgrades shall have density control as required by the city engineer.

D. Street Pavement.

- (1) All local streets shall be constructed of six (6) inches of continuously reinforced portland cement concrete with No. 3 Grade 60 deformed bars spaced at eighteen (18) inches in each direction.
- (2) All collector streets shall be constructed of seven (7) inches of continuously reinforced portland cement concrete with No. 4 Grade 60 deformed bars spaced at eighteen (18) inches in each direction.
- (3) All arterial streets shall be constructed of continuously reinforced portland cement concrete as required by the city engineer, but in no case shall it be less than that required for a collector street.
- (4) The concrete mix will be designed to produce a minimum compressive strength of three thousand (3000) psi at twenty-eight (28) days and shall contain not less than five (5) sacks of cement per cubic yard of concrete. The water cement ratio (net gallons of water per sack of ninety-four (94) pounds of cement) shall not exceed six and one fourth (6-1/4) gallons/sack. The gradation requirements for the course and fine aggregates shall be as required by Item 360 of the TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges.

The following specifies minimum standards required for the pavement, subgrade, and subsurface design for roadway and alleys within the City. These minimum standards are not intended to replace the professional judgement of the Geotechnical Engineer for any specific project. The standards may need to be expanded or modified on a case-by-case basis as determined necessary and appropriate by the Geotechnical Engineer, and as approved by the City Engineer in writing. In no case shall the pavement, subgrade, and subsurface design be less than the minimums.

For all roadways, alleys, and fire lanes developer shall perform a geotechnical investigation and provide designs for the pavement, subgrade, and subsurface material. Results of the geotechnical investigations, engineering analyses, and recommendations shall be presented in a Geotechnical Report signed and sealed by a Licensed Professional Engineer in the State of

Texas trained and qualified to provide geotechnical engineering analysis and pavement, subgrade, and subsurface design recommendations.

At developer's own expense, the developer shall retain the services of a reputable geotechnical testing laboratory, approved by the City, to perform necessary tests on subgrade soils, flexible base material, concrete, and other construction materials, to verify that specifications are being met. These laboratory tests may include: moisture-density relationships, gradation, Atterberg limits, in-place moisture density, concrete strength, and others as required.

The City Engineer and/or his/her designated inspector shall periodically observe the construction of street improvements. Inspection of street improvements is not intended to and does not relieve the developer or developer's contractor, from ensuring that the improvements are constructed in accordance with the accepted plans and specifications. The developer or developer's contractor, shall maintain contact with the City Engineer or his/her representative during construction of improvements.

All street construction materials and construction methods shall comply with the ordinances of this City and state regulations. In the event of a conflict, the stricter requirement shall control. Procedures in the City subdivision ordinance may be utilized to resolve issues raised by this Ordinance.

Section 6. Severability

Should any section, subsection, sentence, clause or phrase of this Ordinance be declared unconstitutional or invalid by a court of competent jurisdiction, it is expressly provided that any and all remaining portions of this Ordinance shall remain in full force and effect. The City of Tom Bean hereby declares that it would have passed this Ordinance, and each section, subsection, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional or invalid.

Section 7. Penalty Clause

Any person, firm, company, partnership, corporation, or association violating any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined an amount of not more than five hundred dollars (\$500.00) for each such violation, and each and every day that the provisions of this Ordinance are violated shall constitute a separate and distinct offense.

Section 8. Effective Date / Repealer

This ordinance is effective with its passage and the publication of the caption and it is hereby understood that this ordinance supersedes any and all ordinances in effect before its passage. To the extent allowed by law, the ordinance shall also apply in the City's ETJ.

Section 9. Open Meeting

It is hereby officially found and determined that the meeting at which this ordinance is passed was open to the public as required by law and that public notice of the time, place, and purpose of said meeting was given as required.

Section 10. Premises Adopted

All of the above premises are found to be true and correct and are hereby approved and adopted into the body of this ordinance

DULY PASSED by the City Council of the City of Tom Bean, this the 10th day of January 2022.

Daniel Harrison, Mayor

ATTEST:

City Secretary