



AGENDA

Planning and Zoning Commission Meeting

March 10, 2022 | 6:00 PM

Council Chambers | Video Conference

City Hall | 665 Country Club Road, Lucas, Texas

Notice is hereby given that a meeting of the City of Lucas Planning and Zoning Commission will be held on Thursday, March 10, 2022, at 6:00 pm at Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002-7651 and by video conference, at which time the following agenda will be discussed. As authorized by Section 551.071 of the Texas Government Code, the Planning and Zoning Commission may convene into closed Executive Session for the purpose of seeking confidential legal advice from the City Attorney on any item on the agenda at any time during the meeting.

To join the meeting, please click this URL:

<https://us06web.zoom.us/j/92691972860?pwd=cWJxTnZGWW1hZDhDVlFNSXJwZFpTQT09>

and enter your name and email address.

Join by phone: 1-346-248-7799

Webinar ID: 926 9197 2860

Passcode: 813188

If you would like to watch the meeting live, and not participate via Zoom, you may go to the City's live streaming link at <https://www.lucastexas.us/live-streaming-videos/>.

How to Provide Input at a Meeting:

Speak In Person: Request to Speak forms will be available at the meeting. Please fill out the form and give to the City Secretary prior to the start of the meeting. This form will also allow a place for comments.

Speak Remotely Via Zoom: If you would like to attend a meeting remotely and speak via Zoom, email the City Secretary at shenderson@lucastexas.us by 4:00 pm noting the item you wish to speak on and noting your attendance will be remote. Please note, any requests received after 4:00 pm will not be included at the meeting.

Submit Written Comments: If you are unable to attend a meeting and would like to submit written comments regarding a specific agenda item, email the City Secretary at shenderson@lucastexas.us by no later than 4:00 pm the day of the meeting. The email must contain the person's name, address, phone number, and the agenda item(s) for which comments will be made. Any requests received after 4:00 pm will not be included at the meeting.

Call to Order

- Roll Call
- Determination of Quorum
- Reminder to turn off or silence cell phones
- Pledge of Allegiance

Regular Agenda – 6:00 PM

1. Consider the request by Anderson Engineering on behalf of O'Reilly Auto Enterprises, LLC for final plat approval for an O'Reilly Auto Parts located on the east side of Angel Parkway approximately one-quarter mile south of McGarity Lane, and part of the William Snider Survey, Abstract No. 821, Tract 16, being 1.140 acres of a 20.79-acre tract on Lot 1, Block 1, of the O'Reilly Addition, located at 561 Angel Parkway, Lucas, Texas. **(Development Services Director Joe Hilbourn)**
2. Consider amendments to the Code of Ordinances, Chapter 13 Utilities, Exhibit A, Stormwater Run-Off Planning and Design Criteria Manual. **(On-Call Engineer Joe Grajewski, P.E., CFM)**
3. Discuss and review Chapter 7, Streets and Drainage, of the City of Lucas Comprehensive Plan including the Master Thoroughfare Plan and recommend proposed amendments if needed. **(Planning and Zoning Commission)**
4. Consider final review of amendments to Chapter 6, Parks, Recreation and Open Space of the City of Lucas Comprehensive Plan, including the updated Trails Master Plan. **(Planning and Zoning Commission)**
5. Discuss building setbacks, lot line definition, building line definition, and lot width requirements in all residential zoning districts. **(Development Services Director Joe Hilbourn)**
6. Discuss proposed amendments to Chapter 14, Zoning, Division 4, Specific Use Permits and provide direction to City staff. **(Development Services Director Joe Hilbourn)**
7. Discuss amending the City's Code of Ordinances, Chapter 14 Zoning, Article 14.01.004 Definitions by amending the definition of home occupation and provide direction to City staff. **(Development Services Director Joe Hilbourn)**
8. Consider approval of the minutes of the February 10, 2022, Planning and Zoning Commission meeting. **(City Secretary Stacy Henderson)**

Public Hearing Agenda – 7:00 PM

9. Public hearing to consider the request for a specific use permit submitted by the property owner Wal-Mart Real Estate for a drive-through restaurant on a .975-acre tract of land in the W. Snider Survey, Abstract Number 821, being part of Lot 1, Block A, Wal-Mart Lucas Addition, situated in the City of Lucas, Collin County, Texas.
 - A. Presentation by Development Services Director Joe Hilbourn
 - B. Conduct Public Hearing
 - C. Take action on the specific use permit request

10. Public hearing to consider the request for a specific use permit by property owner Yueteng Leng to allow a farmers market and agricultural classes to be held within renovated school buses at their property located at 880 Stinson Road within the Trails End Addition, Lot 2, in Lucas, Texas.
 - A. Presentation by Development Services Director Joe Hilbourn
 - B. Conduct Public Hearing
 - C. Take action on the specific use permit request

Executive Agenda

As authorized by Section 551.071 of the Texas Government Code, the Planning and Zoning Commission may convene into closed Executive Session for the purpose of seeking confidential legal advice from the City Attorney regarding any item on the agenda at any time during the meeting. This meeting is closed to the public as provided in the Texas Government Code.

11. Executive Session: An Executive Session is not scheduled for this meeting.
12. Adjournment.

Certification

I do hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002 and on the City's website at www.lucastexas.us on or before 5:00 p.m. on March 4, 2022.

Stacy Henderson, City Secretary

In compliance with the American with Disabilities Act, the City of Lucas will provide for reasonable accommodations for persons attending public meetings at City Hall. Requests for accommodations or interpretive services should be directed to Stacy Henderson at 972-912-1211 or by email at shenderson@lucastexas.us at least 48 hours prior to the meeting.



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 01

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Consider the request by Anderson Engineering on behalf of O'Reilly Auto Enterprises, LLC for final plat approval for an O'Reilly Auto Parts located on the east side of Angel Parkway approximately one-quarter mile south of McGarity Lane, and part of the William Snider Survey, Abstract No. 821, Tract 16, being 1.140 acres of a 20.79-acre tract on Lot 1, Block 1, of the O'Reilly Addition, located at 561 Angel Parkway, Lucas, Texas.

Background Information

The tract for O'Reilly Auto Parts is 1.140 acres and is currently zoned CB, Commercial Business. The minimum size lot permitted is 30,000 square feet. The property has access to public improvements such as water, sewer, gas, electric, and roads. The proposed final plat conforms to the approved preliminary plat with no changes, and conforms to the City's requirements for a final plat.

Attachments/Supporting Documentation

1. Final Plat

Budget/Financial Impact

NA

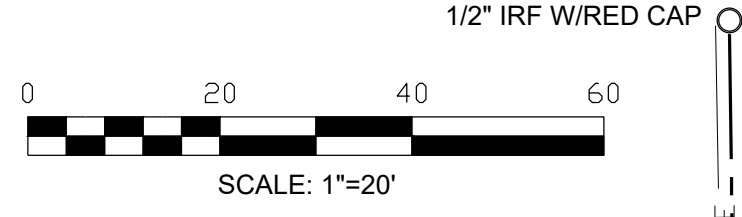
Recommendation

Staff recommends approval of the final plat as presented.

Motion

I make a motion to approve/deny the final plat approval for an O'Reilly Auto Parts located on the east side of Angel Parkway approximately one-quarter mile south of McGarity Lane, and part of the William Snider Survey, Abstract No. 821, Tract 16, being 1.140 acres of a 20.79-acre tract on Lot 1, Block 1, of the O'Reilly Addition, located at 561 Angel Parkway, Lucas, Texas.

BASIS OF BEARING
 BEARINGS ARE BASED ON THE TEXAS STATE PLANE
 COORDINATE SYSTEM NORTH CENTRAL ZONE (4202 NAD 83).



FLOOD STATEMENT

THIS TRACT OF LAND LIES WITHIN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE ANNUAL 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.E.M.A. FLOOD INSURANCE RATE MAP No. 48080C0463 OF COLLIN COUNTY, TEXAS WITH AN EFFECTIVE DATE OF JUNE 2, 2009.

The Director of Public Works of the City of Lucas, Texas hereby certifies that to the best of his/her knowledge or belief, this subdivision plat conforms to all requirements of the Code of Ordinance and with engineering construction standards and processes adopted by the City of Lucas, Texas as to which his/her approval is required.

The Director of Planning and Community Development of the City of Lucas, Texas hereby certifies that to the best of his/her knowledge or belief, this subdivision plat conforms to all requirements of the Code of Ordinance, or as may have been amended or modified, as allowed, by the Planning and Zoning Commission as to which his/her approval is required.

This plat is hereby approved by the Planning and Zoning Commission of the City of Lucas, Texas
 Chairman, Planning and Zoning Commission on the _____ day of _____, 2022.

ATTEST:

 Chairperson, Planning and Zoning Commission

OWNER'S CERTIFICATE

STATE OF TEXAS
 COUNTY OF COLLIN

WHEREAS, O'REILLY AUTO ENTERPRISES, LLC is the owner of a tract of land situated in the William Snider Survey, Abstract No. 821, City of Lucas, Collin County, Texas and being a all of a tract of land described in instrument to O'Reilly Auto Enterprises, LLC as recorded in Instrument No. _____ of the Deed Records, Collin County, Texas (D.R.C.C.T.) and being more particularly described as follows:

BEGINNING at the northwest corner of a tract of land described in instrument to Raiczky Veterinary Services, PLLC as recorded in Inst. No. 20160411000430750 (D.R.C.C.T.), said point being on the east right-of-way line of South Angel Parkway (FM 2551) (a variable width right-of-way, no deed of record found) and from which a 1/2 inch iron rod found with plastic cap stamped "RPLS 5686" bears North 89 degrees 44 minutes 34 seconds East a distance of 0.47 feet;

THENCE, along the east right-of-way line of said South Angel Parkway, North 00 degrees 46 minutes 11 seconds West a distance of 160.00 feet to a 5/8 inch iron rod set with yellow plastic cap stamped "Hult-Zollars" and from which a 1/2 inch iron rod found with red plastic cap found at the northwest corner of a tract of land described in instrument to Pennington Partners as recorded in Volume 5184, Page 1102 (D.R.C.C.T.) bears North 00 degrees 46 minutes 11 seconds West a distance of 696.44 feet;

THENCE, departing the east right-of-way line of said South Angel Parkway, North 89 degrees 44 minutes 34 seconds East a distance of 310.48 feet to a 5/8 inch iron rod set with yellow plastic cap stamped "Hult-Zollars";

THENCE, South 00 degrees 46 minutes 48 seconds East a distance of 160.00 feet to a 1/2 inch iron rod found at the northeast corner of the aforementioned Raiczky Veterinary Services, PLLC tract and from which a 1/2 inch iron rod found at the southeast corner of said Raiczky Veterinary Services, PLLC tract bears South 00 degrees 46 minutes 48 seconds East a distance of 134.86 feet;

THENCE, along the north line of said Raiczky Veterinary Services, PLLC tract South 89 degrees 44 minutes 34 seconds West a distance of 310.50 feet to the POINT OF BEGINNING and containing 49,677 Square Feet or 1.140 Acres of land, more or less.

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

That We, O'REILLY AUTO ENTERPRISES, LLC, Owners, do hereby bind themselves and their heirs, assigns and successors to file this plat designating the herein above described property as O'REILLY ADDITION LUCAS, LOT 1, BLOCK A, an addition to the City of Lucas, and do hereby dedicate to the public forever the streets, alleys and right-of-way easements shown thereon, and do hereby reserve the easement strips shown on this plat for the mutual use and accommodation of garbage collection agencies and all public utilities desiring to use or using same. Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other improvements or growths that in any way endanger or interfere with the construction, maintenance or efficiency of its respective systems or any of these easement strips, and any public utility shall at all times have the right of ingress and egress to and from upon the said easement strips for the purpose of constructing, reconstructing, inspecting, patrolling, without the necessity at any time of procuring the permission of anyone. Additionally, we certify that we are the sole owners of the dedicated property and that no other's interest is attached to this property unless otherwise indicated. This plat approved subject to all platting ordinances, rules, regulations and resolutions of the City of Lucas, Texas.

Witness my hand at _____, Missouri, this _____ day of _____, 2022.

O'REILLY AUTO ENTERPRISES, LLC, Owner

By:

STATE OF MISSOURI
 COUNTY OF GREENE

Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared _____ O'REILLY AUTO ENTERPRISES, LLC, Owner, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledges to me that they executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office, this _____ day of _____, 2022.

Notary Public in and for
 the State of Missouri

SURVEYOR'S CERTIFICATION

KNOW ALL MEN BY THESE PRESENTS:

That I, Mitchell S. Pillar, do hereby certify, that I prepared this plat from an actual on the ground survey of the land described and that the corner monuments shown thereon were properly placed under my personal supervision in accordance with the Platting Rules and Regulations of the City of Lucas Planning and Zoning Commission.

Mitchell S. Pillar,
 Registered Professional Land Surveyor
 Texas Registration No. 5491
 Firm Registration No. 10025600

STATE OF TEXAS
 COUNTY OF DALLAS

Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared Mitchell S. Pillar known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and considerations therein expressed.

Given under my hand and seal of office, this _____ day of _____, 2022.

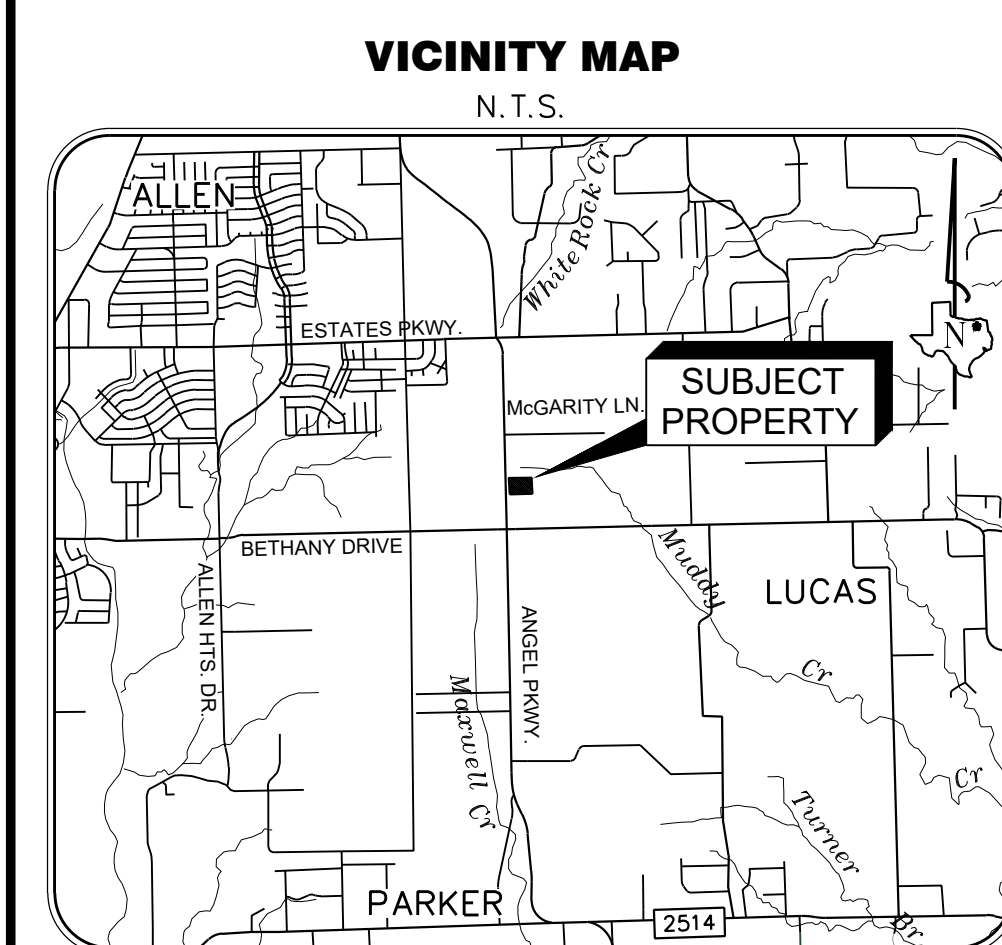
Notary Public in and for
 the State of Texas

NORTH BETHANY LAKE ESTATES
 PHASE TWO
 CAB. L, PG. 959

CITY OF ALLEN

SOUTH ANGEL PARKWAY (FM 2551)
 (VARIABLE WIDTH RIGHT-OF-WAY, DEED OF RECORD NOT FOUND)

CITY OF LUCAS
 (APPROXIMATE CITY LIMIT LINE)



PENNINGTON PARTNERS, LTD.
 VOL. 5184, PG. 1102
 D.R.C.C.T.

LUCAS PLAZA ADDITION
 LOT 1, BLOCK A
 CAB. 2018, PG. 595
 P.R.C.C.T.

O'REILLY AUTO ENTERPRISES, LLC
 Doc. No. 20171102001464850
 O.R.C.C.T.

LOT 1, BLOCK A
 49,677 Square Feet
 or 1.140 Acres

GROSS ACREAGE = 1.140 ACRES
 ROW DEDICATION = 0.0551 ACRES
 NET ACREAGE = 1.0849 ACRES

ZONING 'C'
 COMMERCIAL BUSINESS

PENNINGTON PARTNERS, LTD.
 VOL. 5184, PG. 1102
 D.R.C.C.T.

RAICZYK VETERINARY SERVICES, PLLC
 INST. No. 20160411000430750
 D.R.C.C.T.

ANGEL PARKWAY
 PET HOSPITAL ADDITION
 LOT 1, BLOCK A
 CAB. 2018, PG. 62
 P.R.C.C.T.

SC LUCAS ADDITION
 LOTS 1 & 2, BLOCK 1
 CAB. 2015, PG. 380
 P.R.C.C.T.

- Notes:
- The 15-foot wide right-of-way dedication by this plat, parallel and adjacent to F.M. 2551, shall be used only for the road construction purposes and NTMWD use. Roadway and utilities, both public and private, are restricted to crossing of 45-degrees or greater. No parallel layout of utilities, public or private, shall be permitted within the 15-foot wide right-of-way dedication by this plat.
 - Caution Note: Contractor shall contact NTMWD line locates at 972-442-5405 at least 72 hours prior to working in NTMWD's easement.

FINAL PLAT
 LOT 1, BLOCK 1
 O'REILLY ADDITION LUCAS
 AN ADDITION TO THE CITY OF LUCAS, COLLIN COUNTY, TEXAS
 1.140 ACRES SITUATED IN THE
 WILLIAM SNEIDER SURVEY, ABSTRACT No. 821, TRACT No. 16
 JANUARY 2022

PREPARED FOR
O'Reilly Auto Enterprises, LLC
 233 South Patterson
 Springfield, Missouri 65802-2298
 Phone: (417) 862-2674

PREPARED BY
HUITT-ZOLLARS
 Huitt-Zollars, Inc. Dallas
 5430 Lyndon B. Johnson freeway, Suite 1500
 Dallas, Texas 75240
 Phone (214) 871-3311 Fax (214) 871-0757



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 02

Requester: On-Call Engineer Joe Grajewski, P.E., CFM

Agenda Item Request

Consider amendments to the Code of Ordinances, Chapter 13 Utilities, Exhibit A, Stormwater Run-Off Planning and Design Criteria Manual.

Background Information

Staff is proposing the following revisions to the Code of Ordinances, Chapter 13 Utilities, Exhibit A, Stormwater Run-Off Planning and Design Criteria Manual:

1. Add the following after the first paragraph of Section A. General of Chapter 13, Exhibit A (Stormwater Run-Off Planning and Design Criteria Manual):

“At a minimum, drainage plans shall include, but are not limited to the following:

- a) Drainage area map
- b) Drainage area calculations (including size in acres, runoff coefficient, time of concentration, intensities for each required storm event and calculated flows for each storm event). Refer to the sample drainage area calculation table.
- c) Inlet calculations. Refer to the sample inlet calculation table.
- d) Open channel and/or storm sewer calculations. Refer to the sample open channel and storm sewer calculation tables.
- e) Plan view drawings including centerline alignment (with stationing) for all open channel and closed conduit conveyances.
- f) Profile view drawings including alignment stationing and vertical slope for all open channel and closed conduit conveyances. Hydraulic information stating the quantity of flow (in cubic feet per second), the velocity of flow (in feet per second), the depth of flow (in feet), and the maximum capacity of each segment of the conveyance shall be included.
- g) Cross sections on 100-ft intervals for all open channel conveyances including the 100-year water surface elevation. Each section shall demonstrate that a minimum of 1-ft of freeboard is provided. Hydraulic information stating the quantity of flow (in cubic feet per second), the velocity of flow (in feet per second), and the depth of flow (in feet) shall be included for each cross section.
- h) Grading plans for detention and retention ponds.
- i) Details and calculations for the outfall structures at each detention or retention pond for each storm event. The calculations shall demonstrate that post-development run-off rates are reduced to pre-development rates, or the capacity of downstream systems, whichever is less.
- j) Storm sewer details
- k) Any additional information as requested by the City Engineer”



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

2. Strike the first paragraph of Section D. Rainfall-Intensity-Frequency of Chapter 13, Exhibit A (Stormwater Run-Off Planning and Design Criteria Manual) and replace with the following:

”The National Oceanic and Atmospheric Administration (NOAA) Atlas 14 Precipitation-Frequency Atlas of the United States, Texas (2018) is recognized as the best available set of rainfall data for the State of Texas. This data (referred to as Atlas 14) provides point precipitation frequency values. Lucas City Hall (665 Country Club Rd, Lucas, Texas) has been selected to define standard rainfall intensity values throughout the City. All developments must be analyzed using the most recently adopted rainfall intensities, included as Table 1. Redevelopment sites with receiving drainage infrastructure that was previously designed using a previous rainfall intensity standard are required to analyze and design stormwater facilities using the updated values.

3. Create Section L. Tables and Forms to the end of Chapter 13, Exhibit A (Stormwater Run-Off Planning and Design Criteria Manual). Add the following Table and Forms to Section L as Table 1, Form A, Form B, Form C, Form D & Form E.

Attachments/Supporting Documentation

1. Table 1 & Forms A-E
2. Code of Ordinances, Exhibit 13A, Planning and Design Drainage Criteria

Budget/Financial Impact

N/A

Recommendation

City staff recommends approval of these items as presented.

Motion

I make motion to recommend to the City Council approval/denial of the amendments to the Code of Ordinances, Chapter 13 Utilities, Exhibit A, Stormwater Run-Off Planning and Design Criteria Manual as presented.

Table 1: Rainfall Intensities

Duration		Rainfall Intensity (in/hr) by Storm Frequency (Years)					
min	hr	2-year	5-year	10-year	25-year	50-year	100-year
5	0.083	5.94	7.24	8.29	9.72	10.80	11.90
10	0.167	4.76	5.80	6.65	7.80	8.68	9.53
15	0.25	3.95	4.80	5.50	6.44	7.14	7.84
30	0.5	2.75	3.33	3.81	4.45	4.93	5.40
60	1	1.79	2.18	2.50	2.93	3.26	3.58
120	2	1.11	1.37	1.59	1.88	2.11	2.35
180	3	0.826	1.03	1.20	1.44	1.62	1.82
360	6	0.494	0.620	0.728	0.882	1.00	1.13
720	12	0.291	0.366	0.431	0.522	0.595	0.673
1440	24	0.171	0.215	0.253	0.307	0.350	0.395

EXHIBIT A

PLANNING AND DESIGN DRAINAGE CRITERIA

A. General

The Drainage Criteria included in this section are for the purpose of providing a set of guidelines for planning and designing storm drainage facilities in the City of Lucas Texas and within its extraterritorial jurisdiction. These criteria will be used by the Department of Public Works, other City Departments, consulting engineers employed by the City, and engineers for private developments in the City.

B. Rational Method for Peak Storm Flows

The formula to be used for calculating peak storm flows for drainage areas less than 200 acres shall be the Rational Method, in which:

$Q = CIA$, where

Q - is the peak storm flow at a given point in cubic feet per second (cfs)

C - is the runoff coefficient that is equal to the ratio that the peak rate of runoff bears to the average rate (intensity) of rainfall;

I - is the average intensity of rainfall in inches per hour for a storm duration equal to the time of travel for runoff to flow from the farthest point of the drainage area to the design point in question;

A - is the drainage area tributary to the design point, in acres.

Note: For drainage areas greater than 200 acres, peak storm flows shall be determined based on a flow routing analysis using detailed hydrographs such as the Soil Conservation Service hydrologic methods that are available in such computer programs as TR-20, HEC-1 etc.

C. Runoff Coefficient

The runoff coefficient (C) shall consider the slope of the terrain, the character of the land use, the length of overland flow and the imperviousness of the drainage area and shall be determined based on ultimate land development. The runoff coefficient for the appropriate land used shall be as follows:

Commercial 0.90

Industrial 0.70

Single-Family Residential 0.55

Multifamily 0.75

Parks and Open Space 0.35

Schools Churches, etc. 0.75

D. Rainfall Intensity - Frequency

The rainfall intensity-frequency curves should be platted from data from TXDOT or other government sources in our area. The intensity (I) in the formula $Q = CIA$, is determined from the curves by arriving at a time of concentration for the subject drainage area and adapting a storm frequency upon which to base the design of drainage improvements.

1. Time of Concentration. The time of concentration, which is the longest time of travel for runoff to flow from any point of the subject drainage area to the design point, consists of the time required for runoff to flow overland plus the time required to flow in a street gutter, storm drain, open channel or other conveyance facility. A minimum time of concentration of fifteen (15) minutes shall be used for Single-Family Residential, Parks and Open Space areas and a minimum time of concentration of ten (10) minutes shall be used for Commercial, Industrial, Multifamily Residential, School and Church areas. A nomograph, is attached for estimating the time of concentration.
2. Storm Frequency. Required design storm frequencies for storm drainage improvements in the City of Lucas are shown in the following table.

Type of Design Frequency	Facility (years)
*Storm Sewer Systems	25
*Culverts, Bridges	100

*The drainage system shall be designed to carry those flows greater than the 25-year frequency up to and including a 100-year frequency within defined rights-of-way or drainage easements.

E. Area

The drainage area used in determining peak storm flows shall be calculated by subdividing a map into the watersheds within the basin contributing stormwater runoff to the system. Areas shall be determined by planimetry or digitizing.

F. Spread of Water

During the design storm, the quantity of stormwater that is allowed to collect in the streets before being intercepted by a storm drainage system is referred to as the “spread of water.” In determining the limitations for carrying stormwater in the street, the ultimate development of the street shall be considered. The use of the street for carrying stormwater shall be limited to the following:

SPREAD OF WATER

Major thoroughfares (divided) - One traffic lane on each side to remain clear.

Thoroughfares (not divided) - Two traffic lanes to remain clear.

Collector streets - One traffic lane to remain clear.

Residential streets - Six-inch depth of flow at curb and One traffic lane to remain clear.

G. Storm Sewer Design

Stormwater in excess of that allowed to collect in the streets shall be intercepted in inlets and conveyed in a storm sewer system. Storm sewer capacity shall be calculated by the Manning's formula:

$$Q = AV, \text{ and}$$

$$Q = 1.486 AR^{2/3}S^{1/2}/n$$

where

Q is the discharge in cubic feet per second;

A is the cross-sectional area of the conduit in square feet;

V is the velocity of flow in the conduit in feet per second;

R is the hydraulic radius in feet, which is the area of flow divided by the wetted Perimeter.

S is the slope of the hydraulic gradient in feet per foot;

n is the coefficient of roughness.

The recommended roughness coefficients to use in the design of a storm sewer system are as follows:

Type of Storm Drain Manning's Coefficient

Concrete Box Culvert 0.015

New Concrete Pipe 0.013

Standard, unpaved, with or without bituminous coating corrugated metal pipe 0.024

Paved invert, 25% of periphery paved corrugated metal pipe 0.021

Paved invert, 50% of periphery paved corrugated metal pipe 0.018

100% paved and bituminous coated corrugated metal pipe 0.013

In the design of the storm sewer system, the elevation of the hydraulic gradient of the storm sewer shall be a minimum of 0.5 feet below the elevation of the adjacent street gutter. Storm sewer pipe

sizes shall be so selected that the average velocity in the pipe will not exceed 15 feet per second nor less than 3 feet per second. The minimum grade recommended for storm sewer pipe is 0.30%. Closed storm sewer systems shall be installed in all areas where the quantity of storm runoff is 300 cubic feet per second, or less at the discretion of the city. A closed storm sewer system may be constructed when the quantity exceeds 300 cfs at the discretion of the City. Hydraulic gradients shall be calculated and lines drawn for each storm sewer.

H. Intentionally left blank for future use

[Reserved]

I. Open Channel Design

Stormwater runoff in excess of that allowed to collect and be conveyed in the streets in developed areas and runoff in undeveloped areas may be carried in grass lined, concrete lined or weathered rock open channels. Earthen, non-vegetated or unlined open channels are not acceptable. Open channel capacity shall be calculated by the Manning's Formula, and roughness coefficients shall be as follows:

Maximum Permissible

Type of Lining Roughness Coefficient "n" Mean Velocity

Earth (Bermuda grass) 0.035 6 ft. per sec.

Concrete Lined 0.015 15 ft. per sec.

Weathered Rock 0.030 10 ft. per sec.

Open channels shall be constructed with a trapezoidal cross-section and shall have side slopes no steeper than 3:1 when grass lined and 1.5:1 when lined with concrete. A right-of-way for all channels of sufficient width shall be dedicated to provide for excavation of the open channel of proper width, plus ten feet on each side to permit ingress and egress for maintenance. Additional width may be considered if sanitary sewer mains are proposed to follow the channel alignment.

J. Culvert Design

At locations of stream or open channel crossings with proposed roadway improvements, it is sometimes necessary to receive and transport storm water under the roadway in culverts. The quantity of flow shall be determined by the appropriate method, and the friction loss through of the culvert shall be calculated by Manning's Formula.

Design of culverts shall include the determination of upstream backwater conditions as well as downstream velocities and flooding conditions. Consideration shall be given to the discharge velocity from culverts, and the limitations specified culverts shall not be less than 18". A headwall is required at exposed ends. Under private drives concrete or steel culverts, under public road concrete culverts are required.

K. Stormwater Detention Pond Design

The basic concept underlying the use of stormwater detention ponds (SDP) involves providing temporary storage of stormwater runoff so that peak rates of runoff can be reduced. Runoff is released from storage at a controlled rate which cannot exceed the capacities of the existing downstream drainage systems or the pre-developed peak runoff rate of the site, whichever is less. Stormwater detention ponds may be of two (2) basic types: On-site and Regional. In general, on-site ponds are those which are located off-channel and provide stormwater detention for a particular project of development. Regional ponds are designed to provide stormwater detention in conjunction with other improvements on a watershed-wide basis. The performance and safety criteria in this section apply to all ponds which provide management of peak rates of stormwater runoff, regardless of type.

PERFORMANCE CRITERIA FOR ON-SITE SDP's

1. On-site SDP's are further classified as either small or large, as follows:

ON-SITE SDP	POND CLASS DRAINAGE AREA
Small	<25 acres
Large	25-64 acres

For design purposes, any pond with a drainage area larger than 64 acres shall be classified as a regional pond.

2. On-site SDP ponds shall be designed to reduce post-development peak rate of discharge to existing pre-development peak rates of discharge for the 2-, 10-, 25- and 100-year storm events at each point of discharge from the project or development site. In addition, the capacity of the existing downstream systems must be considered in determining the need for managing the 100-year storm event. For the post-development hydrologic analysis, any offsite areas which drain to the pond shall be assumed to remain in the existing developed condition.
3. The Rational Method (RM) may be used for the design of small on-site ponds only. The maximum contributing drainage area to a pond designed with the RM is 50 acres when using this equation.
4. A design method approved by the City Engineer.

PERFORMANCE CRITERIA FOR REGIONAL SDP's

1. Regional SDP's are classified as small or large, based on the following criteria:

REGIONAL IMPOUNDED	POND CLASS VOLUME, AC-FT
Small	0-150
Large	>150

Any regional pond with a height of dam over 15 feet shall be classified as a large regional pond.

2. Performance criteria for regional detention ponds shall be determined by the City on a project-by-project basis. The determination shall be based on a preliminary engineering study prepared by the project engineer.

SAFETY CRITERIA FOR SDP's. All ponds shall meet or exceed all specified safety criteria. Use of these criteria shall in no way relieve the engineer of the responsibility for the adequacy and safety of all aspects of the design of the SDP.

1. The spillway, embankment, and appurtenant structures shall be designed to safely pass the design storm hydrograph with the freeboard shown in the table below. All contributing drainage areas including on-site and off-site area shall be assumed to be fully developed. Any orifice with a dimension smaller than or equal to twelve (12) inches shall be assumed to be fully blocked.

DETENTION DESIGN STORM FREEBOARD TO TOP POND CLASS EVENT OF EMBANKMENT, FT.

On-site: Small 100 year 0

Large 100 year 1.0

Regional: Small 100 Year 2.0

Large 100 year *

*Design storm event and required freeboard for large regional ponds shall be determined in accordance with Chapter 299 of the Texas Administrative Code (Dam Safety Rules of the Texas Natural Resource Conservation Commission).

2. All SDP's (except small on-site ponds) shall be designed using a hydrograph routing methodology. The Rational Method (RM) may be used only for contributing drainage areas less than fifty (50) acres.
3. The minimum embankment top width of earthen embankments shall be as follows:

TOTAL HEIGHT OF MINIMUM TOP EMBANKMENT, FT. WIDTH, FT.

0-6, 4'

6-10, 6'

10-15; 8'

15-20 10'

20-25, 12'

25-35 15'

4. The constructed height of an earthen embankment shall be equal to the design height plus the amount necessary to ensure that the design height will be maintained once all settlement has taken place. This amount shall in no case be less than five (5%) percent of the total fill height. All earthen embankments shall be compacted to 95% of maximum density.
5. Earthen embankment side slopes shall be no steeper than three (3) horizontal to one (1) vertical. Slopes must be designed to resist erosion, to be stable in all conditions and to be easily maintained. Earthen side slopes for regional facilities shall be designed on the basis of appropriate geotechnical analyses.
6. Detailed hydraulic design calculation shall be provided for all SDP's. Stage-discharge rating data shall be presented in tabular form with all discharge components, such as orifice, weir, and outlet conduit flows, clearly indicated. A stage-storage table shall also be provided.
7. When designing SPD's in a series (i.e., when the discharge of one pond becomes the inflow to another), the engineer must submit a hydrologic analysis which demonstrates the system's adequacy. This analysis must incorporate the development of hydrographs for all inflow and outflow components.
8. No outlet structures from SDP's parking detention, or other concentrating structures shall be designed to discharge concentrated flow directly onto arterial or collector streets. Such discharges shall be conveyed by a closed conduit to the nearest existing storm sewer. If there is no existing storm sewer within 300 feet, the outlet design shall provide for a change in the discharge pattern from concentrated flow back to sheet flow, following as near as possible the direction of the gutter.
9. Stormwater runoff may be detained within parking lots. However, the engineer should be aware of the inconvenience to both pedestrians and traffic. The location of ponding areas in a parking lot should be planned so that this condition is minimized. Stormwater ponding depths (for the 100-year storm) in parking lots are limited to an average of eight (8") inches with a maximum of twelve (12") inches.
10. All pipes discharging into a public storm sewer system shall have a minimum diameter of twelve (12"). In all cases ease of maintenance and/or repair must be assured.
11. All concentrated flows into a SDP shall be collected and conveyed into the pond in such a way as to prevent erosion of the side slopes. All outfalls into the pond shall be designed to be stable and non-erosive.

OUTLET STRUCTURE DESIGN. There are two (2) basic types of outlet control structures: those incorporating orifice flow and those incorporating weir flow. Weir flow is additionally broken down into two (2) categories: rectangular and V-notch. In each type, the bottom edge of the weir over which the water flows is called the crest. Sharp-crested

and broad-crested weirs are the most common types. Generally if the crest thickness is more than 60% of the nappe thickness, the weir should be considered broad-crested. The coefficients for sharp-crested and broad-crested weirs vary. The respective weir and orifice flow equations are as follows:

1. Rectangular Weir Flow Equation

$$Q = CLH^{3/2}$$

where

Q = Weir discharge, cubic feet per second

C = Weir coefficient

L = Horizontal length, feet

H = Head on weir, feet

2. V-notch Weir Flow Equation

$$Q = C_v \tan(O/2) H^{2.5}$$

where

Q = Weir Flow, cubic feet per second

C_v = Weir Coefficient

O = Angle of the Weir notch at the apex (degrees)

H = Head on Weir, feet

3. Orifice Flow Equation

$$Q = C_o A (2gH)^{0.5}$$

where

Q = Orifice Flow, cubic feet per second

C_o = Orifice Coefficient (use 0.6)

A = Orifice Area, square feet

g = Gravitation constant, 32.2 feet/sec²

H = Head on orifice measured from centerline, feet

Analytical methods and equations for other types of structures shall be approved by the City prior to use.

DETENTION POND STORAGE DETERMINATION.

The method to be used for determining detention pond volume requirements is governed initially by the size of the total contributing drainage area to the pond.

For contributing areas up to fifty (50) acres, the Rational Method (RM) may be used.

For contributing areas greater than fifty (50) acres, a flow routing analysis using detailed hydrographs must be applied. The Soil Conservation Service hydrologic methods (available in TR-20, HEC-1) can be used. The engineer may use other methods but must have their acceptability approved by the City engineer. These methods may also be used for the smaller areas.

DETENTION POND MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS

1. Silt shall be removed and the pond returned to original lines and grades when standing water conditions occur or the pond storage volume is reduced by more than 10%.
2. To limit erosion, no unvegetated area shall exceed 10 sq. ft in extent.
3. Accumulated paper, trash and debris shall be removed every 4 weeks or as necessary to maintain proper operation.
4. Ponds shall be mowed monthly between the months of May and September.
5. Corrective maintenance is required any time a pond does not drain completely within 60 hours of cessation of inflow (i.e., no standing water is allowed).
6. Structural integrity of pond embankments shall be maintained at all times.
7. Upon completion of development the owner/Homeowners association shall be required to maintain the detention basin in its original designed and approved condition.

(Ordinance 2009-04-00644 adopted 4/2/09)



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 03

Requester: Planning and Zoning Commission

Agenda Item Request

Discuss and review Chapter 7, Streets and Drainage, of the City of Lucas Comprehensive Plan including the Master Thoroughfare Plan and recommend proposed amendments if needed.

Background Information

The following table outlines a timeline for review of the City of Lucas Comprehensive Plan by the Planning and Zoning Commission. The process to update the Comprehensive Plan will be incorporating amendments recommended by the Planning and Zoning Commission and then bringing those revisions before City Council. Once the City Council has completed its review and revision process, staff will request the two required public hearings to be scheduled.

A draft/working copy of the 2022 Master Thoroughfare Plan has been included with this agenda item that outlines proposed roadway and intersection improvements.

At the City Council meeting on December 2, 2021, the Council directed the Planning and Zoning Commission to review the following items related to the Master Thoroughfare Plan and Chapter 7 and provide a recommendation to the City Council on any proposed updates:

- Review all proposed future roadways including Allison Lane and review the Forest Grove extension that loops to Snider Lane and determine if they should remain on the Thoroughfare Plan
- Consider increasing right of way widths from 90 feet to 120 feet on all throughfares
- Consider leaving right of way as is and requiring the State to acquire right of way
- Review drainage system analysis in the Comprehensive Plan and include the intent of drainage and how it works
- Determine if the geometric configuration of the streets outlined in the Comprehensive Plan meets current vehicle demands as well as future demands
- Recommended roads for reconstruction graph needs updating
- Remove Highland Drive as a through roadway from FM 1378 to Lewis Lane

Chapters	Planning and Zoning Review	City Council Review
Chapter 1 <i>(complete)</i>	January 13	February 17
Chapter 2 <i>(complete)</i>	January 13	February 17
Chapter 3 <i>(complete)</i>	January 13	February 17
Chapter 4 <i>(complete)</i>	February 10	March 3
Chapter 5 <i>(complete)</i>	February 10	March 3
Chapter 6 (including Trails Master Plan)	March 10	April 7
Chapter 7 (including Master Thoroughfare Plan)	April 14	May 5
Chapter 8	May 12	June 2



City of Lucas
Planning and Zoning Agenda Request
March 10, 2022

Item No. 03

Attachments/Supporting Documentation

1. Chapter 7, Streets and Drainage of the Comprehensive Plan
2. Existing 2017 Master Thoroughfare Plan
3. Draft/working copy of the 2022 Master Thoroughfare Plan
4. Amendments to 2017 Master Thoroughfare Plan proposed by Commissioner Sussman
5. List of future road and intersection improvements
6. General Fund Impact Fees (these fees are calculated based on future roadway needs and capacity improvements)

Budget/Financial Impact

NA

Recommendation

NA

Motion

Provide direction to staff regarding any proposed amendments to Chapter 7, Streets and Drainage and the Master Thoroughfare Plan.

CHAPTER 7

STREETS AND DRAINAGE

STREETS

The livelihood of a community is, to a very large extent, dependent upon convenient and efficient access to nearby major trade centers outside the city, major national travel routes and transportation terminals of national importance outside of the city. It is likewise dependent upon efficient circulation of people within the city. Local streets should provide safe, reliable access to work, schools, shopping, and homes. A street network, therefore, is of vital importance as it ties a community together and links it to the outside world.

The primary function of a street network is the safe and efficient movement of vehicles and people. The street network of any city operates, in effect, as the skeleton of that city, providing access in varying degrees to all properties abutting the network. Roadways and other rights-of-ways occupy more than 13% of the total developed area and allow for circulation between all areas within the City. In addition to moving traffic, streets provide: access to and drainage for abutting properties; open space between buildings; and right-of-way for various utilities. In this way, the street network is a primary factor in the determination of appropriate land use locations.

When adequate streets and drainage facilities are constructed, they can represent the largest single required expenditure of a city. As roads age they are affected by many factors: the quality of the soil under the road base, the type of pavement surface; type of preventative maintenance; and drainage conditions in the area (related to topography).

Repairing the roads to proper standards for long term durability can require roads to be raised or lowered to improve drainage, have additional right-of-way dedicated, have improved drainage facilities installed, and have appropriate road materials used in construction.

DRAINAGE

The topography of Lucas consists of both level and rolling terrain. As a result, localized flooding can occur, especially where culvert and drainage ditches are obstructed with vegetation or debris.

Many factors directly affect the surface storm drainage, to minimize property damage from flooding during periods of intense rainfall, the drainage system for a community should be designed, sized, and properly maintained. Storm drainage facilities include inlets, culverts, bridges, concrete lined channels, natural drainage channels, swales, creeks, rivers, retention and detention ponds, and lakes.

Drainage can have significant effects on structural durability of streets and travel safety. Level ground and poor drainage allows water to collect in some areas, which erodes the road base and causes sections of road to fail, and can also lead to loss of traction on the road. Currently roadway drainage is primarily handled via open ditches and culverts. Maintenance in these ditches is needed to avoid overgrowth of trees and other vegetation. Overgrowth can make roads difficult to drain, and roots

can undermine the structural stability of the pavements. As a result, the drainage system is discussed in conjunction with the streets system in this chapter.

STREET SYSTEM ANALYSIS

General Street Statistics

Within the City, traffic control is achieved primarily with signage. The City does not own, operate, or monitor any traffic signals to control traffic flow. However, the Texas Department of Transportation (TxDOT) controls several traffic signals at these intersections:

- Lucas Road and Southview Drive
- West Lucas Road and Country Club Road
- Country Club Road and Estates Parkway

STREET CONFIGURATION AND FUNCTIONAL CLASSIFICATION

The roadways in Lucas, which are classified as arterials including (Type A and B), neighborhood connectors (Type C), and local streets (Type D). All of these roadways provide different levels of access and serve varying levels of the traffic volumes.

The highest level of roadway in the City of Lucas is the arterial, which carries varying amounts of traffic based upon the number of lanes, with limited access connections. Most of these are owned and maintained by the County or State.

The neighborhood connector carries less traffic for mostly local trips and has a higher level of access. Whereas, local streets have direct access to every parcel and carries a more limited volume of traffic. These are owned and maintained by the City. Figure 7.1 shows the relation between different levels of roadways.

Presently, Angel Parkway, Country Club Road, Estates Parkway, Lucas Road, Parker Road, and Southview Drive function as arterial streets in the City allowing traffic movement to cities such as Allen, Fairview, McKinney, Parker, Plano, and Wylie.

The neighborhood connectors in the City are Blondy Jhune Road, Brockdale Park Road, East Winningkoff Road, Forest Grove Road, Highland Drive, Ingram Lane, Lewis Lane, Orr Road, Snider Lane, Stinson Road, and Winningkoff Road. The remaining streets in the City function as local streets. Figure 7.2 represents the street network in City of Lucas located in the Appendix.

The geometric configuration of the street system in Lucas is adequate to meet current vehicle circulation demands.

STREET SYSTEM EVALUATION

Before beginning major improvements to roadways, it is essential that the City have a street condition assessment and management system in place. This system will help to ensure that streets in the existing developed areas of Lucas are improved in a uniform and orderly manner. It is through such a system that completed City projects will provide maximum benefits and will become an integral part of the future City. This should assist in the elimination of duplicate expenditures and assure that possible

early obsolescence of improvements can be avoided.

A system inventory, as part of a street management system helps to identify different segments of the roadway system. Condition evaluation of the roadway segments is the first step in planning improvement. Such a system will provide a continuous evaluation of the street system inventory. It will also help to detect developing problems and determine the proper, corrective action needed. If a road is found to be adequate for its present service, it should be re-evaluated every five to 10 years to determine the trend of changes affecting its future adequacy. A complete evaluation of the roadway system would include all arterials, neighborhood connectors, and local streets in the city. As part of the condition assessment, an extensive visual evaluation of the pavement surface conditions, drainage, traffic control devices, and environmental conditions was performed. This evaluation included collecting data on the existing conditions and rating evaluated elements for adequacy.

The criteria for the condition assessment are based on criteria which was adapted to the City needs. Table 7.1 describes the ratings used in the assessment of the neighborhood connectors. Figure 7.3 summarizes the present ratings of the neighborhood connectors in Lucas.

This condition assessment assists in identifying roadways that are in need of repair or where a total reconstruction is needed.

EXISTING STREET CONDITIONS

The results of the data from the streets observation and the assessments of the neighborhood connectors combined with data obtained from the City of Lucas were utilized to identify areas in need of remedial action. These are ranked according to priority as follows:

1) Street Paving

A large number of streets in the City that are paved, have acceptable pavement width and are in fair to good condition, and most of the concrete sections of roadway are in good condition as well. A number of the asphalt streets are demonstrating signs of failure due to inadequate road bases and poor soil condition and drainage issues.

2) Street Drainage

Some of the street system has been affected by poor drainage flow. The key areas that need to be addressed are silted and improperly sloped bar ditches along some roadways, as well as the silted or undersized culverts. These ditches and culverts allow water to sheet across roadways causing premature damage. Potholes, cracks, and slumped pavement are examples of what can happen when the road base is allowed to erode.

3) Street Right-of-Way

Many of the roadways appear to need further additional right-of-way to address drainage issues. Existing bar ditches are too close to the road base, allowing water to impact road conditions. These narrow rights-of-way also allow trees to grow too close to the road ways, when the right-of-way is not cleaned or maintained, roots from these trees have been found to burrow under the roadway causing damage to the pavement.

4) Surface Conditions

Surface distresses may appear on City streets. The asphalt pavement related-distresses that are most common included: longitudinal and transverse cracking, potholes and patch deterioration, rutting, shoving and corrugation, alligator cracking, and shoulder/pavement edge drop-offs, and deterioration.

5) Street Width

Undersized roadways in the City can hamper vehicular circulation. Design consideration should be given for new and newly reconstructed roadways.

TYPES OF STREET IMPROVEMENTS

There are several different methods of maintaining streets within a City. The appropriate choice depend upon the condition of roadway, the anticipated traffic load, and available funds.

Recommended street maintenance alternatives can include the following.

- Point Repairs -- Excavation of failed pavement sections and repair pavement surfaces (pothole repair).
- Level-Up -- Leveling of depressions in pavement with hot/cold mix asphalt concrete. This is used to even out roadway surface.
- Seal-Coat -- Application of asphaltic cement covered with uniform size of aggregate and rolling the aggregates after application. Ideally used once every three to five years to maintain streets and forestall more costly repairs. It should be noted that sealcoating does not address the structural deficiencies and it is only effective when the roadway base is in relatively good structural condition.
- Overlay -- Depending on the severity of wear, approximately one inch of surface is milled off the existing roadway. The remaining surface material is then overlaid with hot mix asphaltic concrete, followed by a surface treatment. This is used to completely replace the surface material of a street to address pavement deterioration and extend street life.
- Reclaim -- Scarifying existing pavement and base material, while adding cement to create a recycled asphalt-enhanced roadway base. The base is then compacted and overlaid with a new asphaltic concrete pavement. Streets receiving this treatment might last five years, depending on the traffic load and environmental conditions.
- Reconstruction -- Roadway reconstruction options removes the existing pavement, and new asphalt pavement is installed. The existing road pavement can also be replaced with a new reinforced concrete pavement. The goal is to construct pavement that lasts at least 20 years.

DRAINAGE SYSTEM ANALYSIS

The entire City relies on storm water drainage to be carried on the surface. The storm drainage system of Lucas currently consists of a system of bar ditches, channels, and culverts. These facilities carry storm water run-off within Lucas to the eventual terminus outside the city limits in Lavon Lake or Lake Ray Hubbard.

Annual precipitation is approximately 42 inches per year. The rains are heaviest in spring and fall. The streets in the City are crowned to promote open ditch drainage on each side.

The Federal Emergency Management Agency (FEMA) provides flood insurance rate maps that depict the 100-year and 500-year flood plains. These flood plains cover those areas that would most likely be inundated with storm water during the heaviest rains. The 100-year floodway defines the area where buildings are not eligible for flood insurance, while those located in the 100-year floodway fringe are eligible once flood proofing is implemented. The goal of this program is to curtail development in flood plains, thereby reducing damage to structures and minimizing the danger to people during flooding. The City of Lucas is a participating city in the National Flood Insurance Program (NFIP).

Collin County, TxDOT, and US Army Corps of Engineers control some of those facilities in the extraterritorial jurisdiction and some of the roadways in and around the City. Most of the necessary seasonal maintenance is the responsibility of the adjacent individual property owners. Initial design along with poor maintenance can cause negative drainage issues and impact road quality.

GENERAL DRAINAGE PROBLEMS

Creeks

All creeks are subject to flooding at some point. However, most large channels have had their flood carrying capacity as indicated by FEMA, as shown on their respective floodway maps. It is important to note that creeks that have not been mapped by FEMA are still subject to high water flows.

Bar Ditches and Water Channels

A significant portion of the flooding that occurs in the City is associated with bar ditches and culverts being inundated with rainwater flowing off adjacent properties while following the natural topographical lay of the City. Impervious surfaces and changes to drainage patterns also cause issues. Despite the proper construction and operation of the majority of these ditches, some are not able to deal with the intense storm water flows brought on by heavy rains. As a result, water is often left standing in intersections and yards of homes after rain has subsided.

Street System

Some structures in the street system do not lend themselves to adequate drainage since the facilities exist perpendicular to the natural flow lines. In cases where culvert passage is silted, undersized or not provided, the storm water can cause premature damage to roadways and major safety problems.

PLAN AND RECOMMENDATIONS

Purpose

The purpose of the Streets and Drainage section of the Comprehensive Plan is to assist the City in appropriating public funds in a manner which maximizes benefit. The plan identifies those street and drainage improvements, which are needed in order to provide an efficient transportation system, as well as minimizing property damage from flooding during periods of intense rainfall in the City.

STREET RECOMMENDATIONS

The most important consideration when developing a plan for street rehabilitation is to ensure that all plans for roadway construction also include plans for drainage improvements. All plans for road reconstruction must consider the size and slope needs for drainage. Any program for street improvements without drainage improvements is not recommended.

The City has adopted specific street section designs based on the classification of the roadway. Different rights-of-way widths, pavement widths, and base thicknesses, are required for roadways that are expected to serve differing levels of traffic. This is especially useful when enforcing street quality standards and minimums for residential subdivision developments.

If several years lapse before projects are undertaken, a new assessment may be necessary to ensure that data is current. Whether increased traffic due to growth, new commercial, and changes in City; maintenance practices can change the recommendations made in this report. Street maintenance and repair plans should be reviewed annually to adjust for cost and changes in the road conditions.

Proposed improvements should be based on the street analysis, focusing on the improvements that impact safety, are most in need or will benefit the most people. High priority projects including highly traveled roadways in poor condition or first-time paving should be considered as soon as the City is able to finance the repairs. This excludes the state roads since they are maintained by TxDOT. For this plan, improvements should be phased. Phasing of improvements is designed to help minimize the financial impact on the community, while still realizing the need to make necessary improvements.

PROPOSED IMPROVEMENTS

As part of the Street Plan, recommended roads for reconstruction are presented in Table 7.2. Possible funding sources has been developed and is presented below.

POSSIBLE FINANCIAL SOURCES FOR STREETS

The City should pursue funding sources that will make fiscal sense to assist in providing necessary street improvements, including, but not limited to:

- The General Fund
- General Obligation Bonds
- Certificates of Obligation
- City Sales Tax
- Special Fees/User Fees
- Grants
- Cost Sharing

POSSIBLE FINANCIAL SOURCES FOR DRAINAGE IMPROVEMENTS

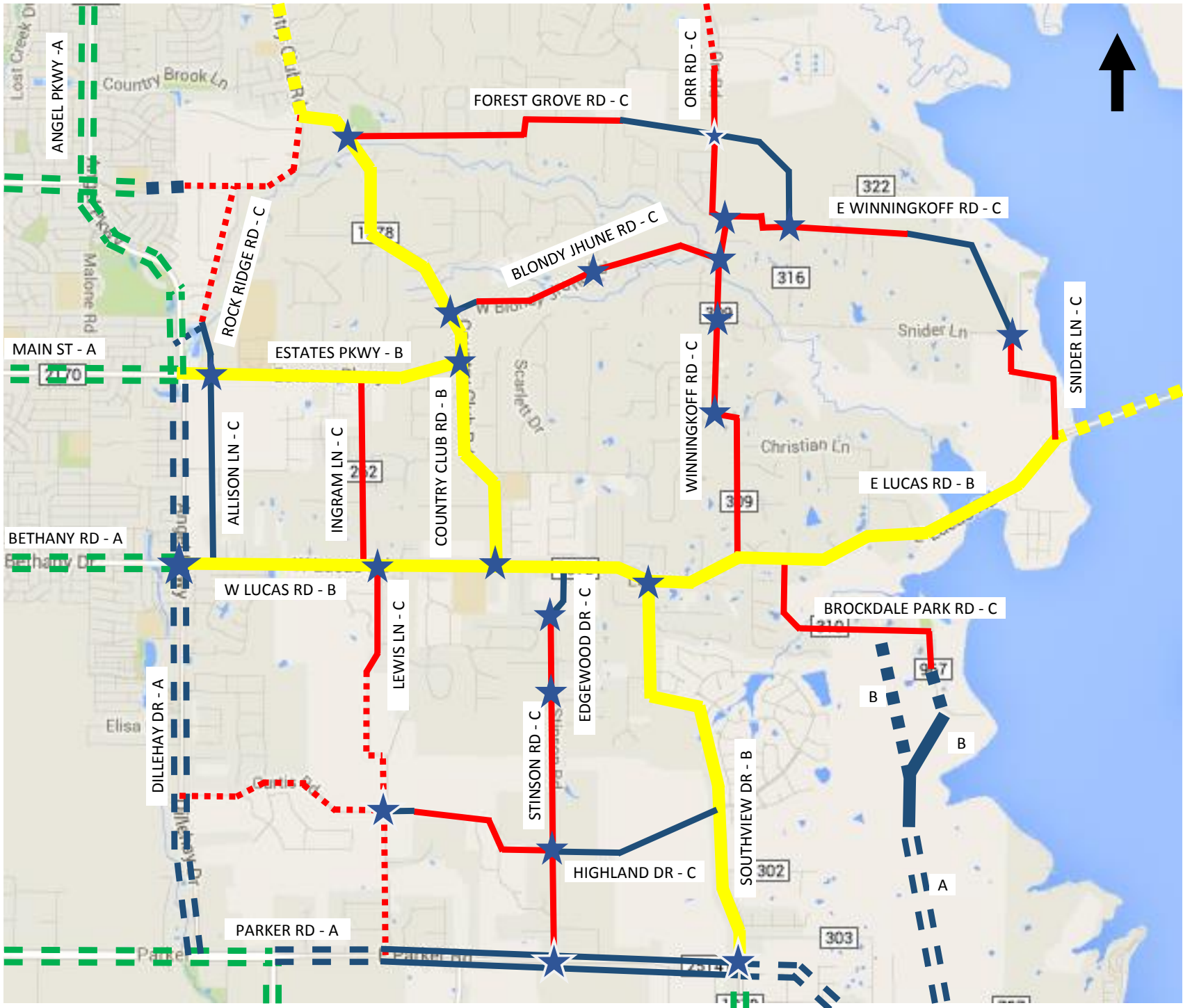
The following is a listing of sources which may be utilized to assist with future drainage projects:

- The General Fund
- General Obligation Bonds
- Certificates of Obligation
- Grants through the Office of Rural Community Affairs
- Special Fees/User Fees

ADDITIONAL FINANCIAL SOURCES

- Grants through the Office of Rural Community Affairs/Texas Community Development Program can be used to re-pave and repair streets. However, while streets are eligible, it is unlikely that a street project alone would be funded. Therefore, it might be possible to incorporate some street work into another, more fundable activity such as water line construction where streets must be torn up to install new lines.
- The Texas Department of Transportation (TxDOT) has a program designed to maintain and improve on- and off-system roadways.
- The Texas Department of Transportation (TxDOT) also has a landscaping cost sharing program through which the department will provide landscaping materials up to 50% of the project cost. The city's contribution may be in-kind in the form of installation of materials. The city must provide the design plan for approval by the department over and above the city's in-kind contribution. Finally, the city must commit to maintaining the landscaping improvements
- Loans from the Texas Department of Agriculture. These low interest loans can be utilized in place of bank loans and the issuing of bonds.
- In an Assessment Paving Program, the City may follow carefully prescribed procedures of notices, public hearings and bidding, begins making the street improvements, assessing a portion of the costs against the adjacent property owners. The City may have to advance the cost of the projects, but eventually, the property owners will pay their fair share of the costs. This procedure is governed by the Texas Civil Statutes.

2017 Master Thoroughfare Plan



Legend




Solid lines are thoroughfares within the city.

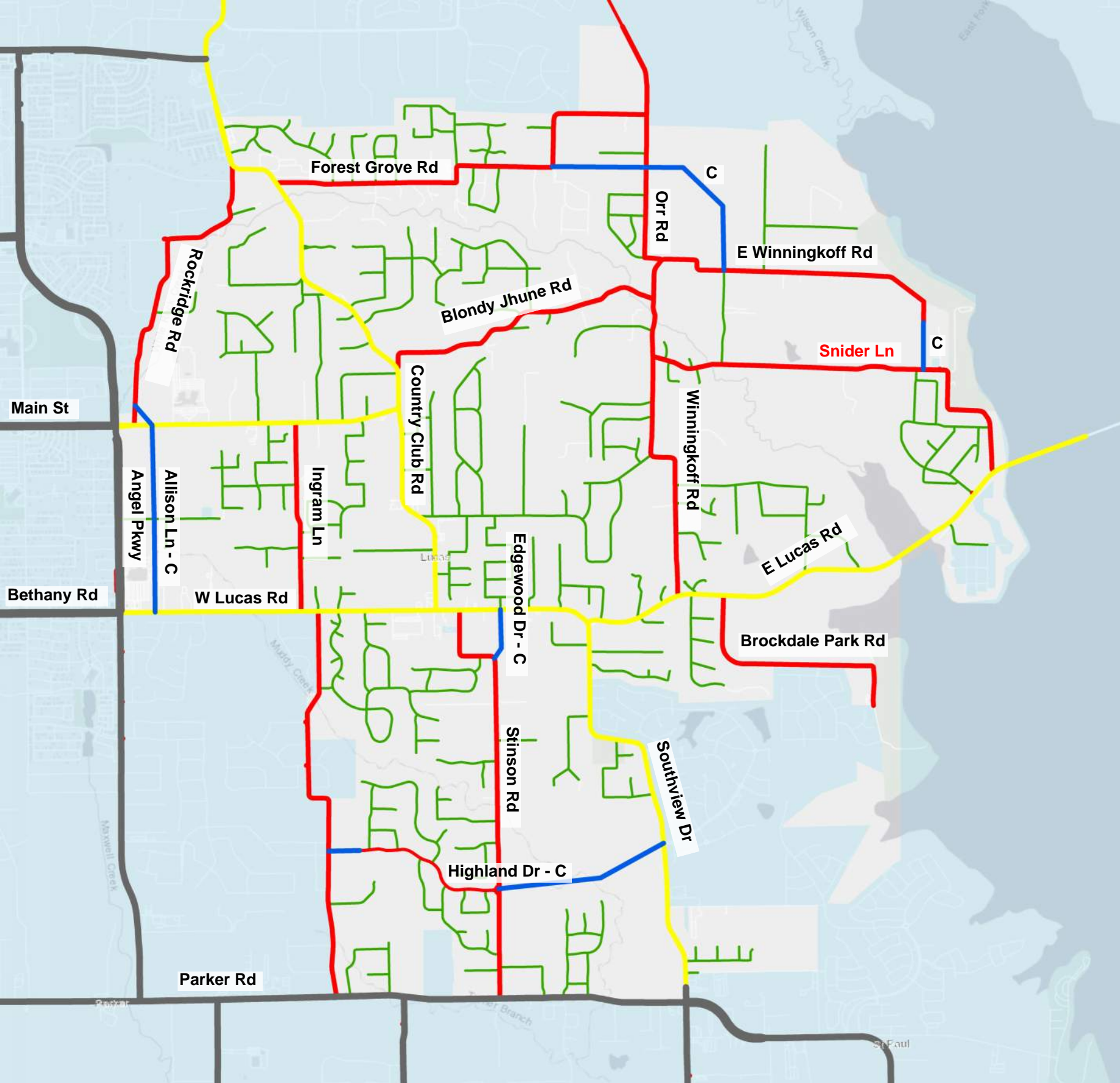
Dashed lines are thoroughfares outside the city.

Blue lines are proposed thoroughfares.

★ Blue stars are proposed intersection improvements locations.

Thoroughfare name is followed by thoroughfare type.

Thoroughfare Type	No. of Lanes	Divided Roadway	Pavement Width (Feet)	Right-of-Way or Easement Width (Feet)
A 	Six	Yes	78 Plus a 16-Foot Median	120
B 	Four	No	52 to 54	60
C  Neighborhood Connector	Two	No	24 to 28	50
D (Not Shown)	Two	No	24	50



LEGEND					
Type	Color	# of Lanes	Divided	Pavement Width (ft)	Right-of-Way Width (ft)
A	Grey	6	Yes	78 + 16ft Median	120
B	Yellow	4	Varies	52-54	60
C	Red	2	No	24-28	50
D	Green	2	No	24	50
Proposed	Blue	As Labeled	As Labeled	As Labeled	As Labeled

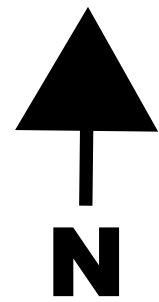
Notes:

- 1. This draft is for REVIEW PURPOSES ONLY**
- 2. Type D roads are shown for readability purposes and are not modified by this plan.**
- 3. Private roads and driveways generally are not shown except where valuable for readability.**
- 4. The blue shaded area is outside of City Limits.**
- 5. Intersection Improvements are to be added following Planning and Zoning Commission Review.**
- 6. Only the Northern 3,750ft of Lewis Lane is Lucas maintained.**

Thoroughfare Plan City of Lucas 2022

DRAFT FOR REVIEW ONLY

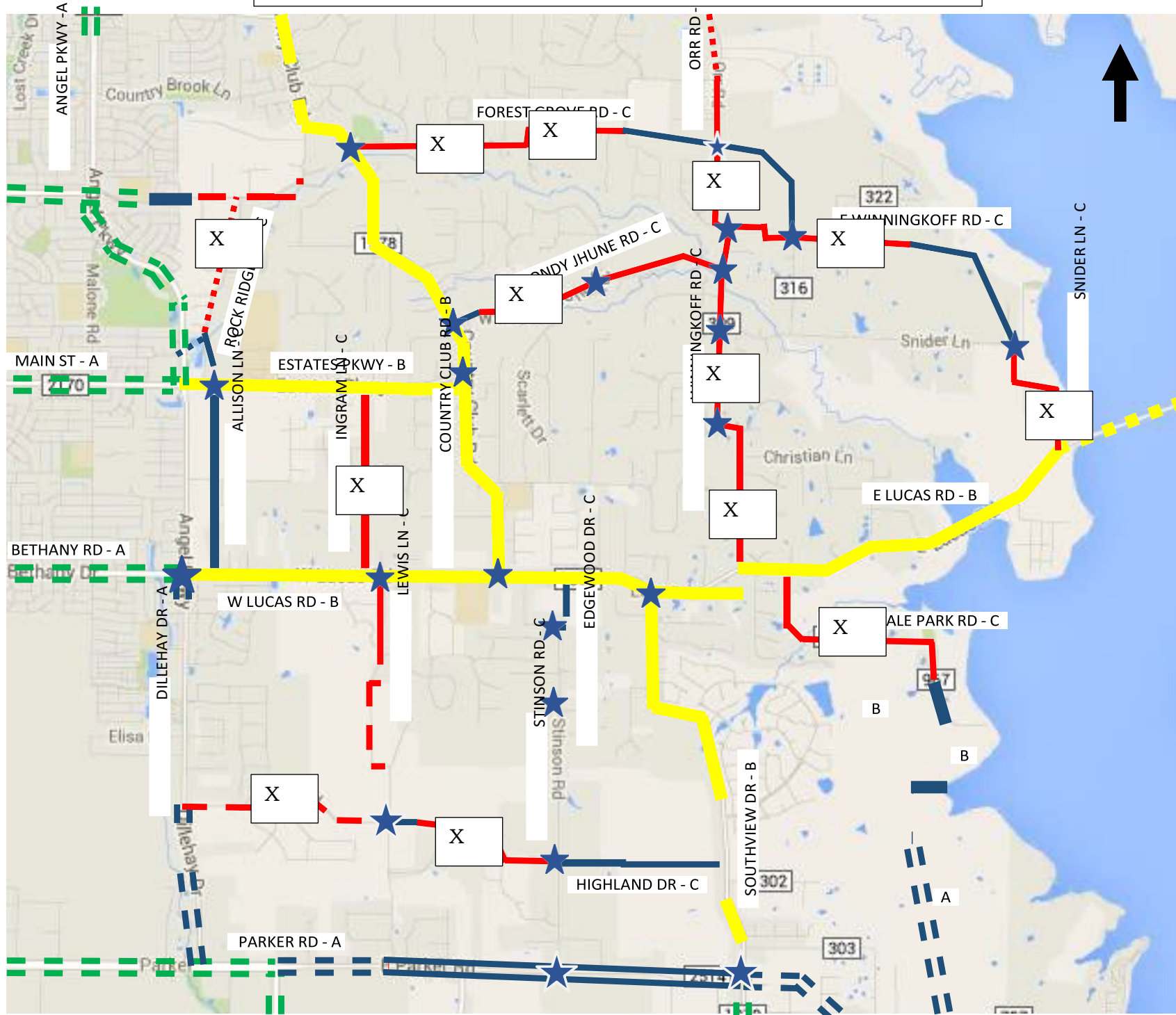
March 1, 2022



Amendments Proposed by Commissioner Sussman




2017 Master Thoroughfare Plan

“X”- My recommendation to keep all city roads single lane (current width) within city boundaries-this will reduce cut through traffic



Legend

- Solid lines are thoroughfares within the city.
- Dashed lines are thoroughfares outside the city.
- Blue lines are proposed thoroughfares.
- ★ Blue stars are proposed intersection improvements locations.
- Thoroughfare name is followed by thoroughfare type.

Thoroughfare Type	No. of Lanes	Divided Roadway	Pavement Width (Feet)	Right-of-Way or Easement Width (Feet)
A 	Six	Yes	78 Plus a 16-Foot Median	120
B 	Four	No	52 to 54	60
C Neighborhood Connector 	Two	No	24 to 28	50
D (Not Shown)	Two	No	24	50

Proposed Improvements to the 2022 Master Thoroughfare Plan

Proposed roadway improvements:

1. Allison Lane including an improved connection to Rock Ridge Road
2. Construction of a connection from Forest Grove Road to Orr Road with a loop connecting Forest Grove Road to East Winningkoff Road at Shady Lane.
3. Highland Drive Connection to Lewis Lane
4. Highland Drive Connection to Southview Drive
5. Reconstruction of Blondy Jhune Road with concrete from west of the West Bridge to Country Club Road (FM 1378) – Development Agreement approved
6. Straighten Stinson Road from Curve to Edgewood Drive – Development Agreement pending
7. East Winningkoff to Snider Connection

Note: The City Council had a preliminary review of the Master Thoroughfare Plan and generally was not supportive of many of the proposed roadway improvements.

Proposed intersection improvements:

1. Brockdale Park Road and East Lucas Road
2. Winningkoff Road and East Lucas Road
3. Blondy Jhune and Country Club Road (FM 1378) – Development Agreement approved
4. Ingram Lane and Estates Parkway
5. Ingram Lane and West Lucas Road
6. Estelle and Country Club Road (FM 1378)
7. Stinson Road and Edgewood Road Intersection
8. Forest Grove Road and Country Club Road (FM 1378)
9. Rock Ridge Road and Country Club Road (FM 1378) (Collin County and TxDOT)
10. Rock Ridge Road and Estates Parkway
11. Angel Parkway and Estates Parkway (City of Allen and TxDOT)

City of Lucas
 General Fund
 Impact Fees by Fiscal Year

	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	Total
General Fund Roadway							
Beginning Balance	\$ 1,116,079	\$ 1,232,213	\$ 1,550,404	\$ 1,732,485	\$ 2,030,002	\$ 1,289,718	
Collected	\$ 270,040	\$ 339,297	\$ 212,881	\$ 330,516	\$ 534,203	\$ 350,000	
Revenue Budgeted						\$ (168,873)	
Expenditures Budgeted						\$ (20,085)	
Developer Reimbursed (CA LUCAS)						\$ (55,000)	
Developer Reimbursed						\$ (41,800)	
Applied Toward Projects	\$ (22,000)	\$ (21,106)	\$ (30,800)	\$ (33,000)	\$ (1,157,602)	\$ (306,489)	
Ending Balance	\$ (131,906)	\$ (21,106)	\$ (30,800)	\$ (33,000)	\$ (1,157,602)	\$ (306,489)	
	\$ 1,232,213	\$ 1,550,404	\$ 1,732,485	\$ 2,030,001	\$ 1,289,718	\$ 1,164,356	\$ 1,164,356
Developer Restricted							
Five Oaks	\$ 8,800	\$ 13,200	\$ 8,800	\$ 13,200	\$ 2,200	\$ 44,000	
Lakeview Downs			\$ 11,000	\$ 13,200	\$ 26,400	\$ 70,400	
Logan Ford Ranch	\$ 13,200	\$ 17,600	\$ 13,200	\$ 26,400	\$ 306,489	\$ 306,489	
Blondy Dhune Rd Alignment							
Total	\$ 22,000	\$ -	\$ 30,800	\$ 33,000	\$ 41,800	\$ 306,489	\$ 434,089



City of Lucas Planning and Zoning Agenda Request March 10, 2022

Item No. 04

Requester: Planning and Zoning Commission

Agenda Item Request

Consider final review of amendments to Chapter 6, Parks, Recreation and Open Space of the City of Lucas Comprehensive Plan, including the updated Trails Master Plan.

Background Information

The following table outlines a timeline for review of the City of Lucas Comprehensive Plan by the Planning and Zoning Commission. The process to update the Comprehensive Plan will be incorporating amendments recommended by the Planning and Zoning Commission and then bringing those revisions before City Council. Once the City Council has completed its review and revision process, staff will request the two required public hearings to be scheduled.

Chapters	Planning and Zoning Review	City Council Review
Chapter 1 <i>(complete)</i>	January 13	February 17
Chapter 2 <i>(complete)</i>	January 13	February 17
Chapter 3 <i>(complete)</i>	January 13	February 17
Chapter 4 <i>(complete)</i>	February 10	March 3
Chapter 5 <i>(complete)</i>	February 10	March 3
Chapter 6 (including Trails Master Plan)	March 10	April 7
Chapter 7 (including Master Thoroughfare Plan)	April 14	May 5
Chapter 8	May 12	June 2

Attachments/Supporting Documentation

1. Chapter 6, Parks, Recreation, and Open Space
2. Updated Trails Master Plan

Budget/Financial Impact

NA

Recommendation

NA

Motion

I make a motion to recommend to the City Council approval/denial of the amendments to Chapter 6, Parks, Recreation and Open Space of the City of Lucas Comprehensive Plan, including the updated Trails Master Plan.

CHAPTER 6

PARKS, RECREATION AND OPEN SPACE

INTRODUCTION OF PARKS, OPEN SPACE, AND TRAILS



Lucas is a distinctive community with unique features in design and surrounding natural environments. The [City](#) contains a total land area of 10,284 acres and 75 percent (or 7,713 acres) of the land has been developed. The remaining acres of land are vacant or being used for agricultural related purposes. Lucas is primarily comprised of low-density housing, large residential lots, and natural open spaces [throughout the City](#). Lucas is a hidden gem community with estate style living in the [Dallas-Fort Worth, DFW](#) Metroplex that is easily accessible to public

parks, trails, recreational activities, and Lavon Lake. The [City](#)'s entire eastern boundary borders along Lavon Lake and the Trinity Trail. There are three public parks, one private park, and three public trailheads located in Lucas; however, there is no planned or designated open space system.

The City Council appoints a Parks and Open Space Board ([POSB](#)) that serves in an advisory capacity to the City Council in all matters relating to parks and open space. The [POSB Parks and Open Space Board](#) also makes recommendations on the implementation of beautification programs and projects to enhance the natural beauty of Lucas. During this update of the Comprehensive Plan, the [City](#) worked with [the POSB Parks and Open Space Board](#) on making necessary revisions to help provide guidance on future planning for parks, open space, and trails. This collaboration has also led to an update of the Trails Master Plan ([TMP](#)) where new trail sections have been added to show the connectivity between neighborhoods, public parks, facilities, and the Trinity Trail. The updated Parks, Open Space, and Trails Master Plans ([POSTMP](#)) continue to place an emphasis on providing public access to recreational opportunities while preserving the natural environment of Lucas.

PREVIOUS PARKS AND OPEN SPACE MASTER PLANS

1988 – The first Comprehensive Plan for Lucas was adopted in 1988 and included a section on parks

which indicated there were no recreation areas within the [city](#). The plan revealed there was a lack of open space and recreation areas that needed to be addressed as the [city](#) continued to be developed.

2003 – The City Council adopted Ordinance No. 2003-11-00490 entitled Park Land Dedication to provide requirements for park land dedication in new residential and mixed-use subdivisions and to provide for necessary planning for open space preservation and park development. The Ordinance states the following requirements for park land dedication:

- The [city](#) shall create and maintain a master park plan.
- The master park plan shall designate the size of the parks and the park zones that are to be supportive of these parks.
- Dedication of park land shall be in accordance with the master park plan.
- The [city](#) will determine the park location based on land suitability.
- This master park plan may be, from time to time, updated and amended at the discretion of the [city](#).

2004 – The [city](#) completed an update to the Comprehensive Plan which included a section on parks and open space. A community survey was conducted to determine interest regarding parks, open space, and recreational amenities.

2005 – [Lucas](#) moved forward with developing the [POSTMP](#). The [city](#) conducted another citizen survey to verify the accuracy of past survey results. The survey findings suggested that citizens were most interested in multi-purpose trails (walking, hiking, and biking), undeveloped open space, picnicking/pavilions, fishing piers, and equestrian trails/arena. These top preferences can be attributed to the rural character of Lucas and [its](#) proximity to [Lake Lavon](#).

Public workshops and meetings were held to obtain additional public input where the citizen concerns were also found to be consistent with the citizen survey results. The citizen group agreed that [Lake Lavon](#) was a major resource for Lucas. This led to recommendations to preserve park land along the lake and that the trail system should also link residential neighborhoods to the lake.

2006 – The [POSMP](#) was adopted by the City Council and serves as the master plan for the physical development of the [city](#) to provide recommendations for [its](#) growth, development, and beautification.

2015 – The City began efforts to update the Comprehensive Plan and the [POSMP](#). These efforts included town hall meetings and workshops to receive citizen feedback about local parks, recreation, and open space priorities. [POSB](#) took on an active role in recommending updates including developing the [TMP](#).

2017 – The City Council approved the Comprehensive Plan which included the [TMP](#) and updated [POSMP](#). [TMP](#) designates all trails east of FM 1378 (Country Club Road) to be equestrian and hiking trails. All trails west and south of FM 1378 are designated as multi-purpose trails.

2021 – In this newly updated Comprehensive Plan, [POSB](#) recommends new changes to the [TMP](#) located in the southern trail section (Willow Springs Middle School to Southview Drive) and northern trail section (Trinity Trail Connect). [POSB](#) has prioritized sections of the [TMP](#) based on connectivity to schools, public facilities, and access points to the Trinity Trail. The [POSB](#) has also expressed an interest in the expansion of existing parks to accommodate more visitors as the population grows.

EXISTING PARKS AND OPEN SPACE

The City of Lucas operates three public parks in addition to having preserved considerable open space and accessibility through the development process. The City's public parks are the Lucas Community Park, Kenneth R. Lewis Park, and Forest Creek Park. There is a private park which is located in the Stonegate subdivision. Brockdale Park and Highland Park are also located in Lucas; however, the parks are located on land owned by the U.S. Army Corps of Engineers ([COE](#)). Lucas has three accessible trailheads available to the public: East Winningkoff Trailhead, Brockdale Park Trailhead, and Highland Park Trailhead. The [city](#) owns and maintains the East Winningkoff Trailhead which provides trail access in the northern area of Lucas. The U.S. Army [COE](#) owns and maintains the Highland Park and Brockdale Park Trailheads which provide trail access on the eastern areas of Lucas.



LUCAS COMMUNITY PARK

665 Country Club Road

The [city](#) established the Lucas Community Park in 2009 and is located south of City Hall. The park is three acres and offers a five-foot-wide concrete sidewalk that circulates around two adjacent walking loops. The park also includes a pavilion, picnic tables, benches, barbecue grills, fire pit, and a large playground. Lucas residents and non-residents have the option to reserve the pavilion for a fee. There is also the Community Center located on the west area next to a gravel parking lot. The Community Center is only available to Lucas residents to reserve at no cost. The facility provides an opportunity for residents to utilize the event space and rooms for special occasions. There is a public parking lot located between City Hall and the park. Improvements were made to the gravel parking lot to expand parking capacity during special events. Drainage improvements were made to the western park loop to prevent any flooding from that area of the park.



KENNETH R. LEWIS PARK

820 Southview Drive

Kenneth R. Lewis dedicated park land to the [city](#) in 1989. The park became known as Kenneth R. Lewis Park and is situated on five acres. Two-thirds of the park is open space and undeveloped for use with recreational activities. The park includes a baseball/softball field with a dugout, soccer fields, pavilion, restroom facilities, and public parking. There is also a concrete pathway surrounding the park that is available for walking.



FOREST CREEK PARK

985 Orchard Gap Lane

Forest Creek Park is a neighborhood park located near the subdivisions of Forest Creek Estates, Whiterock Creek Estates and Northfork Ranch in the northern section of Lucas. The public can access the park from Country Club Road via Orchard Gap Lane off Norfolk Lane or White Rock Trail. The park is two-acres consisting of a parking area, pavilion, two playgrounds, open space, sport court, and soccer field with goals. The [city](#) made park improvements to remove dilapidated structures which accumulated within the vicinity of the park. As part of the park renovations, the [city](#) also added a sport court, soccer goals, pavilion, and picnic tables.



STONEGATE PARK

St. James Drive

Stonegate Park is a private park located within the gated neighborhood of Stonegate in the northern section of Lucas. The park does not have a property address, but it is situated between 150 and 250 St. James Drive. Stonegate Park is only accessible to residents within the Stonegate neighborhood. This is a very small neighborhood

park occupying less than one acre [adjacent](#) to one of the tributaries of White Rock Creek. The park offers a traditional multiuse playground, small gazebo, picnic tables, and two-foot-wide concrete sidewalk that passes through the park. The sidewalk connects to a concrete trail that continues alongside the tributary of White Rock Creek.



EAST WINNINGKOFF TRAILHEAD 745 East Winningkoff Road

In 2017, the [city](#) developed the East Winningkoff Trailhead which is located in the northeast section of the [city](#). The trailhead sits on three acres of land with equestrian and pedestrian access to the Trinity Trail. The trail access point connects to an unimproved trail along

East Winningkoff Road to Welborn Lane that connects to the Trinity Trail. The trailhead offers a large gravel parking lot for easy loading and unloading of horses. Additional facilities include a corral, pavilion, restroom, and access to water.



BROCKDALE PARK 1625 Brockdale Park Road

Brockdale Park was established in 2005 and is located on the eastern edge of Lucas next to Lavon Lake. This park is situated on land owned by the U.S. Army [COE](#). Brockdale Park is 127 acres which includes the Brockdale Park Trailhead, boat ramp, and the Blackland Prairie Raptor Center. The Brockdale Park Trailhead provides recreational trail access to the Trinity Trail

along [Lake Lavon](#). The trailhead includes parking, equestrian loading/unloading area, riding arena, restroom facility, pavilion, corral, and access to water. The Brockdale Park boat ramp is located east of the trailhead which allows access to [Lake Lavon](#). The boat ramp has public parking available for vehicles, trailers, and boats. This provides access to recreational activities on the lake for those who enjoy boating and fishing activities. The Blackland Prairie Raptor Center is a non-profit organization that is located on the land area of Brockdale Park. The Blackland Prairie Raptor Center is dedicated to environmental preservation through public education and the conservation of birds of prey and wildlife in their natural habitat.



HIGHLAND PARK

1955 Snider Lane

Similar to Brockdale Park, the U.S. Army [COE](#) owns and maintains Highland Park. Highland Park is located at the northeast edge of Lucas and is approximately 59 acres. The park has a parking area and restrooms with relatively minimal services onsite. Highland Park

provides a boat ramp at the north end of the park for boating and fishing activities on Lavon Lake. The entrance to the boat ramp is through Highland Park Road which is located north of Snider Lane. The boat ramp is concrete with ample parking for trailers and vehicles. Similar to Brockdale Park, the Trinity Trail passes through Highland Park and provides access points to the trail. A section of the Trinity Trail continues north past the limit of Highland Park to the northern section of Lucas near the [NTMWD](#) Treatment Plant. The Highland Park Trailhead is located south of Highland Park where the public can load and unload their horses to utilize the trail system. The trailhead includes facilities such as a loading/unloading area, [ADA compliant](#) restrooms, one pavilion, and a watering place for horses.

OPEN SPACES AND NATURAL FEATURES

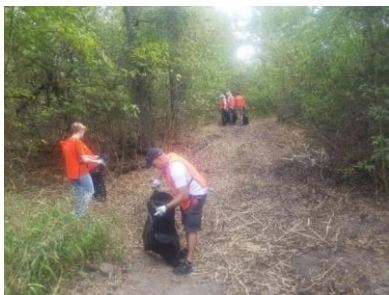
Open space is defined by the U.S. Environmental Protection Agency as any open piece of land that is undeveloped and is accessible to the public. There are no buildings or other structures located on land designated as open space. Open space can include school yards, playgrounds, public seating areas, public plazas, vacant lots, and green space. Green space is land that is partly or completely covered with grass, trees, shrubs, or other vegetation [including](#) parks, community gardens, and cemeteries. The [city's](#) desire to preserve open space is outlined in the Park Land Dedication Ordinance which includes different options for the handling of park land dedication and the preservation of open space in Lucas.

Lucas also has other forms of open space such as trail easements and federal land surrounding [Lake](#) Lavon. The most important natural feature in Lucas is [Lake](#) Lavon and its tributary creeks. [Lake](#) Lavon was constructed in 1954 and is owned and controlled by the U.S. Army [COE](#). There are 20 acres along the lake designated for park use (Brockdale Park and Highland Park) which are located within the City's boundaries. The public has access to these parks, the trail system, and the lake for recreational activities.

EXISTING TRAILS

The Trinity Trail and the connecting trail from the East Winningkoff Trailhead is currently the only public trail in-use that exists in Lucas. The trail is only open for recreational use to equestrians and

hikers. The Trinity Trail is situated along [Lake Lavon](#) with scenic views of the lake and surrounding natural landscape. The trail is unpaved and 25.5 miles long located on federal land owned by the U.S. Army [COE](#). The trail extends from the south at the East Fork Trailhead in Wylie to the north at the Giant Sycamore Loop in Fairview. There is approximately 11 miles of the Trinity Trail that passes through Lucas. This trail enters the [city](#) from the south at Collin Park in St. Paul and stretches north along the edge of the lake passing through Brockdale Park and Highland Park.



The Trinity Trail is operated and maintained by the Trinity Trail Preservation Association, a non-profit organization dedicated to the preservation and maintenance of the Trinity Equestrian and Hiking Trail. The [city](#) partners with the Trinity Trail Preservation Association and the U.S. Army [COE](#) for a Public Lands Trail Cleanup where volunteers pick up trash and debris on sections of the Trinity Trail. The [city](#) also entered into a Memorandum of Understanding between Collin County and the U.S. Army [COE](#) to work together in coordinating and supporting the development and operation of a multi-use trail for equestrian and pedestrian use at [Lake Lavon](#). This partnership helps determine goals related to the planning, development, and operation of the Trinity Trail.

PROPOSED FUTURE TRAILS

During development of the [POSMP](#), the [city](#) conducted a community survey and held public meetings to collect feedback from residents on interests related to parks and open space. Residents ranked trails as the number one interest for parks and open space in the community survey. When the [city](#) began updating [its](#) Comprehensive Plan, [POSB](#) worked towards developing the [TMP](#) which focuses on three primary trail sections within Lucas: 1) Central Loop, 2) Northern Trail (Trinity Trail Connect), and 3) Southern Trail (Willow Springs Middle School to Southview Drive). In order to ensure [the](#) safety of all users along the trail system, the [TMP](#) designates all trails east of FM 1378 (Country Club Road) to be equestrian and hiking trails. The trails west and south of FM 1378 are designated separate as multi-purpose trails to prevent potential safety risks between horse riders, bicyclists, walkers, and hikers.

Central Trail Loop



[POSB](#) has prioritized the Central Loop in the [TMP](#) as the number one trail priority. The Central Loop is a multi-purpose trail focused on connectivity to schools, public facilities, churches, and businesses. There are three major schools located along the Central Loop: Hart Elementary School, Willow Springs Middle School, and Lovejoy High School. The loop also connects to City Hall, [the](#) Fire Station, and the Lucas Community Park. The trail loop would begin at West Lucas Road/Allison Lane, extend east to and north on Country Club Road, west onto Estates Parkway, and south on Allison Lane returning to West Lucas Road. There would also be a trail connection through Ingram Lane to connect West Lucas Road and Estates Parkway. As the Texas Department of Transportation (TxDOT) works on the roadway expansion along Angel Parkway, the [city](#) may want to consider a potential trail connection from the Central Loop. This would allow residents to connect to retail and dining establishments in the main commercial area of Lucas.

Northern Trail (Trinity Trail Connect)

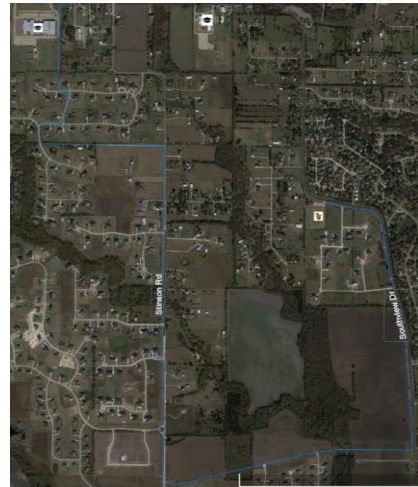
The Northern Trail (also known as Trinity Trail Connect) is considered second priority on the [TMP](#). The Trinity Trail Connect is an equestrian and pedestrian trail that connects to the East Winningkoff Trailhead and has access points to the Trinity Trail. This trail consists of two loops which are centrally connected to the East Winningkoff Trailhead. These two loops would allow recreational access for residents who live in the northern area of the [city](#). Public parking is available at the East Winningkoff Trailhead where users could walk or ride horses on the trail and connect to the Trinity Trail through access points.

The first trail loop extends west from Welborn Lane, south on Orr Road, east on Winningkoff Road, and returns north onto Welborn Lane. The second trail loop creates a connecting southern section that extends south from East Winningkoff Road onto Shady Lane, west on Snider Lane, and north on Winningkoff Road.



Southern Trail (Willow Springs Middle School to Southview Drive)

The Southern Trail (also known as Willow Springs Middle School to Southview Drive) is considered third priority in the [TMP](#). This trail would connect the southern neighborhoods to Willow Springs Middle School and Kenneth R. Lewis Park. The trail would begin on the eastern side of Willow Springs Middle School on West Lucas Road and continue south to the back of the school connecting to North Bluffview Drive. The trail would extend south through Hidden Pass Lane, west on South Bluffview Drive, south and east on Bastrop Road connecting to Stinson Road. The trail would continue south along Stinson Road, passing Highland Drive, extend east to Southview Drive, and continues north connecting to Kenneth R. Lewis Park.



It is desirable to develop a small trailhead in the southern trail section but due to undefined development, the location has not yet been identified.

GOALS AND OBJECTIVES

The City continues to make improvements and pursue special projects to achieve the goals established in the Comprehensive Plan. The goals and objectives were developed in coordination with previous

comprehensive and community planning. The [POSTMP](#) help outline a prioritized plan for the development of parks, open space, and trails in Lucas. Since 2017, the [city](#) has taken major efforts to achieve these goals such as the development of the East Winningkoff Trailhead, renovation at Forest Creek Park, maintenance at Kenneth R. Lewis Park, and improvements at Lucas Community Park. The [city](#) has submitted trail grant applications to be considered for TxDOT Safe Routes to Schools Project, Texas Parks and Wildlife Department Recreational Trails Grant, and Collin County Parks and Open Space Project Funding Assistance Program. The [city](#) continues to monitor for new grant application opportunities and identify potential special projects that would be deemed eligible. [Lucas](#) supports the following goals and objectives when considering new projects for parks, open space, and trails.

GOAL 1.

Preserve natural environment and native ecosystems.

Objectives:

- Conserve and protect ecologically sensitive and naturally beautiful areas (e.g., floodplains along creeks, wetlands, high points with scenic views toward [Lake Lavon](#), etc.).
- Establish and/or enhance green space and natural areas along flood plains, and promote public access to green belt areas with trail systems, equestrian/hiking trails, etc.
- Encourage and promote water conservation using native plant materials, Smartscape techniques, and other methods.
- Maintain high standards for groundwater quality due to the proximity of [Lake Lavon](#).
- Encourage development types which minimize impacts upon the community's natural resources and visual appeal.

GOAL 2.

Provide a comprehensive [TMP](#) to include green belt and open space that is compatible with the environment and compatible with residential neighborhoods.

Objectives:

- Continue to update Chapter 6, Parks, Recreation and Open Space of the Comprehensive Plan to meets current preferences and reflection of changing environment in the region.
- Promote trail connections and ensure greenbelt and open space dedication during the development review process.
- Create pedestrian and equestrian trails between residential neighborhoods, linear greenbelts, schools, public administrative facilities, and other activity centers, whenever physically and financially possible.
- Continue to adopt and finalize a detailed plan for necessary open space/trail easements to connect existing and future parks, schools, and neighborhoods into an integrated, low maintenance parks and recreation system.
- Formulate and adopt policies and ordinances that protect the acquired/donated park land and

open space easements.

- Utilize trails, wherever possible, to connect schools, parks, and residential areas locally and regionally.
- Design a parks and open space system that is interconnected and multifunctional, which protects important natural, cultural, and visual resources while providing appropriate opportunities for recreation.
- Integrate locally planned trails with the “Collin County Regional [TMP](#)” approved by the Collin County Commissioners Court on May 7, 2012.
- Coordinate planning efforts and trail connection points with adjacent cities.

GOAL 3.

Develop and maintain the new Lucas parks and open space system.

Objectives:

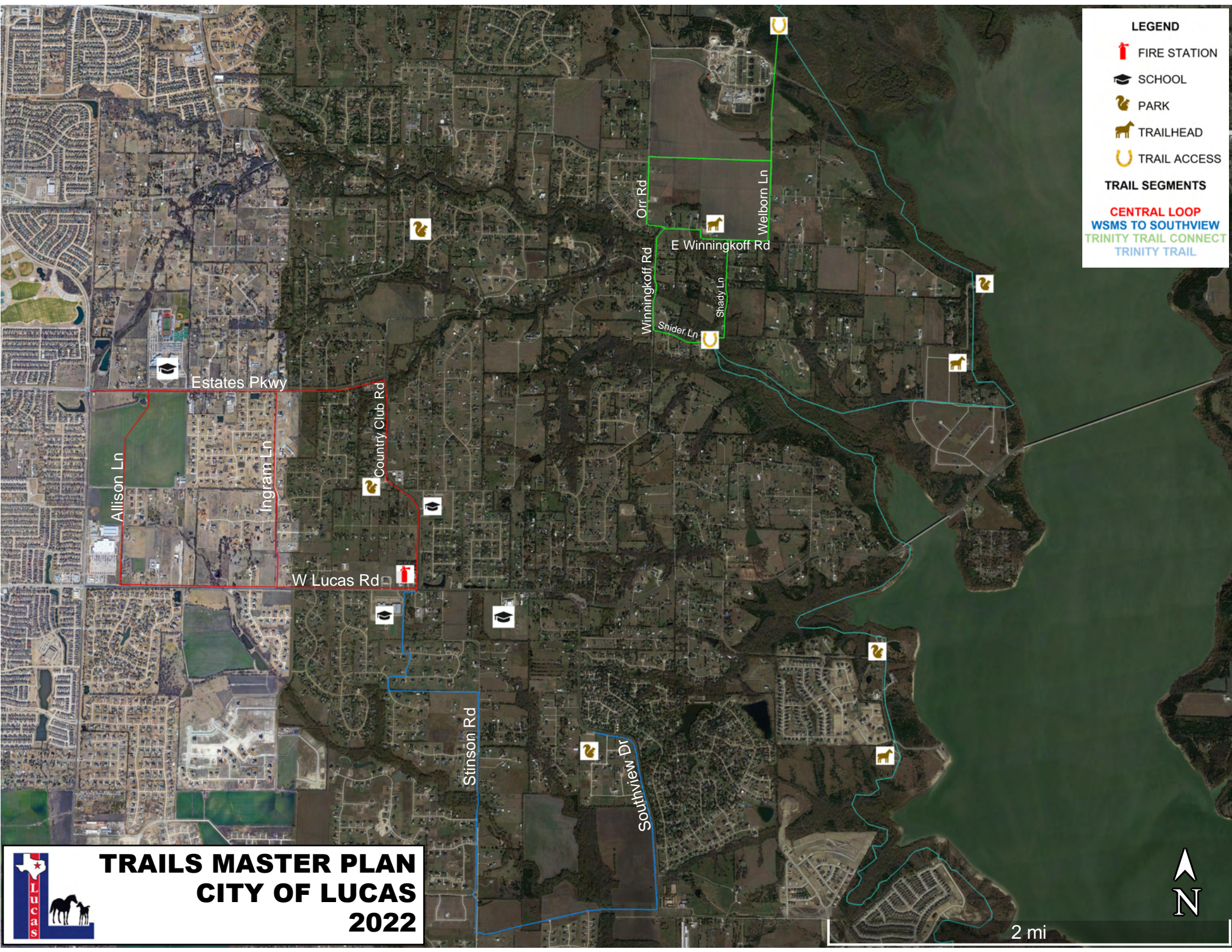
- Determine actual maintenance cost currently needed to maintain existing parks.
- Undertake the necessary effort to determine maintenance costs and capital investment costs associated with acquiring and/or developing new parks and open space as well as the expansion and redevelopment of existing park facilities
- Allocate sufficient funding to maintain existing parks, open space, and trails.
- Formulate and adopt policies and ordinances that protect existing park facilities, open spaces, and trails.
- Explore cost sharing options such as local, state, and federal grant opportunities.

PLAN AND RECOMMENDATIONS






The purpose of this plan and recommendations are to provide community direction in a constantly changing environment. The [city](#) collaborates with community stakeholders when considering new projects related to public parks, open space, and trails. As the Lucas population continues to increase, the [POSB](#) recommends focusing on the expansion of existing parks to accommodate visitors and additional space. Lucas Community Park is a popular park used by the [city](#) for large-scale special events and it has become evident that public parking is limited. Special events at the park have become large community gatherings where the [city](#) may want to consider expansion in the future. In addition to parks and open space, the City has updated its [TMP](#) by examining practical trail locations that would not impede on a resident’s property.

[POSB](#) has developed an adopt-a-park program where each board member visits a city park on a rotational basis to help recommend park improvements to the [city](#). To further help achieve the goals in this plan, the [city](#)’s Keep Lucas Beautiful program continues to promote the beautification and natural preservation of Lucas. As the [city](#) considers future planning and decision making related to parks, open space, and trails, the following recommendations are intended as a guide for the [POSTMP](#).

- Trails (equestrian, hiking and biking), greenbelts, parkways or paths should connect to large recreational areas and provides access to recreational opportunities and scenic views.
- Prioritization of the [TMP](#) beginning with the Central Loop, Northern Trail (Trinity Trail Connect), and Southern Trail (Willow Springs Middle School to Southview Drive).
- Expansion of existing parks to accommodate additional space and public parking during special events.
- Municipal recreational facilities should be used to serve the community and prevent the construction of redundant facilities.
- School recreational facilities are encouraged to make the [ir](#) facilities available to the public when practical. If possible, school recreational areas should include parking, drinking fountains, restrooms, and remain open on weekends and during the summer months.



LEGEND

-  FIRE STATION
-  SCHOOL
-  PARK
-  TRAILHEAD
-  TRAIL ACCESS

TRAIL SEGMENTS

- **CENTRAL LOOP**
- **WSMS TO SOUTHVIEW**
- **TRINITY TRAIL CONNECT**
- **TRINITY TRAIL**



**TRAILS MASTER PLAN
CITY OF LUCAS
2022**



2 mi



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 05

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Discuss building setbacks, lot line definition, building line definition, and lot width requirements in all residential zoning districts.

Background Information

Staff was directed to evaluate the City's building setbacks, lot line definition, building line definition, and lot width requirements in all residential zoning districts.

This item was brought forward to the Planning and Zoning Commission at their meeting on February 10, 2022. The Commission asked staff to provide clearer definitions at the next meeting to further define setbacks for accessory buildings; definition of lot width at the front and back of a lot; and side yard setbacks related to corner lots.

Under the recommendation section of this coversheet, staff has provided some revised language for consideration. Staff is requesting additional clarification from the Commission regarding the methodology to use in the measurement of setbacks. Staff considers measuring from the property line or edge of pavement, whichever is a greater viable option.

Attachments/Supporting Documentation

1. Chapter 14 Zoning of the Code Of Ordinances, Section 14.01.004
2. Chapter 14 Zoning of the Code Of Ordinances, Section 14.03.113
3. Chapter 14 Zoning of the Code Of Ordinances, Section 14.03.173
4. Chapter 14 Zoning of the Code Of Ordinances, Section 14.03.233

Budget/Financial Impact

NA

Recommendation

Staff is seeking direction on potential modifications to building setbacks, lot line definition, building line definition, and lot width requirements in all residential zoning districts and is proposing the following modifications:

The minimum size of yards for R-2, R-1.5, and R-1.0 in Single Family Residential Districts:

Front yards: 50 feet



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 05

Side yard: Ten percent of the lot width or 20 feet whichever is less. If the side yard abuts a roadway, the minimum is 25 feet.

Rear yard: 50 feet

Lot width:

R-2	200 feet
R-1.5	160 feet
R-1	140 feet

Lot depth: 180 feet

Definitions:

Building line - The line that designates the boundary where the property owner may not build and specifies the required front yard which is generally parallel to the street line. A building cannot lawfully extend beyond the building line.

Lot line - A boundary of a building lot.

Lot line, front - That boundary of a building lot which is the line of an existing or dedicated street. The front of the lot is that area so designated on the approved development plat. On an existing lot of record without dedicated right-of-way, the edge of pavement shall be used as the front property line to determine setbacks. Upon corner lots either street line may be selected as a front lot line providing a front and rear yard are provided adjacent and opposite, respectively, to the front lot line.

Lot line, side - That boundary of a building lot which is not a front lot line or a rear lot line.

Lot line, rear - That boundary of a building lot which is most distant from and is, or is most nearly, parallel to the front lot line and is greater than ten feet in length.

Lot of record - An area of land designated as a lot on a plat of a subdivision recorded, pursuant to statutes of the State of Texas, with the county clerk of Collin County, Texas or an area of land held in single ownership described by metes and bounds upon a deed recorded of registered with the county clerk.

Lot width - The width of a lot at the front property line.

Motion

No motion is required because this is a discussion item. Once recommendations are received from the Commission, this matter will be scheduled for the required public hearings.

Section 14.01.004 DEFINITIONS

(a) Tense, plurality, etc. Words used in the present tense include the future; words in the singular number include the plural number and words in the plural number include the singular number; the word “building” includes the word “structure”; the word “lot” includes the words “plot” and “tract,” etc.; the word “shall” is mandatory and not discretionary.

(b) Definitions.

Accessory building or use. Is:

- (1) Subordinate to and serves a principal building or principal use;
- (2) Subordinate in area, extent, or purpose to the principal building or principal use served;
- (3) Contributes to the comfort, convenience, and necessity of occupants of the principal building or principal use served; and
- (4) Located on the same building lot as the principal use served. “Accessory” when used in the text shall have the same meaning as accessory use.

Alley. A public space or thoroughfare which may afford secondary means of access to property abutting thereon.

Area of the lot. Shall be the net area of the lot and shall not include portions of public streets or alleys.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Automobile repair.

- (1) Collision services. Body, frame, and fender straightening or repair; customizing; painting.
- (2) Major. Major repair, rebuilding or reconditioning of engines, radiators, or transmissions; undercoating and rust proofing; any operation requiring dismantling or removal of head, crankcases, engines or other major parts; and recapping or re-grooving of tires; any use of a welder or cutting torch; any repair of heavy load vehicles; and other operations not listed as minor repair, but not collision services.
- (3) Minor. Minor repair or replacement of parts, tires, batteries, and accessories; diagnostic services; minor motor services such as grease, oil, spark plug and filter changes; tune-ups; replacement of starters, alternators, hoses, brake parts, mufflers, water or fuel pumps; state inspections; steam cleaning and detailing; servicing of air-conditioning systems; for vehicles, but not heavy load vehicles and not including any operation listed as major repair or collision service.

(Ordinance 2012-10-00737 adopted 10/4/12)

Block. An area enclosed by streets and occupied by or intended for buildings; or, if said word is used as a term of measurement, it shall mean the distance along a side of a street between the nearest two streets which intersect said street on the said side.

Building. Any structure built for the support, shelter, and enclosure of persons, animals, chattels, or movable property of any kind. When subdivided in a manner sufficient to prevent the spread of fire, each portion so subdivided may be deemed a separate building.

Building height. The number of stories contained in a building and/or the number of feet above the average level of the adjoining ground.

Building line (setback line). A line parallel or approximately parallel to the street line or property line at a specific distance therefrom marking the minimum distance from the street line or property line that a building may be erected.

Building lot. A single tract of land located within a single block which (at the time of filing for a building permit) is designed by its owner or developer as a tract to be used, developed, or built upon as a unit, under single ownership or control. It shall front upon a street or approved place. Therefore, a “building lot” may be subsequently subdivided into two or more “building lots” or a number of “building lots,” subject to the provisions of this chapter and the subdivision ordinance.

Building official. The building inspector or administrative official charged with the responsibility for issuing permits and enforcing the zoning ordinance, subdivision ordinance, and building code.

Certificate of occupancy or compliance. An official certificate issued by the city through the building official

which indicates conformance with or approval of a conditional waiver from the zoning regulations and authorizes legal use of the premises for which it was issued.

Child care center. A facility licensed, certified or registered by the Texas Department of Family and Protective Services (“TDFPS”) to provide assessment, care, training, education, custody, treatment, or supervision for a child who is not related by blood, marriage, or adoption to the owner or operator of the facility, for all or part of the 24-hour day, whether or not the facility is operated for profit or charges for the services it offers.

Church or rectory. A place of assembly and worship by a recognized religion including synagogues, temples, churches, instruction rooms, and the place of residence for the ministers, priests, rabbis, teachers, and directors of the premises.

City. The word “city” shall mean the City of Lucas.

Clinic. A group of offices for one or more physicians, surgeons, dentists or similar members of the medical profession to treat sick or injured outpatients or animals.

College or university. An institution established for educational purposes and offering a curriculum similar to the public schools or an accredited college or university, but excluding trade and commercial schools.

Commission and/or planning commission. The planning and zoning commission of the city.

Community home. A place meeting the requirements established under section 123.004 of the Texas Human Resources Code and where no more than six (6) persons with disabilities and up to two (2) supervisors reside at the same time to provide services to persons with disabilities including food, shelter, personal guidance, care, habilitation and supervision.

Conditional use. A use which shall be permitted in a particular district only upon fulfillment of the conditions as set forth for that use in the use regulations for the appropriate district.

Council. The word “council” shall mean the city council.

Courtyard. An open, occupied space bounded on more than two (2) sides by the walls of a building. An inner courtyard is entirely surrounded by the exterior walls of a building. An outer courtyard is a court having one side open to a street, alley, yard, or other permanent open space.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Depth of lot. The mean horizontal distance between the front and rear lot lines.

Design review committee (DRC). The DRC is comprised of staff members representing the various departments and divisions involved in the review and approval process (administration, planning, engineering, building inspection, public works, fire, parks and health). DRC is responsible for review of development and building plans, subdivision plats and zoning applications. It offers reports and recommendations to both P&Z and city council pertaining to applications and proposals requiring actions by these bodies. DRC has final approval authority for certain plats such as amending plats, replats and minor plats in compliance with [Texas Local Government Code, section 212.0065](#) and [section 212.016](#).

Development or to develop. A “development” includes the construction of new buildings or structures on a building lot, the relocation of an existing building on another building lot, or the use of open land for a new use. To “develop” is to create a development.

(Ordinance 2015-08-00816 adopted 8/20/15)

District. A section of the city for which the regulations of this chapter, such as the area, height, use, etc., of the land and buildings, are uniform. (Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Drive-through, drive-thru, drive-in, or drive-up. A product or service provided by a business that allows customers to purchase a product or service without leaving their cars. For the purposes of this definition, any product or service that is provided to a customer without the need for the customer to leave their vehicle is a drive-through, drive-thru, drive-in or drive-up. (Ordinance 2013-07-00760 adopted 7/18/13)

Dwelling, multiple family. Any building or portion thereof which is designed, rented, leased, or let to be occupied as two or more dwelling units or apartments of [or] which is occupied as a home or residence of two or more families.

Dwelling, single-family. A detached building, but not a mobile home, manufactured housing or RV, having accommodations for and occupied by not more than one family, located on a lot or separate building tract, and having no physical connection to a building located on any other separate lot or tract.

Dwelling unit. A building or portion of a building which is arranged, occupied, or intended to be occupied as living quarters of a family and including facilities for food preparation and sleeping.

Equestrian boarding. A business consisting of a minimum of two (2) acres and up to five (5) acres for the boarding of a maximum of two (2) horses per acre regardless of ownership, that receives compensation through the boarding of horses. On lots greater than five (5) acres no such limit shall be imposed.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Equestrian facilities. A facility or place used for horse boarding, including equestrian pasture boarding, horse training, riding lessons, horse breeding, horse rescue or horse shows. The facility may contain a riding arena provided the arena does not exceed 10% of the total lot size or a maximum of 20,000 square feet regardless of the size of the lot. (Ordinance 2012-06-00718, sec. 1, adopted 6/21/12)

Family. One or more persons related by blood, marriage, or adoption; or a group not to exceed four (4) persons not all related by blood or marriage, adoption or guardianship, occupying a dwelling unit.

Farm or ranch. An area which is used for growing of usual farm products, vegetables, fruits, trees, and grain and for the raising thereon of the usual farm poultry and farm animals such as horses, cattle, and sheep and including the necessary accessory uses for raising, treating, and storing products raised on said premises, but not including the commercial feeding or the feeding of garbage to swine or other animals and not including any type of agricultural or husbandry specifically prohibited by ordinance or law.

Farmer's market. The retail sale of farm produce by individual vendors for the primary purpose of selling fruits, vegetables, herbs, spices, edible seeds, nuts, live plants, flowers and honey, where such produce, or its portion, is not grown on the premises.

Floor area. The total square feet of floor space within the outside dimensions of a building including each floor level, but excluding porches, carports, garages or unfinished cellars.

Garage, auto repair. A building or portion thereof whose principal use is for the repair, servicing, equipping, or maintenance of motor vehicles or motor vehicle components, including engines, radiators, starters, transmissions, brakes, tires and wheels, seats, and similar components.

Halfway house. A residence for former mental patients, convicts, or recovering drug users or alcoholics that serves as a transitional environment between confinement and the return to society.

Home occupation. A business, occupation, or profession conducted wholly within a residential dwelling unit by only the residents thereof, and which shall have the following characteristics:

- (1) The activity shall employ only members of the immediate family of the resident of the dwelling unit.
- (2) There shall be no external evidence of the occupation detectable at any lot line, said evidence to include, advertising signs, or displays, smoke, dust, noise, fumes, glare, vibration, electrical disturbance, storage of materials or equipment, or traffic or parking of vehicles in a manner evidencing the conduct of a business.

Hospital. A legally authorized institution in which there are complete facilities for diagnosis, treatment, surgery, laboratory, X-ray, and the prolonged care of bed patients. Clinics may have some but not all of these facilities.

HUD-code manufactured home. A structure, constructed on or after June 15, 1976, according to the rules of the United States Department of Housing and Urban Development (HUD), transportable in one or more sections, which, in the traveling mode, is eight (8) body feet or more in width or forty (40) body feet or more in length, or, when erected on site, is three hundred twenty (320) or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems. The term does not include a recreational vehicle as that term is defined by 24 CFR section 3282.8(g).

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Kennel. Any business or establishment other than a veterinary hospital, whether operated separately or in connection with another business or establishment, that keeps, breeds and/or boards and/or trains dogs and/or cats for profit. Veterinary hospitals shall not be considered a kennel, unless such hospitals contain pens or facilities for housing, boarding, breeding, training, harboring, or keeping dogs, cats or other domesticated animals, swine, equine, or other livestock or animals other than, or in addition to, short-term care incidental to the hospital use. Kennels must be established, maintained and operated in compliance with all applicable zoning and land use regulations of the city.

Livestock. Any horses, mules, donkeys, ponies, cattle, sheep, goats, hogs, pigs, of any and all kinds regardless of sex.

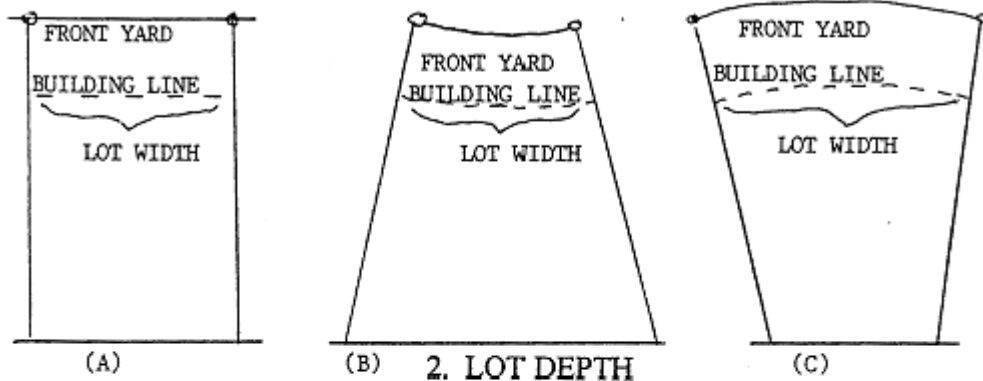
(Ordinance 2018-03-00876 adopted 3/1/18)

Lot. Land occupied or to be occupied by a building and its accessory building including such open spaces as are required under this chapter and having its principal frontage upon a public street or officially approved place.

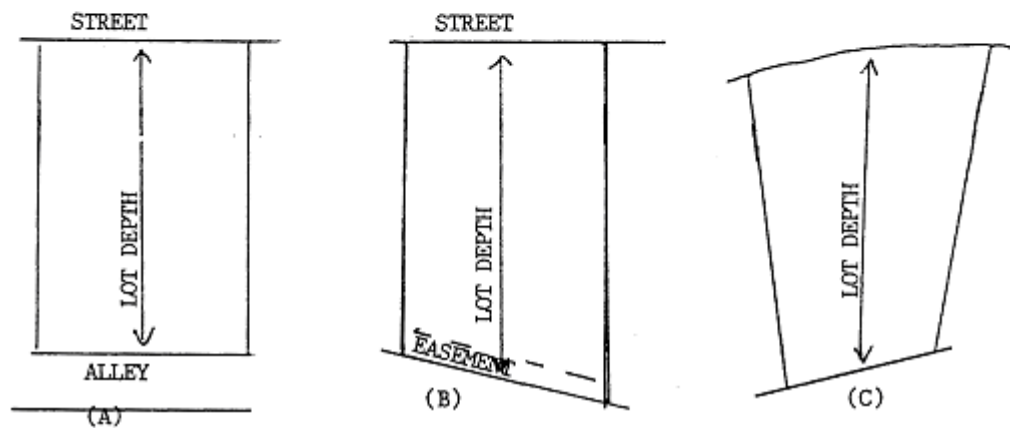
Lot lines. The lines bounding a lot as defined herein.

- (1) Lot line, front. A “front lot line” is that boundary of a building lot which is the line of an existing or dedicated street. Upon corner lots, either street line may be selected as the front lot line providing that a front and rear yard are provided adjacent and opposite, respectively, to the front lot line.
- (2) Lot line, rear. The “rear lot line” is that boundary of a building lot which is the most distant from and is, or is most nearly, parallel to the front lot line.
- (3) Lot line, side. A “side lot line” is that boundary of a building lot which is not a front lot line or a rear lot line.

1. LOT WIDTH



2. LOT DEPTH



Lot of record. A lot which is part of a subdivision, the plat of which has been recorded in the office of the county clerk prior to the adoption of this chapter.

Lot width. The width of a lot at the front building or setback line.

Main building. The building or buildings on a lot which are occupied by the primary user.

Major retail development. A singular retail establishment or shopping center that involves any one, or a combination of the following and as defined herein:

- (1) New construction of a singular retail sales establishment that is greater than 20,000 gross square feet in size;
- (2) New construction of a shopping center on a parcel or combination of parcels comprising ten acres or larger; or
- (3) Expansion to a singular retail sales establishment or shopping center existing as of the effective date of adoption of this chapter and which said expansion will increase the square footage of a singular retail sales establishment to become more than 20,000 gross square feet in area or increase the size of a shopping center to more than ten acres.

Masonry. An exterior building material which includes: brick of a minimum three and one-half inch (3-1/2") nominal thickness, stone with a minimum average thickness of two inches (2") or stucco.

Mobile home. A structure that was constructed before June 15, 1976, transportable in one or more sections, which, in the traveling mode, is eight (8) body feet or more in width or forty (40) body feet or more in length, or, when erected on site, is three hundred twenty (320) or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems.

Mobile home park. Any premises on which one or more mobile homes are parked or situated and used for living or sleeping purposes, or any premises used or held out for the purpose of supplying to the public a parking space for one or more mobile homes whether such vehicles stand on wheels or on rigid supports. A trailer park is a mobile home park.

Museum, library or art gallery (public). An institution for the collection, display and distribution of books and objects of art, or science and sponsored by a public or quasipublic agency and open to the general public.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Nonconforming. A building, structure, or use of land lawfully occupied at the time of the effective date of this chapter or amendments thereto, and which does not conform to the use of the regulations of the district in which it is situated.

Noxious matter. A material which is capable of causing injury to living organisms by chemical reaction or is capable of causing detrimental effects upon the physical or economic well-being or comfort of humans.

Nursing home facility (also termed skilled nursing facility, convalescent home, assisted living, memory care facility or long-term care facility). A facility providing primarily in-patient health care, personal care or rehabilitative services over a long period of time to persons chronically ill, aged, or disabled who need ongoing health supervision and such facilities comply with the required state licensing, if any.

Occupancy. The use or intended use of the land or building by proprietors or tenants.

Office, general business or professional. An establishment providing administrative, business, executive, management or professional services, but not involving medical or dental services or the sale of merchandise, except as incidental to a permitted use.

(Ordinance 2016-04-00835 adopted 4/7/16)

Office, medical or dental. An office or group of offices for one or more physicians, surgeons, dentists or other health-care professionals to treat sick or injured patients who do not remain overnight.

Open space or open areas. Area included in any side, rear, or front yard or any unoccupied space on the lot that is open and unobstructed to the sky except for the ordinary projections of cornices, eaves, or porches.

Open storage. The storage of any equipment, machinery, commodities, raw or semi-finished materials, and building materials, not accessory to a residential use, which is visible from any point on the building lot line when viewed from ground level to six feet above ground level.

Park, playground, community center. An open recreation facility or park owned and operated by a general public agency and available to the general public.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Parking space. A surface area, enclosed or unenclosed, sufficient in size to store one automobile together with a surface driveway connecting the parking space with the street or alley and permitting ingress or egress of an automobile.

Pet. A domesticated animal kept for companionship or pleasure that includes any dogs, cats, birds, rodents, of any and all kinds regardless of sex, and those similar in nature and function.

Pet boarding. Commercial establishment which provides accommodations, feeding and general care for pets.

(Ordinance 2018-03-00876 adopted 3/1/18)

Plat. A plan of a subdivision of land creating building lots or tracts and showing all essential dimensions and other information essential to comply with the subdivision standards of the city and subject to approval by the planning and zoning commission. Reference to a plat in this chapter means an official plat of record which has been approved by the planning and zoning commission and filed in the plat records of the county.

Premises. Land together with any buildings or structures occupying it.

Public park. Any publicly owned park, playground, parkway, greenbelt, or roadway within the jurisdiction and control of the city.

Recreation area. A privately owned park, playground, or open space maintained by a community club, property owners' association, or similar organization.

Refueling station. Any building or premises used for the dispensing, sale, or offering for sale at retail any automobile fuels, oils, propane, natural gas, or electrical recharging. If the dispensing, sale, or offering for sale is incidental to a public garage, the premises shall be classified as a public garage.

Registered family home.

(1) A home that is registered with the Texas Department of Family Protective Services ("TDFPS") and that provides regular care in the caretaker's own residence for not more than six children under 14 years of age, excluding children who are related to the caretaker, and that provides care after school hours for not more than six additional elementary school children, but the total number of children, including children who are related to the caretaker, does not exceed 12 at any given time.

(2) The term does not include a home that provides care exclusively for any number of children who are related to the caretaker. For purposes of this definition regular care means care that is provided at least:

(A) Four hours a day, three or more days a week, for three or more consecutive weeks; or

(B) Four hours a day for 40 or more days in a period of 12 months.

Residence. Same as a dwelling; also, when used with "district," an area of residential regulations.

Restaurant or cafeteria. An eating establishment where service is provided to customers at tables and not involving service of food to customers in automobiles.

Retail sales establishment. An establishment or place of business primarily engaged in selling goods directly to the consumer, where such goods are generally available for immediate purchase and removal from the premises by the purchaser.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

Retirement home/senior independent living facility. A multifamily dwelling complex or similar living arrangements that is age restricted for senior citizens but which is not an assisted-living center or long-term care facility. (Ordinance 2016-03-0832 adopted 3/3/16)

School, private. A school under the sponsorship of a private agency or corporation other than a public agency.

School, public or parochial. A school under the sponsorship of a public or religious agency having a curriculum generally equivalent to public elementary or secondary schools, but not including private, trade, or commercial schools.

Schools, trade and commercial. Establishments, other than public or parochial schools, private primary or secondary schools, or colleges, offering training or instruction in a trade, art, or occupation.

Screening device. A barrier of stone, brick, pierced brick or block, uniformly colored wood, or other permanent material of equal character, density, and acceptable design at least four (4) feet in height, where the solid area equals at least sixty-five percent (65%) of the wall surface, including an entrance gate or gates; or foliage of an acceptable type with a density that will not permit through passage; or an acceptable combination of these materials. Such screening device shall be continuously maintained.

Servant's quarters. An accessory building or portion of a main residential building located on the same lot as the principal residential building, occupied only by such persons and their families as are employed fulltime by the occupants of the principal residence.

Shopping center. A grouping of two (2) or more commercial units built primarily for retailing purposes on common property planned, developed, owned or managed as a unit with common off-street parking provided on the same site. For purposes of this chapter, a neighborhood shopping center shall be considered to be a shopping center primarily serving adjacent residential area.

Specific use. A means for developing certain designated uses in a manner in which the specific use will be compatible with the adjacent property and consistent with the character of the neighborhood.

Stadium or playfield, public. An athletic field or stadium owned and operated by a public agency for the general public including a baseball field, football field or stadium.

Street. An area for vehicular traffic whether designated as a street, highway, thoroughfare, parkway, throughway, road, avenue, boulevard, lane, place or otherwise designated.

Street line. A dividing line between a lot, tract, or parcel of land and contiguous street.

Structural alterations. Any change in the supporting member of a building, such as a bearing wall, column, beams, or girders.

Toxic materials. Those materials which are capable of causing injury to living organisms by chemical means when present in relatively small amounts.

Use. The purpose or activity for which the land, or building thereon, is designed, arranged, or intended, or for which it is occupied and maintained, and shall include any manner of such activity with respect to the standards of this chapter.

Use, principal. The main use of land or buildings as distinguished from a subordinate or accessory use.

Utility facilities, private or franchised. A nonpublic utility requiring specific facilities in residential areas or on public property such as heating, cooling, or communications not customarily provided by the municipality or the normal franchised utilities.

Yard. An open space other than a court, on the lot on which a building is situated and which is not obstructed from a point forty (40) inches above the general ground level of the graded lot to the sky, except as provided for roof overhang and similar special features.

Yard, front. An open, unoccupied space on a lot facing a street extending across the front of the lot between the side lot lines and from the main building to the front lot or street line and the main building line as specified for the district in which it is located.

Yard, rear. An open, unoccupied space, except for accessory building as herein permitted, extending across the rear of a lot from one side lot line to the other side lot line and having a depth between the buildings and the rear lot line as specified in the district in which the lot is located.

Yard, side. An open, unoccupied space or spaces on one or two sides of a main building and on the same lot with the building, situated between the building and a side line of the lot and extending through from the front yard to the rear. Any lot line not the rear line or a front line shall be deemed a side line.

Zoning district map. The official certified map upon which the boundaries of the various districts are drawn and which is an integral part of the zoning ordinance.

(Ordinance 2012-05-00715, sec. 2, adopted 5/17/12)

SECTION 14.03.113 AREA REGULATIONS

(a) Size of yards.

(1) Front yard. There shall be a front yard having a depth of not less than fifty feet (50'). Where lots have double frontage, running through from one street to another, the required front yard shall be provided on both streets. No required parking shall be allowed within the required front yard.

(2) Side yard. There shall be a side yard on each side of the lot having a width of not less than ten percent (10%) of the lot width, [or] twenty feet (20'), whichever is less. A side yard adjacent to a side street shall not be less than twenty-five feet (25'). No side yard for allowable nonresidential uses shall be less than twenty-five feet (25').

(3) Rear yard. There shall be a rear yard having a depth of not less than fifty feet (50').

(1995 Code, sec. 9-37)

(b) Size of lot.

(1) Lot area. No building shall be constructed on any lot of less than two (2) acres (87,120 square feet).

(2) Lot width. The width of the lot shall be not less than two hundred feet (200') at the front street property line, nor shall its average width be less than two hundred feet (200'). The minimum width of a lot on a cul-de-sac shall be not less than forty feet (40') at the property line, nor shall its average width be less than two hundred feet (200'). The minimum width of a lot on a curve exceeding thirty degrees shall be not less than one hundred feet (100') at the property line, nor shall its average width be less than two hundred feet (200').

(3) Lot depth. The average depth of the lot shall not be less than one hundred eighty feet (180').

(4) Where a lot having less area, width, and/or depth than herein required exists in separate ownership upon the effective date of this chapter, the above regulations shall not prohibit the erection of a one-family dwelling thereon.

(c) Minimum dwelling size. The minimum floor area of any dwelling shall be two thousand square feet (2,000 sq. ft.), exclusive of garages, breezeways, and porches. Dwellings shall have a minimum seventy-five percent (75%) of the exterior walls of masonry construction or the heartwood of a natural decay resistance wood, cementitious siding, stucco, cultured stone exterior or combination of these materials. Alternate materials may be approved by the DRC so as to maintain the architectural compatibility with existing structures.

(d) Lot coverage. In no case shall more than thirty percent (30%) of the total lot area be covered by the combined area of the main buildings and accessory buildings.

(e) Roof pitch. Residential dwelling structures shall have a roof pitch of not less than 6" vertical for each 12" horizontal (6:12). Alternative roof design and roof pitches may be considered and approved by the design review committee (DRC).

(f) Exterior walls and foundation. The exterior walls of residential dwellings shall be supported on a continuous solid concrete beam or slab; or on a fully grouted masonry foundation designed to carry the imposed loads. Exterior and load bearing walls shall be secured to the foundation as required by the adopted residential building code.

(g) A specific use permit shall be required when the total square footage of the main building and/or any accessory buildings exceeds 50,000 square feet.

(Ordinance 2015-08-00816 adopted 8/20/15)

Section 14.03.173 AREA REGULATIONS

- (a) Size of yards. See [section 14.03.113](#). (1995 Code, sec. 9-42)
- (b) Size of lot.
- (1) Lot area. No building shall be constructed on any lot of less than one and one-half (1-1/2) acres (65,340 square feet).
- (2) Lot width. The width of the lot shall be not less than one hundred sixty feet (160') at the front street property line, nor shall its average width be less than one hundred seventy-five feet (175'). The minimum width of a lot on a cul-de-sac shall be not less than thirty-five feet (35') at the property line, nor shall its average width be less than one hundred seventy-five feet (175'). The minimum width of a lot on curve exceeding thirty degrees shall be not less than thirty-five feet (35') at the property line, nor shall its average width be less than one hundred seventy-five feet (175').
- (3) Lot depth. The average depth of the lot shall not be less one hundred eighty feet (180').
- (4) Where a lot having less area, width, and/or depth than herein required exists in separate ownership upon the effective date of this chapter, the above regulations shall not prohibit the erection of a one-family dwelling thereon.
- (c) Minimum dwelling size. The minimum floor area of any dwelling shall be eighteen hundred square feet (1,800 sq. ft.), exclusive of garages, breezeways, and porches. Dwellings shall have a minimum seventy-five percent (75%) of the exterior walls of masonry construction or the heartwood of a natural decay resistance wood, cementitious siding, stucco, cultured stone exterior or combination of these materials. Alternate materials may be approved by the DRC so as to maintain the architectural compatibility with existing structures.
- (d) Lot coverage. In no case shall more than thirty percent (30%) of the total lot area be covered by the combined area of the main buildings and accessory buildings.
- (e) A specific use permit shall be required when the total square footage of the main building and/or any accessory buildings exceeds 50,000 square feet.
- (f) Accessory building and structures shall comply with [article 14.04, division 8](#), of this chapter.
- (g) Roof pitch. Residential dwelling structures shall have a roof pitch of not less than 6" vertical for each 12" horizontal (6:12). Alternative roof design and roof pitches may be considered and approved by the design review committee (DRC).
- (h) Exterior walls and foundation. The exterior walls of residential dwellings shall be supported on a continuous solid concrete beam or slab; or on a fully grouted masonry foundation designed to carry the imposed loads. Exterior and load bearing walls shall be secured to the foundation as required by the adopted residential building code.

(Ordinance 2015-08-00816 adopted 8/20/15)

Section 14.03.233 AREA REGULATIONS

(a) Size of yards. See [section 14.03.113](#). (Ordinance 2016-02-00829 adopted 2/4/16)

(b) Size of lot.

(1) Lot area. No building shall be constructed on any lot of less than one (1) acre (43,560 square feet).

(2) Lot width. The width of the lot shall be not less than one hundred forty feet (140') at the front street property line, nor shall its average width be less than one hundred sixty feet (160'). The minimum width of a lot on a cul-de-sac shall be not less than thirty feet (30') at the property line, nor shall its average width be less than one hundred sixty feet (160'). The minimum width of a lot on a curve exceeding 30 degrees shall be not less than thirty feet (30') at the property line, nor shall its average width be less than one hundred sixty feet (160').

(3) Lot depth. The average depth of the lot shall not be less than one hundred eighty feet (180').

(4) Where a lot having less area, width, and/or depth than herein required exists in separate ownership upon the effective date of this chapter, the above regulations shall not prohibit the erection of a one-family dwelling thereon.

(Ordinance 2015-08-00816 adopted 8/20/15)

(c) Minimum dwelling size. The minimum floor area of any dwelling shall be eighteen hundred square feet (1,800 sq. ft.), exclusive of garages, breezeways, and porches. Dwellings shall have a minimum eighty-five percent (85%) of the exterior walls of masonry construction, stucco, cultured stone exterior or combination of these materials. Alternate materials may be approved by the DRC so as to maintain the architectural compatibility with existing structures. (Ordinance 2016-02-00829 adopted 2/4/16)

(d) Lot coverage. In no case shall more than thirty percent (30%) of the total lot area be covered by the combined area of the main buildings and accessory buildings.

(e) A specific use permit shall be required when the total square footage of the main building and/or any accessory buildings exceeds 50,000 square feet.

(f) Accessory building and structures shall comply with [article 14.04, division 8](#), of this chapter.

(g) Roof pitch. Residential dwelling structures shall have a roof pitch of not less than 6" vertical for each 12" horizontal (6:12). Alternative roof design and roof pitches may be considered and approved by the design review committee (DRC).

(h) Exterior walls and foundation. The exterior walls of residential dwellings shall be supported on a continuous solid concrete beam or slab; or on a fully grouted masonry foundation designed to carry the imposed loads. Exterior and load bearing walls shall be secured to the foundation as required by the adopted residential building code.

(Ordinance 2015-08-00816 adopted 8/20/15)



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 06

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Discuss proposed amendments to Chapter 14, Zoning, Division 4, Specific Use Permits and provide direction to City staff.

Background Information

Staff was directed to review the City's specific use permit requirements to ensure compliance with State law. Staff is proposing the changes below to update the City's language in our Code of Ordinances.

Chapter 14, Zoning, Division 4, Specific Use Permits, Section 14 states the following with the recommended changes:

Section 14.02.081 Public hearings concerning request for permit

- (a) Any individual, partnership, corporation, or group of persons having a proprietary interest in any property, upon proof of such, may petition the planning and zoning commission for a specific use permit for the tract of land that the petitioners have the proprietary interest.
- (b) The planning and zoning commission shall have the proper public hearing notices appear in the area newspaper and be sent to the property owners within five hundred feet (500") of the property for which the specific use permit is required.
- (c) Following the public hearing by the planning and zoning commission, the commission shall make a recommendation for the city council at the properly noticed public hearing, where the council shall consider the granting or denial of the specific use permit.
- (d) If the council grants the specific use permit, an ordinance amending the zoning ordinance shall be prepared for action by the council at its next regular meeting.
- (e) The conditions imposed by the council shall be agreed to in writing by the grantee before any building permit or occupancy permit may be issued.

Section 14.02.082 Specific use permit considered as amendment

- (a) Each specific use permit granted under the provisions of this chapter shall be considered as an amendment to the comprehensive zoning regulations as applicable to such property. In granting any special use permit, the city council may impose conditions as necessary and which shall be complied with by the grantee before any building permit or occupancy permit may be issued,



City of Lucas Planning and Zoning Agenda Request March 10, 2022

Item No. 06

~~(b) Specific use permits may be granted for any period of time. Shall run with the land~~

~~(b) (e) No specific use permit shall be transferred from one individual, corporation, partnership, or group of persons. No specific use permit shall be transferred from one tract, parcel, or lot in the city to another tract, parcel, or lot.~~

~~(d) A request for renewal of a specific use permit must be filed with the city secretary at least ninety (90) days prior to its termination or the specific use permit may be determined [terminated] on the final date of time period granted.~~

Section 14.02.083 Recommendations considered as advisory in nature

All recommendations made by the city planning and zoning commission to the city council shall be considered advisory in nature and shall not be binding upon the governing body; the city council shall have the sole and final authority to grant or deny any request for specific use permits. (1995 Code, sec. 9-142; Ordinance 2005-12-00544, sec. 2, adopted 12/5/05)

Section 14.02.084 Zoning map to show place of specific use

When the city council authorizes granting of a specific use permit, the zoning map shall be amended according to its legend to indicate that the affected area has conditional and limited uses, said amendment to indicate the specific use by an “S” designation. (1995 Code, sec. 9-143; Ordinance 2005-12-00544, sec. 2, adopted 12/5/05)

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

Provide direction to staff on any recommended changes.

Motion

There is no motion necessary, this is a discussion item only.



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Discuss amending the City's Code of Ordinances, Chapter 14 Zoning, Article 14.01.004 Definitions by amending the definition of home occupation and provide direction to City staff.

Background Information

On February 17, 2022, Ordinance 2022-02-00945 was brought before the City Council to amend City's Code of Ordinances, Chapter 14 Zoning, Article 14.01.004 Definitions. A motion was made to have the Planning and Zoning Commission review the changes presented, specifically:

- (a) Home occupation shall not create a nuisance to persons of ordinary sensibilities that occupy the surrounding property such as offensive noises, vibrations, sound, smoke dust, odors, heat, glare, x-rays or electrical disturbances to radio and telephone instruments.
- (b) There shall be no traffic generated by the home occupation in greater volumes than normally expected in a residential neighborhood.

Also, the City Council requested the Planning and Zoning Commission to review the inclusion of accessory buildings as part of the definition.

Currently, the City has the following home-based business regulations in place:

Home occupation. A business, occupation, or profession conducted wholly within a residential dwelling unit by only the residents thereof, and which shall have the following characteristics:

- (1) The activity shall employ only members of the immediate family of the resident of the dwelling unit.
- (2) There shall be no external evidence of the occupation detectable at any lot line, said evidence to include, advertising signs, or displays, smoke, dust, noise, fumes, glare, vibration, electrical disturbance, storage of materials or equipment, or traffic or parking of vehicles in a manner evidencing the conduct of a business.

At the December 16, 2021, City Council meeting, the City Council discussed its current regulations pertaining to a home-based business and the need to provide additional clarity in regulating the activities associated with home-based business in Lucas. In addition, the City Council requested that the City Attorney assist in clarifying the legal authority and/or limitations the City of Lucas has regarding the regulation of commercial activities that occur within residentially zoned properties.



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Attachments/Supporting Documentation

1. Home Based Business Regulations: City of Plano, City of Allen, Town of Fairview

Budget/Financial Impact

NA

Recommendation

Staff recommends there be a limit on the number of employees to home occupation requirements for the following reasons:

- 1) Home occupation is a commercial business located within in a residential district. The commercial business can have a negative impact on the quality of life of the surrounding residents if it is not strictly controlled.
- 2) Without the requirement of a set number of employees, enforcement is more difficult. The hardest things to prove in court are home based businesses and transient renters.

Motion

There is no motion necessary, this is a discussion item only.

Home Based Business Regulations

City of Plano

Article 15 Use-specific Regulations: 15.700 Home Occupations

Home Occupations: Any activity carried out for gain by a resident which results in the manufacture or provision of goods and/or services and is conducted as an accessory use in a dwelling unit (See Sec. 15.700)

15.700 Home Occupations

In all cases, home occupations shall meet the following conditions and requirements:

1. Only one employee other than occupants of the residence may be employed. A person who receives a wage, salary, or percentage of profits directly related to the home occupation shall be considered an employee. This definition shall not include the coordination or supervision of employees who do not regularly visit the house for purposes related to the business.
2. No interior or exterior signage shall be used to advertise the occupation. Vehicles bearing business signs shall not be parked on the street or within 30 feet of the curb.
3. A home occupation shall be conducted wholly within the principal dwelling and not in any accessory building. The total floor area to be used for a home occupation shall not exceed 20% of the total floor area of the principal dwelling, including garages. However, instructional classes may be held outside providing other stipulations of this ordinance are met. A maximum of 6 students may be allowed in each session.
4. Merchandise shall not be offered or displayed for sale on the premises. Sales incidental to a service shall be allowed, and orders previously made by telephone or at a sales party may be filled on the premises.
5. No outdoor storage of materials, goods, supplies, or equipment shall be allowed.
6. No building alterations shall be allowed that alter the residential character of the home.
7. No repair or servicing of vehicles, internal combustion engines, large equipment, or large appliances shall be allowed.
8. A home occupation shall produce no offensive noise, vibration, smoke, electrical interference, dirt, odors, or heat in excess of those normally found in residential areas.
9. No toxic, explosive, flammable, combustible, corrosive, radioactive, or other hazardous materials shall be used or stored on the site for business purposes.
10. No traffic shall be generated by a home occupation in greater volumes than normally expected in a residential neighborhood, and any parking must be accommodated within the required off-street parking for the residence or along the street frontage for the lot.

City of Allen

Land Development Code / Article IV – Zoning Regulations / Sec. 4.10. – Residential accessory use regulations

(Ord. No. 1939-5-01, 5-3-2001; Ord. No. 2900-3-10, § 3, 3-23-2010; Ord. No. 3157-6-13, § 1, 6-11-2013; Ord. No. 3342-12-15, § 1, 12-8-2015)

6. Home occupations. Home occupations are permitted as accessory uses subject to the following requirements:

- a. The activity shall be conducted wholly within the main building and not in any accessory building. Home occupations
- b. Total floor area to be used for a home occupation shall not occupy more than 20 percent of the total floor area of the main building nor exceed 400 square feet.
- c. Outdoor activities shall be limited to instructional activities conducted in the back yard and screened from the neighboring property.
- d. No outside storage of materials, goods, supplies, vehicles, trailers or equipment connected with the home occupation shall be allowed.
- e. No advertisement, sign, or display shall be allowed on the premises. No advertisement shall include the street address of the premises.
- f. There shall be no activity that regularly attracts persons other than the residents to the location of the home occupation, except those related to instructional activities.
- g. Instructional activities shall be limited to a maximum of six students at any time.
- h. Parking, picking up, or dropping off students is prohibited in city alleys.
- i. Merchandise or products of the home occupation shall not be offered or displayed for sale at or on the premises. Exception: Garage sales may be held twice in one calendar year provided that: (1) merchandise is not acquired solely for the purpose of resale on the premises; (2) the duration of sale shall not exceed three calendar days; (3) signage shall be in conformance with section 7.09 of this Code.
- j. Sales incidental to a service are allowed, provided that orders previously made by telephone generally are filled off the premises of the person conducting the home occupation, or at a sales party conducted off the premises of the person conducting the home occupation.
- k. There shall be no external evidence of the home occupation. No activity shall indicate, from the exterior of the structure, that the premises are being used for anything other than a dwelling unit.

- l. The activity shall employ only residents of the location of the home occupation.
- m. A home occupation shall produce no offensive odor, noise, dust, smoke, fumes, glare, vibration, electrical disturbance, or heat in excess of those normally found in residential areas.
- n. No traffic or parking of vehicles shall be generated by a home occupation in greater volumes than normally expected in a residential neighborhood and any need for parking must be accommodated within the required off-street parking for the dwelling unit.
- o. Child care in a registered family home will be allowed and shall be limited to the number of children allowed under applicable state law or city regulation.
- p. Any business, occupation, or activity conducted within a dwelling unit and which does not meet these characteristics shall be construed to be a commercial activity and shall be cause for the city to order a cease to all such activity within such dwelling unit.
- q. Except for a person working on or selling a motor vehicle owned by the person and subject to all other applicable laws, rules, ordinances and regulations, the service, repair, painting, or onsite selling of any motor vehicle, including, but not limited to, automobiles, motorcycles, trailers, boats, personal watercraft, recreation vehicles and lawn equipment is not authorized as, and is specifically excluded from the definition of, a home occupation.

Town of Fairview

Article 14.02 Zoning Ordinance: Sec. 14.02.020 - Definitions

(1998 Code, sec. 154.020)

Home occupation. An occupation performed at the residence provided that:

- (1) No person, other than members of the family residing on the premises, shall be engaged in such occupation.
- (2) Such use is clearly incidental and secondary to the use of the premises for residential purposes.
- (3) The use of the dwelling unit for the home occupation shall be clearly incidental and subordinate to its use for residential purposes by its occupants, and not more than 25% of the floor area of the dwelling unit shall be used in the conduct of the home occupation.
- (4) There shall be no change in the outside appearance of the building or premises, or other visible evidence of the conduct of such home occupation.
- (5) No traffic shall be generated by such home occupation in greater volumes than would normally be expected in a residential neighborhood, and any need for parking generated by the conduct of such home occupation shall be met off the street and other than in a required front yard.
- (6) No equipment or process shall be used in such home occupation which creates noise, vibration, glare, fumes, odors, or electrical interference detectable to the normal senses off the lot, if the occupation is conducted in a single-family residence, or outside the dwelling unit if conducted in other than a single-family residence. In the case of electrical interference, no equipment or process shall be used which creates visual or audible interference in any radio or television receivers off the premises, or causes fluctuations in line voltage off the premises.
- (7) Home occupation uses shall not include beauty culture schools, barber and beauty shops, commercial or quasi-commercial repairs to automobiles or other motorized vehicles including parts thereof, medical or chiropractic offices, or other uses of a similar nature and character.
- (8) There shall be no display in any yard area of goods for sale.



City of Lucas
Planning and Zoning Agenda Request
March 10, 2022

Item No. 08

Requester: City Secretary Stacy Henderson

Agenda Item Request

Consider approval of the minutes of the February 10, 2022, Planning and Zoning Commission meeting.

Background Information

NA

Attachments/Supporting Documentation

1. February 10, 2022, Planning and Zoning Commission minutes.

Budget/Financial Impact

NA

Recommendation

NA

Motion

I make a motion to approve the minutes of the February 10, 2022, Planning and Zoning Commission meeting.



MINUTES

PLANNING AND ZONING COMMISSION MEETING

February 10, 2022 | 7:00 PM

Council Chambers | Video Conference

City Hall | 665 Country Club Road, Lucas, Texas

Call to Order

The meeting was called to order at 7:00 pm. It was determined that a quorum was present, and the Pledge of Allegiance was recited.

Commissioners Present:

Chairman Dusty Kuykendall
Vice Chairman Tommy Tolson
Commissioner Joe Williams
Commissioner Peggy Rusterholtz
Commissioner Adam Sussman

Staff Present:

City Manager Joni Clarke
Development Services Director Joe Hilbourn
City Secretary Stacy Henderson
City Attorney Courtney Morris

Commissioners Absent:

Alternate Commissioner James Foster
Alternate Commissioner Chris Bierman

City Council Liaison Present:

Mayor Jim Olk

Regular Agenda

- 1. Consider approval of an application for a site plan, landscape plan, elevations, and preliminary plat submitted by the property owner Bill Shipley on behalf of Golden Chick for use as a commercial restaurant on a 0.833-acre tract of land in the William Snider Survey, Abstract Number 821, situated in the City of Lucas, located at 451 South Angel Parkway.**

Development Services Director Joe Hilbourn gave a presentation discussing elements of the site plan, landscape plan, and preliminary plat and noted that staff was recommending approval of the request.

MOTION: A motion was made by Commissioner Williams, seconded by Commissioner Sussman to recommend approval of the site plan, landscape plan, elevations, and preliminary plat submitted by the property owner Bill Shipley on behalf of Golden Chick for use as a commercial restaurant on a 0.833-acre tract of land in the William Snider Survey, Abstract Number 821, situated in the City of Lucas, located at 451 South Angel Parkway. The motion passed unanimously by a 5 to 0 vote.

- 2. Consider the request by Brian Umberger on behalf of Pankaj Srivastava for approval of a final plat for a 17.646-acre parcel of land being part of the Jas Grayum Survey, Abstract CO-354 located on the west side of Country Club Road and north of Graham Lane at 2115 and 2125 Country Club Road, more commonly known as New Castle Estates.**

Chairman Kuykendall noted that the applicant had requested their item be withdrawn from the agenda. There was no action taken on this item.

3. Consider the request by Michelle Tilotta with LJA Engineering on behalf of HC Highpoint, LLC for final plat approval of a parcel of land being 74.914 acres, part of the Orpha Shelby Survey, Abstract 799, more commonly known as Inspiration Phase 8B within the City of Lucas ETJ.

Development Services Director Joe Hilbourn gave a presentation discussing elements of the final plat and noted that staff was recommending approval of the request.

MOTION: A motion was made by Commissioner Rusterholtz, seconded by Commissioner Sussman to approve the final plat for a parcel of land being 74.914 acres, part of the Orpha Shelby Survey, Abstract 799, more commonly known as Inspiration Phase 8B within the City of Lucas ETJ. The motion passed unanimously by a 5 to 0 vote.

4. Discuss the request by Michael and Kelly Sparks, owners of Sparks Loving Care located at 999 West Forest Grove Road, Lucas Texas to add Nursing Home/Assisted Living to the City's Code of Ordinances, Zoning Use Chart, in the R-2 zoning district by right or by a specific use permit.

Development Services Director Joe Hilbourn gave a presentation discussing differences between allowing a use by right or with a specific use permit, and how the state defines a community home versus an assisted living facility. The Comprehensive Plan calls for a community home to be allowed in commercial and light industrial districts only.

The following individuals spoke regarding this request:

- Kelly Sparks, owner of Loving Care Home on Forest Grove Road, discussed their desire to move their facility to a location within Lucas where currently the zoning did not allow for an assisted living type facility. The applicant expressed their desire to allow an assisted living facility to be located within an R-2 zoning district by specific use permit.
- Carla and Jerry Coleman, 900 Honeysuckle, spoke in favor of allowing an assisted living facility to locate within an R-2 zoning district.
- Liz Gray, 18 Estates Road, spoke against allowing a deviation from current R-2 zoning standards.

Chairman Kuykendall noted that seven emails were received in favor of the request, and six emails opposed to the request.

The Commission discussed how various sized assisted living facilities could locate on a property should the use be added to R-2 zoning; and therefore, the Commission was not in favor of moving forward with any zoning use change to the R-2 zoning district.

There was no formal action taken on this item.

5. Discuss building setbacks, lot line definition, building line definition, and lot width requirements in all residential zoning districts.

The Commission discussed current definitions in the City’s Code of Ordinances outlining lot lines, building lines, and lot width requirements in residential zoning districts. The Commission asked staff to provide clearer definitions at the next meeting to further define setbacks for accessory buildings; definition of lot width at the front and back of a lot; and side yard setbacks related to corner lots.

There was no formal action taken on this item, it was for discussion purposes only.

6. Consider final review and approval of amendments to Chapters 4, 5 and 6, including the Land Use Map and Trails Master Plan of the City of Lucas Comprehensive Plan and review Chapter 7 including the Master Thoroughfare Plan to discuss possible amendments.

The Commission discussed proposed changes to the Master Thoroughfare Plan and made minor edits to Chapters 4 and 5. The Commission requested an updated Master Thoroughfare Plan that would be reviewed at the next meeting that shows what roads had been completed. Chapter 6 Parks and Recreation along with an updated Trails Master Plan would also be brought back to the next meeting for final review and approval.

The following individual spoke regarding this item:

- Alec Morris, 1229 Highland Drive, discussed his concerns with a connection proposed on the Thoroughfare Plan at Highland Drive and Lewis Lane. The amount of roadway traffic that would increase and would prefer a connection not be made at this location.

There was no action taken on this item.

7. Consider approval of the minutes of the January 13, 2022, Planning and Zoning Commission meeting.

MOTION: A motion was made by Commissioner Williams, seconded by Vice Chairman Tolson to approve the minutes as submitted. The motion passed unanimously by a 5 to 0 vote.

8. Adjournment.

MOTION: A motion was made by Commissioner Williams seconded by Vice Chairman Tolson to adjourn the meeting at 8:48 pm. The motion passed unanimously by a 5 to 0 vote.

Peggy Rusterholtz, Chairman

Stacy Henderson, City Secretary



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 09

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Public hearing to consider the request for a specific use permit submitted by the property owner Wal-Mart Real Estate for a drive-through restaurant on a .975-acre tract of land in the W. Snider Survey, Abstract Number 821, being part of Lot 1, Block A, Wal-Mart Lucas Addition, situated in the City of Lucas, Collin County, Texas.

- A. Presentation by Development Services Director Joe Hilbourn
- B. Conduct Public Hearing
- C. Take action on the specific use permit request

Background Information

Panda Express is proposing a 2,500 square foot restaurant space with a drive-through. The use does require a specific use permit as outlined in the table below. The site is currently zoned Commercial Business and will be located at the southwest corner of Wal-Mart parking lot directly behind Bank of America.

	AO	R2	R1.5	R1	VC	CB	OS	MH	LI	ED
Restaurant drive in					S	S			X	
Restaurant (food smoked on site)					S	S			X	
Self-storage						S			S	
Sporting goods					X	X			X	

Attachments/Supporting Documentation

- 1. Site plan
- 2. Public notice

Budget/Financial Impact

NA

Recommendation

Staff recommends approving the specific use permit with the following recommendations:



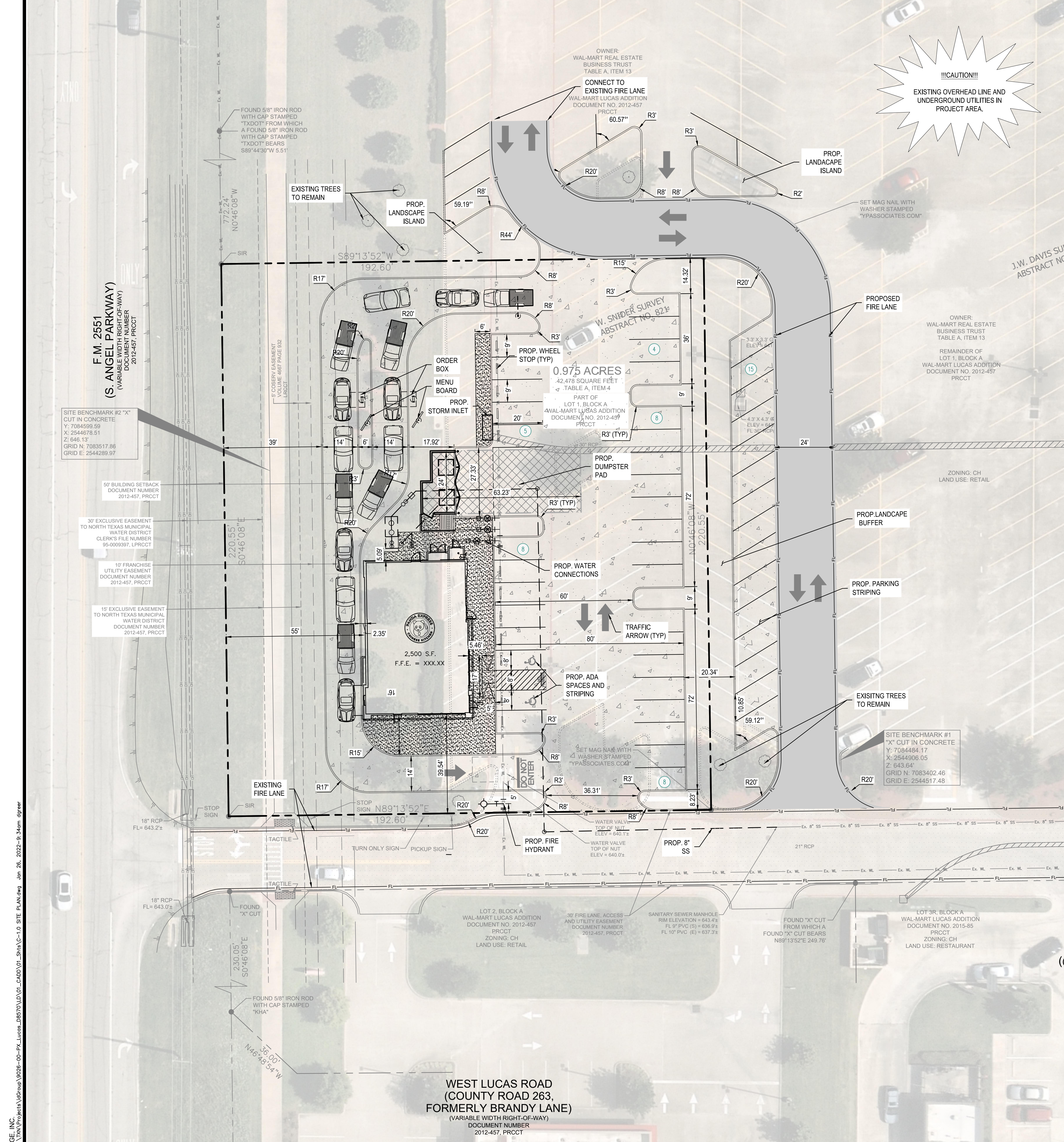
Item No. 09

City of Lucas
Planning and Zoning Agenda Request
March 10, 2022

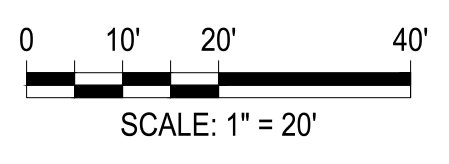
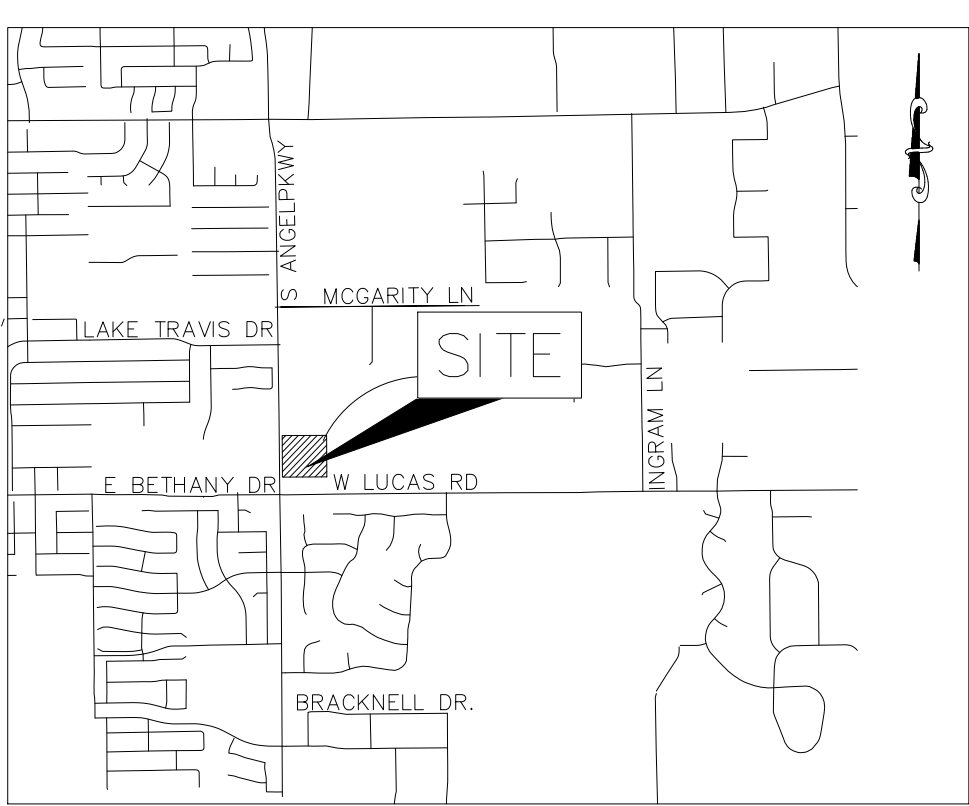
1. All exterior lighting be on a timer, that turns all lights except security lighting off 30 minutes after close of business.
2. Hours of operation are 6:00 a.m. to 1:00 a.m. (Panda Express' current hours of operation are 9:30 a.m. until 9:30 p.m. Staff is recommending the hours of 6:00 a.m. to 1:00 a.m. to be consistent with surrounding businesses as the SUP goes with the property should it change hands.
3. Exterior lighting shall omit no glare extending beyond the property line.
4. Signage should include a monument sign consistent with other monument signs along Angel Parkway.
5. The SUP be terminated if the project has not started within 12 months.
6. Tie the attached concept plan to the SUP

Motion

I make a motion to approve/deny the specific use permit submitted by the property owner Wal-Mart Real Estate for a drive-through restaurant on a .975-acre tract of land in the W. Snider Survey, Abstract Number 821, being part of Lot 1, Block A, Wal-Mart Lucas Addition, situated in the City of Lucas, Collin County, Texas.



PLAN SUBMITTAL RECORD	
DATE	SUBMITTAL
10/7/2021	SITE PLAN SUBMITTAL



SITE SUMMARY TABLE	
GENERAL SITE DATA	
ZONING	CC (CORRIDOR COMMERCIAL)
LAND USE	RESTAURANT W/DRIVE-THROUGH
LOT AREA	42,478 S.F. (0.975 ACRES)
BUILDING AREA (SQ. FEET)	2,500 S.F.
BUILDING HEIGHT (STORIES)	22'-6" - 1 STORY
LOT COVERAGE	5.89%
PARKING	
PARKING RATIO REQUIRED	1 PER 208 S.F. BUILDING AREA
REQUIRED PARKING	(2,500/208) = 12
PROVIDED PARKING	33 SPACES
ACCESSIBLE PARKING REQUIRED	2
ACCESSIBLE PARKING PROVIDED	2

LEGEND	
7" CONCRETE PAVEMENT (HEAVY DUTY)	
CONCRETE PAVEMENT (MEDIUM/LIGHT DUTY)	
4" SIDEWALK/FLATWORK PAVEMENT	
EXISTING FIRE LANE	
PAVEMENT STRIPING	
PROPERTY LINE	
EXISTING CURB	
PROPOSED CURB	
PROPOSED FIRE LANE	
DENOTES BLUE PLACARD ADA STALLS	
PARKING COUNT	
EXISTING WATER	
PROPOSED WATER	
EXISTING SANITARY SEWER	
PROPOSED SANITARY SEWER	

CITY NOTES

1. THIS CONCEPT PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY AND SUBJECT TO CHANGE. THIS CONCEPT PLAN, ALONG WITH THE DEVELOPMENT REGULATIONS (FOR PLANNED DEVELOPMENT REQUESTS), ARE INTENDED TO DESCRIBE THE INTENT OF THE PLANNED DEVELOPMENT. SIGNIFICANT DEVIATIONS FROM THIS CONCEPT PLAN, AS DETERMINED BY THE DEVELOPMENT SERVICES DIRECTOR, WILL REQUIRE AN AMENDMENT TO THE CONCEPT PLAN AND, AS NECESSARY, THE DEVELOPMENT REGULATIONS.



**Know what's below.
Call before you dig.**
(@ least 48 hours prior to digging)

BENCHMARKS	
ONSITE BENCHMARKS	
BM #1: "X" CUT WITH BOX	N: 7083402.46 E: 2544517.48 ELEV. = 643.64
BM #2: "X" CUT WITH BOX	N: 7083517.86 E: 2544289.97 ELEV. = 646.13

- NOTES**
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - SEE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.
 - WHEEL STOPS SHOWN ON PLANS SHALL BE GNR TECHNOLOGIES, "PARK 11" 6" PARKING CURB #16201R (BLACK & YELLOW) OR APPROVED EQUAL.

**SPECIFIC USE PERMIT - SITE PLAN
PANDA EXPRESS**

W LUCAS RD & S ANGEL PKWY
0.975 ACRES
PART OF LOT 1, BLOCK A WAL-MART LUCAS ADDITION
SITUATED IN W. SNIDER SURVEY
CITY OF LUCAS
COLLIN COUNTY, TEXAS

ARCHITECT
IDGROUP
2641 Irving Blvd.
DALLAS, TX 75207
Contact: Tom Ruz
Tel: 214-538-9800 (Office)

OWNER
WALMART STORES INC.
2698 SE J STREET
BENTONVILLE, AR 72716-5510

DEVELOPER
PANDA RESTAURANT GROUP
1683 Walnut Grove Ave.
Rosemead, California 91770
Tel: 626-799-9898 (Office)
Tel: 626-372-8288 (Cell)

ENGINEER
BGE, Inc.
777 Main St., Suite 1900
Fort Worth, TX 76102
Tel: 972-887-6130 www.bgeinc.com
TBPE Registration No. F-1046
Contact: David Greer Tel: 817-872-6005

BGE, Inc.
777 Main St., Suite 1900
Fort Worth, TX 76102
Tel: 972-887-6130 • www.bgeinc.com
TBPE Registration No. F-1046
Contact: David Greer
Tel: 817-872-6005
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DEVELOPER
PANDA RESTAURANT GROUP
1683 Walnut Grove Ave.
Rosemead, California 91770
Tel: 626-799-9898 (Office)
Tel: 626-372-8288 (Cell)

**ZONING CONCEPT
PLAN-EXHIBIT B**

PANDA EXPRESS
W LUCAS RD & S ANGEL PKWY
PART OF LOT 1, BLOCK A WAL-MART LUCAS ADDITION
SITUATED IN W. SNIDER SURVEY
ABSTRACT NO. 821
0.975 ACRES
CITY OF LUCAS
COLLIN COUNTY, TEXAS

THESE PLANS ARE ISSUED FOR THE PURPOSE OF PRELIMINARY REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION. WHEN ISSUED IN FINAL FORM THEY WILL BE SEALED, SIGNED AND DATED.

RESPONSIBLE ENGINEER:
BGE, INC.
TEXAS REGISTERED ENGINEERING FIRM F-1046
DAVID GREER, P.E.
TEXAS REGISTRATION NO. 109928
JANUARY 26, 2022

!! CAUTION !!
CONTRACTOR TO VERIFY EXACT LOCATION & DEPTH OF EXIST FACILITIES PRIOR TO ANY CONSTRUCTION ACTIVITIES

!! CAUTION !!
CONTACT: 1-800-DIG-TESS
48 HOURS PRIOR TO CONSTRUCTION

REVISIONS		
REV NO.	DATE	DESCRIPTION

DRAWN BY: CA
CHECKED BY: DG
DATE: 10/7/2021
PROJECT NUMBER: 9026-00

SHEET NO.

SP-1.0

BGE, INC. G:\TNA\Projects\2021\0026-00-PX-Lucas_08270\VD\01_CADD\01_Shts\C-1.0 SITE PLAN.dwg Jan 26, 2022-9:34am egreer



NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN, that the Planning & Zoning Commission of the City of Lucas, Texas will conduct a public hearing on Thursday, March 10, 2022 at 7:00 p.m. and City Council will conduct a second public hearing on Thursday, April 7, 2021 at 7:00 p.m. at Lucas City Hall, 665 Country Club, Lucas, Texas to consider a Specific Use Permit (SUP) application to permit a drive-thru for a restaurant at 767 S. Angel Parkway. The property is zoned Commercial and more particularly described as follows:

BEING a 0.975 acre tract of land situated in the W. Snider Survey, Abstract Number 821, located in the City of Lucas, Collin County, Texas, being part of Lot 1, Block A, Wal-Mart Lucas Addition, an addition to Collin County, recorded in Document Number 2012-457 of the Official Public Records, Collin County, Texas, (OPRCCT), said 0.975 acre tract being more particularly described as follows: COMMENCING at a found "X" cut having Texas Coordinate System of the North American Datum of 1983 (2011) EPOCH 2010, North Central Zone (4202) Grid Coordinates of Northing 7084431.7 and Easting 2544662.3, at the southwest corner of said Lot 1, Block A, at the northwest corner of Lot 2, Block A, of said Wal-Mart Lucas Addition and on the east line of F.M. 2551 (variable width right-of-way), from which a found 5/8" iron rod found with cap stamped "KHA" at the most west southwest corner of said Lot 2 bears South 00 degrees 46 minutes 08 seconds East, a distance of 230.05 feet; THENCE North 00 degrees 46 minutes 08 seconds West (Grid Bearings based on said Texas Coordinate System), along the west line of said Lot 1 and east right-of-way line of said F.M. 2551, a distance of 30.00 feet to the POINT OF BEGINNING of the herein described; THENCE North 00 degrees 46 minutes 08 seconds West, along the west line of said Lot 1 and east right-of-way line of said F.M. 2551, a distance of 220.55 feet to a point for corner, from which a found 5/8" iron rod with cap stamped "TXDOT" at the northwest corner of said Lot 1 bears North 00 degrees 46 minutes 08 seconds West, a distance of 772.24 feet; THENCE North 89 degrees 13 minutes 52 seconds East, across said Lot 1, a distance of 192.60 feet to a point for corner; THENCE South 00 degrees 46 minutes 08 seconds East, continuing across said Lot 1, a distance of 220.55 feet to a point for corner; THENCE South 89 degrees 13 minutes 52 seconds West, continuing across said Lot 1, a distance of 192.60 feet to the POINT OF BEGINNING and containing 0.975, or 42,478 square feet of land, more or less.

Those wishing to speak FOR or AGAINST the above item are invited to attend. If you are unable to attend and have comments you may send them to City of Lucas, Attention: City Secretary, 665 Country Club Road, Lucas, Texas 75002, email shenderson@lucastexas.us and it will be presented at the Hearing. If you have any questions about the above hearing you may contact jhilbourn@lucastexas.us



City of Lucas Planning and Zoning Agenda Request March 10, 2022

Item No. 10

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Public hearing to consider the request for a specific use permit by property owner Yueteng Leng to allow a farmers market and agricultural classes to be held within renovated school buses at their property located at 880 Stinson Road within the Trails End Addition, Lot 2, in Lucas, Texas.

- A. Presentation by Development Services Director Joe Hilbourn
- B. Conduct Public Hearing
- C. Take action on the specific use permit request

Background Information

Property owner Yueteng Leng is proposing a farmers market to be held at her property located at 880 Stinson Road approximately one to two hours a day. The farmers market will be held in one converted school bus. The property is currently zoned AO, Agriculture. A farmers market does require a specific use permit in the AO zoning district as outlined in the Code of Ordinances, Schedule Use Chart below. Along with the farmers market, agricultural classes are also being proposed to be held in up to five renovated buses that will be parked on the property.

Use	AO	R2	R1.5	R1	VC	CB	OS	MH	LI	ED
Fabric store					X	X			X	
Farmer's market	S				S	S			X	
Feed store						X			X	
Fish and tackle store					S	X			X	

Attachments/Supporting Documentation

- 1. Site plan
- 2. Location Map
- 3. Public notice

Budget/Financial Impact

NA



City of Lucas

Planning and Zoning Agenda Request

March 10, 2022

Item No. 10

Recommendation

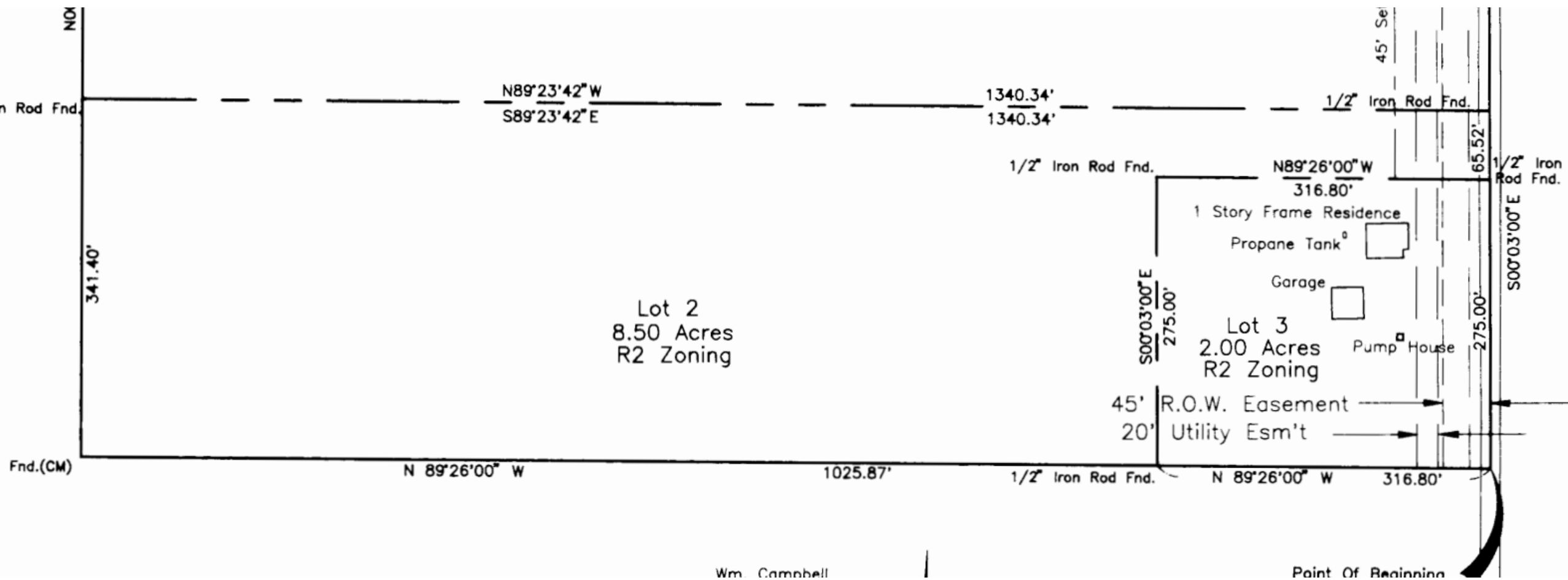
Staff recommends approval of the farmers market, including one renovated bus, with the following conditions:

1. Limited maximum time frame of two hours per day, four days a week
2. Signage only permitted during the hours of operation
3. No lighting installed for the farmers market
4. Paint the bus a neutral color to blend in with the area

Should the farmers market be successful and does not create a nuisance, the applicant may bring back the agricultural educational use at a future date.

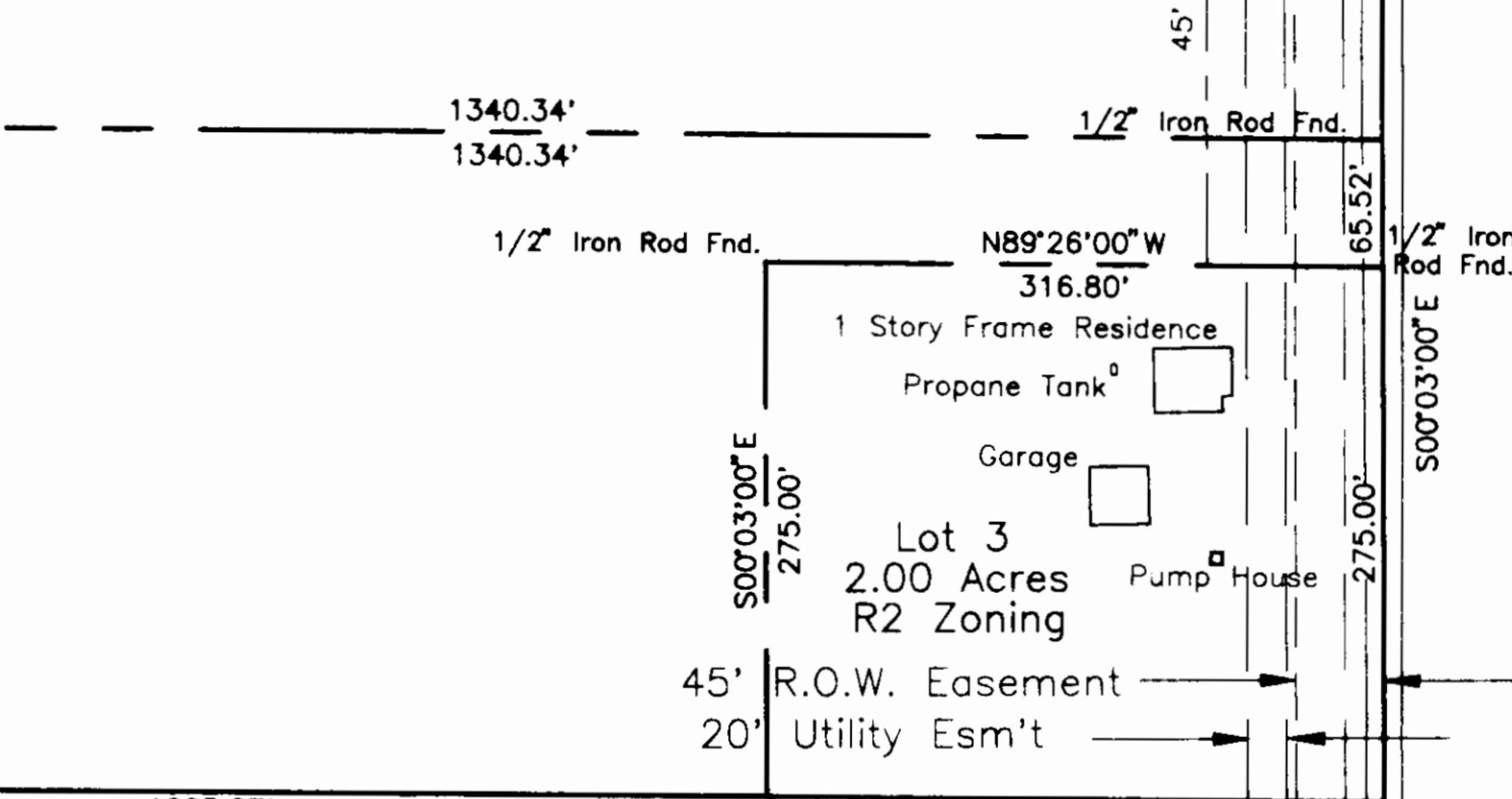
Motion

I hereby make a motion to approve/deny the specific use permit by property owner Yueteng Leng to allow a farmers market and agricultural classes to be held within renovated school buses at their property located at 880 Stinson Road within the Trails End Addition, Lot 2, in Lucas, Texas



Wm. Campbell

Point Of Beginning





760

880

920

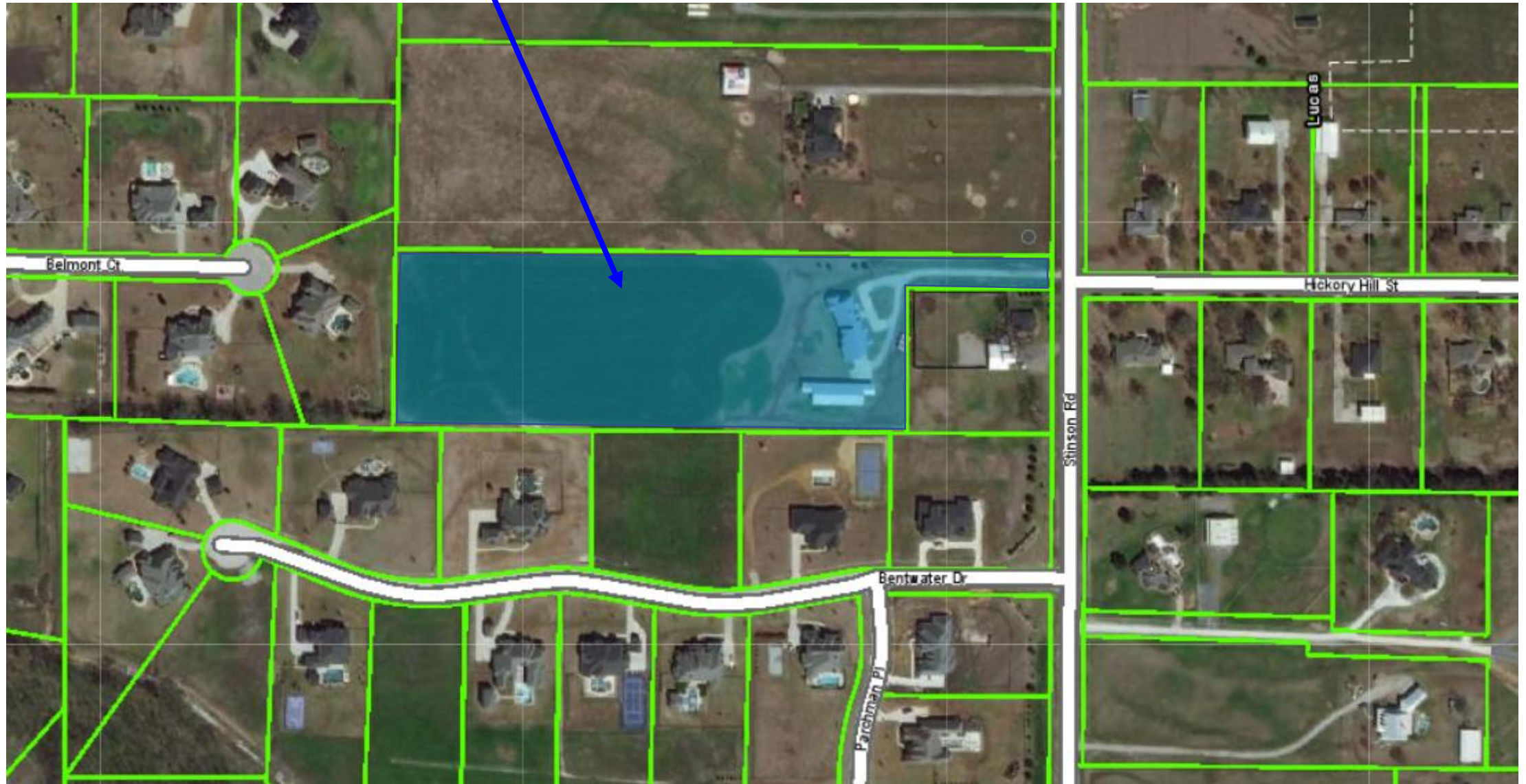
Stinson Rd

40ft

26.585 33.075 Degrees

Location Map

880 Stinson Road





NOTICE OF PUBLIC HEARINGS

NOTICE IS HEREBY GIVEN, that the Planning & Zoning Commission of the City of Lucas, Texas will conduct a public hearing on Thursday, March 10, 2022 at 7:00 p.m. and City Council will conduct a second public hearing on Thursday, April 07, 2022 at 7:00 p.m. at Lucas City Hall, 665 Country Club, Lucas, Texas to consider a Specific Use Permit (SUP) application to permit a farmers market, and school bus agricultural education park project at 880 Stinson Rd, Lucas, Texas. The property is Zoned (AO) Agricultural more particularly described as follows:

Being all of an 7.5 +/- acre tract of land located in the Trails End Addition Lot 2. Otherwise known as 880 Stinson Rd Lucas, TX 75002

Those wishing to speak FOR or AGAINST the above item are invited to attend. If you are unable to attend and have comments you may send them to City of Lucas, Attention: City Secretary, 665 Country Club Road, Lucas, Texas 75002, email shenderson@lucastexas.us and it will be presented at the Hearing. If you have any questions about the above hearing you may contact jhilbourn@lucastexas.us.