



AGENDA

CITY COUNCIL MEETING

June 16, 2022 | 6:30 PM

Council Chambers | Video Conference

City Hall | 665 Country Club Road, Lucas, Texas

Notice is hereby given that a meeting of the Lucas City Council will be held on Thursday, June 16, 2022, beginning at 6:30 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 City Council 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. Pursuant to Texas Government Code 551.127, one or more members of the governing body may appear via videoconference call.

To join the meeting, please click this URL:

<https://us06web.zoom.us/j/83937347874?pwd=Q1p3U3Vsa0dpbzNzQ2FJcFZJZz09>

and enter your name and email address

Join by phone: 1-346-248-7799

Webinar ID: 839 3734 7874

Passcode: 325863

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 3:30 pm noting the item you wish to speak on and noting your attendance will be remote. Please note, any requests received after 3:30 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 3:30 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 3:30 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

Citizen Input

1. Citizen Input

Community Interest

Pursuant to Section 5510415 of the Texas Government Code, the City Council may report on the following items: 1) expression of thanks, congratulations or condolences; 2) information about holiday schedules; 3) recognition of individuals; 4) reminders about upcoming City Council events; 5) information about community events; and 6) announcements involving imminent threat to public health and safety.

2. Items of Community Interest.

Consent Agenda

All items listed under the consent agenda are considered routine and are recommended to the City Council for a single vote approval. If discussion is desired, an item may be removed from the consent agenda for a separate vote.

3. Consent Agenda:
 - A. Approval of the minutes of the June 2, 2022, City Council meeting. (City Secretary Stacy Henderson)

Regular Agenda

4. Consider amending FY 21/22 budget by appropriating \$1,134,546 from Unrestricted Water Fund Reserves to line item 21-8210-490-129 for construction of a 12-inch water line along West Lucas Road, Southview Drive, and East Lucas Road (FM 1378/FM 3286, the Bait Shop Intersection). (Public Works Director Scott Holden)
5. Consider entering into a Development Agreement with James Irwin for roadway improvements to the first 1,284 feet of Stinson Road south of West Lucas Road and appropriating funds in an amount not to exceed \$762,250 (95% of \$802,368 - the cost of the roadway improvements) from account 11-1009 General Fund Roadway Impact Fees in the amount of \$44,000 and the remainder \$718,250 from General Fund Reserves to account 21-8210-491-325 Stinson Road Realignment and authorize the City Manager to execute the agreement. (Development Services Director Joe Hilbourn)
6. Consider entering into a Development Agreement with Farmstead Estates Phase Two for detention of excess offsite stormwater runoff in the amount of \$199,075 and authorize the City Manager to negotiate the agreement. (Development Services Director Joe Hilbourn)
7. Consider the regulation of high grass, weeds, brush, shrubs, trees and other vegetation and the requirements of property owners to maintain property abutting public streets, to keep all right-of-way or easements clear of obstructions, and provide guidance to the City Manager. (Development Services Director Joe Hilbourn)
8. Consider Chapter 8, Water System of the City of Lucas Comprehensive Plan and recommend proposed amendments if needed. (Development Services Director Joe Hilbourn)

Executive Agenda

9. Executive Session: An Executive Session is not scheduled for this meeting.

As authorized by Section 551.071 of the Texas Government Code, the City Council 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.

10. Reconvene from Executive Session and take any action necessary as a result of the Executive Session.
11. 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, TX 75002 and on the City's website at www.lucastexas.us on or before 5:00 p.m. on June 10, 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 City Secretary Stacy Henderson at 972.912.1211 or by email at shenderson@lucastexas.us at least 48 hours prior to the meeting.



City of Lucas

City Council Agenda Request

June 16, 2022

Item No. 01

Requester: Mayor Jim Olk

Agenda Item Request

Citizen Input

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA



City of Lucas City Council Agenda Request June 16, 2022

Requester: Mayor Jim Olk

Agenda Item Request

Items of Community Interest

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA



City of Lucas

City Council Agenda Request

June 16, 2022

Requester: City Secretary Stacy Henderson

Agenda Item Request

Consent Agenda:

- A. Approval of the minutes of the June 2, 2022, City Council meeting.

Background Information

NA

Attachments/Supporting Documentation

1. Minutes of the June 2, 2022, City Council meeting

Budget/Financial Impact

NA

Recommendation

City Staff recommends approval of the Consent Agenda.

Motion

I make a motion to approve/deny the Consent Agenda as presented.



MINUTES CITY COUNCIL REGULAR MEETING

June 2, 2022 | 6:30 PM

Council Chambers | Video Conference
City Hall | 665 Country Club Road, Lucas, Texas

City Councilmembers Present:

Mayor Jim Olk
Mayor Pro Tem Kathleen Peele
Councilmember Tim Johnson
Councilmember David Keer
Councilmember Tim Baney
Councilmember Phil Lawrence (*remote*)
Councilmember Debbie Fisher

City Staff Present:

City Manager Joni Clarke
City Secretary Stacy Henderson
Development Services Director Joe Hilbourn
Public Works Director Scott Holden
Assistant to the City Manager Kent Souriyasak
City Attorney Joe Gorfida
City Attorney Courtney Morris

The regular City Council meeting was called to order at 6:30 pm.

Citizen Input

1. Citizen Input

There was no citizen input at this meeting.

Community Interest

2. Items of Community Interest

Mayor Olk discussed events being held at the upcoming farmers markets, and the upcoming Art in Public Places display at City Hall in conjunction with Lovejoy High School.

Consent Agenda

3. Consent Agenda:

- A. Approval of the minutes of the May 19, 2022, City Council meeting.
- B. Approval of Ordinance 2022-06-00954 of the City of Lucas, Texas, amending the Code of Ordinances by amending Appendix C titled "Fee Schedule" amending Article 24.000 titled "Solid Waste Collection and Disposal" amending Section 24.100 titled "Monthly Rates" by amending monthly rates for residents; by Repealing Section 24.200 Refrigeration Appliances; by providing a repealing clause; providing a severability clause; providing a savings clause; and providing for an effective date beginning October 1, 2022.

- C. Authorize the Mayor to enter into an Interlocal Cooperation Agreement 2022-2026 with Collin County for shared maintenance of specific roadways in the City of Lucas.
- D. Approval of Resolution R 2022-06-00527 of the City of Lucas suspending the June 17, 2022 effective date of Oncor Electric Delivery Company's requested rate change to permit the City time to study the request and to establish reasonable rates; approving cooperation with the Steering Committee of cities served by Oncor to hire legal and consulting services and to negotiate with the company and direct any necessary litigation and appeals.

MOTION: A motion was made by Councilmember Baney, seconded by Councilmember Johnson to approve the Consent Agenda as presented. The motion passed unanimously by a 7 to 0 vote.

The City Council moved to Agenda Item No. 9, Executive Session, at this time.

Executive Session Agenda

- 9. **The City Council will convene into Executive Session pursuant to Section 551.071 of the Texas Government Code to consult with the City Attorney regarding City of Lucas, Texas v. Robert Kubicek and the following real property: 2205 Estates Parkway, Lucas, Texas, In Rem, Cause No. 417-00147-2018 in the 417th Judicial District Court of Collin County, Texas.**

The City Council convened into Executive Session at 6:37 pm.

- 10. **Reconvene from Executive Session and take any action necessary as a result of the Executive Session.**

The City Council reconvened from Executive Session at 7:01 pm and took the following action:

MOTION: A motion made by Councilmember Baney, seconded by Councilmember Johnson to authorize the City Manager to negotiate an agreement between the City of Lucas and plaintiff Robert Kubicek of 2205 Estates Parkway, Lucas, Texas. The motion passed unanimously by a 7 to 0 vote.

The City Council moved back to Public Hearing Agenda Item No. 4.

Public Hearing Agenda

- 4. **Public hearing to consider adopting Ordinance 2022-06-00955 approving a specific use permit request by NDC Holdings on behalf of Lucas Retail Shopping Center to allow a drive-through restaurant on a proposed tract of land, zoned Commercial Business, being 1.619 acres, part of ABS A0821 William Snider Survey, Tract 16, 8.2121 acres, Collin County Texas, located at the southeast corner of South Angel Parkway and McGarity Lane.**

Development Services Director gave a presentation regarding the proposed specific use permit request and stated the Planning and Zoning Commission recommended approval of the request with the following conditions:

1. Tie the attached concept plan to the specific use permit
2. All exterior lighting be on a timer, that turns all lights except security lighting off thirty minutes after close of business, with lights shielded to prevent glare across property lines.
3. Hours of operation are 6:00 a.m. to 1:00 a.m.
4. A sign frame similar in nature to the existing monument signs along Angel Parkway, shaped like an L with a decorative top.

The City Council discussed traffic on McGarity Road and the need for possible roadway improvements in the future along with impact fees that would be collected for this project.

Mayor Olk suggested that as part of the conditions recommended by the Planning and Zoning Commission, language be added to include the masonry monument sign also include a masonry sign base.

The public hearing was opened at 7:08 pm, there being no one requesting to speak, the public hearing was closed.

MOTION: A motion was made by Mayor Pro Tem Peele, seconded by Councilmember Keer to adopt Ordinance 2022-06-00955 approving a specific use permit on behalf of the Lucas Retail Shopping Center to allow a drive-through restaurant on a tract of land, zoned Commercial Business, being 1.619 acres, part of ABS A0821 William Snider Survey, Tract 16, 8.2121 acres, Collin County Texas, located at the southeast corner of South Angel Parkway and McGarity Lane with the below conditions. The motion passed unanimously by a 7 to 0 vote.

- (1) The Property shall be developed in accordance with the Zoning Concept Plan attached as part of the ordinance as Exhibit "B".
- (2) All exterior lighting will be on a timer that turns all lights, except security lighting off, thirty (30) minutes after close of business.
- (3) Allowed hours of operation shall be 6:00 a.m. to 1 :00 a.m.
- (4) No glare directly or indirectly shall be created at the property line from luminaires.
- (5) Signage shall include a monument sign consistent with other masonry monument signs along Angel Parkway, shaped like an L with a decorative top, and a masonry base.

5. Public hearing to consider adopting Ordinance 2022-06-00956 approving a specific use permit request by Adam and Eve Fowles, property owners of 1745 Stinson Road, in the Lozano Addition, Part of Lot 2 to allow a kitchen and food preparation area in an accessory building with habitable space.

The City Council discussed their concerns related to the size of accessory buildings allowed within residential and agricultural zoning districts, as well as concerns regarding larger lots that could be subdivided in the future. The Council discussed zoning regulations and setback requirements should a lot be subdivided.

The City Council recommended the Planning and Zoning Commission at a future meeting review the allowable size of accessory buildings and the number of allowable homes and/or accessory buildings per acre.

The public hearing was opened at 7:22 pm.

Adam Fowles, property owner of 1745 Stinson, explained that the accessory building would be used as a home for his parents.

The public hearing was closed at 7:25 pm.

MOTION: A motion was made by Mayor Olk seconded by Councilmember Lawrence to adopt Ordinance 2022-06-00956 approving a specific use permit for Adam and Eve Fowles, for the property located at 1745 Stinson Road, in the Lozano Addition, part of Lot 2 allowing a kitchen and food preparation area in an accessory building with habitable space. The motion passed by a 4 to 3 vote with Councilmember Fisher, Councilmember Baney and Mayor Pro Tem Peele voting in opposition.

Regular Agenda

6. Consider the Land Use Map and Zoning Map of the City of Lucas Comprehensive Plan and recommend proposed amendments if needed.

The City Council discussed updates to the Zoning and Land Use Maps and properties that had not yet been annexed into the City. Councilmember Fisher noted one correction to the Land Use Map on the Legend, to update R-1 zoning to one acre, currently it states two acres.

There was no formal action taken on this item.

7. Consider nominations of a primary and alternate member to the North Central Texas Council of Governments Regional Transportation Council.

Mayor Olk notified the Council that these positions had already been filled by the Regional Transportation Council and therefore, no vote was required. There was no action taken on this item.

8. Consider Resolution R 2022-06-00528 opposing alternatives proposed by the Texas Department of Transportation (TxDOT) regarding the proposed Country Club Road (FM 1378) expansion.

Mayor Pro Tem Peele prepared a Resolution opposing the alternatives proposed by TxDOT regarding the Country Club Road, FM 1378 expansion and read the Resolution aloud.

The following individuals came forward to express their opposition to the expansion of Country Club Road, FM 1378.

Kathy Hufstetler, 18 Glenbrook
Steve Hufstetler, 18 Glenbrook

Councilmember Johnson recommended Section 6 of the Resolution be removed as it was a duplicate to Section 4.

MOTION: A motion was made by Councilmember Fisher seconded by Councilmember Lawrence to approve Resolution R 2022-06-00528 opposing alternatives proposed by the Texas Department of Transportation regarding the proposed Country Club Road (FM 1378) expansion. The motion to oppose the Resolution passed unanimously by a 7 to 0 vote.

11. Adjournment.

MOTION: A motion was made by Councilmember Johnson, seconded by Councilmember Lawrence to adjourn the meeting at 7:57 pm. The motion passed unanimously by a 7 to 0 vote.

APPROVED:

ATTEST:

Mayor Jim Olk

City Secretary Stacy Henderson



City of Lucas

City Council Agenda Request

June 16, 2022

Item No. 04

Requester: Public Works Director Scott Holden

Agenda Item Request

Consider amending FY 21/22 budget by appropriating \$1,134,546 from Unrestricted Water Fund Reserves to line item 21-8210-490-129 for construction of a 12-inch water line along West Lucas Road, Southview Drive, and East Lucas Road (FM 1378/FM 3286, the Bait Shop Intersection).

Background Information

The Texas Department of Transportation (TxDOT) has indicated that improvements to the FM 1378/FM 3286 intersection requires the relocation of the City of Lucas water line. The Bait Shop Intersection project is tentatively scheduled to be let in May of 2023. TxDOT has acquired all right of way, completed 95% construction plans, and existing utilities are currently being relocated.

Huitt-Zollars, Inc. was retained in January 2021 to evaluate proposed alignments for the water line relocation and design of the new water line. The preferred alignment utilizes Prado Verde Drive. The Prado Verde Drive alignment provides for 1) opportunity to replace an aging 40-plus-year-old waterline, 2) increase water volumes to Prado Verde Drive residences, and 3) little to no impact to the existing waterline during the construction of the new waterline.

Huitt-Zollars, Inc. has completed the plans, specifications, and engineer's opinion of probable construction costs. With the final easement being secured for the construction of the 12-inch water line relocation to accommodate TxDOT's Bait Shop Intersection Improvements, the 12-inch water line is now ready to bid. The engineer's estimate is \$1,031,406. With a 10% contingency at \$103,140, the total cost of construction is estimated to be \$1,134,546.

Attachments/Supporting Documentation

1. Engineer's Opinion of Probable Construction Costs prepared by Huitt-Zollars, Inc.
2. Certificates of Obligation Series 2019 Remaining Balance in Water Fund
3. Water Fund Reserves

Budget/Financial Impact

The Bait Shop Waterline Relocation project is not funded in the FY 21/22 Budget. Funding in the amount of \$1,134,546 is being proposed from Unrestricted Water Fund Reserves.



City of Lucas
City Council Agenda Request
June 16, 2022

Item No. 04

Recommendations

City staff recommends appropriating funds in the FY 21/22 budget for the water line improvements associated with the Bait Shop Intersection project.

Motion

I make a motion to approve/deny amending FY 21/22 budget by appropriating \$1,134,546 from Unrestricted Water Fund Reserves to line item 21-8210-490-129 for construction of a 12-inch water line along West Lucas Road, Southview Drive, and East Lucas Road as part of the Bait Shop Intersection project.

CITY OF LUCAS

ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST - BAIT SHOP WATERLINE RELOCATION

Prepared by Huitt-Zollars, Inc.

May 26, 2022

100% OPCC				
DESCRIPTION	UNITS	QUANTITY	UNIT PRICE	COST ESTIMATE
Mobilization	LS	1	\$ 56,000.00	\$ 56,000.00
Clearing of Easement Area (Site Preparation)	LS	1	\$ 10,000.00	\$ 10,000.00
Remove and Dispose of Chain Link Fence on Bassler Parcel	LF	180	\$ 50.00	\$ 9,000.00
2" PVC Water, Fittings, Blocking, Embedment & Trench Safety, and Wet Bore of Driveways	LF	385	\$ 60.00	\$ 23,100.00
6" PVC Water, Fittings, Blocking, Embedment & Trench Safety	LF	111	\$ 100.00	\$ 11,100.00
12" PVC Water, Fittings, Blocking, Embedment & Trench Safety	LF	3347	\$ 170.00	\$ 568,990.00
1" Water Service & Water Meter (Furnished By the City), Fittings, Blocking, Embedment & Trench Safety	EA	14	\$ 1,000.00	\$ 14,000.00
2" Water Service & Water Meter (Furnished By the City), Fittings, Blocking, Embedment & Trench Safety	EA	1	\$ 2,500.00	\$ 2,500.00
Bore 12" PVC Water w/ 21" Steel Encasement Pipe	LF	156	\$ 500.00	\$ 78,000.00
Wet Bore 12" PVC Water	LF	250	\$ 200.00	\$ 50,000.00
2" Gate Valve	EA	2	\$ 1,000.00	\$ 2,000.00
6" Gate Valve	EA	8	\$ 2,100.00	\$ 16,800.00
12" Gate Valve	EA	11	\$ 4,200.00	\$ 46,200.00
Fire Hydrant	EA	8	\$ 5,500.00	\$ 44,000.00
Remove & Deliver Existing Fire Hydrant	EA	5	\$ 850.00	\$ 4,250.00
Remove Existing 12" Water	LF	530	\$ 50.00	\$ 26,500.00
Connect to Existing Water	EA	3	\$ 2,000.00	\$ 6,000.00
Cut & Plug Existing Water	EA	12	\$ 1,000.00	\$ 12,000.00
Testing	LS	1	\$ 5,000.00	\$ 5,000.00
4" Top Soil	SY	2361	\$ 3.00	\$ 7,081.67
Block Sodding (Match Existing)	SY	2361	\$ 8.00	\$ 18,884.44
Erosion Control	LS	1	\$ 20,000.00	\$ 20,000.00
			TOTAL	\$ 1,031,406.11

City of Lucas
Certificates of Obligation
Series 2019
Payments applied against outstanding Bond Funding
Water Fund Account 51-1013

Beginning Balance	1,450,000.00
Interest Earned	<u>23,025.47</u>
Subtotal	<u>1,473,025.47</u>

Payments Applied:

Remaining Balance	<u><u>1,473,025.47</u></u>
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GL Balance 6-16-22	<u><u>1,473,025.47</u></u>
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Minus O/S Wire	<u><u>1,473,025.47</u></u>
Remaining Balance 2019 CO	<u><u>1,473,025.47</u></u>
Balance	<u><u>1,473,025.47</u></u>

City of Lucas
Water Fund Reserves by Fiscal Year

	Actual 2013-2014	Actual 2014-2015	Actual 2015-2016	Actual 2016-2017	Actual 2017-2018	Actual 2018-2019	Actual 2019-2020	Actual 2020-2021	Projected 2021-2022
Unrestricted Cash Balance per Audit Report	\$ 3,382,193	\$ 4,295,531	\$ 5,579,746	\$ 5,548,487	\$ 5,996,412	\$ 6,215,622	\$ 6,945,017	\$ 7,276,317	\$ 7,276,317
Adjusted For:									
Projected Excess Fund Balance FY 21-22									\$ 278,536
Additional Restrictions:									
Capital Project funding approved at (3-2-17) City Council Meeting BHC Water Master Plan 12-16-21				\$ (120,979)					\$ (63,483)
Customer Deposits	\$ (209,565)	\$ (223,300)	\$ (239,250)	\$ (245,600)	\$ (247,600)	\$ (256,220)			\$ (63,800)
Reserve Balance Prior to GASB 54 Requirement	\$ 3,172,628	\$ 4,072,231	\$ 5,340,496	\$ 5,181,908	\$ 5,748,812	\$ 5,959,402	\$ 6,945,017	\$ 7,276,317	\$ 7,427,570
Reserve Balance in Operating Months	13	15	19	16	18	18	20	21	19.5
50% Current Year General Fund Expenditures (6 months)	\$ (1,397,368)	\$ (1,605,672)	\$ (1,656,470)	\$ (1,897,744)	\$ (1,949,722)	\$ (1,983,894)	\$ (2,081,761)	\$ (2,127,754)	\$ (2,322,263)
Reserve Balance After GASB 54 Requirement	\$ 1,775,260	\$ 2,466,559	\$ 3,684,026	\$ 3,284,164	\$ 3,799,090	\$ 3,975,508	\$ 4,863,256	\$ 5,148,563	\$ 5,105,307
Reserve Balance in Operating Months	7	9	13	10	12	12	14	15	13.5
Restricted during Fiscal Year Audit:									
Capital Project Funding approved (3-2-17)(51-1007-50/3105)					\$ 120,979	\$ 120,979	\$ 120,979	\$ 120,979	\$ -
Reserve Funding Bait Shop Water Line(51-1007-75/51-3106-75)							\$ 31,118		
Impact Fees (Lakeview Downs) (51-1001-75)/(51-3106-10)							\$ 27,500	\$ 33,000	\$ 33,000
Impact Fees (Capital Projects) (51-1001)/(51-3106-15)								\$ 352,448	\$ -
Debt Service (51-1007-40)/(51-1008)/(51-3106)	\$ 360,000	\$ 365,000	\$ 375,000	\$ 425,000	\$ 435,000	\$ 477,800	\$ 515,000	\$ 495,000	\$ 410,000
Project Mgmt (51-1007-70)						\$ 69,945	\$ 17,486		
Customer Deposits (51-1012)/(51-3106-20)							\$ 258,400	\$ 278,625	\$ 278,625
Reserve Restricted per Audit Report	\$ 360,000	\$ 365,000	\$ 375,000	\$ 425,000	\$ 555,979	\$ 668,724	\$ 939,365	\$ 1,311,170	\$ 721,625



Item No. 05

City of Lucas
City Council Agenda Request
June 16, 2022

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Consider entering into a Development Agreement with James Irwin for roadway improvements to the first 1,284 feet of Stinson Road south of West Lucas Road and appropriating funds in an amount not to exceed \$762,250 (95% of \$802,368 - the cost of the roadway improvements) from account 11-1009 General Fund Roadway Impact Fees in the amount of \$44,000 and the remainder \$718,250 from General Fund Reserves to account 21-8210-491-325 Stinson Road Realignment and authorize the City Manager to execute the agreement.

Background Information

This project is located on the south side of West Lucas Road and northeast of Stinson Road, between 505 West Lucas Road and 685 West Lucas Road. The property is currently zoned Residential 2-acre (R-2) and has an approved preliminary plat.

As part of the project, Stinson Road will be realigned, and this section will be built as a concrete roadway. The owner will construct roadway facilities that consist of replacing and realigning the existing Stinson Road (approximately 1,284 feet). The Comprehensive Plan that was adopted in 2017 included this realignment. The City will be responsible for its proportional share of roadway improvements, in this case the City's responsibility is 95%.

The developer's total seven-day traffic count was 14,142 trips, creating a daily average of 2,020 trips. The number of lots proposed is 10, with an average trip count of 10 trips for each lot, per day creating 100 trips per day. $100/2,020 = 0.0495$, the City's proportional share is 95%. Staff does have a concern that all traffic on Stinson Road was included in the analysis, and some traffic may continue to use the existing section of road.

In the Development Agreement, Article 3, Section 2, City Cost Participation for Roadway Improvements states: The City agrees to participate in the costs of the Roadway Improvements as set forth herein. The City's participation in the cost of the construction of the Roadway Improvements shall be 95% of the actual Roadway Improvement Costs (the "City Participation Amount"). Within thirty (30) days after completion of the Roadway Improvements and acceptance thereof by the City, the City shall pay to the Owner an amount equal to the City Participation Amount. The Owner agrees to competitively bid the Roadway Improvements to at least three (3) contractors.

In March 2022, this item was brought before the City Council and there were concerns regarding timing and creating a neighborhood collector street with houses on either side of the roadway. The developer has attempted to mitigate traffic and speed concerns by changing the alignment of



City of Lucas

City Council Agenda Request

June 16, 2022

Stinson Road creating a sweeping T-intersection and placing a significant bend in the road to reduce traffic speeds in the area.

The Area Engineer for TxDOT was asked to review this potential connection. The Engineer indicated that creating an intersection location at Edgewood was better for future signalization (1,800 feet to Lucas Road/FM 1378), 2,000 plus feet to the Bait Shop. It also creates a benefit of sharing median openings. The developer adjusted the intersection to align with Edgewood based on TxDOT comments.

Staff also requested that the City's Contract Engineer Joe Grajewski evaluate the proposed realignment of Stinson and he provided the following items for consideration:

- Development of a 22.7-acre tract has provided the City of Lucas with an opportunity to re-align Stinson Road south of FM 1378 (West Lucas Road) with Edgewood Drive to the north. The City has requested an analysis on how this revised intersection location would impact traffic mobility and overall safety.
- The proposed intersection is situated approximately halfway between the two adjacent signalized intersections. The existing intersection of West Lucas Road and Country Club Road is approximately 1,800 feet to the west and the proposed intersection of FM 1378 and Southview Drive is approximately 2,300 feet to the east. According to the Area Engineer for TxDOT, this potentially allows for a signalized intersection at this location in the future.
- Design coordination would be required by the engineer for the proposed development to ensure the connection of Stinson Road from the south was aligned with Edgewood Road to the north. An exhibit previously submitted for this intersection indicated a slight off-set between Edgewood Road and Stinson Road which could be resolved with a mild reverse curve to align the two roadways.
- If the intersection is relocated to align with Edgewood Drive to the north, revisions to the existing Stinson Road intersection at FM 1378 are recommended. The safest alternative would be to eliminate the existing intersection by inserting a cul-de-sac bulb north of the driveway for the Lucas Fellowship church. The remaining pavement and culvert would be removed, and the roadside ditch would be re-graded through the former pavement connection. Alternatively, the City could consider re-configuring the intersection limiting traffic movements to "right-in, right-out". This would eliminate left turn movements at the old intersection removing the ability for northbound traffic on Stinson Road to turn westbound on to FM 1378 or westbound traffic on FM 1378 to turn southbound on Stinson Road. As TxDOT proceeds with plans to expand this segment of FM 1378, it is recommended that the proposed median opening for the old intersection be removed.



City of Lucas

City Council Agenda Request

June 16, 2022

Item No. 05

To provide further clarification on traffic counts, Staff retained the services of Global Civil Solutions to conduct traffic counts in this area, the results of which are attached.

Attachments/Supporting Documentation

1. Proposed Development Agreement
2. Traffic Counts Provided by the Developer
3. Traffic Counts Completed by the City
4. Opinion of Probable Cost, On-Site Improvements
5. General Fund Roadway Impact Fee Schedule
6. General Fund Reserve Schedule
7. Pavement Schedule and Layout

Budget/Financial Impact

The City's participation cost would include the following:

- \$718,250 funding from General Fund Reserves
- \$44,000 funding from account 11-1009 General Fund Roadway Impact Fees

The developer will receive reimbursement for the impact fees (\$44,000) as lots are developed.

Recommendation

The proposed development agreement complies with the City's approved Master Thoroughfare Plan.

Motion

I make a motion to approve/deny authorizing the City Manager to enter into a Development Agreement with James Irwin for roadway improvements to the first 1,284 feet of Stinson Road south of West Lucas Road and appropriating funds in an amount not to exceed \$762,250 (95% of \$802,368 - the cost of the roadway improvements) from account 11-1009 General Fund Roadway Impact Fees in the amount of \$44,000 and the remainder \$718,250 from General Fund Reserves to account 21-8210-491-325 Stinson Road Realignment.

STATE OF TEXAS §
 § **DEVELOPMENT AGREEMENT**
COUNTY OF COLLIN §

This Development Agreement (the “Agreement”) is made by and between James Irwin (the “Owner”) and the City of Lucas, Texas (the “City”).

RECITALS

WHEREAS, Owner owns that certain tract of real property consisting of 22.679 acres, more or less, located in the City of Lucas, Collin County, Texas, more particularly described and/or depicted on **Exhibit A** attached hereto and incorporated herein (the “Property”). Owner intends to develop a ten (10) lot residential subdivision on the Property; and

WHEREAS, Owner has agreed to (i) dedicate a portion of the Property to the City to allow Stinson Road to be extended north through the Property so that it intersects with W. Lucas Road, as generally depicted on **Exhibit B** attached hereto and incorporated herein (the “Dedication Area”) and (ii) construct and install within the Dedication Area a variable width public road (the “Roadway Improvements”); and

WHEREAS, Texas Local Government Code §212.071, as amended, authorizes municipalities to participate in the Owner’s costs of construction of public improvements related to the development of subdivisions within the municipality without compliance with Chapter 252 of the Texas Local Government Code, as amended;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, City and Owner agree as follows:

Article 1
Term

This Agreement shall commence on the last date all the parties have executed this Agreement (“Effective Date”) and shall terminate on the date (“Expiration Date”) that is the earlier date of (1) the expiration of one (1) year after City acceptance of the Roadway Improvements; or (2) the date the Owner has fully satisfied all of the terms and conditions herein; or (3) unless sooner terminated herein.

Article 2
Definitions

For the purposes of this Agreement, each of the following terms shall have the meanings set forth herein unless the context clearly requires otherwise:

2.01 “**Approved Plans**” means the plans and specifications for the Roadway Improvements and Intersection Improvements approved by the City Manager of the City of Lucas, or designee. The Approved Plans shall be in substantial conformance with the preliminary plans

submitted by the Owner and attached as **Exhibit C**, and the approval shall not be unreasonably withheld.

2.02 “**City Manager**” means the City Manager of the City of Lucas, or designee.

2.03 “**Commencement of Construction**” means (i) preparation and approval of the approved plan, (ii) issuance by all applicable governmental authorities of necessary permits for the construction of the Roadway Improvements, (iii) commencement of grading for the Roadway Improvements pursuant to Approved Plans, (iv) commencement of construction of the Roadway Improvements pursuant to Approved Plans, and (v) issuance by all applicable governmental authorities of necessary permits for construction of the Roadway Improvements pursuant to Approved Plans.

2.04 “**Completion of Construction**” means that (i) the Roadway Improvements have been substantially completed in accordance with the Approved Plans, (ii) a certificate of substantial completion has been issued by the general contractor(s) and engineer(s)/architect(s) for the Roadway Improvements, and a copy of such certificate has been delivered to the City, and (iii) the Roadway Improvements have been accepted in writing by the City, which the City agrees to do within ten (10) days after receipt of request therefore as long as the Roadway Improvements have been constructed substantially in accordance with the Approved Plans.

2.05 “**Effective Date**” shall mean the last date of execution of this Agreement.

2.06 “**Event of Bankruptcy or Insolvency**” shall mean insolvency, appointment of receiver for any part of Owner's property and such appointment is not terminated within ninety (90) days after such appointment is initially made, any general assignment for the benefit of creditors, or the commencement of any proceeding under any bankruptcy or insolvency laws by or against Owner and such proceeding is not dismissed within ninety (90) days after filing thereof.

2.07 “**Force Majeure**” shall mean any contingency or cause beyond the reasonable control of Owner, as applicable, including, without limitation, acts of God or the public enemy, war riot, civil commotion, insurrection, adverse weather, government or de facto governmental action or inaction (unless caused by negligence or omissions of Owner), fires, explosions or floods, strikes, slowdowns or work stoppages, shortage of materials and labor, or delays by the City.

Article 3

Roadway Improvements

3.01 **Construction of Roadway Improvements.** Owner agrees to design and install the Roadway Improvements in accordance with the applicable standards, ordinances and regulations adopted by the City (“City Standards”). The Owner shall submit plans for the design and construction of the Roadway Improvements (“Construction Plans”) to the City for review and approval by the City Manager. The Construction Plans shall include the estimated cost of design and installation of the Roadway Improvements. Subject to extension for delays caused by events of Force Majeure and to the City’s approval of the Approved Plans, Owner agrees to construct the Roadway Improvements. The parties acknowledge and agree that the City and Owner have no

obligation to condemn or pay any sum of money in connection with the dedication of right-of-way except as otherwise provided herein. The Roadway Improvements shall be constructed within the Dedication Area. The Owner agrees and covenants to cause commencement of the Roadway Improvements on or before ~~April~~July 1, 2022, and to cause completion of construction thereof within six (6) months thereafter.

3.02 **City Cost Participation for Roadway Improvements.** The City agrees to participate in the costs of the Roadway Improvements as set forth herein. The City's participation in the cost of the construction of the Roadway Improvements shall be 95% of the actual Roadway Improvement Costs (the "City Participation Amount"), provided, however, that the City Participation Amount will not exceed ~~\$762,250.00~~596,577.62. Within thirty (30) days after Completion of the Construction of the Roadway Improvements and acceptance thereof by the City, the City shall pay to the Owner an amount equal to the City Participation Amount. The Owner has already completed the process of competitively bidding the Roadway Improvements and received bids from three (3) contractors, a breakdown of which is attached hereto as **Exhibit D** (the "Bids"). In no case shall the City Participation Amount to the Roadway Improvements exceed thirty percent (30%) of the actual costs of design, engineering, site preparation and construction of any improvements, including buildings or the Roadway Improvements themselves, on the Property as required by the development regulations, whether constructed by Owner or another party ("the Development Infrastructure"), unless the contracts for construction of the Development Infrastructure have been procured and entered into in compliance with the applicable competitive sealed bid procedures set forth in Chapter 252 of the Texas Local Government Code, as amended.

Article 4 Notice

Any notice to be given or to be served upon a Party hereto in connection with this Agreement must be in writing and may be given by hand delivery or by certified or registered mail and shall be deemed to have been given and received two (2) business days after a certified or registered letter containing such notice, properly addressed with postage prepaid, is deposited in the United States mail, and if given otherwise than by certified or registered mail, it shall be deemed to have been given and delivered to and received by the Party (or such Party's agent or representative) to whom it is addressed when actually received by the intended recipient. Such notice shall be given to the Parties hereto at the address set forth below. Any Party hereto may, at any time by giving two (2) days written notice to the other parties, designate any other address in substitution of the foregoing address to which such notice shall be given.

If notice to Owner:

James Irwin

With a copy to:

Chris Zillmer
Abernathy, Roeder, Boyd & Hullett, P.C.
1700 Redbud Blvd., Suite 300
McKinney, Texas 75069

If notice to City:

Joni Clarke, City Manager
City of Lucas, Texas
665 Country Club Road
Lucas, Texas 75002

With a copy to:

Joseph J. Gorfida, Jr., City Attorney
Nichols, Jackson, Dillard,
Hager & Smith, LLP
500 North Akard Street
1800 Ross Tower
Dallas, Texas 75201

Article 5 Termination

This Agreement shall terminate upon the earliest to occur of the following:

- (a) the written agreement of the parties;
- (b) the Expiration Date;
- (c) the election by either party in the event the other party breaches any of the terms or conditions of this Agreement and such breach is not cured within thirty (30) days after written notice thereof to the breaching party;
- (d) the election by the City if the Owner suffers an Event of Bankruptcy or Insolvency;
- (e) the election by the City, if any Impositions owed to the City or the State of Texas by the Owner shall become delinquent (provided, however the Owner retains the right to timely and properly protest and contest any such Impositions); and
- (f) the election by the City, if any subsequent Federal or State legislation or any decision of a court of competent jurisdiction declares or renders this Agreement invalid, illegal or unenforceable.

Article 6 Miscellaneous

6.01 **Assignment of Agreement.** This Agreement may not be assigned by Owner without the prior written consent of City which consent shall not be unreasonably withheld, conditioned or delayed. This Agreement may not be assigned, in whole or in part, by City.

6.02 **Venue.** This Agreement shall be construed under and in accordance with the laws of the State of Texas and is specifically performable in Collin County, Texas. Exclusive venue shall be in state district court in Collin County, Texas.

6.03 **Savings/Severability.** In case any one or more provisions contained in this Agreement shall be for any reason held invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, and it is the intention of the Parties to this Agreement that in lieu of each provision that is found to be illegal, invalid, or unenforceable, a provision be added to this Agreement which is legal, valid, and enforceable and is as similar in terms as possible to the provision found to be illegal, invalid, or unenforceable.

6.04 **Authority.** Each of the Parties represents and warrants to the other that they have the full power and authority to enter into and fulfill the obligations of this Agreement.

6.05 **Entire Agreement.** This Agreement contains the entire agreement of the Parties with respect to the matters contained herein and may not be modified or terminated except upon the provisions hereof or by the mutual written agreement of the Parties to this Agreement.

6.06 **Consideration.** This Agreement is executed by the Parties hereto without coercion or duress and for substantial consideration, the sufficiency of which is forever confessed.

6.07 **Counterparts.** This Agreement may be executed in a number of identical counterparts, each of which will be deemed an original for all purposes.

6.08 **Representations.** Each signatory represents this Agreement has been read by the Party for which this Agreement is executed, and that such Party has had an opportunity to confer with its legal counsel.

6.09 **Miscellaneous Drafting Provisions.** This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any Party shall not apply. Headings in this Agreement are for the convenience of the Parties and are not intended to be used in construing this document.

6.10 **Binding Effects.** This Agreement will be binding upon and inure to the benefit of the Parties hereto and their respective heirs, executors, administrators, legal representatives, successors, and authorized assigns. This Agreement only inures to the benefit of, and may only be enforced by, the Parties and their respective heirs, executors, administrators, legal representatives, assignees, lender, successors, and City. No other person or entity is a third-party beneficiary of this Agreement.

6.11 **No Joint Venture.** It is acknowledged and agreed by the Parties that the terms hereof are not intended to and shall not be deemed to create a partnership or joint venture among the Parties, or to cause City to be deemed to be a constituent partner of the Owner.

6.12 **Recordation of Agreement.** A copy of this Agreement shall be recorded in the Deed Records of Collin County, Texas. THIS AGREEMENT AND ALL OF ITS TERMS, CONDITIONS, AND PROVISIONS IS AND SHALL CONSTITUTE A RESTRICTION AND CONDITION UPON THE PROJECT AND ALL PORTIONS THEREOF AND A COVENANT RUNNING WITH THE PROJECT AND ALL PORTIONS THEREOF, AND IS AND SHALL BE BINDING UPON OWNER AND ALL OF ITS HEIRS, SUCCESSORS, AND ASSIGNS AND THE FUTURE OWNERS OF THE PROPERTY AND ANY PORTION THEREOF; PROVIDED, HOWEVER, THIS AGREEMENT SHALL NOT CONSTITUTE AN OBLIGATION OF OR BE DEEMED A RESTRICTION OR ENCUMBRANCE WITH RESPECT TO ANY FINAL PLATTED RESIDENTIAL LOT UPON WHICH A COMPLETED HOME HAS BEEN CONSTRUCTED.

6.13 **Multiple Counterparts and Duplicate Originals.** This Agreement may be executed in any number of multiple counterparts and/or duplicate originals, each of which shall be deemed an original and all of which considered together shall be deemed one and the same Agreement.

6.14 **THIS SECTION SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.**

PARTIES' ACKNOWLEDGEMENT OF LUCAS' COMPLIANCE WITH FEDERAL AND STATE CONSTITUTIONS, STATUTES AND CASE LAW, AND FEDERAL, STATE AND LOCAL ORDINANCES, RULES AND REGULATIONS; AND OWNER'S WAIVER AND RELEASE OF CLAIMS FOR OBLIGATIONS IMPOSED BY THIS AGREEMENT AND OTHER DEVELOPMENT OBLIGATIONS IMPOSED BY THE CITY UPON THE DEVELOPMENT.

OWNER ACKNOWLEDGES AND AGREES THAT:

- I. THE CONVEYANCES, DEDICATIONS, EASEMENTS AND/OR PAYMENT OF MONEY REQUIRED BY THIS AGREEMENT AND THE OTHER DEVELOPMENT OBLIGATIONS IMPOSED BY THE CITY UPON THE PROJECT TO BE PERFORMED BY OWNER, IN WHOLE OR IN PART, DO NOT CONSTITUTE A:**
 - (A) TAKING UNDER THE TEXAS OR UNITED STATES CONSTITUTION;**
 - (B) VIOLATION OF THE TEXAS WATER CODE, AS IT EXISTS OR MAY BE AMENDED;**
 - (C) NUISANCE; AND/OR**
 - (D) CLAIM FOR DAMAGES AND/OR REIMBURSEMENT AGAINST THE CITY FOR A VIOLATION OF ANY FEDERAL AND/OR STATE CONSTITUTION, STATUTE AND/OR CASE LAW AND/OR FEDERAL, STATE AND/OR LOCAL ORDINANCE, RULE AND/OR REGULATION.**
- II. THE AMOUNT OF OWNER'S FINANCIAL OR INFRASTRUCTURE CONTRIBUTION (AFTER RECEIVING ALL CONTRACTUAL OFFSETS, CREDITS AND REIMBURSEMENTS, IF ANY) AGREED TO IN THIS AGREEMENT IS ROUGHLY PROPORTIONAL TO THE DEMAND THAT THE PROJECT PLACES ON THE CITY'S INFRASTRUCTURE.**
- III. OWNER HEREBY AGREES THAT ANY INFRASTRUCTURE THAT IT CONSTRUCTS OR PROPERTY THAT IT CONVEYS TO THE CITY PURSUANT TO THIS AGREEMENT AND THE OTHER DEVELOPMENT**

OBLIGATIONS IMPOSED BY THE CITY UPON THE PROJECT IS ROUGHLY PROPORTIONAL TO THE BENEFIT RECEIVED BY OWNER FOR SUCH INFRASTRUCTURE AND LAND, AND OWNER HEREBY WAIVES ANY CLAIMS THEREFORE THAT IT MAY HAVE. OWNER FURTHER ACKNOWLEDGES AND AGREES THAT ALL PREREQUISITES TO SUCH A DETERMINATION OF ROUGH PROPORTIONALITY HAVE BEEN MET, AND THAT ANY VALUE RECEIVED BY THE CITY RELATIVE TO SAID INFRASTRUCTURE AND CONVEYANCE ARE RELATED BOTH IN NATURE AND EXTEND TO THE IMPACT OF THE DEVELOPMENT OF THE PROJECT ON THE CITY'S INFRASTRUCTURE. OWNER AND THE CITY FURTHER AGREE TO WAIVE AND RELEASE ALL CLAIMS ONE MAY HAVE AGAINST THE OTHER RELATED TO ANY AND ALL ROUGH PROPORTIONALITY AND INDIVIDUAL DETERMINATION REQUIREMENTS MANDATED BY THE UNITED STATES SUPREME COURT IN *DOLAN V. CITY OF TIGARD*, 512 U.S. 374 (1994), AND ITS PROGENY, AS WELL AS ANY OTHER REQUIREMENTS OF A NEXUS BETWEEN DEVELOPMENT CONDITIONS AND THE PROJECTED IMPACT OF THE PUBLIC INFRASTRUCTURE.

- (IV) OWNER RELEASES THE CITY FROM ANY AND ALL CLAIMS OR CAUSES OF ACTION BASED ON EXCESSIVE OR ILLEGAL EXACTIONS.
- (V) OWNER WAIVES ANY CLAIM FOR DAMAGES AND/OR REIMBURSEMENT AGAINST THE CITY FOR A VIOLATION OF ANY FEDERAL AND/OR STATE CONSTITUTION, STATUTE AND/OR CASE LAW AND/OR FEDERAL, STATE AND/OR LOCAL ORDINANCE, RULE AND/OR REGULATION.
- (VI) THIS PARAGRAPH SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

(Signature Page Follows)

EXECUTED in duplicate originals this _____ day of _____, 2022.

CITY:

CITY OF LUCAS, TEXAS

By: _____
Name: _____
Title: _____

Approved as to Form

By: _____
Joseph J. Gorfida, Jr.
(02-24-2022: FINAL TM 127991)

STATE OF TEXAS §
§
COUNTY OF COLLIN §

This instrument was acknowledged before me on the _____ day of _____, 2022, by _____, _____ of the City of Lucas, Texas, on its behalf.

Notary Public – State of Texas

EXECUTED in duplicate originals this _____ day of _____, 2022.

OWNER:

By: _____
James Irwin

STATE OF TEXAS §

§

COUNTY OF COLLIN §

This instrument was acknowledged before me on the _____ day of _____, 2022, by James Irwin.

Notary Public – State of Texas

Exhibit "A"
The Property

Being a tract of land, situated in the James Lovelady Survey, Abstract No. 538, in the City of Lucas, Collin County, Texas, and being all of that called 22.661 acre tract of land, described by deed to Gus Gibson, Jr. and Walter G. Bedell, as recorded in Volume 1889, Page 283, of the Deed Records, Collin County, Texas (D.R.C.C.T.), said tract being more particularly described, as follows:

BEGINNING at a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5686" found for the northwesterly corner of said 22.661 acre tract, same being the northeasterly corner of a tract of land, described by deed to Chris Koerner and Jessica Koerner, as recorded under Document No. 20160725000950450, of the Official Public Records, Collin County, Texas (O.P.R.C.C.T.), same being in the southerly monumented line of W. Lucas Road (F.M. 1378);

THENCE South 89°43'16" East, along said southerly monumented line of W. Lucas Road, a distance of 739.61' to a 5/8" iron rod found for the northeasterly corner of said 22.661 acre tract, same being the northwesterly corner of a right-of-way dedication, dedicated by plat recorded in Vol. 2009, Pg. 224, O.P.R.C.C.T. (**LUCAS CHURCH ADDITION**);

THENCE South 00°19'15" East, along the common line between said 22.661 acre tract and said **LUCAS CHURCH ADDITION**, passing a 1/2" iron rod found for the northwesterly corner of Lot 1, Block A, of said **LUCAS CHURCH ADDITION**, at a distance of 15.00', and continuing in all, a total distance of 1283.67' to a point for corner, being the southeasterly corner of said 22.661 acre tract, same being in the northerly line of Lot 3, of **HI FLYIN' ACRES**, an addition to the City of Parker, as recorded in Volume J, Page 929, of the Map Records, Collin County, Texas (M.R.C.C.T.), from which a 5/8" iron rod found bears, South 00°34'004" East, a distance of 3.60';

THENCE North 89°38'41" West, along the southerly line of said 22.661 acre tract, same being along the northerly line of said Lot 3, passing a 1/2" iron rod found, at a distance of 212.71', for the northwesterly corner of said Lot 3, same being the northeasterly corner of Lot 2, of said **HI FLYIN' ACRES**, and continuing along the northerly line of said Lot 2, a total distance of 516.44' to a 1/2" iron rod with a yellow plastic cap stamped "RPLS 5686" set for the northwesterly corner of said Lot 2;

THENCE North 89°49'30" West, along the southerly line of said 22.661 acre tract, a distance of 283.67' to a 1" iron rod found for the southwesterly corner of said 22.661 acre tract, same being on the southerly side of Stinson Road, said corner also being the southeasterly corner of a tract of land, described by deed to Adagio Investments, Inc., as recorded under Document No. 20180111000049020, O.P.R.C.C.T.;

THENCE North 02°22'44" East, along the westerly line of said 22.661 acre, same being the easterly line of said Adagio Investments, LLC tract, passing a 1/2" iron rod found, at a distance of 44.70' and continuing a distance of 390.43' (total easterly line of said Adagio tract: 435.13') a 1/2" iron rod found for the northeasterly corner of said Adagio Investments, LLC tract, same being the southeasterly corner of the aforementioned Koerner tract, and continuing, in all, a total distance of 1284.29' to the **POINT OF BEGINNING** and containing 987,894 square feet or 22.679 acres of land, more or less.

Exhibit "B"

The Dedication Area

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OWNER
JAMES IRWIN

DEVELOPER
B-DILL PROPERTIES

ANDREA BEDELL
15140 HIGHWAY 14,
JUSTIN, TX 78247
T: 903-517-8452
EMAIL: BEDELLPROPERTIES@GMAIL.COM

CIVIL ENGINEER

DYNAMIC ENGINEERING CONSULTANTS, PC
JOSHUA T. DODD, P.E.
714 S. DREXELWILL, STE 100
ALLEN, TX 75002
T: 972-534-2100
EMAIL: JEDODD@DYNAMICCEC.COM

SURVEYOR

NORTH TEXAS SURVEYING, L.L.C.
REGISTERED PROFESSIONAL LAND SURVEYORS
1010 W. SI. UNIVERSITY
MCKINNEY, TX 75069
T: 469-424-2074
F: 469-424-1937
EMAIL: NORTHTEXASURVEYING.COM
FIRM REGISTRATION NO. 10074200

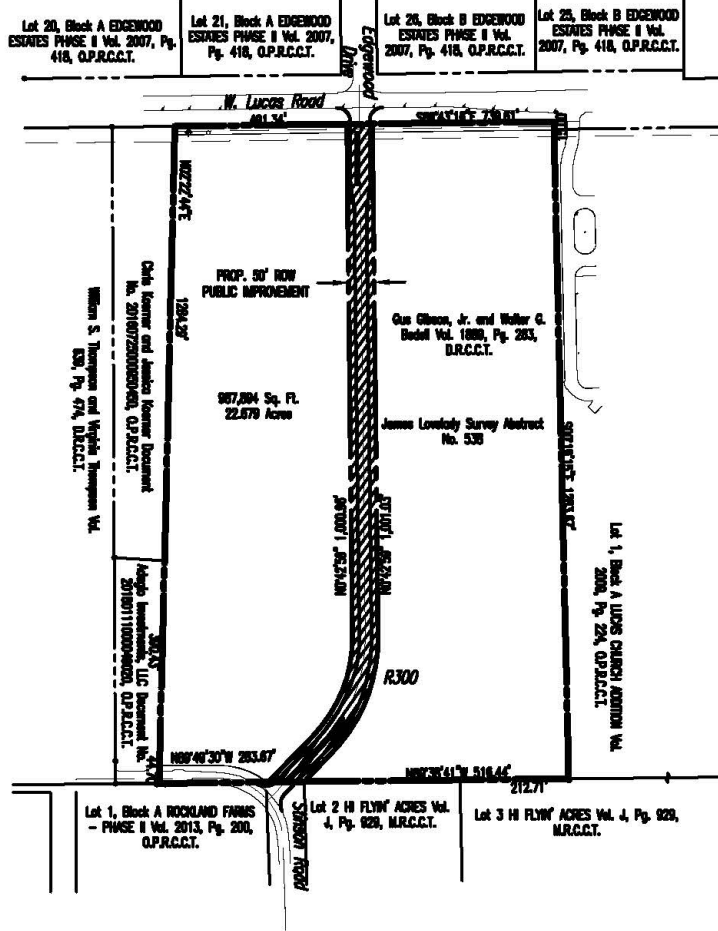
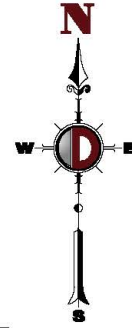


EXHIBIT B
RIGHT OF WAY DESCRIPTION
SINGLE-FAMILY SUBDIVISION - LUCAS
CITY OF LUCAS, TEXAS
22.679 ACRE LOT

DYNAMIC ENGINEERING
LAND DEVELOPMENT CONSULTING • PERMITTING • GEOTECHNICAL • ENVIRONMENTAL • SURVEY • PLANNING & ZONING

100 WEST DYNAMIC ENGINEERING CONSULTANTS, PC
Lubbock, Texas 79411-4466 | Dallas, Texas 75244-4466 | Houston, Texas 77061-7966 | Phoenix, Arizona 85004-4466
Austin, Texas 78744-4466 | Denver, Colorado 80202-4466 | Fort Worth, Texas 76102-4466 | San Antonio, Texas 78202-4466
San Diego, California 92108-4466 | San Jose, California 95128-4466 | Seattle, Washington 98108-4466

Plotted: 06/07/22 - 9:09 AM, By: cgifford, - Product Ver: 24.1s (LMS Tech)
File: \\decpc.local\decfolders\Data\DECPC PROJECTS\3943 James Irwin\99-001 Single Family Subd- Lucas TX\Dwg\Exhibits'

Exhibit "C" The Preliminary Plans

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OWNER
JAMES IRWIN

DEVELOPER

BEDELL PROPERTIES
ANDREA BEDELL
15400 HIGHWAY 14,
JUSTIN, TX 78247
T: 803-517-8452
EMAIL: BEDELLPROPERTIES@GMAIL.COM

CIVIL ENGINEER

DYNAMIC ENGINEERING CONSULTANTS, PC
JUSTINA T. EDGE, P.E.
714 S. DRISCOLLVILLE, STE 100
ALLEN, TX 75002
T: 972-534-2100
EMAIL: JEDGE@DYNAMICCC.COM

SURVEYOR

NORTH TEXAS SURVEYING, L.L.C.
REGISTERED PROFESSIONAL LAND SURVEYORS
1010 WISI UNIVERSITY
MCKINNEY, TX 75069
T: 469-424-2074
F: 469-424-1897
EMAIL: NORTHTEXASURVEYING.COM
FIRM REGISTRATION NO. 10074200

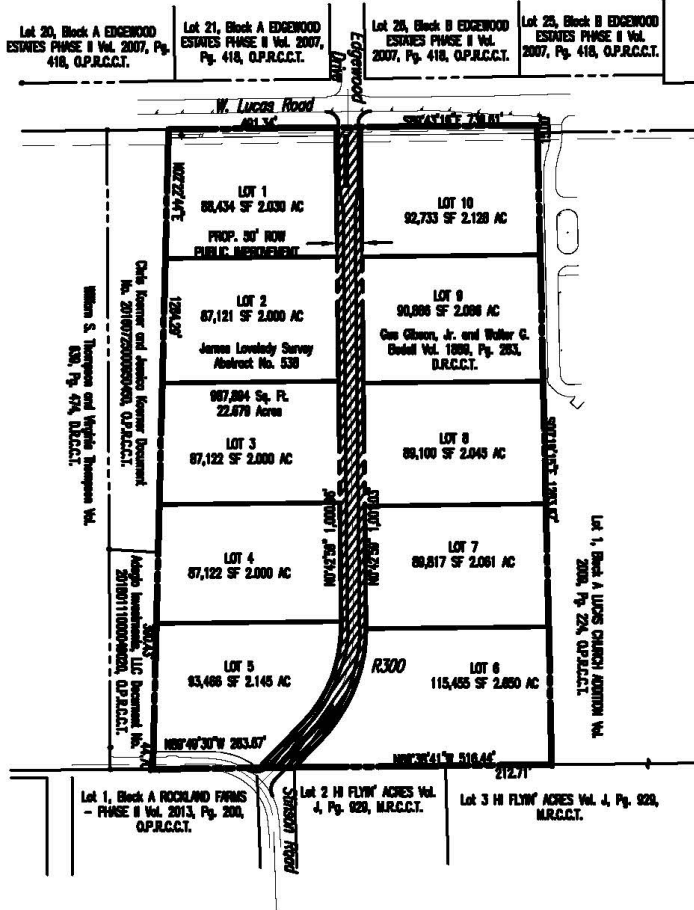
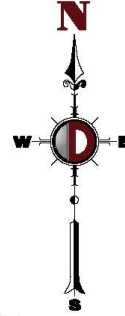
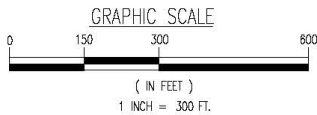


EXHIBIT C
RIGHT OF WAY DESCRIPTION
SINGLE-FAMILY SUBDIVISION - LUCAS
CITY OF LUCAS, TEXAS
22.679 ACRE LOT



DYNAMIC ENGINEERING
(db) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, PC

LAND DEVELOPMENT CONSULTING • PERMITTING • GEOTECHNICAL • ENVIRONMENTAL • SURVEY • PLANNING & ZONING

Austin, Texas 512.333.4444 | Dallas, Texas 972.333.4444 | Houston, Texas 281.333.4444 | Phoenix, Pennsylvania 481.333.4444

Tampa, Florida 813.333.4444 | Chicago, Illinois 630.333.4444 | New York, New York 212.333.4444

Plotted: 06/07/22 - 9:10 AM, By: cgifford, - Product Ver: 24.1s (LMS Tech)
File: \\decpc.local\decfolders\Data\DECPC PROJECTS\3943 James Irwin\99-001 Single Family Subd- Lucas TX\Dwg\Exhibits'

Exhibit "D" The Bids

[SEE ATTACHED]



PRELIMINARY OPINION OF
PROBABLE CONSTRUCTION COST
FOR

Lee Creek Estates
Lucas, Collin County, Texas
2/15/2022
DECPC #: 3943-99-001

Prepared by:
DYNAMIC ENGINEERING CONSULTANTS, P.C.
714 S. Greenville Avenue, Suite 100 Allen, TX 75002

Prepared By: RA
Checked By: JTE

ITEM DESCRIPTION	QUANTITY	UNIT	FreeCon		Watts Excavating		Morrow Construction	
			UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
SITE CLEARING								
Clearing & Grubbing (Greater Than 1/2 an Acre)	1.5	AC	\$14,167.00	\$21,518.81	\$5,000.00	\$7,594.70	\$5,500.00	\$8,354.17
			Subtotal	\$21,518.81	Subtotal	\$7,594.70	Subtotal	\$8,354.17
SITE DEMOLITION								
Sawcutting	147	LF	\$10.00	\$1,465.00	\$15.00	\$2,197.50	\$13.50	\$1,977.75
			Subtotal	\$1,465.00	Subtotal	\$2,197.50	Subtotal	\$1,977.75
FINAL GRADING								
Grading at Pavement	34,281	SF	\$2.31	\$79,189.11	\$1.50	\$51,421.50	\$1.65	\$56,563.65
			Subtotal	\$79,189.11	Subtotal	\$51,421.50	Subtotal	\$56,563.65
EARTHWORK								
Strip Topsoil	408	CY	\$4.00	\$1,633.70	\$5.00	\$2,042.13	\$5.50	\$2,246.34
Respread Topsoil (with stockpiled topsoil)	214	CY	\$7.50	\$1,606.02	\$5.00	\$1,070.68	\$5.50	\$1,177.75
Import & Place Fill	5,872	CY	\$23.15	\$135,930.60	\$12.00	\$70,460.78	\$15.00	\$88,075.98
			Subtotal	\$139,170.32	Subtotal	\$73,573.59	Subtotal	\$91,500.07
SITE WORK								
6" Reinforced Concrete Pavement (#3 Bars @ 18" O.C.E.W)	635	CY	\$417.50	\$265,042.92	\$475.00	\$301,545.83	\$446.46	\$283,427.69
8" Lime Treated Subgrade	846	CY	\$35.15	\$29,752.52	\$70.92	\$60,029.84	\$70.92	\$60,029.84
			Subtotal	\$294,795.44	Subtotal	\$361,575.67	Subtotal	\$343,457.53
SOIL EROSION & SED. CONTROL								
Silt Fence	1377	LF	\$1.40	\$1,927.80	\$5.25	\$7,229.25	\$4.25	\$5,852.25
Construction Entrance	1	EA	\$2,500.00	\$2,500.00	\$2,000.00	\$2,000.00	\$3,500.00	\$3,500.00
Concrete Wash-out Area	1	EA	\$5,500.00	\$5,500.00	\$1,000.00	\$1,000.00	\$2,000.00	\$2,000.00
			Subtotal	\$9,927.80	Subtotal	\$10,229.25	Subtotal	\$11,352.25

SUBTOTAL: \$546,066.48	SUBTOTAL: \$506,592.21	SUBTOTAL: \$513,205.42
15% CONTINGENCY: \$81,909.97	15% CONTINGENCY: \$75,988.83	15% CONTINGENCY: \$76,980.81
TOTAL COST NOT TO EXCEED: \$627,976.45	TOTAL: \$582,581.04	TOTAL: \$590,186.23

NOTE:
1.) This preliminary opinion of probable construction cost has been prepared based upon review of plans titled Engineering Construction Plans for Lee Creek Estates Subdivision as prepared by Dynamic Engineering Consultants, P.C., dated 02/15/2022.

Traffic Counts Submitted by the Developer



Dynamic Traffic, LLC
714 S. Greenville Avenue,
Suite 100, Allen, TX 75002
T. 732.681.0760

December 8, 2021

City of Lucas
Development Services
665 Country Club
Lucas, TX 75002

Attn: Joseph Hilbourn

**RE: Traffic Counts
Lee Creek Estates
West Lucas Road (FM 1378)
City of Lucas, Collin County, Texas
3943-99-001T**

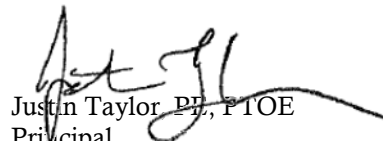
Dear Mr. Hilbourn:

Dynamic Traffic has conducted traffic counts in support of the above referenced project in order to quantify the amount of “cut-thru” traffic that would utilize the proposed roadway to travel between Stinson Road and West Lucas Road. This traffic count data was collected via the installation of Automatic Traffic Recorders (ATR’s) placed along Stinson Road just east of La Cantera Drive. The ATR’s were placed for the period of one (1) week from Friday, August 27th to Thursday, September 2nd, 2021 and the traffic data is attached. It is anticipated that the ATR’s will be replaced subsequent to the project being completed for another week to determine the volume of existing traffic that will use the proposed roadway. This data and analysis will be provided upon completion of the development.

Please do not hesitate to contact me if you have any questions or comments on the above.

Sincerely,

Dynamic Traffic, LLC


Justin Taylor PE, PTOE
Principal
TX PE License #118486



www.dynamictraffic.com

Lake Como, NJ • Chester, NJ • Toms River, NJ • Newark, NJ • Newtown, PA • Philadelphia, PA
Bethlehem, PA • Allen, TX • Houston, TX • Austin, TX • Delray Beach, FL

Dynamic Traffic, LLC

714 S. Greenville Avenue, Suite 100
 Allen, TX 75002
 732-681-0760

Locations: Stinson Rd
 Cross Street: E of La Cantera Dr
 Town/County: Lucas/Collin
 Job #: 3493-99-001T

Site Code:
 Station ID:

Latitude: 0' 0.0000 Undefined

Start Time	23-Aug-21		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	1	4	3	9	2	6	2	6
01:00	*	*	*	*	*	*	*	*	1	1	1	5	1	2	1	3
02:00	*	*	*	*	*	*	*	*	0	0	0	2	2	1	1	1
03:00	*	*	*	*	*	*	*	*	1	1	2	1	0	0	1	1
04:00	*	*	*	*	*	*	*	*	1	0	1	2	2	0	1	1
05:00	*	*	*	*	*	*	*	*	9	5	4	11	3	2	5	6
06:00	*	*	*	*	*	*	*	*	28	10	9	8	5	0	14	6
07:00	*	*	*	*	*	*	*	*	116	92	29	15	14	6	53	38
08:00	*	*	*	*	*	*	*	*	71	67	34	24	21	16	42	36
09:00	*	*	*	*	*	*	*	*	67	62	53	51	35	26	52	46
10:00	*	*	*	*	*	*	*	*	74	58	52	60	50	30	59	49
11:00	*	*	*	*	*	*	*	*	92	81	51	58	25	36	56	58
12:00 PM	*	*	*	*	*	*	*	*	50	69	53	79	40	70	48	73
01:00	*	*	*	*	*	*	*	*	61	75	50	59	51	74	54	69
02:00	*	*	*	*	*	*	*	*	41	79	26	71	26	61	31	70
03:00	*	*	*	*	*	*	*	*	52	106	46	69	51	52	50	76
04:00	*	*	*	*	*	*	*	*	60	176	51	67	26	48	46	97
05:00	*	*	*	*	*	*	*	*	67	239	33	72	39	74	46	128
06:00	*	*	*	*	*	*	*	*	58	143	41	59	31	61	43	88
07:00	*	*	*	*	*	*	*	*	42	48	33	46	23	33	33	42
08:00	*	*	*	*	*	*	*	*	29	39	16	41	45	34	30	38
09:00	*	*	*	*	*	*	*	*	12	28	17	36	20	13	16	26
10:00	*	*	*	*	*	*	*	*	17	29	5	20	5	6	9	18
11:00	*	*	*	*	*	*	*	*	8	15	6	15	3	6	6	12
Total	0	0	0	0	0	0	0	0	958	1427	616	880	520	657	699	988
Day	0	0	0	0	0	0	0	0	2385	1496	1177	1687				
AM Peak	-	-	-	-	-	-	-	-	07:00	07:00	09:00	10:00	10:00	11:00	10:00	11:00
Vol.	-	-	-	-	-	-	-	-	116	92	53	60	50	36	59	58
PM Peak	-	-	-	-	-	-	-	-	17:00	17:00	12:00	12:00	13:00	13:00	13:00	17:00
Vol.	-	-	-	-	-	-	-	-	67	239	53	79	51	74	54	128

Dynamic Traffic, LLC

714 S. Greenville Avenue, Suite 100

Allen, TX 75002

732-681-0760

Locations: Stinson Rd
 Cross Street: E of La Cantera Dr
 Town/County: Lucas/Collin
 Job #: 3493-99-001T

Site Code:
 Station ID:

Latitude: 0' 0.0000 Undefined

Start Time	30-Aug-21		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	5	2	1	1	2	2	3	5	*	*	*	*	*	*	3	2
01:00	1	4	0	2	0	3	0	1	*	*	*	*	*	*	0	2
02:00	1	1	1	0	1	4	0	1	*	*	*	*	*	*	1	2
03:00	2	1	3	2	1	1	1	0	*	*	*	*	*	*	2	1
04:00	5	0	5	0	2	0	4	0	*	*	*	*	*	*	4	0
05:00	16	3	11	3	8	3	9	0	*	*	*	*	*	*	11	2
06:00	22	21	25	13	34	18	21	16	*	*	*	*	*	*	26	17
07:00	110	73	72	63	113	80	74	89	*	*	*	*	*	*	92	76
08:00	64	73	77	75	79	72	65	65	*	*	*	*	*	*	71	71
09:00	55	57	61	61	57	58	56	64	*	*	*	*	*	*	57	60
10:00	47	35	54	47	35	58	51	42	*	*	*	*	*	*	47	46
11:00	42	58	39	60	62	50	48	64	*	*	*	*	*	*	48	58
12:00 PM	42	68	40	61	65	76	53	72	*	*	*	*	*	*	50	69
01:00	51	76	54	81	51	72	45	68	*	*	*	*	*	*	50	74
02:00	51	53	58	55	58	78	60	78	*	*	*	*	*	*	57	66
03:00	49	106	42	77	54	94	46	113	*	*	*	*	*	*	48	98
04:00	60	161	51	190	51	152	51	183	*	*	*	*	*	*	53	172
05:00	53	219	70	279	73	262	91	308	*	*	*	*	*	*	72	267
06:00	63	156	53	261	50	180	61	155	*	*	*	*	*	*	57	188
07:00	30	61	42	82	22	62	33	70	*	*	*	*	*	*	32	69
08:00	23	52	23	54	33	44	19	63	*	*	*	*	*	*	24	53
09:00	20	26	14	23	16	39	11	25	*	*	*	*	*	*	15	28
10:00	5	12	6	7	10	10	8	19	*	*	*	*	*	*	7	12
11:00	2	7	4	6	5	8	5	7	*	*	*	*	*	*	4	7
Total	819	1325	806	1503	882	1426	815	1508	0	0	0	0	0	0	831	1440
Day	2144		2309		2308		2323		0		0		0		2271	
AM Peak	07:00	07:00	08:00	08:00	07:00	07:00	07:00	07:00	-	-	-	-	-	-	07:00	07:00
Vol.	110	73	77	75	113	80	74	89	-	-	-	-	-	-	92	76
PM Peak	18:00	17:00	17:00	17:00	17:00	17:00	17:00	17:00	-	-	-	-	-	-	17:00	17:00
Vol.	63	219	70	279	73	262	91	308	-	-	-	-	-	-	72	267

Comb. Total	2144	2309	2308	2323	2385	1496	1177	3958
ADT	ADT 2,020	AADT 2,020						

Traffic Count Report from the City

Traffic Counts Analysis—Country Club Rd/Blondy Jhune Rd Intersection & Stinson Rd East of La Cantera Dr, City of Lucas, Texas

5/27/2022

Technical Memorandum

To: Mr. Joseph Hilbourn
From: Firoze Shams, PE, PTOE
CC: Sam Dam
Date: May 27, 2022



Firoze Shams
Firoze Shams, PE, PTOE

Subject: Traffic Counts Analysis- Country Club Rd/Blondy Jhune Rd Intersection & Stinson Rd East of La Cantera Dr, City of Lucas, Texas

Introduction

Global Civil Solutions, LLC (GCS) was tasked by the City of Lucas to obtain some traffic counts at two locations within the City of Lucas. The locations are:

- Intersection of Country Club Rd and Blondy Jhune Rd – Intersection Turning Movement Counts and 24-Hr ADT Counts on Two Legs
- Stinson Rd East of La Cantera Dr – 24-Hr ADT Counts for Seven (7) consecutive days

As part of two existing TIAs submitted to the City for approval, the two locations were studied by other consultants (Kimley Horn & Associates, Dynamic Traffic) during the COVID pandemic times. The City wanted a reaffirmation of the projected traffic volume numbers used by the consultants to evaluate the current conditions at the two locations prior to approving the TIAs.

Traffic Counts and Analysis

GCS had the counts done in the week of May 12, 2022 – May 18, 2022. The raw counts are provided in Appendix A. We compared the raw counts with the counts and projections predicted in the two documents. Tables 1 and 2 use the numbers from the Kimley Horn study and compares with the GCS collected traffic data. Table 3 uses the numbers from the Dynamic Traffic analysis and compares with the GCS collected data. The red fonts in the tables below indicate the counts collected by GCS.

Year	ADT	
	Country Club Rd	Blondy Jhune Rd
2021 (Observed) - Kimley Horn	9403	2114
2021 (expected) - Kimley Horn	11446	2344
2022 Projected @ 6% Growth - Kimley Horn	12132	2484
2022 Actual - GCS Counts	12217	2417

Note: To estimate the 2021 expected traffic, we used adjustment factor of 1.22 for Country Club Rd and and Adjustment Factor of 1.11 for Blondy Jhune Rd (per Kimley Horn Technical Memorandum)

Table 2 - Country Club Rd and Blondy Jhune Rd Intersection Turning Movement Counts

YEAR	PEAK	WB (BLONDY JHUNE RD)			NB (COUNTRY CLUB RD)			SB (COUNTRY CLUB RD)			TOTAL INTERSECTION
		WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
2021 - Kimley Horn	AM	62	-	94	-	664	73	47	435	-	1375
	PM	61	-	44	-	383	59	81	520	-	1148
2022 Projected	AM	66	-	100	-	704	77	50	461	-	1458
	PM	65	-	47	-	406	63	86	551	-	1218
2022 Actual - GCS Counts	AM	106	-	20	-	506	54	18	696	-	1400
	PM	66	-	21	-	522	115	33	510	-	1267

Note: A growth percentage of 6% was applied to the 2021 traffic volumes to generate the 2022 traffic

Table 3 - ADT at Stinson Rd East of La Cantera Dr

Year	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Average
2021 - Dynamic Traffic	2144	2309	2308	2323	2385	1496	1177	2020
2022 Projected	2273	2448	2446	2462	2528	1586	1248	2142
2022 Actual - GCS Counts	2154	2356	2458	2494	2725	1944	1194	2189

Note: A growth percentage of 6% was applied to the 2021 traffic volumes to generate the 2022 projected traffic

The yearly growth factor used was 6%, which is based on the Kimley Horn & Associates study recommendation.

Conclusions and Recommendations

The City of Lucas, as well as the surrounding areas have experienced major residential and commercial growth over the last five years which has resulted in significant traffic increase in the surrounding streets. The counted as well as the projected traffic volumes reflect the significant growth in the surrounding areas .

Based on our analysis of the traffic conditions, we found the existing traffic counts to be fairly close to the projected values based on the two reports. Therefore, we recommend the City of Lucas to accept the traffic counts presented in the two studies and proceed with the evaluation of the TIA documents.

Note that the work performed by GCS does not include any detailed evaluation of the two TIA reports for any conclusions drawn in the reports. As such, GCS does not endorse or reject any of the findings and conclusions of the two reports. It is the City of Lucas' responsibility to evaluate and accept the reports and their conclusions.



**PRELIMINARY OPINION OF
PROBABLE CONSTRUCTION COST
FOR**

**Lee Creek Estates
Lucas, Collin County, Texas
12/30/2021
DECPC #: 3943-99-001**

Prepared by:
**DYNAMIC ENGINEERING CONSULTANTS, P.C.
714 S. Greenville Avenue, Suite 100 Allen, TX 75002**

Prepared By: RA
Checked By: JTE

	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>
SITE CLEARING				
Clearing & Grubbing (Greater Than 1/2 an Acre)	1.5	AC	\$14,167.00	\$21,518.81
			Subtotal	\$21,518.81
SITE DEMOLITION				
Sawcutting	147	LF	\$10.00	\$1,465.00
			Subtotal	\$1,465.00
FINAL GRADING				
Grading at Pavement	34,281	SF	\$2.31	\$79,189.11
			Subtotal	\$79,189.11
EARTHWORK				
Strip Topsoil	408	CY	\$4.00	\$1,633.70
Respread Topsoil (with stockpiled topsoil)	214	CY	\$7.50	\$1,606.02
Import & Place Fill	5,872	CY	\$23.15	\$135,930.60
			Subtotal	\$139,170.32
SITE WORK				
6" Reinforced Concrete Pavement (#3 Bars @ 18" O.C.E.W)	635	CY	\$417.50	\$265,042.92
8" Lime Treated Subgrade	846	CY	\$35.15	\$29,752.52
			Subtotal	\$294,795.44
STRIPING & SIGNAGE				
Traffic Control Measures	1	EA	\$12,000.00	\$12,000.00
			Subtotal	\$12,000.00
STORM DRAINAGE				
5x5 Concrete box culvert	171	LF	\$451.00	\$77,121.00
Concrete Headwall & Footing	2	EA	\$2,850.00	\$5,700.00

Traffic Guardrail	435	LF	\$100.00	\$43,500.00
9" – 12" Grouted Rock Rip-Rap with filter fabric	1,880	SF	\$12.00	\$22,560.00
Subtotal				\$148,881.00

WATER

8" PVC	1,448	LF	\$80.00	\$115,840.00
6" PVC	28	LF	\$60.00	\$1,680.00
Hydrant, Valve & Stem	2	EA	\$6,000.00	\$12,000.00
8" Bend w/ Thrust Block	5	EA	\$700.00	\$3,500.00
8" Valve	9	EA	\$3,000.00	\$27,000.00
8" water line bore	67	LF	\$750.00	\$50,250.00
1" Service Lines	10	EA	\$1,500.00	\$15,000.00
Connections to Existing line	2	EA	\$6,250.00	\$12,500.00
Subtotal				\$237,770.00

FRANCHISE UTILITIES

3-4" PVC Telecommunication Conduits	1,050	LF	\$136.00	\$142,800.00
3-6" Underground Electric Conduits	1,057	LF	\$162.00	\$171,234.00
2" PVC Natural Gas Main	1,110	LF	\$75.00	\$83,250.00
Subtotal				\$397,284.00

SOIL EROSION & SED. CONTROL

Silt Fence	1377	LF	\$1.40	\$1,927.80
Construction Entrance	1	EA	\$2,500.00	\$2,500.00
Concrete Wash-out Area	1	EA	\$5,500.00	\$5,500.00
Subtotal				\$9,927.80

SUBTOTAL:	\$1,342,001.48
15% CONTINGENCY:	\$201,300.22
TOTAL:	\$1,543,301.70

NOTE:

1.) This preliminary opinion of probable construction cost has been prepared based upon review of plans titled Engineering Construction Plans for Lee Creek Estates Subdivision as prepared by Dynamic Engineering Consultants, P.C., dated 12/17/2021.

2.) The unit pricing included is appropriate and is based upon available pricing indices or this firms historical experience in the general geographical area as a result of same, it is only approximate. For utilization as a budget estimate, same must be updated by current market conditions and other constructability factors.

3.) This opinion of probable construction cost excludes costs that may be associated with the dewatering, unforeseen sub-surface conditions, environmental conditions, earth work, adverse weather conditions, material requirements, temporary utility installations, electrical transformer costs, water meter costs, etc. This estimate is not to be utilized for pro forma or finance purposes.

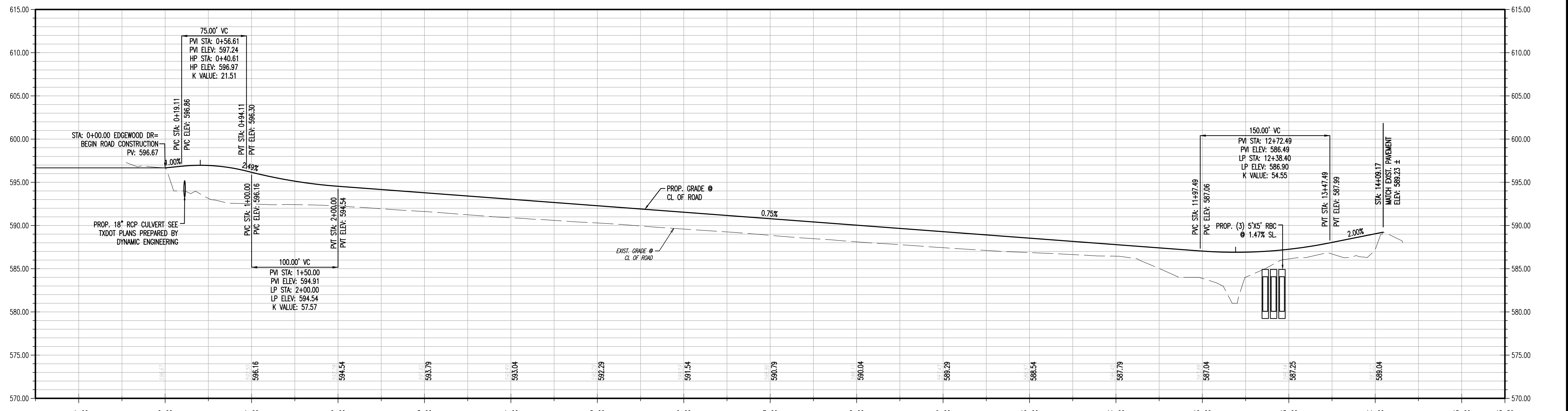
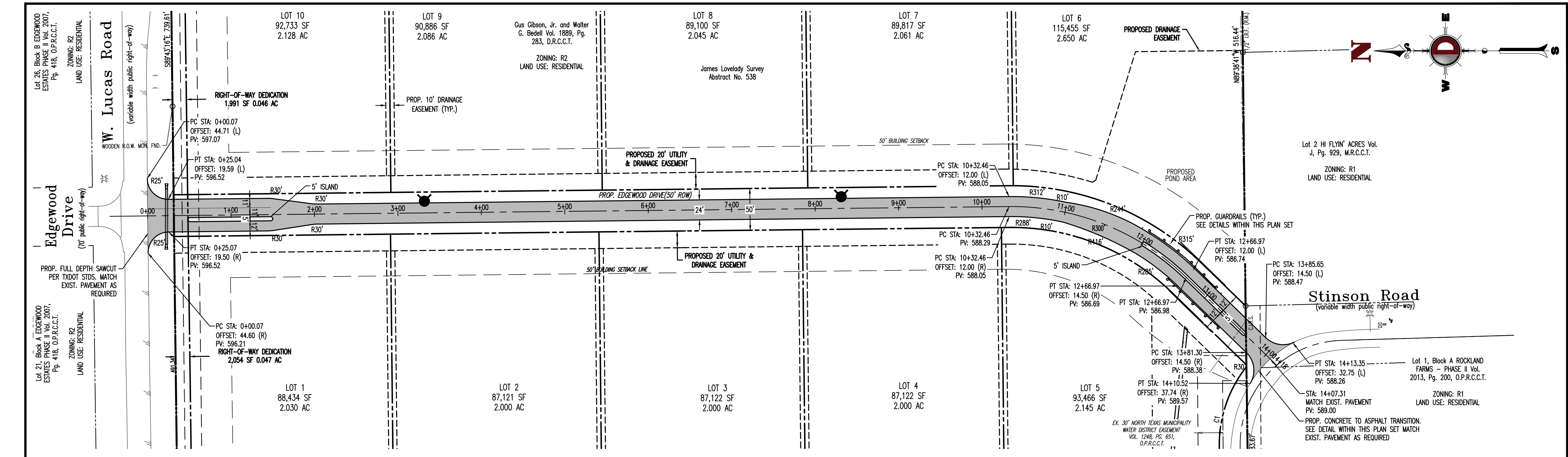
4) This opinion of probable construction cost is for bonding purposes only.

City of Lucas
General Fund Roadway Impact Fee Schedule
Account 11-1009

		<u>General</u>
Beginning Balance	9/30/2021	\$ 1,289,718
FY 21-22 Budgeted Impact Fee Collections		\$ 470,000
FY 21-22 Capital Project Expenditures:		
21-8210-491-127 Winningkoff Phase 2		\$ (94,516)
21-8210-491-130 Blondy Jhune Rd Alignment		\$ (306,489)
Total GF Roadway Impact Fees Remaining		<u>\$ 1,358,713</u>

City of Lucas
General Fund Reserves by Fiscal Year

	Actual 2013-2014	Actual 2014-2015	Actual 2015-2016	Actual 2016-2017	Actual 2017-2018	Actual 2018-2019	Actual 2019-2020	Actual 2020-2021	Projected 2021-2022
Unassigned Fund Balance per Audit Report	\$ 5,867,875	\$ 6,203,973	\$ 7,545,674	\$ 8,774,909	\$ 7,380,496	\$ 7,442,323	\$ 8,524,465	\$ 10,085,127	\$ 10,085,127
Adjusted For:									
Projected Excess Fund Balance FY 21-22 (Revenue vs. Expense)									\$ 142,236
Additional Restrictions:									
Capital Project funding approved at (3-2-17) City Council Meeting				\$ (1,385,000)					
FY 20-21 Brockdale Roadway Improvements carry-over	\$ (47,935)	\$ (102,935)	\$ (140,335)	\$ (199,570)			\$ -	\$ (41,349)	\$ (41,349)
FY 20-21 FD bunker gear carry-over								\$ (5,000)	\$ (5,000)
FY 20-21 Energov Software/Hardware carry-over								\$ (34,843)	\$ (34,843)
FY 20-21 -CC 7-1-21 Lemontree drainage carry-over								\$ (67,813)	\$ (67,813)
Reserve for Capital Outlay FY 20-21			\$ (50,000)	\$ (100,000)					
Reserve for Capital Outlay FY 21-22									\$ -
CC 11-4-21 Reserves for Claremont Springs Drainage (FY 21-22)									\$ (192,025)
CC 11-4-21 Reserves for Brookhaven Culvert (FY 21-22)									\$ (110,758)
CC 12-16-21 Reserves for Water Master Plan (FY 21-22)									\$ (30,000)
CC 1-20-22 Reserves for Records Management Scanning (FY 21-22)									\$ (26,607)
CC 2-17-22 Reserves for Rimrock Detention Pond Design (FY 21-22)									\$ (23,280)
CC 2-17-22 Reserves for Orchard Road Crossing Design (FY 21-22)									\$ (32,450)
CC 4-21-22 Reserves for Pavement Management Projects (FY 21-22)									\$ (236,482)
Reserve Balance Prior to GASB 54 Requirement	\$ 5,819,940	\$ 6,101,038	\$ 7,355,339	\$ 7,090,339	\$ 7,380,496	\$ 7,442,323	\$ 8,524,465	\$ 9,936,122	\$ 9,426,756
Reserve Balance in Operating Months	16.7	17.1	19.3	16.5	16.9	14.9	17.9	18.3	15.7
50% Current Year General Fund Expenditures (6 months)	\$ (2,089,807)	\$ (2,143,890)	\$ (2,286,670)	\$ (2,583,535)	\$ (2,624,410)	\$ (3,009,319)	\$ (2,861,041)	\$ (3,245,588)	\$ (3,559,425)
Reserve Balance After GASB 54 Requirement	\$ 3,730,133	\$ 3,957,148	\$ 5,068,669	\$ 4,506,804	\$ 4,756,086	\$ 4,433,005	\$ 5,663,424	\$ 6,690,534	\$ 5,867,331
Reserve Balance in Operating Months	10.7	11.1	13.3	10.5	10.9	8.9	11.9	12.3	9.7
Restricted during Fiscal Year Audit:									
Ambulance Donation					\$ 100,000	\$ -	\$ -	\$ -	\$ -
Capital Project Funding approved (3105)					\$ 1,385,000	\$ 1,385,000	\$ 613,590	\$ -	\$ -
Restricted Court/Misc (3105.10)(3105.35)	\$ 35,473	\$ 45,612	\$ 51,004	\$ 56,820	\$ 64,031	\$ 77,266	\$ 78,726	\$ 76,647	\$ 76,647
Restricted Cable Fees (3105.20)	\$ 8,256	\$ 12,773	\$ 17,670	\$ 21,843	\$ 25,318	\$ 28,582	\$ 31,834	\$ 34,707	\$ 34,707
Brockdale Roadway Improvements (3105.25)					\$ 245,054	\$ 285,878	\$ 385,528	\$ -	\$ -
Restricted Impact Fees (3105.30)	\$ 770,508	\$ 867,279	\$ 1,116,079	\$ 1,254,213	\$ 1,572,405	\$ 1,785,286	\$ 2,115,802	\$ 1,417,322	\$ 1,291,956
Restricted Water Rescue (3105-32)								\$ 120,000	
Restricted FD Equipment (3105-34)								\$ 16,379	
Restricted Cares Funding (3105.40)							\$ 89,755		
Restricted Mass Mutual LOSAP (3105.45)				\$ 216,615	\$ 233,592	\$ 252,407	\$ 265,669	\$ 279,043	\$ 279,043
Capital Outlay (\$50K per year) (3106)					\$ 150,000	\$ 200,000	\$ 250,000	\$ 300,000	\$ 250,000
Project Mgmt (3107)						\$ 358,290	\$ 70,853	\$ -	\$ -
Reserve Restricted per Audit Report	\$ 814,237	\$ 925,664	\$ 1,184,753	\$ 1,549,491	\$ 3,775,400	\$ 4,372,709	\$ 3,901,757	\$ 2,244,098	\$ 1,932,353

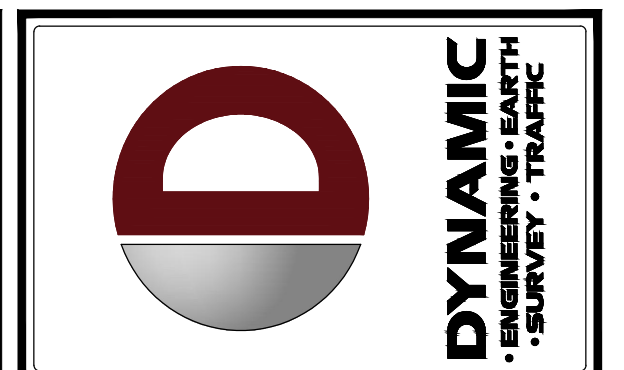
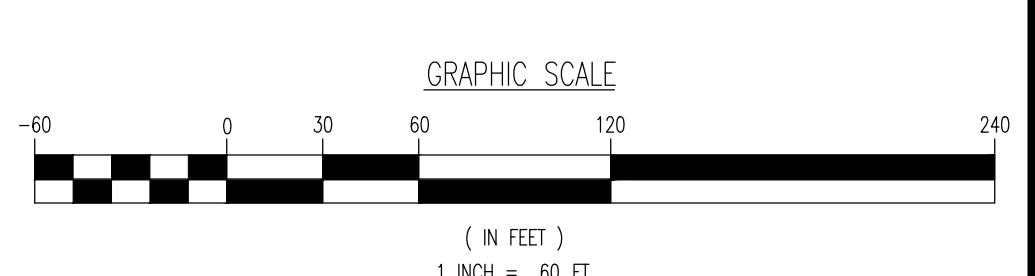


GENERAL NOTES

1. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
3. THE SOILS REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER CONSTRUCTION MANAGER OF ANY DISCREPANCY BETWEEN SOILS REPORT & PLANS.
4. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL UNDERGROUND TANKS, PIPES, VALUES, ETC.
5. THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
6. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. FOR NECESSARY PLAN CHANGES, NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
7. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
8. ALL EXCAVATED UNSUITABLE MATERIAL MUST BE TRANSPORTED TO AN APPROVED DISPOSAL LOCATION.
9. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
10. ALL CONTRACTORS MUST CARRY STATUTORY WORKERS COMPENSATION, EMPLOYERS LIABILITY INSURANCE AND APPROPRIATE LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR OOL POLICIES ENDORSED TO NAME DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. ITS SUBCONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNIFY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. WITH CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. AND ITS SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
11. NEITHER THE PROFESSIONAL ACTIVITIES OF DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C., NOR THE PRESENCE OF DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. OR ITS EMPLOYEES AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JUSTICE SAFETY. DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
12. DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION MEANS OR METHODS. COORDINATION OF THE WORK WITH OTHER TRADES OR CONSTRUCTION SAFETY PRECAUTIONS, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. DYNAMIC ENGINEERING'S REVIEW SHALL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. IN WRITING BY THE CONTRACTOR. DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
13. IN AN EFFORT TO RESOLVE ANY CONFLICTS THAT ARISE DURING THE DESIGN AND CONSTRUCTION OF THE PROJECT OR FOLLOWING THE COMPLETION OF THE PROJECT, DYNAMIC ENGINEERING CONSULTANTS, P.C. (DBA) MIDWEST DYNAMIC ENGINEERING CONSULTANTS, P.C. AND THE CONTRACTOR MUST AGREE THAT ALL DISPUTES BETWEEN THEM ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE PROJECT SHALL BE SUBMITTED TO NONBIDDING MEDIATION UNLESS THE PARTIES MUTUALLY AGREE OTHERWISE.
14. THE CONTRACTOR MUST INCLUDE A MEDIATION PROVISION IN ALL AGREEMENTS WITH INDEPENDENT SUBCONTRACTORS AND CONSULTANTS RETAINED FOR THE PROJECT AND TO REQUIRE ALL INDEPENDENT CONTRACTORS AND CONSULTANTS ALSO TO INCLUDE A SIMILAR MEDIATION PROVISION IN ALL AGREEMENTS WITH THEIR SUBCONTRACTORS, SUBCONSULTANTS, SUPPLIERS AND FABRICATORS, THEREBY PROVIDING FOR MEDIATION AS THE PRIMARY METHOD FOR DISPUTE RESOLUTION BETWEEN THE PARTIES TO ALL THOSE AGREEMENTS.
15. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED THEREON WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND ENGINEER, IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND IT SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.
16. ALL TRAFFIC SIGNS AND STRIPING SHALL FOLLOW THE REQUIREMENTS SPECIFIED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS* PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
17. THE BUILDING SETBACK DIMENSIONS ILLUSTRATED AND LISTED ON THE SITE PLAN DRAWINGS ARE MEASURED FROM THE OUTSIDE SURFACE OF BUILDING WALLS. THESE SETBACK DIMENSIONS DO NOT ACCOUNT FOR ROOF OVERHANGS, ORNAMENTAL ELEMENTS, SIGNAGE OR OTHER EXTERIOR EXTENSIONS UNLESS SPECIFICALLY NOTED.
18. CONTRACTOR ACKNOWLEDGES HE HAS READ AND UNDERSTOOD THE DESIGN PHASE SOIL PERMEABILITY AND GROUNDWATER TEST RESULTS IN THE STORMWATER MANAGEMENT REPORT AND THAT THE CONTRACTORS RESPONSIBILITIES INCLUDE NECESSARY PROVISIONS TO ACHIEVE THE DESIGN PERMEABILITY IN THE FIELD.
19. CONTRACTOR TO BE ADVISED THAT THE ENGINEER WAS NOT PROVIDED WITH FINAL FLOOR PLAN DRAWINGS FOR THE BUILDING AT THE TIME OF SITE PLAN DESIGN. AS A RESULT, ENTRANCE DOOR LOCATIONS AS DEPICTED HEREON MAY NOT BE FINAL AND MUST BE CONFIRMED WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION. THE HANDICAP ACCESSIBLE PARKING SPACES AND THE ASSOCIATED RAMPS AND ACCESSIBLE ROUTE MUST COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS OF THE ARCHITECTURAL BARRIERS ACT (ARTICLE 9102, TEXAS CIVIL STATUTES) AND THE HANDICAP PARKING SPACES MUST BE LOCATED AS THE NEAREST SPACES TO THE ENTRANCE. CONTRACTOR TO NOTIFY OWNER AND ENGINEER IMMEDIATELY OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.
20. ALL WORK PERFORMED AND MATERIALS SUPPLIED SHALL CONFORM TO THE SITE WORK SPECIFICATIONS, IF SUPPLIED. ANY WORK NOT COVERED IN THE SITE WORK SPECIFICATIONS SHALL CONFORM TO THE TEXAS DEPARTMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES", LATEST EDITION.

PAVING LEGEND

- PROPOSED CONCRETE @ 3500 PSI REINFORCED WITH #3 BARS @ 18" O.C.E.W. OVER 8-INCHES OF LIME TREATED SUBGRADE AS DESCRIBED IN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY D&S ENGINEERING LABS, DATED SEP. 15, 2021.
- * IN LIEU OF LIME TREATMENT, A SIMILAR THICKNESS OF AGGREGATE BASE MAY BE USED.



NO.	REV.	DATE	COMMENTS

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION.

DESIGNER: CUB
 CHECKED BY: JTE
 DRAWN BY: JTE

PROJECT: PROPOSED 10 LOT SINGLE FAMILY SUBDIVISION
 LEE ESTATES SUBDIVISION
 JAMES IRWIN LEE ESTATE SURVEY, ABSTRACT 2013, PG. 200, O.P.R.C.C.T.
 WEST LUCAS ROAD
 CITY OF LUCAS, COLLIN COUNTY, TEXAS

811 PROTECT YOURSELF
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DIG INTO THE EARTH'S SURFACE ANYWHERE IN ANY STATE.

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

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- St. Louis, Missouri • 1: 314.991.8800

Texas Registered Engineering Firm No. F-13660

www.dynamiccec.com

PRELIMINARY PLAN FOR REVIEW ONLY

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW AND MARKUP UNDER THE AUTHORITY OF JOSHUA T. EDGE, STATE LICENSE NUMBER 105854 ON 2022/01/31. THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

JOSHUA T. EDGE
 PROFESSIONAL ENGINEER
 TEXAS LICENSE No. 105854
 LOUISIANA LICENSE No. 58196
 OKLAHOMA LICENSE No. 27807
 COLORADO LICENSE No. 55605
 MISSOURI LICENSE No. PE-200057891

TITLE: PAVING, DIMENSION CONTROL PLAN AND PROFILE

SCALE: (H) 1"=60'
 (V) 1"=5'

DATE: 04/14/2022

PROJECT No.: 3943-99-001

SHEET No.: 2 OF 13

Rev. #: XX



City of Lucas

City Council Agenda Request

June 16, 2022

Item No. 06

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Consider entering into a Development Agreement with Farmstead Estates Phase Two for detention of excess offsite stormwater runoff in the amount of \$199,075 and authorize the City Manager to negotiate the agreement.

Background Information

This parcel of land is currently zoned Residential 2-acre (R-2), containing 18.858 acres of land, and proposes seven new residential lots. This subdivision has a private road that will be shared with Farmstead Phase One. Public improvements include modifications to the existing turn around and bring the lateral water service lines to the existing water main on the east side of Farmstead.

The City hired engineering firm, Birkhoff, Hendricks, and Carter LLC, (BHC) to conduct a study of the drainage system in the area around Farmstead. One of the recommendations from BHC was to reduce the rate of stormwater run-off leaving Claremont Springs by 47 cubic feet per second (CFS).

At the February 3, 2022, City Council meeting the preliminary plat for Farmstead Estates Phase Two was approved pending modifications to the drainage system. As part of these modifications, the water leaving the retention ponds in Claremont Springs Phase One needed to be considered. Staff asked the developer of Farmstead to review what the necessary steps would be to reduce the water from Claremont Springs within the Farmstead retention ponds. The City asked to slow the offsite water in the amount of 47 CFS.

Attachments/Supporting Documentation

1. Farmstead Estates Phase Two Grading Plan
2. Drainage Cost provided by the Developer
3. General Fund Reserves Schedule

Budget/Financial Impact

The Developer of Farmstead Estates Phase Two has provided a cost estimate to reduce the rate of offsite stormwater runoff in the amount of \$199,075.



City of Lucas

City Council Agenda Request

June 16, 2022

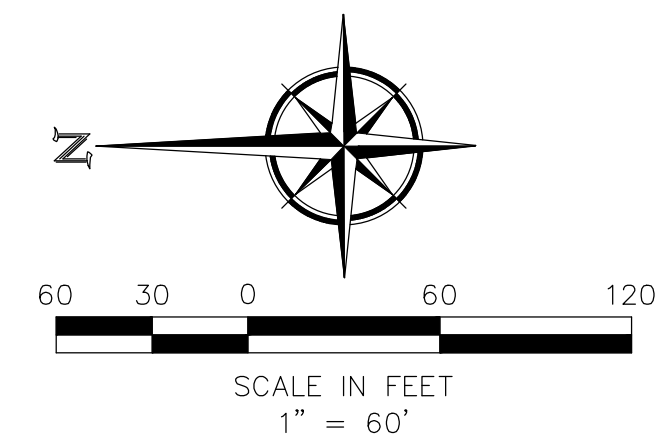
Item No. 06

Recommendation

Staff recommends entering into a Development Agreement with Farmstead Estates Phase Two and to fund this project using unrestricted General Fund Reserves. If the City Council authorizes this development agreement, City staff would place the agreement on a future agenda and request the appropriation of funds.

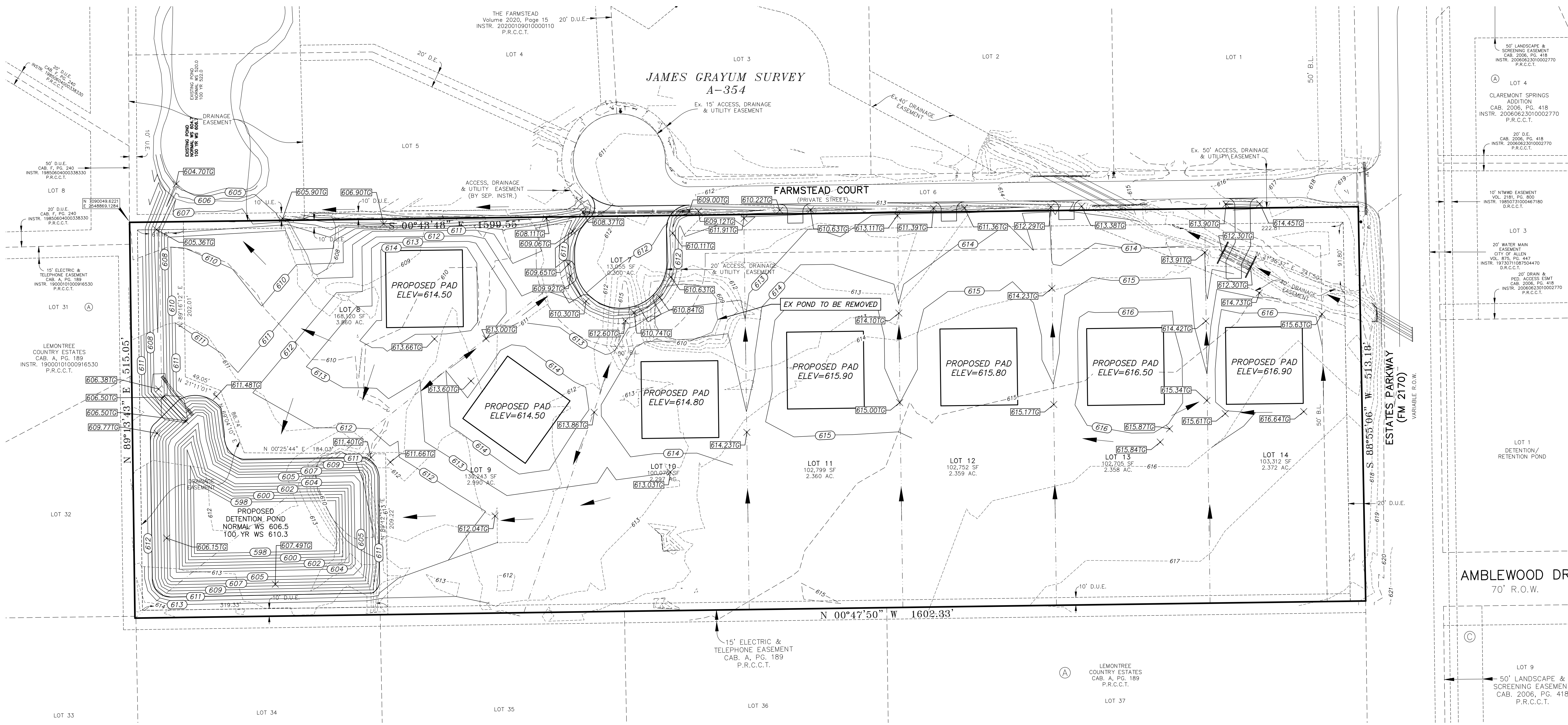
Motion

I make a motion to approve/deny entering into a Development Agreement with Farmstead Estates Phase Two for detention of excess offsite stormwater runoff in the amount of \$199,075 and authorize the City Manager to negotiate the agreement.



LEGEND

460.00	=	TOP OF PROP PWMT
FF=460.00	=	PROP FINISHED FLOOR ELEV
460.00 TP	=	TOP OF PAVING
460.00 TG	=	TOP OF GRADING
---610---	=	EXISTING CONTOUR
○610○	=	PROPOSED CONTOUR



Y:\PROJECTS\08362\Farmstead P2 - Lucas - 19AC on Estates\dwg\shells\08362 GRD.dwg-GRD Plotted May 25, 2022 at 5:41pm by bh | Last Saved by: Clayton Mulrey



CAUTION!
THE UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.



ENGINEERINGCONCEPTS & DESIGN, L.P.
ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

DRAWN: ECDLP	DATE: May 25, 2022
CHECKED: ECDLP	DATE: May 25, 2022
PROJECT NO.: 08362	
DWG FILE NAME: 08362.GRD.DWG	

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW AND BIDDING ONLY.



GRADING PLAN
THE FARMSTEAD PHASE TWO
CITY OF LUCAS
COLLIN COUNTY, TEXAS

SHEET
05

<u>City of Lucas</u>	<u>Drainage Easement</u>		<u>Farmstead Phase 2</u>
<u>Item</u>		<u>Units</u>	<u>Per Unit</u>
Excavation	\$ 178,875.00	26500	\$ 6.75
Concrete	\$ 16,000.00	2000	\$ 8.00
Rip Rap and Stone	\$ 4,200.00	15	\$ 280.00
<u>Total Costs</u>	<u>\$ 199,075.00</u>		

City of Lucas
 General Fund Reserves by Fiscal Year

	Actual 2013-2014	Actual 2014-2015	Actual 2015-2016	Actual 2016-2017	Actual 2017-2018	Actual 2018-2019	Actual 2019-2020	Actual 2020-2021	Projected 2021-2022
Unassigned Fund Balance per Audit Report	\$ 5,867,875	\$ 6,203,973	\$ 7,545,674	\$ 8,774,909	\$ 7,380,496	\$ 7,442,323	\$ 8,524,465	\$ 10,085,127	\$ 10,085,127
Adjusted For:									
Projected Excess Fund Balance FY 21-22 (Revenue vs. Expense)									\$ 142,236
Additional Restrictions:									
Capital Project funding approved at (3-2-17) City Council Meeting				\$ (1,385,000)					
FY 20-21 Brockdale Roadway Improvements carry-over	\$ (47,935)	\$ (102,935)	\$ (140,335)	\$ (199,570)			\$ -	\$ (41,349)	\$ (41,349)
FY 20-21 FD bunker gear carry-over								\$ (5,000)	\$ (5,000)
FY 20-21 Energov Software/Hardware carry-over								\$ (34,843)	\$ (34,843)
FY 20-21 -CC 7-1-21 Lemontree drainage carry-over								\$ (67,813)	\$ (67,813)
Reserve for Capital Outlay FY 20-21			\$ (50,000)	\$ (100,000)					
Reserve for Capital Outlay FY 21-22									\$ -
CC 11-4-21 Reserves for Claremont Springs Drainage (FY 21-22)									\$ (192,025)
CC 11-4-21 Reserves for Brookhaven Culvert (FY 21-22)									\$ (110,758)
CC 12-16-21 Reserves for Water Master Plan (FY 21-22)									\$ (30,000)
CC 1-20-22 Reserves for Records Management Scanning (FY 21-22)									\$ (26,607)
CC 2-17-22 Reserves for Rimrock Detention Pond Design (FY 21-22)									\$ (23,280)
CC 2-17-22 Reserves for Orchard Road Crossing Design (FY 21-22)									\$ (32,450)
CC 4-21-22 Reserves for Pavement Management Projects (FY 21-22)									\$ (236,482)
Reserve Balance Prior to GASB 54 Requirement	\$ 5,819,940	\$ 6,101,038	\$ 7,355,339	\$ 7,090,339	\$ 7,380,496	\$ 7,442,323	\$ 8,524,465	\$ 9,936,122	\$ 9,426,756
Reserve Balance in Operating Months	16.7	17.1	19.3	16.5	16.9	14.9	17.9	18.3	15.7
50% Current Year General Fund Expenditures (6 months)	\$ (2,089,807)	\$ (2,143,890)	\$ (2,286,670)	\$ (2,583,535)	\$ (2,624,410)	\$ (3,009,319)	\$ (2,861,041)	\$ (3,245,588)	\$ (3,559,425)
Reserve Balance After GASB 54 Requirement	\$ 3,730,133	\$ 3,957,148	\$ 5,068,669	\$ 4,506,804	\$ 4,756,086	\$ 4,433,005	\$ 5,663,424	\$ 6,690,534	\$ 5,867,331
Reserve Balance in Operating Months	10.7	11.1	13.3	10.5	10.9	8.9	11.9	12.3	9.7
Restricted during Fiscal Year Audit:									
Ambulance Donation					\$ 100,000	\$ -	\$ -	\$ -	\$ -
Capital Project Funding approved (3105)					\$ 1,385,000	\$ 1,385,000	\$ 613,590	\$ -	\$ -
Restricted Court/Misc (3105.10)(3105.35)	\$ 35,473	\$ 45,612	\$ 51,004	\$ 56,820	\$ 64,031	\$ 77,266	\$ 78,726	\$ 76,647	\$ 76,647
Restricted Cable Fees (3105.20)	\$ 8,256	\$ 12,773	\$ 17,670	\$ 21,843	\$ 25,318	\$ 28,582	\$ 31,834	\$ 34,707	\$ 34,707
Brockdale Roadway Improvements (3105.25)					\$ 245,054	\$ 285,878	\$ 385,528	\$ -	\$ -
Restricted Impact Fees (3105.30)	\$ 770,508	\$ 867,279	\$ 1,116,079	\$ 1,254,213	\$ 1,572,405	\$ 1,785,286	\$ 2,115,802	\$ 1,417,322	\$ 1,291,956
Restricted Water Rescue (3105-32)								\$ 120,000	
Restricted FD Equipment (3105-34)								\$ 16,379	
Restricted Cares Funding (3105.40)							\$ 89,755		
Restricted Mass Mutual LOSAP (3105.45)				\$ 216,615	\$ 233,592	\$ 252,407	\$ 265,669	\$ 279,043	\$ 279,043
Capital Outlay (\$50K per year) (3106)					\$ 150,000	\$ 200,000	\$ 250,000	\$ 300,000	\$ 250,000
Project Mgmt (3107)						\$ 358,290	\$ 70,853	\$ -	\$ -
Reserve Restricted per Audit Report	\$ 814,237	\$ 925,664	\$ 1,184,753	\$ 1,549,491	\$ 3,775,400	\$ 4,372,709	\$ 3,901,757	\$ 2,244,098	\$ 1,932,353



City of Lucas City Council Agenda Request June 16, 2022

Item No. 07

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Consider the regulation of high grass, weeds, brush, shrubs, trees and other vegetation and the requirements of property owners to maintain property abutting public streets, to keep all right-of-way or easements clear of obstructions, and provide guidance to the City Manager.

Background Information

The City of Lucas has consistently responded to code violations in response to complaints received by City Staff. The City has one full-time Code Enforcement Officer who also has facility maintenance responsibilities as well as building inspection duties. The City's code cases have continued to grow in number and complexity. City staff is seeking guidance from the City Council regarding whether staff should become more proactive in its code enforcement activities. Common violations include tall grass and maintenance activities along City streets and in easements involving tree limbs and shrubs.

Attachments/Supporting Documentation

1. Relevant sections of Article 5.05 Accumulations of Combustible Debris, Weeds, Grass or Brush, Article 6.03 High Grass and Weeds and Article 8.01 General Provisions.

Budget/Financial Impact

NA

Recommendation

NA

Motion

Provide direction to the City Manager regarding any proposed amendments to existing ordinances and the level of enforcement activities to gain compliance and clarify services that should be provided by City staff.

ARTICLE 5.05 ACCUMULATIONS OF COMBUSTIBLE DEBRIS, WEEDS, GRASS OR BRUSH

Sec. 5.05.001 Prohibited conditions

It shall be unlawful for any person owning, claiming, occupying or having supervision or control of any real property to permit weeds, grass, or brush to grow to a greater height than twelve (12) inches (unless such property is currently being used for agricultural purposes, such as the raising of crops, including hay, or the grazing of cattle) upon any such real property or adjacent easements or rights-of-way, or to permit the accumulation of any other debris which creates a fire hazard, including but not limited to dead grass, tree limbs and stumps, wastepaper, scrap wood or lumber, or discarded or abandoned construction material. All grass and weeds which exceed twelve (12) inches in height shall be presumed to be a fire hazard, and all wood, paper, and construction materials shall be presumed to be discarded and abandoned after remaining as such for ten (10) days after first notice of the noncompliance with the provisions of this article. (1995 Code, sec. 5-32)

Sec. 5.05.002 Abatement

(a) In the event that any person owning, claiming, occupying, or having supervision or control of a lot, tract, or parcel of land or portion thereof shall fail to comply with section 5.05.001, then said person may be charged with violation of this article and/or be given notice by the city fire marshal to comply with the same. The notice shall be given:

- (1) Personally to the owner in writing;
- (2) By letter addressed to the owner at the owner's address as recorded in the appraisal district records of the appraisal district in which the property is located; or
- (3) If personal service cannot be obtained:
 - (A) By publication at least once;
 - (B) By posting the notice on or near the front door of each building on the property to which the violation relates; or
 - (C) By posting the notice on a placard attached to a stake driven into the ground on the property to which the violation relates.

If the city mails a notice to a property owner in accordance with subsection (a), and the United States Postal Service returns the notice as “refused” or “unclaimed,” the validity of the notice is not affected, and the notice is considered as delivered. (1995 Code, sec. 5-33; Ordinance adopting Code)

(b) In a notice provided under this section, the city may inform the owner by regular mail and a posting on the property, or by personally delivering the notice, that if the owner commits another violation of the same kind or nature that poses a danger to the public health and safety on or before the first anniversary of the date of the notice, the city without further notice may correct the violation at the owner's expense and assess the expense against the property. If a violation covered by a notice under this subsection occurs within the one-year period, and the city has not been informed in writing by the owner of an ownership change, then the city without notice may take any action permitted and assess its expenses as provided by V.T.C.A., Health and Safety Code, section 342.007. (Ordinance adopting Code)

(c) If, after the expiration of ten (10) days after notification, there has remained the fire hazard prohibited in this article, the city may do or cause to be done the work necessary to obtain compliance with this article, including but not limited to the mowing of grass and weeds or the removal of brush in excess of twelve (12) inches in height, or the removal of abandoned or discarded wood, paper, or construction materials. The expense incurred in correcting the condition of such property, including a one hundred dollar (\$100.00) administration fee, shall be charged to the owner of such property, and the city may cause the expense thereof to be assessed on the real estate or lot or lots upon which such expense is incurred. On filing with the county clerk a statement by the official designated by the mayor of the expense incurred in correcting the condition on the property, the city shall have a privileged lien on such property, second only to tax liens for street improvements, to secure the payment of the amount so expended. Such amount shall bear interest at the rate of ten percent (10%) from the date the city incurs the expense. For any such expenditures and interest, suit may be instituted and recovery and foreclosure had by the city. The statement of expense filed with the county clerk or a certified copy thereof shall be prima facie proof of the amount expended as specified in V.T.C.A., Health and Safety Code, chapter 342, or as subsequently amended or codified, which is hereby adopted by reference. (1995 Code, sec. 5-33)

Sec. 5.05.003 Issuance of citation; penalty; violations declared nuisance

In addition to the abatement procedures provided in section 5.05.002, the city fire marshal may issue a citation for violation of this article. A violation of this article shall be punishable by a fine as provided in section 1.01.009 of this code. Each day a prohibited act of this article is violated shall be a separate offense, and each violation shall constitute a common nuisance which may be abated by the city in any manner authorized herein or by law, including injunction and action for damages. (1995 Code, sec. 5-34; Ordinance adopting Code)

ARTICLE 6.03 HIGH GRASS AND WEEDS

Sec. 6.03.001 Prohibited

It shall be unlawful for any person owning, claiming, occupying or having supervision or control of any real property, occupied or unoccupied, within the city, to permit weeds or grass, save and except crops that are regularly cultivated, to grow to a greater height than twelve (12) inches upon any such real property within one hundred fifty (150) feet of any property line which abuts street rights-of way, developed property or any buildings or other structures.

Sec. 6.03.002 Duty to cut and remove

It shall be the duty of any person owning, claiming, occupying or having supervision or control of any real property to cut and remove all such grass or weeds as often as may be necessary to comply with section 6.03.001; provided that the removing and cutting of same at least once in every thirty (30) days shall be deemed in compliance with this article. (Ordinance 2015-01-00806 adopted 2/5/15)

Sec. 6.03.003 Notice to cut and remove

- (a) In the event that any person owning, claiming, occupying or having supervision or control of any real property, occupied or unoccupied, within the city, fails to comply with the provisions of section 6.03.001, it shall be the duty of the building official to give seven (7) days' notice to such person violating the terms of this article. (1995 Code, sec. 13-10; Ordinance adopting Code)
- (b) The notice shall be given:
 - (1) Personally to the owner in writing;
 - (2) By letter addressed to the owner at the owner's address as recorded in the appraisal district records of the appraisal district in which the property is located; or
 - (3) If personal service cannot be obtained:
 - (A) By publication at least once;
 - (B) By posting the notice on or near the front door of each building on the property to which the violation relates; or
 - (C) By posting the notice on a placard attached to a stake driven into the ground on the property to which the violation relates.
- (c) If the city mails a notice to a property owner in accordance with subsection (a), and the United States Postal Service returns the notice as "refused" or "unclaimed," the validity of the notice is not affected, and the notice is considered as delivered.
- (d) In a notice provided under this section, the city may inform the owner by regular mail and a posting on the property, or by personally delivering the notice, that if the owner commits another violation of the same kind or nature that poses a danger to the public health and safety on or before the first anniversary of the date of the notice, the city without further notice may correct the violation at the owner's expense and assess the expense against the property. If a violation covered by a notice under this subsection occurs within the one-year period, and the city has not been informed in writing by the owner of an ownership change, then the city without notice may take any action permitted and assess its expenses as provided by V.T.C.A., Health and Safety Code, section 342.007. (Ordinance adopting Code)

Sec. 6.03.004 Cutting and removal by city; lien for city's expenses

- (a) If any person fails or refuses to comply with the provisions of section 6.03.001 after notice as provided in section 6.03.003, then the city may do such work or cause the same to be done in order to bring the property into compliance and may pay the expenses for doing or having the work done on the offending property and cause the expense to be assessed in the form of a lien on the property upon which such expense is incurred.
- (b) A statement by the mayor or his designated representative of such expenses shall be filed with the county clerk, and upon filing the city will have a privileged lien on the property, second only to tax liens and liens for street improvements, to secure the expenditures so made. The amount of such expenditures shall bear ten percent (10%) per annum interest from the date of payment by the city until paid by the property owner. For any such expenditures and interest, as aforesaid, suit may be instituted and foreclosure had in the name of the city, and the statement so made as aforesaid, or a certified copy thereof, shall be prima facie proof of the amount expended in any such work or improvements. (1995 Code, sec. 13-11)

Sec. 6.03.005 Penalty

Any person violating any of the provisions of this article shall be subject to a fine, upon conviction in the municipal court, of up to one hundred dollars (\$100.00) for the first offense, two hundred fifty dollars (\$250.00) for the second offense, and five hundred dollars (\$500.00) for any subsequent offenses. Each and every day that the premises shall remain in a condition in violation of the terms of this article shall constitute a separate offense. (1995 Code, sec. 13-12)

Sec. 6.03.006 Additional authority to abate dangerous weeds

- (a) The city may abate, without notice, weeds that:
 - (1) Have grown higher than 48 inches; and
 - (2) Are an immediate danger to the health, life, or safety of any person.
- (b) Not later than the 10th day after the date the city abates weeds under this section, the city shall give notice to the property owner in the manner required by section 6.03.003.
- (c) The notice shall contain:
 - (1) An identification, which is not required to be a legal description, of the property;
 - (2) A description of the violations of the ordinance that occurred on the property;
 - (3) A statement that the city abated the weeds; and
 - (4) An explanation of the property owner's right to request an administrative hearing about the city's abatement of the weeds.
- (d) The city shall conduct an administrative hearing on the abatement of weeds under this section if, not later than the 30th day after the date of the abatement of the weeds, the property owner files with the city a written request for a hearing.
- (e) An administrative hearing conducted under this section shall be conducted not later than the 20th day after the date a request for a hearing is filed. The owner may testify or present any witnesses or written information relating to the city's abatement of the weeds.
- (f) The city may assess expenses and create liens under this section as it assesses expenses and creates liens under section 6.03.004. A lien created under this section is subject to the same conditions as a lien created under section 6.03.004.
- (g) The authority granted the city by this section is in addition to the authority granted by V.T.C.A., Health and Safety Code, section 342.006. (Ordinance adopting Code)

State law reference—Additional authority to abate dangerous weeds without notice, V.T.C.A., Health and Safety Code, sec. 342.008.

ARTICLE 8.01 GENERAL PROVISIONS

Sec. 8.01.001 Obstructions in right-of-way

- (a) Duty of abutting property owners. All owners of real property abutting a public street or roadway within the city shall keep all rights-of-way or easements along, adjacent or contiguous to the public street or roadway clear of all obstructions that are a hazard to the operation of a motor vehicle or to pedestrians, including but not limited to weeds, tall grass, trees, shrubs or other vegetation more than eighteen (18) inches in height.

(b) Order to remove; removal by city. In addition to any other penalties provided in this code, upon a finding by the municipal court that any person, individual, corporation, firm or other property owner has violated a provision of subsection (a) of this section, said person, in lieu of a fine, may be ordered to remove the obstruction as specified in the foregoing subsection. In addition, the city may, at its option, give notice to a landowner in violation of this section that, if the obstructions are not removed within ten (10) days after the date the notice is served upon the landowner, the city will remove the obstructions at its cost and expense and such cost and expense will be levied against said landowner, for which a lien may be attached in accordance with statutes of the state. (1995 Code, secs. 13-6, 13-7)



City of Lucas City Council Agenda Request June 16, 2022

Item No. 08

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Consider Chapter 8, Water System of the City of Lucas Comprehensive Plan and recommend proposed amendments if needed.

Background Information

The Planning and Zoning Commission began the process of updating the City’s Comprehensive Plan in January 2022 with recommended revisions being forwarded to City Council for review. The following updated table outlines a status timeline of the review process of the City of Lucas Comprehensive Plan:

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 <i>(complete)</i> <i>(including Trails Master Plan)</i>	March 10	April 7
Chapter 7 <i>(Including Master Thoroughfare Plan)</i>	April 14	May 5
Land Use Map and Zoning Map	May 12	June 2
Chapter 8 <i>(including existing Water System Map)</i>	June 9	June 16

City staff has rewritten Chapter 8 removing outdated information and projects that have been completed such as the expansion to the City’s Pump Station. The existing Water System Map has been included for reference purposes but has not yet been updated to include future capital improvement projects. Birkhoff, Hendricks, and Carter, LLC have been retained by the City to update the City’s Water Master Plan and their timeline and anticipated completion of the Water Master Plan has also been included.

Attachments/Supporting Documentation

1. Chapter 8, Water System of the Comprehensive Plan
2. 2021 Water Distribution System, Existing System Hydraulic Model Map
3. Birkhoff, Hendricks and Carter, LLC timeline for completion of the Water Master Plan

Budget/Financial Impact

NA



City of Lucas
City Council Agenda Request
June 16, 2022

Item No. 08

Recommendation

The Planning and Zoning Commission recommended approval of Chapter 8 as rewritten.

Motion

I make a motion to approve/deny the proposed amendments to Chapter 8, Water System of the City of Lucas Comprehensive Plan.

CHAPTER 8 Water System

INTRODUCTION

One of the most essential services provided by the City of Lucas is delivering safe drinking water to the community. The City of Lucas owns and operates its water system that consists of elevated storage tanks, ground storage tanks, pumps, water lines, hydrants, valves, etc. A Certificate of Convenience and Necessity (CCN No. 10193 amended on April 5, 2019) was issued by the State of Texas Public Utility Commission (PUC) to the City of Lucas to define its water service area and grant exclusive retail service rights. Because the CCN does not follow city boundaries, there are areas that are not in the city limits of Lucas but receive water from Lucas such as the area west of Rock Ridge Road that is located in the City of Allen’s extraterritorial jurisdiction (ETJ) and Trinity Park that is located in unincorporated Collin County. The Seis Lagos Utility District (SLUD), the Wylie Northeast Special Utility District (WNSUD), and the City of Allen supply water to a portion of residents inside the Lucas city limits and ETJ.

The city’s water system is a vital part of the city-owned infrastructure. The purpose of this section is to provide a description of the current water system, identifying criteria for determining future improvements to the water system, and providing a description of the water system capital improvements needed to meet future demand.

EXISTING WATER SYSTEM

Water Supply

The City of Lucas purchases water from the North Texas Municipal Water District (NTMWD). Water is delivered to the city at two delivery points. One delivery point is at the North Pump Station site located on Country Club Road between West Lucas Road and Estates Parkway. The other delivery site is at the McGarity site located on McGarity Lane just east of Angel Parkway. The delivery point at the McGarity site is the newer of the two delivery sites, established in fiscal year 2004/2005.

Existing System Facilities

The following information describes the location and description of the city’s water infrastructure:

Ground Storage:

McGarity Site	200,000-gallon tank 350,000-gallon tank
North Pump Station	500,000-gallon tank 750,000-gallon tank

Total: 1,800,000 gallons

Elevated Storage:

McGarity Site 300,000-gallon tank

Winnigkoff Site 300,000-gallon tank

Total: 600,000 gallons

McGarity Pumping Facilities:

Building No. 1 Pump No. 1 – 1,100 gallons per minute (gpm)
Pump No. 2 – 1,100 gpm

Building No. 2 Pump No. 1 – 750 gpm
Pump No. 2 – 750 gpm
Pump No. 3 – 750 gpm

Total: 4,450 gpm

North Pump Station Pumping Facilities:

Pump No. 1 – 900 gpm
Pump No. 2 – 900 gpm
Pump No. 3 – 900 gpm
Pump No. 4 – 900 gpm
Pump No. 5 – 900 gpm

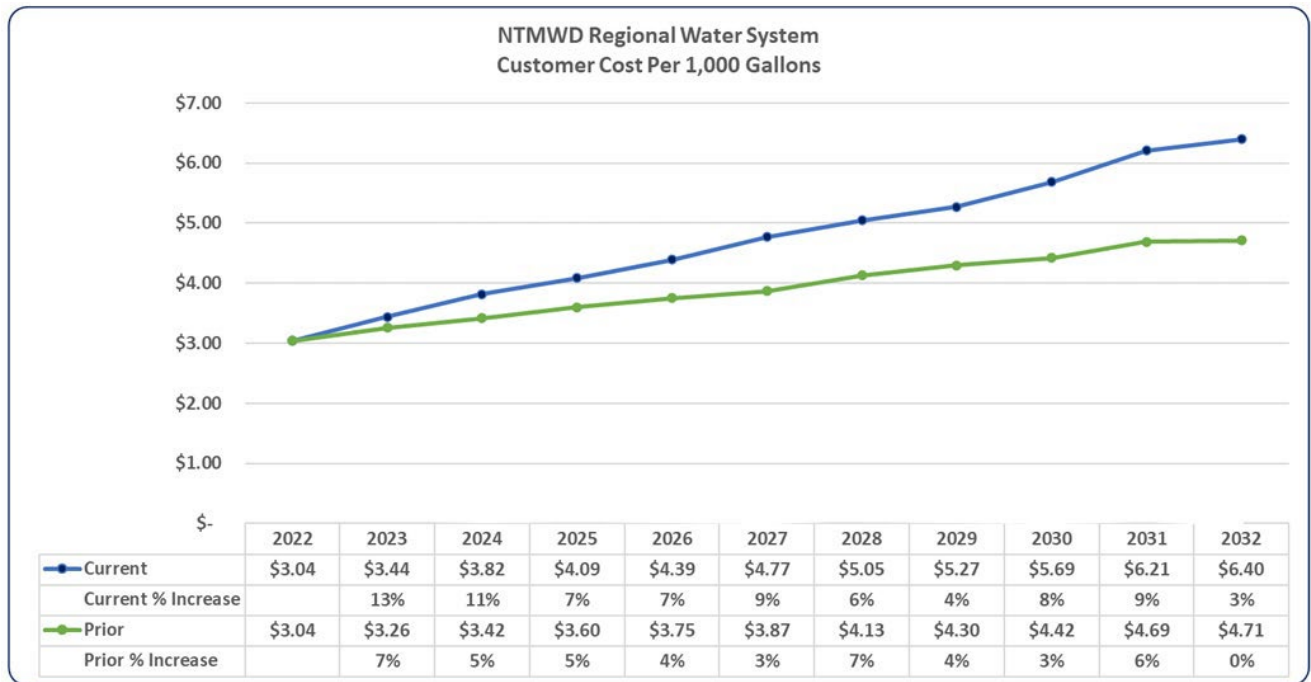
Total: 4,500 gpm

FINANCIAL

The water system is funded by the fees adopted by ordinance and paid by the rate payers within the service area. Approximately every five years, the City of Lucas conducts a rate study to ensure the financial stability of the water system. The objectives of the rate study are to:

- Benchmark the City of Lucas water rates against surrounding communities for the purpose of assessing the regional rate equity.
- Review and forecast operational and maintenance costs and evaluate debt service and future capital investment.
- Develop fair and equitable rate structure for each defined customer class and create a phased approach to rate adjustments.

The graph below illustrates the projected wholesale water rate over a ten-year period. The City must include the cost of its water infrastructure and operational cost to determine the retail water rate for its water customers.



PARAMETERS FOR FUTURE FACILITIES

Typically, the two principal factors that determine the size and capacity of future water system facilities are the anticipated water demand in the water system and certain facilities design criteria. In the case of the Lucas water system, other factors will also have an impact on the future water system facilities. These factors are staging the additions to the water system to account for development, the need to reduce the number of dead-end water lines in the system, and the ability of the NTMWD to supply water.

Water Demand

Water demand is a function of the number of people living in the service area and their water usage. The population to be served by the water system will include the build-out population of 13,274, plus an estimated population of 250 people currently being served by the water system that live outside the city limits. Accordingly, an estimated population of 13,442 located within the proposed CCN will be utilized for determining the water demand, size and capacity of future system facilities that will eventually need to be met by the water system.

Since water demand in the water system service area is based on the population and their water usage, historical water usage is used to determine per capita per day usage. Based on this historical data, the water usage is approximately 250 gallons per capita per day, the maximum day to average day ratio is 2.5, and the peak hour to maximum day ratio is 1.8. With a build-out population of 13,442 in the

service area, this water usage will result in an average daily demand of 3.75 million gallons per day (mgd), a maximum day demand of 8.4 mgd, and a peak hour demand of 15.12 mgd for the water system at build-out.

Design Criteria

Different design criteria can be used to determine the size and capacity needed for future system facilities. Minimum requirements for determining the size of storage and pumping facilities are provided by the Texas Commission on Environmental Quality (TCEQ). Per the TCEQ, the water system needs to have at least 200 gallons of ground storage and 100 gallons of elevated storage per connection. More stringent design criteria have been utilized, per previous analysis, for the present water system. This design criteria are based on providing elevated storage to meet peak hour demands in the system. Based on these criteria, the elevated storage needs to have enough capacity to provide for peak hour demand with a reserve of one-third of the total elevated storage capacity for fire flow. The ground storage requires sufficient capacity to meet a specified portion of the maximum day demand. The pumping capacity in the system needs to be sufficient to meet a specified portion of the maximum day demand. It is recommended that the more stringent design criteria, which has been used in the past for the existing water system, continue to be utilized for system facilities.

Pressure Planes

The existing water system operates on two pressure planes. The upper pressure plane is located primarily in the northwest part of the service area. The lower pressure plane serves the rest of the service area. The McGarity pump station pumps water to the McGarity tower. The McGarity tower has an elevation of 792 feet which is the upper pressure plane. The North Pump Station pumps water to the Winningkoff tower. The Winningkoff tower has an elevation of 723 feet which is the lower pressure plane.

Dead End Water Lines

There are a large number of dead-end water lines in the existing water system. Dead-end water lines have to be periodically flushed per TCEQ requirements in order to keep sufficient disinfection levels in the water lines. The City has to devote resources and funds to accomplish this purpose. It is the city's goal to reduce the number of dead-end water lines thru the addition of water lines that will provide loops to eliminate the longer dead-end water lines. Looping lines will eliminate the need to flush the lines, improve the dependability of the system in the area, and enhancing fire protection. **Included in the Appendix is a water system map showing the existing dead end water lines.**

PROPOSED WATER SYSTEM

In 2021, the City acquired the services of an engineering firm, Birkhoff, Hendricks & Carter, LLP (BHC), to prepare an existing water distribution system hydraulic computer model and evaluation.

To conduct the existing waters system demand analysis, the following was evaluated:

- Hourly Pumping, Elevated and Ground Storage Levels
- NTMWD Supply Meter Data

- Customer Retail Billing Records

The findings of the demand analysis illustrated the following:

- Residential Maximum Day Unit Demand: 495 gallons per capita per day (gpcd)
- Residential Maximum Hour Unit Demand: 891 gpcd
 - Maximum Day Demand (4.3 MGD)
 - Maximum Hour Demand (7.7 MGD)
 - Minimum Hour Demand (0.98 MGD)

The existing water system hydraulic model included the following information:

- Base Map: Collin Central Appraisal District Lots
- All known water lines in the system create network
- Junction Nodes (Elevations and System Demands)
- Existing System Pressure Plans (or Service Areas)
 - 792 Service Area (High Zone – McGarity Pump Station and EST)
 - 723 Service Area (Low Zone- North Pump Station. and EST)
- Pump Stations and Ground Storage Reservoirs
 - McGarity Pump Station: 5 Pumps = 4.82 MGD
 - North Pump Station: 5 Pumps = 5.20 MGD
 - Total = 10.02 MGD**

Table 8a – Existing System Pumping Recommendations

Service Area	Population Served	Estimated Number of Connections	TCEQ Min. Pumping (0.6-gpm/Conn.)	BHC Pumping Requirements	Total Existing Pumping
723 Service Area	5,356	1,706	1.47-MGD	2.72 MGD	5.20 MGD
792 Service Area	2,711	863	0.75-MGD	1.58 MGD	4.82 MGD
System Totals	8,067	2,569	2.22 MGD	4.30 MGD	10.02 MGD

Table 8b – Existing System Storage Recommendations

Service Area	Population Served	Estimated Number of Connections	TCEQ Min. Volume Elev. Storage	BHC Elevated Storage Requirements	Total Existing Elev. Storage	BHC Ground Storage Recommendation	Total Existing Ground Storage
723 Service Area	5,356	1,706	0.34 MG	0.54 MG	0.30 MG	0.68 MG	1.25 MG
792 Service Area	2,711	863	0.17 MG	0.32 MG	0.30 MG	0.40 MG	0.55 MG
System Totals	8,067	2,569	0.51 MG	0.86 MG	0.60 MG	1.08 MG	1.80 MG

The general conclusions identified the strengths of the water system to include:

1. The Water Distribution System has adequate and modern ground storage and high service pumping capacity.

2. The Distribution System layout and sizing is generally adequate and meets the needs of the current system demands, even under a severe test.

The improvements recommended:

1. Additional Elevated Storage Capacity is recommended in the 723 System.
2. The pressure boundary divide could be shifted to provide better and more stable pressures for some customers in the system.
3. Maintenance on the EST at McGarity is difficult (but not impossible) without a second EST in the 792 Service Area.
4. Carefully monitor the operational condition of the new pumps at both the McGarity Pump Station and North Pump Station.

The long-term recommendations include:

1. Develop a Water Distribution Master Plan.
2. Coordinate with NTMWD on long-term water supply needs.
3. Consider a second elevated storage tank for the 792-service area.

Proposed System Facilities

A number of system improvements will need to be made for the future water system based on water demand, the design criteria for improvements, and the other criteria mentioned in the previous section.

Need completion of Water Distribution Master Plan to complete this section.

As indicated in the long-term recommendations, the City of Lucas has engaged the engineering firm of Birkhoff, Hendricks & Carter, LLP (BHC) to create a Water Distribution Master Plan which will include the following:

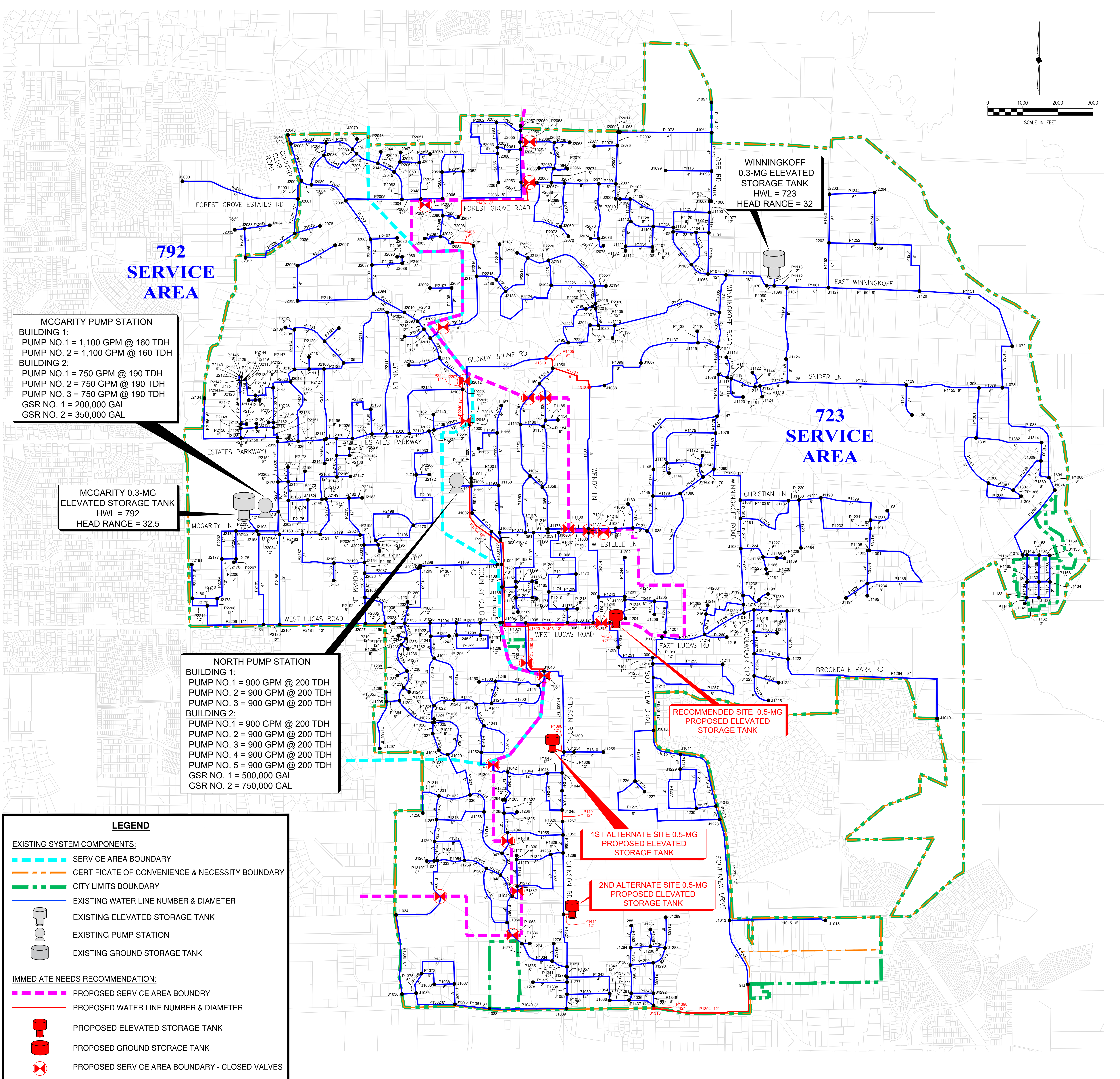
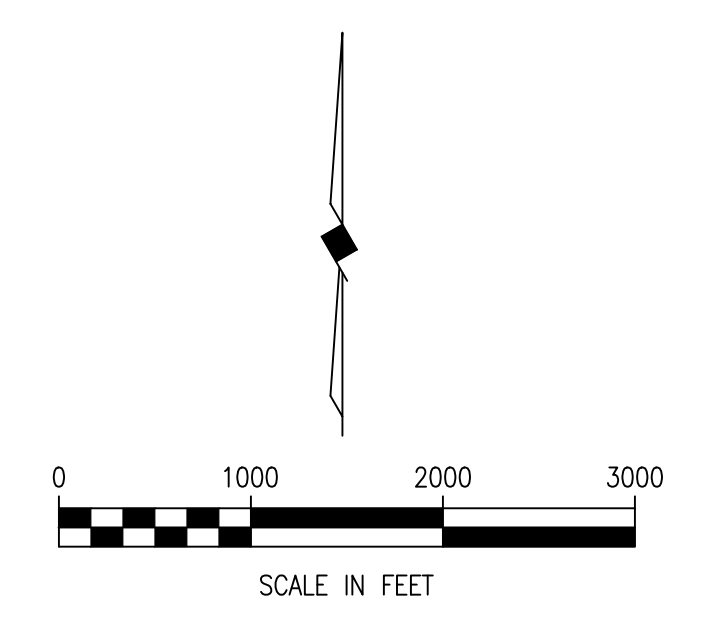
1. Review the water capital improvement projects included in the last impact fee report.
2. Review, update, and add where necessary capital projects eligible for recovery in the impact fee program.
3. Update the impact fee models for the years 2022 and 2032 based on population and land use absorption provided by the City. Water models will be 72-hour extended period simulation models for maximum hourly demand conditions. Impact fee models will be compared to the Master Plan buildout models to determine excess capacity in impact fee water lines and facilities.
4. Update the 10-year capital improvement program, including opinions of probable costs and implementation schedule. The 10-year Capital Improvement Program will be based on land use and growth assumptions provided by the City of Lucas.
5. Inventory new and existing water and wastewater projects eligible for the impact fee program.
6. For each project identified, analyze the capacity currently utilized, total capacity available, and the capacity utilized over the impact fee period.

The principal facilities needed for build-out conditions within the water system service area include the following:

Project Component	Total Capital Cost (\$)*
Proposed 0.5 MG EST & Parallel 12-Inch Water Line	
Proposed 0.5 MG EST	\$3,500,000
Phase 1 Water Line Improvements	\$500,000
TOTAL:	\$4,000,000
Proposed Service Area Adjustment & Water Line Improvements	
Additional Water Lines and Service Area Adjustment	\$6,500,000
TOTAL:	\$6,500,000

*Opinion of Cost Includes

- a) Construction
- b) Engineering
- c) Easements
- d) 20% Contingency



792 SERVICE AREA

MCGARITY PUMP STATION
 BUILDING 1:
 PUMP NO. 1 = 1,100 GPM @ 160 TDH
 PUMP NO. 2 = 1,100 GPM @ 160 TDH
 BUILDING 2:
 PUMP NO. 1 = 750 GPM @ 190 TDH
 PUMP NO. 2 = 750 GPM @ 190 TDH
 PUMP NO. 3 = 750 GPM @ 190 TDH
 GSR NO. 1 = 200,000 GAL
 GSR NO. 2 = 350,000 GAL

MCGARITY 0.3-MG ELEVATED STORAGE TANK
 HWL = 792
 HEAD RANGE = 32.5

NORTH PUMP STATION
 BUILDING 1:
 PUMP NO. 1 = 900 GPM @ 200 TDH
 PUMP NO. 2 = 900 GPM @ 200 TDH
 PUMP NO. 3 = 900 GPM @ 200 TDH
 BUILDING 2:
 PUMP NO. 1 = 900 GPM @ 200 TDH
 PUMP NO. 2 = 900 GPM @ 200 TDH
 PUMP NO. 3 = 900 GPM @ 200 TDH
 PUMP NO. 4 = 900 GPM @ 200 TDH
 PUMP NO. 5 = 900 GPM @ 200 TDH
 GSR NO. 1 = 500,000 GAL
 GSR NO. 2 = 750,000 GAL

WINNINGOFF 0.3-MG ELEVATED STORAGE TANK
 HWL = 723
 HEAD RANGE = 32

723 SERVICE AREA

RECOMMENDED SITE 0.5-MG PROPOSED ELEVATED STORAGE TANK

1ST ALTERNATE SITE 0.5-MG PROPOSED ELEVATED STORAGE TANK

2ND ALTERNATE SITE 0.5-MG PROPOSED ELEVATED STORAGE TANK

LEGEND

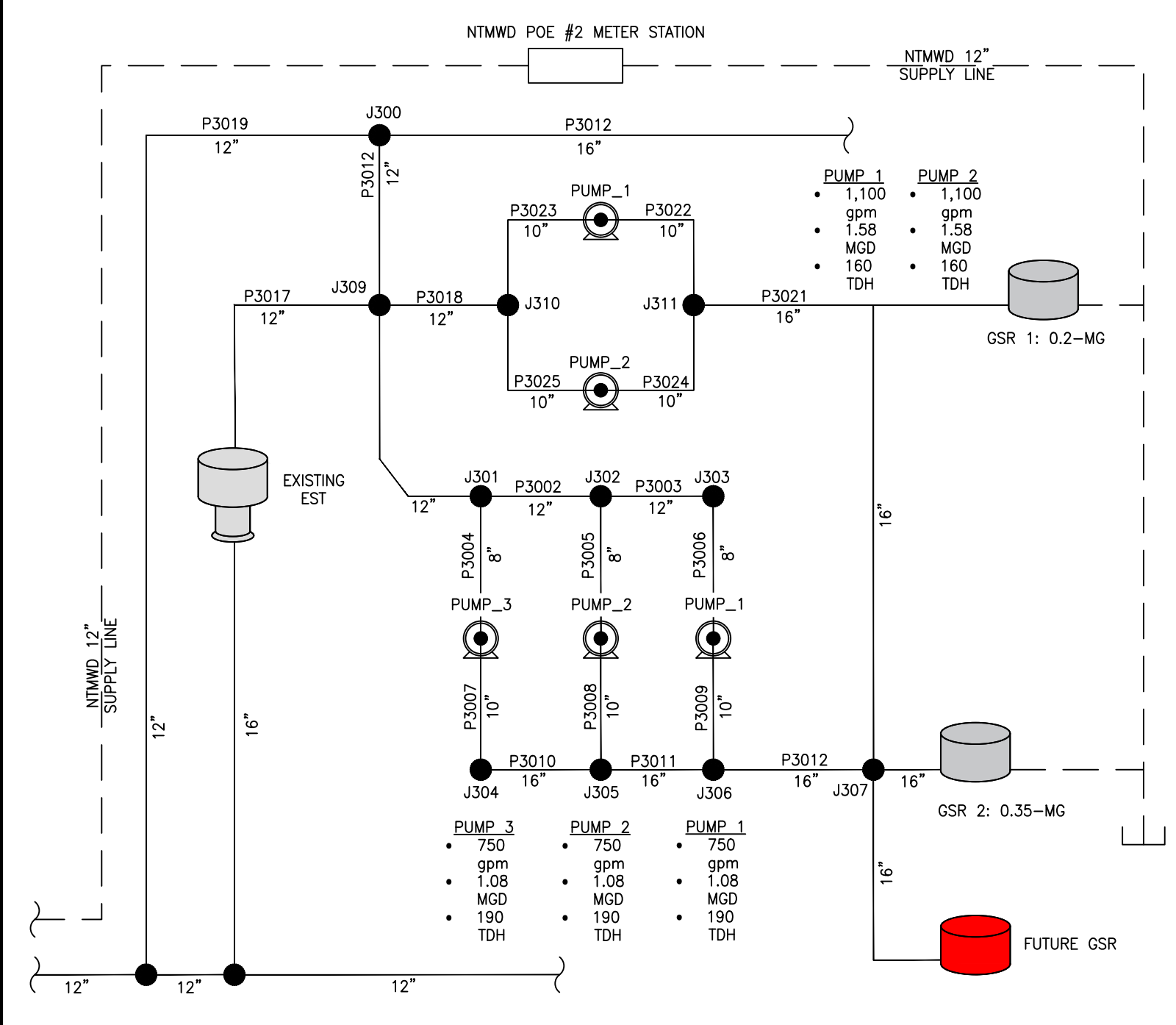
EXISTING SYSTEM COMPONENTS:

- SERVICE AREA BOUNDARY
- CERTIFICATE OF CONVENIENCE & NECESSITY BOUNDARY
- CITY LIMITS BOUNDARY
- EXISTING WATER LINE NUMBER & DIAMETER
- EXISTING ELEVATED STORAGE TANK
- EXISTING PUMP STATION
- EXISTING GROUND STORAGE TANK

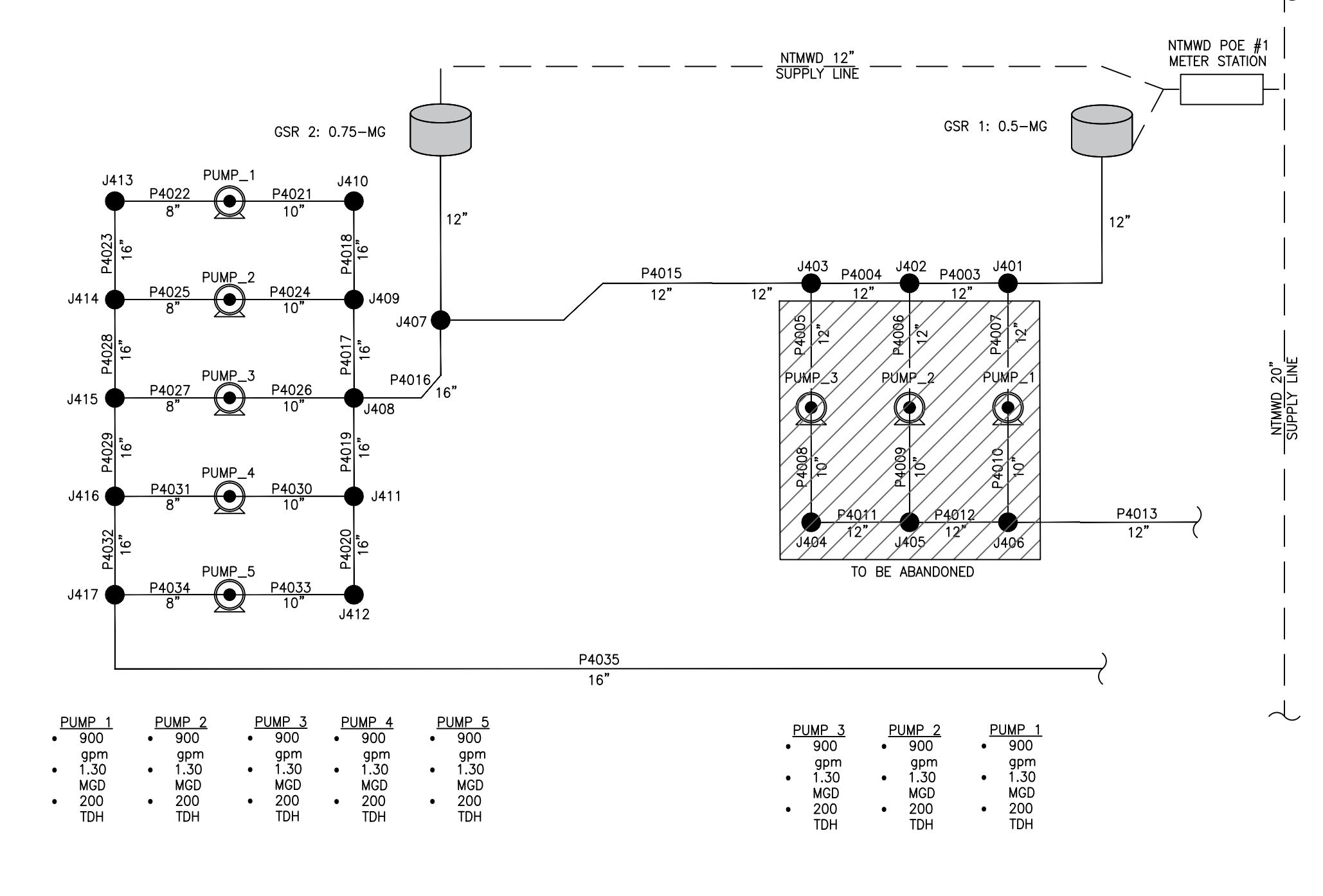
IMMEDIATE NEEDS RECOMMENDATION:

- PROPOSED SERVICE AREA BOUNDARY
- PROPOSED WATER LINE NUMBER & DIAMETER
- PROPOSED ELEVATED STORAGE TANK
- PROPOSED GROUND STORAGE TANK
- PROPOSED SERVICE AREA BOUNDARY - CLOSED VALVES

MCGARITY PUMP STATION



NORTH PUMP STATION



**2021 WATER DISTRIBUTION SYSTEM
 EXISTING SYSTEM HYDRAULIC MODEL
 MAP AND IMMEDIATE NEEDS
 RECOMMENDATIONS**

**WATER MASTER PLAN UPDATE
WATER AND ROADWAY IMPACT FEE UPDATE**

Notice to Proceed December 2021 (Actual start month May 2022)

Update Water Master Plan 5 Months after Notice to Proceed (September 2022)

Update Impact Fee Report 6 Months after Notice to Proceed (October 2022)

Presentations and Hearings 6-7 Months after Notice to Proceed (November 2022)



City of Lucas City Council Agenda Request June 16, 2022

Requestor: Mayor Jim Olk

Agenda Item Request

Executive Session: An Executive Session is not scheduled for this meeting.

As authorized by Section 551.071 of the Texas Government Code, the City Council 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.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA



City of Lucas City Council Agenda Request June 16, 2022

Item No. 10

Requester: Mayor Jim Olk

Agenda Item Request

Reconvene from Executive Session and take any action necessary as a result of the Executive Session.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA