AGENDA
CITY COUNCIL MEETING

May 1, 2025 | 6:30 PM
Council Chambers
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, May 1, 2025, beginning at 6:30 pm at Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002-7651, 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. The presiding officer and a quorum of the City Council will be physically present at this meeting.

If you would like to watch the meeting live, you may go to the City's live streaming link at https://www.lucastexas.us/departments/public-meetings/.

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 City Secretary Toshia Kimball prior to the start of the meeting. This form will also allow a place for comments.

Submit Written Comments: If you are unable to attend a meeting and would like to submit written comments regarding a specific agenda item, email City Secretary Toshia Kimball at tkimball@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

The Citizen Input portion of the agenda is an opportunity for the public to address the City Council on any subject. By completing a "Request to Speak" form and submitting to the City Secretary, citizens have an opportunity to speak at the City Council meeting. However, in accordance with the Texas Open Meetings Act, the City council cannot discuss issues raised or make any decisions, but may refer items to City Staff for research and possible inclusion on a future agenda.

1. Citizen Input.

Community Interest

Pursuant to Section 551.0415 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 minutes of the April 17, 2025, City Council meeting.
   B. Approval of minutes of the April 24, 2025, City Council meeting.

Regular Agenda

4. Receive a presentation, consider capital project priorities and provide direction to the City Manager. **(Presenter: CIP Manager Patrick Hubbard)**

5. Discuss and consider authorizing the City Manager to negotiate and enter into a contract with Raftelis for a Water and Wastewater Rate Study and Five-Year Financial Plan **(Presenter: Development Services Director Joe Hilbourn)**

6. Consider amending the current Interlocal Agreement between Collin County and the City of Lucas for Law-Enforcement Services. **(Presenter: City Manager John Whitsell)**

7. Receive a presentation on the final plans for the Water System Improvements: Estates Waterline Replacement and Water Line Loop at North Pump Station and Provide Direction to the City Manager. **(Presenter: CIP Manager Patrick Hubbard)**

Executive Session

8. 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.

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

10. Adjournment.

Certification

I do hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, Texas 75002 and on the City's website at www.lucastexas.us on or before 5:00 p.m. on April 25, 2025.

_____

Toshia Kimball, 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 Toshia Kimball at 972.912.1211 or by email at tkimball@lucastexas.us at least 48 hours prior to the meeting.

Item No. 01

City of Lucas
City Council Agenda Request
May 1, 2025

Requester: Mayor Dusty Kuykendall

Agenda Item Request

Citizen Input.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA

Item No. 02

City of Lucas
City Council Agenda Request
May 1, 2025

Requester: Mayor Dusty Kuykendall

Agenda Item Request

Items of Community Interest.

Background Information

NA

Attachments/Supporting Documentation

NA

Budget/Financial Impact

NA

Recommendation

NA

Motion

NA

Item No. 03

City of Lucas
Council Agenda Request
May 1, 2025

Requester: Mayor Dusty Kuykendall
City Secretary Toshia Kimball

Agenda Item Request

1. Consent Agenda:

   A. Approval of the minutes of the April 17, 2025, City Council meeting.
   B. Approval of the minutes of the April 24, 2025, City Council meeting.

Background Information

NA

Attachments/Supporting Documentation

1. Minutes of the April 17, 2025, City Council meeting.
2. Minutes of the April 24, 2025, City Council meeting.

Budget/Financial Impact

NA

Recommendation

City Staff recommends approval of the Consent Agenda.

Motion

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

MINUTES
CITY COUNCIL REGULAR MEETING

April 17, 2025 | 6:30 PM
Council Chambers
City Hall | 665 Country Club Road, Lucas, Texas

City Councilmembers Present:
Mayor Dusty Kuykendall
Mayor Pro Tem Debbie Fisher
Councilmember Chris Bierman
Councilmember Tim Johnson
Councilmember Neil Peterson
Councilmember Brian Stubblefield

City Staff Present:
City Manager John Whitsell
City Secretary Toshia Kimball
Development Services Director Joe Hilbourn
Fire Chief Ted Stephens
Deputy Christopher Ronan

City Councilmembers Absent:
Councilmember Phil Lawrence

Mayor Kuykendall called the meeting to order at 6:30 p.m., determined that a quorum was present, and the Pledge of Allegiance was recited.

Citizen Input

1. Citizen Input

No citizen input.

Community Interest

2. Community Interest

A. Proclamation honoring lifesaving efforts will be presented to family members of Mr. Danny Evans, the City of Wylie Public Safety Communications, and Lucas Fire-Rescue:

Wife Jolee Davis
Father Dan Evans
Patient Danny Evans
City of Wylie Public Safety Communications Dispatcher Robin Livingston
City of Wylie Public Safety Communications Dispatcher Karsen Knight
Lucas Fire-Rescue Captain/Paramedic Sean Peterson
Lucas Fire-Rescue Engineer/Paramedic Anthony Aguinaga
Lucas Fire-Rescue Firefighter/Paramedic Jackson Kurtz
Lucas Fire-Rescue Firefighter/EMT Zach Winans
Lucas Fire-Rescue Fire Chief Ted Stephens

Community Events:
- City Hall Closure – April 18th
- Art in Public Places – April 22, 2025 – 5 pm – 7 pm
- Lucas Farmers Market – April 26, 2025 – 8 am to 12 pm

- Reporting Violations of the Water Schedule
- The Lucas Car Show – May 17, 2025 – 8 am – 12 pm
- Free Community CPR Class – Lucas Fire Station, May 3rd, 9 am to 12pm.
- 2025 General & Special Elections – The City of Lucas election has been cancelled due to City Council Seats 5 and 6 running unopposed. This does not affect the ISD elections.
- Voting open at LoveJoy ISD Administration Building Portable #1.
- Early voting begins April 22nd – 26th 8 am – 5 pm. April 28th -29th – 7 am – 7 pm.
- May 3rd Election Day – 7 am to 7 pm.

Consent Agenda

3. Consent Agenda:

A. Approval of the April 3, 2025, meeting minutes

MOTION: A motion was made by Mayor Kuykendall, seconded by Mayor Pro Tem Fisher, to approve the Consent Agenda as presented. The motion passed unanimously by a 6 to 0 vote.

Regular Agenda

4. Consider adopting ordinance number 2025-04-01016 approving mid-year budget adjustments for fiscal year beginning October 1, 2024, and ending September 30, 2025.

MOTION: A motion was made by Mayor Pro Tem Fisher, seconded by Councilmember Johnson to adopt Ordinance 2025-04-01016 approving mid-year adjustments for the fiscal year beginning October 1, 2024, and ending September 30, 2025. The motion passed unanimously by a 6 to 0 vote.

5. Consider approving ordinance number 2025-04-01015, a proposed Interlocal Agreement between the City of Lucas and the City of Parker mutually agreeing on certain jurisdictional boundaries.

MOTION: A motion was made by Mayor Pro Tem Fisher, seconded by Mayor Kuykendall, to table approving ordinance number 2025-04-01015, an Interlocal Agreement between the City of Lucas and the City of Parker mutually agreeing on certain jurisdictional boundaries to a later date. The motion passed unanimously by a 6 to 0 vote.

6. Consider the inclusion of or exclusion of the City of Lucas Extraterritorial Jurisdiction (ETJ) from the creation of the Collin County Emergency Services District No. 1.

MOTION: A motion was made by Mayor Kuykendall, seconded by Councilmember Johnson to deny including the City's ETJ in Collin County Emergency Services District #1. The motion passed unanimously by a 6 to 0 vote.

7. Consider approval of a Trails Master Plan update.

MOTION: A motion was made by Councilmember Bierman, seconded by Councilmember Peterson to approve the update to the Trails Master Plan. The motion passed unanimously by a 6 to 0 vote.

Executive Session Agenda

8. Executive Session:

A. The City Council will convene into executive session pursuant to Section 551.072 of the Texas Government Code, DELIBERATION REGARDING REAL PROPERTY, to deliberate the purchase, exchange, lease, or value of real property.

B. The City Council will convene into executive session pursuant to Section 551.076 of the Texas Government Code, DELIBERATION REGARDING SECURITY DEVICES OR SECURITY AUDITS; CLOSED MEETING, the deployment, or specific occasions for implementation, of security personnel or devices.

City Council convened into Executive Session at 7:18 pm.

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

City Council reconvened from Executive Session at 7:56 pm. There was no action taken.

Adjournment

10. Adjournment.

MOTION: A motion was made by Councilmember Johnson, seconded by Mayor Kuykendall, to adjourn the meeting at 7:57 pm. The motion passed unanimously by a 6 to 0 vote.

APPROVED: ATTEST:

Dusty Kuykendall, Mayor

Toshia Kimball, City Secretary

MINUTES
CITY COUNCIL SPECIAL CALLED MEETING

April 24, 2025 | 6:30 PM
Council Chambers
City Hall | 665 Country Club Road, Lucas, Texas

City Councilmembers Present:
Mayor Dusty Kuykendall
Mayor Pro Tem Debbie Fisher
Councilmember Tim Johnson
Councilmember Neil Peterson
Councilmember Brian Stubblefield

City Staff Present:
City Manager John Whitsell
City Secretary Toshia Kimball
Development Services Director Joe Hilbourn
CIP Manager Patrick Hubbard
Public Works Director Jeremy Bogle

City Councilmembers Remote:
Councilmember Chris Bierman

City Councilmembers Absent:
Councilmember Phil Lawrence

Mayor Kuykendall called the meeting to order at 6:30 p.m., determined that a quorum was present, and the Pledge of Allegiance was recited.

Citizen Input

1. Citizen Input

City Manager John Whitsell discussed measles notification.

Regular Agenda

2. Conduct a Streets Workshop to develop a comprehensive strategy for road maintenance and improvements in the City of Lucas.

No motion required for this item.

Adjournment

3. Adjournment.

MOTION: A motion was made by Councilmember Johnson, seconded by Councilmember Peterson, to adjourn the meeting at 7:48 pm. The motion passed unanimously by a 6 to 0 vote.

APPROVED:

Dusty Kuykendall, Mayor

ATTEST:

Toshia Kimball, City Secretary

Item No. 04

City of Lucas
City Council Agenda Request
May 1, 2025

Requester: Capital Improvement Projects Manager Patrick Hubbard

Agenda Item Request

Receive a presentation, consider capital project priorities and provide direction to the City Manager.

Background Information

City of Lucas staff provide an annual presentation of the state of the city's capital projects. This includes recent, current and proposed capital projects. This provides an opportunity for the City Council to provide input and to discuss capital projects at mid-year, in the lead up to the preparation of budget documents for adoption.

Staff has prepared a comprehensive spreadsheet identifying key projects and potential funding sources. This includes projects that have occurred, are occurring, or are foreseen as warranting consideration in the most recent, current, or in upcoming one to two fiscal years. Longer-term capital projects are included in the Comprehensive Capital Improvement Plan. The spreadsheet is organized into the following categories:

- Bridges
- Drainage
- Equipment/Vehicle
- Facility
- Parks
- Roadways
- Technology
- Water

Projects within each category have a staff priority ranking (High, Medium, Low). Other information includes the project's budget, costs, color coded funding information, project lead, and detailed notes. A resource summary with available funding sources is located at the end of the spreadsheet.

Attachments/Supporting Documentation

1. Fiscal Year 2025-2026 Capital Projects Summary

Budget/Financial Impact

Staff has provided a comprehensive overview of the budget and financial impact of the capital projects in the attached spreadsheet.

City of Lucas
City Council Agenda Request
May 1, 2025

Item No. 04

Recommendations

No action is requested during this meeting; however, staff have presented several priority recommendations and will adjust plans based on City Council input at this meeting. These will be brought forward for action at a suitable time, as applicable.

Motion

No motion is required at this time.

Capital Projects Fiscal Year 2025/2026

Completed
Funded
Partially Funded
City Staff Recommendation - Unfunded

Category	Fund	Description	Department	Lead	Budget	Cost to Date	Source of Estimate	Priority	Notes
Bridge	G	Snider Bridge Redesign	PW/Engineering	Joe H	179,130	0	JTG Engineering	High	Snider Lane from Susan Circle to Shady Lane including Bridge over White Rock Creek (Completed)
Bridge	G	Snider Bridge Construction	PW/Engineering	Patrick	5,512,260	0	BCC Engineering	Low	Snider Lane from Susan Circle to Shady Lane including Bridge over White Rock Creek
Bridge	G	Stinson Bridge Construction	PW/Engineering	Patrick	5,162,308	0	BCC Engineering	Low	Stinson Road from Bristol Park to Bentwater Drive Including Bridge over Muddy Creek
Bridge	G	Winningkoff Bridge - Bridge/ Roadway Repair	PW/Engineering	Patrick	400,000	0	BCC Engineering	Low	General repair to surface and abutments of bridge
Bridge	G	Winningkoff Bridge - Replace	PW/Engineering	Patrick	4,300,000	0	BCC Engineering	Low	
Drainage	G	Belvedere, Park Lane, and Stinson Road	PW/Engineering	Jeremy	48,550	48,550	Four Star	High	Clean out sediment in Ditch and Culverts FY 23-24
Drainage	G	Winningkoff and Arthur Court	PW/Engineering	Jeremy	28,700	28,700	Four Star	High	Build Headwall for culverts and replace dropping pavement over culverts
Drainage	G	Winningkoff and Brockdale Park	PW/Engineering	Jeremy	42,950	42,950	Four Star	High	Culvert Maintenance and repair of three culverts
Drainage	G	McGarity Culvert	PW/Engineering	Jeremy	28,250	28,250	Four Star	High	Repairing, cleaning, and building a rock dam for culvert under McGarity
Drainage	G	Snider Lane Drainage Inlet	PW/Engineering	Jeremy	23,590	23,590	Four Star	High	Correction of a drainage deficiency on Snider Lane
Drainage	G	Lewis Lane - replace two 72 inch culverts	PW/Engineering	Jeremy	170,162	170,162	Four Star	High	Emergency replacement of malformed rusted culverts FY 23-24
Drainage	G	Cimmaron Lane Culvert Repair - Emergency	PW/Engineering	Jeremy	15,800	15,800	Four Star	High	Emergency repair of collapsing under road bridge FY 23-24
Drainage	G	Stinson Drainage (west side) Highland to Creek	PW/Engineering	Jeremy	246,740	0	Four Star	Low	To improve drainage similar to work done at Claremont Springs
Equip/Veh	G	Law Enforcement Vehicle F-150 Truck outfitted	Administration	CM/Liz	130,000	82,604	Collin County	High	Completed funded FY 24-25
Equip/Veh	G	Law Enforcement Vehicle F-150 Truck outfitted	Administration	CM/Liz	130,000	126,345	Completed	High	Completed funded FY 24-25
Equip/Veh	G	Law Enforcement Vehicle F-150 Truck outfitted	Administration	CM/Liz	130,000	126,345	Completed	High	Completed funded FY 24-25
Equip/Veh	G/W	One Ton Truck with Utility Bed	PW/Engineering	Joe H	76,500	81,203	Lake County Chevrolet	High	Completed funded FY 24-25
Equip/Veh	G	Utility Side by Side	Fire-Rescue	Chief	25,000	20,707	Completed	Med	Utility Vehicle Replacement Request for FY 24-25
Equip/Veh	G	Fire Engine	Fire-Rescue	Chief	1,400,000	167,721	Siddons-Martin	High	Replace Yr 2029 - 2004 Spartan - Nov 25 estimated delivery/includes equip, radio, & truck (Budget cost based on ordering before 11/1/23)(Funding approved 4-20-23)
Equip/Veh	G	Ambulance	Fire-Rescue	Chief	490,000	0	Siddons-Martin	High	Replace Yr 2025 - 2014 Ford F-550/Braum Box - August 25 estimated delivery (Ambulance funded on order)
Equip/Veh	G	Assistant Chief Vehicle and All Associated Emergency Equipment	Fire-Rescue	Chief	115,000	910	Estimate	High	Vehicle Replacement Request (including all associated emergency equipment) for FY 24-25
Equip/Veh	G	Law Enforcement Vehicle F-150 Truck outfitted	Administration	CM/Liz	92,150	87,500	Estimate	High	Replacement for Deputy Gillespie. Funded FY 24-25 Collin County Sheriff's Office replaces vehicles at 110,000 miles.
Equip/Veh	G	Building Inspector Truck	Dev Services	Joe H	38,288	0	Buyboard	High	
Equip/Veh	G	2025 Chevrolet 2500 with utility bed	PW/Engineering	Jeremy	92,000	0	Buyboard	High	
Equip/Veh	G	Admin-Finance vehicle	Administration	Joe H	27,550	0	Buyboard	High	Fleet vehicle for general travel.
Equip/Veh	G	SCBA Air Packs	Fire-Rescue	Ted	16,782	0	Vendor	High	Due to replace existing equipment on ambulance based on replacement schedule.
Facility	G	Driveway Approach and Mow Strip at McGarity Lift Station	Public Works	Jeremy	8,468	8,468	Salazar Concrete	High	
Facility	G	Fire Station Auxiliary Building	Development Svcs	Joe H	616,678	0	Jones Brothers Construction	High	Addition of a storage building to the Fire Station property to provide for additional equipment storage on site.
Facility	W	Equipment Storage at North Pump Station for all of Public Works Equipment	Public Works	Jeremy	734,380	0	Jones Brothers Construction	High	
Parks	G	Community Park Sidewalk Connection to Community Center	PW/Engineering	Jeremy	8,000	8,000	Salazar Concrete	High	
Parks	G	Community Park Parking Area Improvements (Concrete Curb/Fence Moving)	PW/Engineering	Scott	42,330	42,330	Four Star	High	Completed FY 23-24 - Completed to complement paving of back parking lot.
Parks	G	Community Park - Paving of Back Parking Lot	PW/Engineering	Scott	126,000	158,450	Reynolds Asphalt/ Road Master Striping	High	Completed FY 23-24

Capital Projects Fiscal Year 2025/2026

Completed
Funded
Partially Funded
City Staff Recommendation - Unfunded

Category	Fund	Description	Department	Lead	Budget	Cost to Date	Source of Estimate	Priority	Notes
Parks	G	East Winningkoff Trail Loop Phase 1	PW/Engineering	Patrick	358,012	0	TBD	Med	Create trail loop connecting to East Winningkoff Trailhead. City portion of total project is estimated at $179,006 with 50% grant match from Collin County. FY 23-24
Parks	G	Forest Creek Park - Replacement of Playground Equipment	PW/Engineering	Patrick	236,326	0	Vendor	High	Replace Playground Equipment. City portion of total project is estimated at $118,163 with 50% grant match from Texas Parks & Wildlife. Pending grant agreement.
Parks	G	Central Loop Trail - West Lucas Road Segment (Design)	PW/Engineering	Patrick	135,000	81000	Vendor	High	
Parks	G	Central Loop Trail - West Lucas Road Segment (Construction)	PW/Engineering	Joe H	900,822	0	BCC Engineering	Med	Portion of Central Loop Trail to be constructed as part of West Lucas Road Project.
Parks	G	East Winningkoff Trail Phase 2	PW/Engineering	Patrick	TBD	0	TBD	Low	Extension of trail to connect to Trinity Trail along Welborn Lane.
Parks	G	Community Park - Walking Loop Extension	PW/Engineering	Patrick	21,252	0	2023 CCIP	Low	Construct an extension of walking loop to the east side of the Community Park Pavilion.
Roadways	G	Concrete Panel Replacement - Estelle and City Hall	PW/Engineering	Jeremy	23,900	25,400	Tejas Cutters	High	Part of 24-25 Improvement Roads
Roadways	G	2024 Road Improvements (Lynn Lane Culvert, Winningkoff/East Winningkoff Road Intersection, Shady Lane)	PW/Engineering	Patrick	714,260	776,383	TexasBit	High	FY 23-24 Road Improvement Projects. City Council raised the budget at the time of approval.
Roadways	G	Logan Ford Ranch Road Improvements (Welborn Lane and Ford Lane)	PW/Engineering	Patrick	314,778	302,278	TexasBit	High	$200,000 funded by impact fees, via development agreement.
Roadways	G	West Lucas Road Reconstruction - Design	PW/Engineering	Joe H	2,531,090	2,056,120	BCC Engineering	High	Funded Portion - $8,365,180 2018 Collin County Bonds $6,470,513 City 2019 Cos/Interest 2019 CO $126,729/Interest Collin County Funding $115,428/$7,600,000 from Regional Toll Revenue. Design costs include original design and project management costs, re-design, and surveying costs.
Roadways	G	West Lucas Road Reconstruction - Construction	PW/Engineering	Joe H	24,101,347	0	BCC Engineering	High	Funded Portion - $8,365,180 2018 Collin County Bonds $6,470,513 City 2019 Cos/Interest 2019 CO $126,729/Interest Collin County Funding $115,428/$7,600,000 from Regional Toll Revenue. Updated cost reflected EOPCC dated 3/18/2025 minus sidewalk and force main relocation costs. Previous EOPCC reflected cost of $22,677,850.
Roadways	G	Woodmoor Subdivision Road and Drainage Improvements (Culvert Replacements, Mill and Overlay)	PW/Engineering	Patrick	Estimate Pending	0	TexasBit/Four Star	High	Recommended for road maintenance in FY 24-25
Roadways	G	Meadows Subdivision Road and Drainage Improvements (Culvert Replacements, Mill and Overlay)	PW/Engineering	Patrick	Estimate Pending	0	TexasBit/Four Star	High	Recommended for road maintenance in FY 24-25
Roadways	G	Improvement Roads 2025-2026	PW/Engineering	Patrick	Estimate Pending	0	Pending	High	Item depends on results of Streets Workshop to be held on 4/24/25, after this document is finalized.
Roadways	G	Forest Grove Road from Country Club to S Curve	PW/Engineering	Patrick	5,626,500	0	2023 CCIP	Low	Indicated as 25-26 project in CIP. Not recommended for funding at this time.
Technology		[PLACEHOLDER]							
Water	W	West Lucas Road Elevated Storage Tank - Design	PW/Engineering	Patrick	336,700	322,532	JTG Engineering	High	Funded - American Recovery Plan Funding $2.21M/2017 Certficates of Obligation Funding Water Fund $639K/Restricted Reserves $121K/Restricted Impact Fees $619K
Water	W	Estates Road 8-Inch Waterline Replacement - Design	PW/Engineering	Patrick	32,000	2,940	SPI Engineering	High	
Water	W	North Pump Station 12-inch Water Line - Design	PW/Engineering	Patrick	9,500	0	SPI Engineering	High	
Water	W	McGarity Stem replacement	PW/Engineering	Jeremy	110,000	97,380	Axis Construction LP	High	Emergency replacement of McGarity Stem approved by City Council on 1-2-25
Water	W	AMI Meter Upgrade	PW/Engineering	Jeremy	695,194	309,758	Core & Main	High	City Council approved 10-17-24
Water	W	West Lucas Road Elevated Storage Tank - Construction and Materials Testing	PW/Engineering	Patrick	5,027,616	3,920,985	Landmark Services/ ESC Southwest, LLP	High	2019 Certificates of Obligation Funding Water Fund $1,59M/$162K FY 23-24 Reserves - Currently under construction by Landmark Structures

Capital Projects Fiscal Year 2025/2026

Completed
Funded
Partially Funded
City Staff Recommendation - Unfunded

Category	Fund	Description	Department	Lead	Budget	Cost to Date	Source of Estimate	Priority	Notes
Water	W	Repaint McGarity 350,000 and 200,000 Gallon Ground Storage Tanks - Design	PW/Engineering	Patrick	58,960	17,952	JTG Engineering	High	
Water	W	Estates Road 8-Inch Waterline Replacement and North Pump Station 12-inch Water Line - Construction	PW/Engineering	Jeremy	801,309	0	SPI Engineering	High	Combination of two CCIP Projects under design with SPI Engineering, to be bid as a package. Updated EOPCC based on final design is pending.
Water	W	Repaint McGarity 350,000 and 200,000 Gallon Ground Storage Tanks - Construction	PW/Engineering	Jeremy	445,172	0	2023 CCIP	High	Combination of two CCIP Projects under design with JTG Engineering, to be bid as a package.
Water	W	Brockdale Park Road to Lakeview Drive 8-inch water lines	PW/Engineering	Jeremy	940,392	0	2023 CCIP	Medium	CCIP project identified in FY 25-26.
Water	W	Estates Parkway to Glenbrook Circle and Glenbrook Circle to Country Club Road sixteen-inch water line	PW/Engineering	Jeremy	946,391	0	2023 CCIP	Medium	CCIP project identified in FY 25-26.
Wastewater	W	Osage Force Main Pressurization	PW/Engineering	Jeremy	14,200	14,200	Four Star	High	Placing the existing wastewater force main under pressure to aid in the identification of leaks.
Wastewater	W	Osage Force Main Vales and Corporation Stops	PW/Engineering	Jeremy	34,750	34,750	Four Star	High	Preparation of force main for entering service
Wastewater	W	Osage Lane Lift Station Project (formerly Hunt Lift Station Project) - Design	PW/Engineering	Patrick	74,500	68,865	Huitt-Zollars	High	Funded by water fund reserves - approved by City Council on 12-21-23.
Wastewater	W	West Lucas Rd Redesign - Relocation of Force Main (Design)	PW/Engineering	Patrick	41,450	8,290	BCC Engineering	High	City Council approved 8-1-24
Wastewater	W	West Lucas Rd Widening - Relocation of Force Main (Construction)	PW/Engineering	Joe H	3,467,500	0	BCC Engineering	High	
Wastewater	W	Osage Lane Lift Station Project (formerly Hunt Lift Station Project) - Construction	PW/Engineering	Patrick	765,940	0	Huitt-Zollars	High	Remaining costs to complete Osage Lane Lift Station/Mobilization, Pumps, Valves, Scada System, Pressure Test, and Electric. Remaining escrow balance of $263,051 has been received on 1/29/2024

Resources:

Excess General Fund Reserves $2,569,374 (50% of $5,138,748)
Excess Water Fund Reserves $4,117,598 (50% of $8,235,195)

Note 1: Cost to Date Column and Resources reflect balances as of 4/22/2025.
Note 2: Completed projects are shown for Fiscal Years 23-24 and 24-25 only.
Note 3: Designs designated as "Complete" may still have outstanding services to be billed. In these cases, "Complete" refers to the plan set, not the contract.

City of Lucas
City Council Agenda Request
May 1, 2025

Item No. 05

Requester: Development Services Director Joe Hilbourn

Agenda Item Request

Discuss and consider authorizing the City Manager to enter into a contract with Raftelis for a Water and Wastewater Rate Study and Five-Year Financial Plan.

Background Information

Raftelis – Phase Two On-Call Services Scope of Work Summary

Raftelis has proposed a second phase of its on-call services, focused on conducting a **comprehensive water rate study** for the City. This phase will include an **updated financial impact analysis** in response to the most recent proposal from the **North Texas Municipal Water District (NTMWD)**.

Key details include:

- **Scope of Work**: Detailed in *Attachment A* (included in the City Council's back-up materials).
- **Objective**: Evaluate the financial implications of NTMWD's proposed rate structure, including tiered pricing and premium components.
- **Estimated Cost**: **$29,900**
- **Timeline**: Estimated **3–4 months** from issuance of a **Notice to Proceed**. The timeline may shift depending on the **City's responsiveness to data requests**.

This study will provide valuable insights to help the City understand and prepare for potential long-term cost impacts stemming from NTMWD's proposed changes.

Overview of the "Customer Rate"

This is the price a **Customer** (likely a non-Member City purchasing water) pays per **1,000 gallons** of water from **NTMWD (North Texas Municipal Water District)**. It's recalculated every year.

Initial Phase (Before FY 2029):

- The **Customer Rate** is simply the **Member City Rate** (the rate NTMWD charges to its member cities) **plus $0.05** per 1,000 gallons.

City of Lucas
City Council Agenda Request
May 1, 2025

Item No. 05

Starting FY 2029: The Customer Rate gets more complex, with two tiers and a cap:

1. **Legacy Premium Component:**
    - Applies to the amount of water equal to the customer's **FY 2028 Annual Minimum plus 5%**.
    - That portion (called the **Legacy Volume**) will still be charged at the **Member City Rate + $0.05**.
2. **Growth Premium Component:**
    - Applies to water use **above the Legacy Volume** (called the **Growth Volume**).
    - This part is charged at **Member City Rate + 10%**.
3. **Effective Premium Cap:**
    - The average rate the customer ends up paying (called the **Effective Rate**) is calculated based on the two components above.
    - If the Effective Rate is **more than 2.8% higher** than the Member City Rate, the customer's rate is **capped** at exactly **Member City Rate + 2.8%**.
    - **Important**: Once a customer hits this cap, their rate **can't go below it** in future years—even if usage patterns change.

In Summary:

- **Before FY 2029**: Simple surcharge of **$0.05** over Member City Rate.
- **FY 2029 and after**:
    - You pay less for "old" usage levels (Legacy Volume).
    - You pay more for usage above that (Growth Volume).
    - But, there's a safety net: if your total average rate (Effective Rate) is too high, it's capped at **Member City Rate + 2.8%**, and that's your new minimum going forward.

Proposed Projects for Inclusion in Upcoming Rate Study

City staff recommends that the following water utility-related projects be included in the scope of the upcoming **Raftelis rate study**. These projects are associated with **TxDOT-proposed roadway widenings** that affect city-owned water infrastructure located within existing TxDOT rights-of-way.

During a recent coordination meeting, TxDOT provided **conceptual drawings** for proposed improvements along:

- **FM 1378 North of West Lucas Road (Country Club Road)**
- **FM 1378 South of West Lucas Road (Southview)**
- **East Lucas Road**

All three corridors currently include **existing water mains** that may require **relocation or adjustment**.

City of Lucas
City Council Agenda Request
May 1, 2025

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Projects Identified for Inclusion:

1. **Ground Storage Tank – McGarity Lane Pump Station**
    - **Capacity**: 1 million gallons
    - **Estimated Cost**: $4.5 million
2. **Water Main Relocation – Southview (FM 1378 South of W. Lucas Rd.)**
    - **Estimated Cost**: TBD
3. **Water Main Relocation – Country Club Road (FM 1378 North of W. Lucas Rd.)**
    - **Estimated Cost**: TBD
4. **Water Main Relocation – East Lucas Road**
    - **Estimated Cost**: TBD

City staff has engaged **Mike Burge with SPI Engineering** to develop cost estimates for:

- Design services
- Engineering estimates of probable construction costs

Mike Burge brings continuity to these efforts, having previously been with **BW2 Engineers**, the firm responsible for much of the original design work for these water systems. SPI Engineering has since acquired BW2, and Mike's familiarity with the projects is expected to support a more efficient and accurate estimate process.

Attachments/Supporting Documentation

1. Raftelis Phase II – Rate Study and Final NTMWD Impact Analysis
2. NTMWD proposed customer contract.
3. Q&A NTWMD customer contract.

Budget/Financial Impact

1. $29,900 for the Raftelis Rate study.

Recommendation

Staff recommends moving forward with a rate study using Raftelis with the recommended projects included in the study.

Motion

I make a motion to approve/deny authorizing the City Manager to negotiate and enter into a contract with Raftelis for a Water and Wastewater Rate Study and Five-Year Financial Plan.

NORTH TEXAS MUNICIPAL WATER DISTRICT
[CUSTOMER NAME]
POTABLE WATER SUPPLY CONTRACT

THE STATE OF TEXAS §
§
THE COUNTY OF COLLIN §

THIS CONTRACT (the "Contract") made and entered into as of this the _____ day of _____ _____, 2025, by and between the North Texas Municipal Water District, hereinafter called "NTMWD", a conservation and reclamation district created under Article 16, Section 59, of the Texas Constitution, and the [CUSTOMER NAME], hereinafter called "Customer." NTMWD and Customer are each referred herein as "party" and jointly referred to as "parties" in this Contract.

W I T N E S S E T H :

WHEREAS, NTMWD and Customer are authorized to enter into this Contract pursuant to Chapter 62, Acts of the 52nd Legislature, 1951 (Article 8280-141, Vernon's Texas Civil Statutes), Chapter 791 of the Texas Government Code (the "Interlocal Cooperation Act") and other applicable laws;

WHEREAS, **[INSERT DESCRIPTION OF PREVIOUS CONTRACT, IF APPLICABLE]**;

WHEREAS, Customer desires to obtain an adequate and dependable water supply from NTMWD;

WHEREAS, NTMWD was created, among other things, to serve the water needs of its Member Cities, as defined below;

WHEREAS, Customer acknowledges and understands that this Contract establishes a maximum amount of potable water that NTMWD is required to deliver to Customer;

WHEREAS, Customer agrees to construct and operate adequate water distribution, storage and pump station facilities so that the maximum delivery rate of water will not exceed, at any time, 2.2 times the Highest Historical Average at the Point(s) of Delivery, as such terms are defined herein;

WHEREAS, Customer acknowledges and understands that NTMWD determines the rates to be paid by Member Cities and Customer and that rates for Customer will not be the same as and are higher than the rates for Member Cities;

WHEREAS, Customer is not compelled to purchase water from NTMWD and is voluntarily entering into this Contract;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, NTMWD agrees to furnish water, and Customer agrees to pay for water, upon the terms and conditions and for the consideration hereinafter set forth, to wit:

Section 1. DEFINITION OF TERMS. The following terms and expressions as used in this Contract, unless the context clearly shows otherwise, shall have the following meanings:

(a) "Annual Minimum" or "Annual Minimum Volume" means the minimum amount of potable water Customer must compensate NTMWD for during the Annual Payment Period, and each year thereafter, regardless of whether Customer actually takes such quantity of water. The Annual Minimum shall be adjusted annually after the first Annual Payment Period as provided in Section 8;

(b) "Annual Maximum" means the maximum amount of potable water that NTMWD agrees to sell and deliver to Customer during any Water Year under this Contract;

(c) "Annual Payment" means the amount of money to be paid to NTMWD by Customer during each Annual Payment Period;

(d) "Annual Payment Period" means NTMWD's fiscal year, which currently begins on October 1 of each calendar year and ends on September 30 of the next following calendar year, but which may be any twelve (12) consecutive month period fixed by NTMWD;

(e) "Contract Date" means the effective date of this Contract as executed by both parties, which is the day and year first above written;

(f) "Customer" means [INSERT CUSTOMER NAME] as defined in the preamble to this Contract;

(g) "Customer Entity or Customer Entities" means any customer other than the Member Cities with which NTMWD contracts with to furnish water;

(h) "Customer Rate" is defined as the rate to be paid by Customer on a per 1,000 gallon basis, calculated annually by NTMWD, as provided herein, and applied to Customer's Annual Minimum. Initially, the Customer Rate shall be equal to the rate set by the NTMWD Board of Directors for Member Cities ("Member City Rate") plus $0.05. Commencing at the beginning of FY 2029, the Customer Rate shall be made up of two tiers and a cap that include the Legacy Premium Component, Growth Premium Component, and Effective Premium Cap, as set forth below:

(i) "Legacy Premium Component": For that portion of Customer's Annual Minimum equal to its FY 2028 Annual Minimum plus 5% ("Legacy Volume"), the Customer Rate applied shall be the Member City Rate plus $0.05 ("Legacy Charge");

(ii) "Growth Premium Component": For that portion of the Customer's Annual Minimum greater than the Legacy Volume ("Growth Volume"), the Customer Rate applied shall be the Member City Rate plus 10% ("Growth Charge"); and

(iii) "Effective Premium Cap": For the purposes of this calculation, "Effective Rate" means the amount to be paid by Customer per 1,000 gallons resulting from calculation of the Legacy Premium Component and the Growth Premium Component. If the Customer's calculated Effective Rate exceeds more than 2.8% of the Member City Rate, the Customer Rate shall be adjusted to result in payment by Customer that equals the Member City Rate plus 2.8% (Effective Premium Rate"). After a Customer reaches the

Effective Premium Rate, the Customer Rate cannot fall below the Effective Premium Rate.

Customer Rate calculation examples are included in **Exhibit A**.

(i) "Emergency Condition" means a condition that necessitates an expeditious delivery of water to prevent or combat imminent peril to the public health, safety, or welfare;

(j) "FY" means NTMWD's fiscal year which currently begins on October 1 of each calendar year and ends on September 30 of the next following calendar year, but which may be any twelve (12) consecutive month period fixed by NTMWD.

(k) "Highest Historical Average" means the higher of (1) [INSERT AMOUNT] gallons per day, that being 1/365 of the Annual Minimum as provided in Section 8 of this Contract at the Point(s) of Delivery, or (2) 1/365 of the highest annual amount of potable water delivered to the Customer at the Point(s) of Delivery in a Water Year during the term of this Contract;

(l) "Member City or Member Cities" means the Cities of Allen, Farmersville, Forney, Frisco, Garland, McKinney, Mesquite, Plano, Princeton, Richardson, Rockwall, Royse City, Wylie, and any other city that may hereafter legally be annexed into the service area of NTMWD in accordance with Tex. Rev. Civ. Stat. Art. 8280-141;

(m) "NTMWD" means the North Texas Municipal Water District as defined in the preamble to this Contract;

(n) "Point(s) of Delivery" means the meter vault(s) at which water service is delivered by NTMWD to Customer at the location(s) specified in Section 5. The meter vault(s) and facilities upstream thereof shall be the sole responsibility of NTMWD, and facilities downstream thereof shall be the sole responsibility of the Customer except as otherwise provided herein by this Contract;

(o) "Regional Contract" means the "North Texas Municipal Water District Regional Water Supply Facilities Amendatory Contract," dated August 1, 1988, as amended, together with all similar contracts between NTMWD and contracting parties;

(p) "System" means, collectively, the existing system and the future improvements and water of NTMWD included as part of the System under the Regional Contract for projects, water storage, treatment, transmission and supply, including all dams, reservoirs, and other properties or interests therein wherever located. Said terms do not include any of NTMWD's facilities that provide wastewater treatment or disposal services, or solid waste disposal services, of any kind. Said terms do not include any facilities acquired or constructed by NTMWD with the proceeds from the issuance of "Special Facilities Bonds," which are payable from any source, contract, or revenues whatsoever, other than revenues from the System; and,

(q) "Water Year" means the period of August 1 of each calendar year through July 31 of the next following calendar year, or such other twelve (12) month period designated by NTMWD to all Member Cities and Customer Entities.

Section 2. DELIVERY OF WATER. NTMWD agrees to sell and to deliver potable water under this Contract to Customer at its Point(s) of Delivery as described in Section 5 hereof, and Customer agrees to take at its Point(s) of Delivery all water required for use by Customer during the term of this Contract, including all potable water for Customer's own use and for distribution to all customers served by Customer's water distribution system, or within Customer's existing certificated retail service area regulated by the Public Utility Commission of Texas ("PUCT"), or any successor agency. **[OPTIONAL LANGUAGE ON ADDITIONAL WATER SOURCE]** NTMWD acknowledges that Customer receives water from other sources in addition to the water supplied hereunder. It is specifically provided, however, that after the Contract Date, Customer shall be required to enter into a new potable water supply contract with NTMWD to replace and supersede this Contract in its entirety prior to the Customer entering into, renewing, or amending with regard to volume of water to be supplied, any agreement to provide wholesale or retail potable water for use outside its boundaries, its extraterritorial jurisdiction, or its certificated retail service area. Customer shall not become a party to any contract for the sale of potable water that would violate or be inconsistent with the provisions of this Contract. NTMWD will use its best efforts to furnish and remain in a position to furnish potable water sufficient for all reasonable potable water requirements of Customer, but its obligation shall be limited to the amount of potable water available to it from the System during routine operation. **[OPTIONAL LANGUAGE ON CURRENT WHOLESALE CUSTOMERS]** NTMWD acknowledges that Customer currently provides wholesale water service to those entities identified on **Exhibit B** attached hereto, and consents thereto for all purposes.

The Annual Maximum that NTMWD agrees to sell and deliver to Customer under this Contract at the Point(s) of Delivery shall be [ANNUAL MAXIMUM] gallons per year. If Customer exceeds the Annual Maximum for the Point(s) of Delivery during any Water Year, within sixty (60) days of such exceedance Customer agrees to commence negotiations with NTMWD for the execution of a new or an amended or restated contract.

Except as provided in Section 8(j), the maximum rate of delivery at the Point(s) of Delivery shall not exceed 2.2 times the Highest Historical Average supplied to Customer hereunder, which is consistent with the capabilities and abilities of NTMWD facilities, and it is understood that NTMWD may from time to time adjust the maximum rate of delivery to all Customer Entities on a reasonable, equitable and uniform basis.

Section 3. OTHER CONTRACTS. NTMWD reserves the right to supply potable water from the System to additional parties as determined by the Board of Directors of NTMWD.

Section 4. QUALITY. The water to be delivered by NTMWD and received by Customer shall be potable water. Customer has satisfied itself that such water will be suitable for its needs, but NTMWD is obligated to treat such water so as to meet the standards of all State and Federal agencies having jurisdiction over water quality. NTMWD and Customer shall cooperate, each within its legal powers, in preventing, to the extent practicable, the pollution and contamination of the reservoirs and watersheds from which water is obtained.

Section 5. POINT(S) OF DELIVERY. The Point(s) of Delivery for Customer is located on [ROAD NAME] on the [PIPELINE NAME] pipeline. **Exhibit C** attached hereto identifies the location of the Point(s) of Delivery and [PIPELINE NAME]. The parties agree that if the [PIPELINE NAME] pipeline as depicted on Exhibit C is abandoned or relocated at the request of the Customer, the Customer shall pay all costs associated with the construction of a new Point of Delivery or connection to a different pipeline at the discretion of NTMWD, including any and all costs associated with furnishing the site of the new Point of Delivery as described in this section. NTMWD, in its sole discretion, may pay the costs associated with the construction of a new Point of Delivery.

Customer agrees to furnish the site at the Point(s) of Delivery and to construct and operate adequate water distribution, storage, and pump station facilities so that the maximum rate of delivery will not exceed 2.2 times the Highest Historical Average at the Point(s) of Delivery. Customer shall design and construct a separate vault for the Point(s) of Delivery. The vault will include the billing meter, control valve, and appropriate SCADA equipment. Customer shall also provide one level transmitter for the ground storage tank for NTMWD use and shall provide a separate air gap for the Point(s) of Delivery at the ground storage tank. At the request of the Customer, or upon NTMWD's own determination, NTMWD may install isolation valves associated with the Point(s) of Delivery. NTMWD may require Customer to bear all costs associated with such installation.

Customer shall provide to NTMWD all plans for the design, construction, and installation of any facilities and equipment required to receive and take all potable water delivered to it under this Contract and Customer shall not proceed with any construction or installation without NTMWD's prior written approval of such plans, which approval shall not be unreasonably withheld. Further, NTMWD shall have the right to inspect any and all facilities and equipment to ensure compliance with the NTMWD approved plans. Customer shall also perform and coordinate with NTMWD regarding any and all construction activities that involve the System. Customer shall construct, maintain, and operate, at its own cost and expense, all facilities and equipment necessary to receive and take all potable water delivered to it under this Contract. Regardless of NTMWD's approval of any Customer plans for the design, construction, and installation of any facilities and equipment required to receive and take all potable water delivered to it under this Contract, Customer is solely responsible for the sufficiency of design to receive volume(s) of water established pursuant to this Contract. Any construction from NTMWD's pipeline including the air gap must meet NTMWD standard specifications. Any change in the Point(s) of Delivery, including but not limited to a change in the type or size of meters, or size of tap, shall only be allowed if the Customer enters into a new or an amended and restated contract in accordance with Section 10, MODIFICATION. In NTMWD's sole discretion, NTMWD may waive the requirement for a new or an amended and restated contract for a change in the Point(s) of Delivery and allow such change through an amendment to this Contract.

Section 6. MEASURING EQUIPMENT. Customer shall furnish, and install at its own expense at, or near, the Point(s) of Delivery the necessary rate of flow equipment, of a standard type approved by NTMWD, for measuring properly in both low and high flow periods the quantity of potable water delivered under this Contract and such billing meter and other equipment so installed shall become the property of NTMWD. In its sole discretion, NTMWD may furnish, install, and/or replace at its own expense at, or near, the Point(s) of Delivery the necessary rate of flow equipment for measuring properly in both low and high flow periods the quantity of potable water delivered under this Contract and such billing meter and other equipment so installed shall remain the property of NTMWD. Customer shall have access to such metering equipment at all reasonable times, but the reading, calibration, and adjustment thereof shall be accomplished only by the employees or agents of NTMWD. For the purpose of this Contract, the original record or reading of the meter shall be the journal or other record book, including, but not limited to electronic databases, maintained by NTMWD in its office in which the records of the employees or agents of NTMWD who take the reading may be transcribed. Upon written request of Customer, NTMWD will provide a copy of such journal or record book, or permit it to have access to the same in the office of NTMWD during reasonable business hours.

Not more than once in any six (6) month time period, NTMWD shall test its billing meter if requested in writing by Customer to do so, in the presence of a representative of Customer, and the parties shall jointly observe any adjustments that are made to the billing meter in case any adjustments shall be necessary. If upon any test, the percentage of inaccuracy of any billing meter equipment is found to be in excess of two percent (2%), registration thereof shall be corrected for a period extending back to the time when such inaccuracy began, if such time is ascertainable, and if such time is not ascertainable, then for a

period extending back one-half (1/2) of the time elapsed since the last date of calibration, but in no event further back than a period of six (6) months. If for any reason any billing meters are out of repair so that the amount of water delivered cannot be ascertained or computed from the reading thereof, the water delivered through the period such billing meters are out of service or out of repair shall be estimated and agreed upon by the parties hereto upon the basis of the best data available. For such purpose, the best data available shall be deemed to be the registration of any check meter or meters if the same have been installed and are accurately registering. Otherwise, the amount of water delivered during such period may be estimated (i) by correcting the error if the percentage of the error is ascertainable by calibration tests or mathematical calculation, or (ii) estimating the quantity of delivery by deliveries during the preceding periods under similar conditions when the billing meter or meters were registering accurately.

Customer may, at its option and its own expense, install and operate a check meter downstream of the Point(s) of Delivery to check each billing meter installed by NTMWD, but the measurement of water for the purpose of this Contract shall be solely by NTMWD's meters, except in the cases hereinabove specifically provided to the contrary. All such check meters shall be of standard make and shall be subject at all reasonable times to inspection and examination by any employee or agent of NTMWD.

Section 7. UNIT OF MEASUREMENT. The unit of measurement for potable water delivered under this Contract shall be 1,000 gallons of water, U.S. Standard Liquid Measure.

Section 8. PRICE AND TERMS. The service to be performed under this Contract by NTMWD consists of the readiness of NTMWD to deliver to Customer upon its demand, water in accordance with the conditions, limitations, and provisions of this Contract.

In return for such service, Customer agrees to compensate NTMWD by payment of certain minimum annual sums of money, for each of which said sums NTMWD agrees, if required by Customer, to deliver all, or so much thereof as Customer may desire, of a certain corresponding volume of water, as follows:

(a) Customer will compensate NTMWD at the Customer Rate, as such Customer Rate is calculated on an annual basis by NTMWD in accordance with the provisions of this Contract, for an Annual Minimum of [ANNUAL MINIMUM] gallons of water, regardless of whether said quantity is actually taken by Customer, and any water delivered in excess of the amount allowed for the Annual Minimum will also be purchased at the Customer Rate. The Annual Minimum Customer will be required to purchase at the above Customer Rate, shall be calculated annually for each ensuing year and such minimum amount shall be the value as calculated by using the same methodology as applied to the Member Cities or [ANNUAL MINIMUM] gallons as set forth in **Exhibit D**; provided however, Customer cannot take more than [ANNUAL MAXIMUM] gallons per year as provided in Section 2 of this Contract, and Customer shall pay the Customer Rate for any water taken in excess of [ANNUAL MAXIMUM] gallons per year.

(b) If potable water must be rationed, such rationing shall, within the limits permitted by law, be accomplished by NTMWD on an equal basis of the relative actual total amount of all potable water taken by each Customer Entity, respectively, during the last preceding Annual Payment Period in which rationing among said Customer Entities was not necessary.

(c) The Annual Minimum as set forth herein shall be reviewed at the end of the first Annual Payment Period, and each year thereafter, and shall be re-determined by the Board of Directors of NTMWD at that time based upon the methodology set forth in **Exhibit D**.

(d) Payment of the Annual Payment shall be made each year by Customer to NTMWD in twelve (12) equal monthly installments, each of which shall be due and payable on or before the 10th day of the month following the service.

(e) It is further agreed that, in addition to the amounts required to be paid by Customer herein, if during any Water Year Customer uses System treated water in excess of the Annual Minimum for the Annual Payment Period that commenced during such Water Year up to the Annual Maximum allowed in Section 8(a) or in excess of the Annual Maximum allowed in Section 8(a), then Customer shall pay for such excess water in accordance with the provisions of Section 8(a). Excess water charges shall be billed by NTMWD to Customer as soon as practicable after the end of such Water Year and shall be paid to NTMWD as soon as practicable thereafter, and in all events prior to the beginning of the next Annual Payment Period.

(f) Liability for making payments, as herein set forth, shall commence on the date of the first tender of delivery of water to Customer by NTMWD at the Point(s) of Delivery.

(g) In the event that Customer shall fail to make any such monthly payment or Annual Payment within the time herein in this section specified, interest on such amount shall accrue at the rate of ten percent (10%) per annum from the date such payment becomes due until paid in full with the interest as herein specified. In the event such payment is not made within thirty (30) days from the date such payment becomes due, and unless otherwise prohibited by law, NTMWD may at its option discontinue delivery of water to Customer upon reasonable notice to Customer until the amount due NTMWD is paid in full with interest as herein specified.

(h) If Customer takes an amount of water above the authorized amount or authorized rate of delivery allowed by NTMWD's water conservation plan and drought contingency plan, as may be amended from time to time, NTMWD may require the Customer to pay three (3) times the Customer Rate for water taken in excess of the authorized amount or authorized rate of delivery under either plan. NTMWD shall provide 14 day written notice upon the first observed exceedance in a Fiscal Year before the imposition of such surcharge.

(i) Any time Customer exceeds the maximum rate of delivery of 2.2 times the Highest Historical Average at the Point(s) of Delivery as determined by the NTMWD, Customer shall pay three (3) times the Customer Rate for such water. NTMWD shall provide 14 day written notice upon the first observed exceedance in a Fiscal Year before the imposition of such surcharge.

(j) In the event of an Emergency Condition, as that term is defined herein, NTMWD may, in its sole discretion, waive the increased rate in Section 8(i) for exceedance of the maximum rate of delivery of 2.2 times the Highest Historical Average for the Point(s) of Delivery. This waiver shall apply for a 48-hour period, after which such waiver shall terminate. In its sole discretion, NTMWD may extend the waiver for additional 48-hour periods, if NTMWD determines that an extension of the waiver is warranted.

NTMWD, at its sole discretion and at any time, may deliver water to Customer at a delivery rate greater than 2.2 times the Highest Historical Average for the purpose of (i) minimizing or managing energy costs (e.g. 4 Coincident Peak (4CP), minimizing pump starts and/or stops, etc.); or (ii) managing hydraulic constraints in the System. In the event NTMWD exercises either of these options, Customer shall pay only the Customer Rate for water

received. Additionally, if NTMWD does not have infrastructure installed with the capability of limiting the delivery rate of water to 2.2 times the Highest Historical Average, or such infrastructure is inoperable, Customer shall pay the Water Rate for water received from NTMWD.

Section 9. TERM OF CONTRACT. This Contract shall commence on the Contract Date and shall continue for a term of twenty (20) years following the Contract Date.

Section 10. MODIFICATION. This Contract may be changed or modified only by written agreement of the parties and only after having obtained approval from the governing bodies of both NTMWD and Customer. No change or modification shall be made to this Contract which will affect adversely the prompt payment when due of all monies required to be paid by Customer under the terms of this Contract.

Section 11. FORCE MAJEURE. If by reason of force majeure any party hereto shall be rendered unable wholly or in part to carry out its obligations under this Contract, other than the obligation of Customer to make the payments required under Section 8 of this Contract, then if such party shall give notice and full particulars of such force majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied on, the obligation of the party giving such notice, so far as it is affected by such force majeure, shall be suspended during the continuance of the inability then claimed, but for no longer period, and any such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term "force majeure" as employed herein shall mean acts of God, strikes, lockouts, or other industrial disturbances, acts of public enemy, orders of any kind of the Government of the United States or the State of Texas, or any civil or military authority, insurrection, riots, epidemics (including pandemics), landslides, lightning, earthquake, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, partial or entire failure of water supply, or on account of any other causes not reasonably within the control of the party claiming such inability.

Section 12. INSURANCE. NTMWD agrees to carry and arrange for fire, casualty, public liability, and/or other insurance, including self-insurance for purposes and in amounts which, as determined by NTMWD, ordinarily would be carried by a privately-owned utility company owning and operating such facilities, except that NTMWD shall not be required to provide liability insurance except to insure itself against risk of loss due to claims for which it can, in the opinion of NTMWD's legal counsel, be liable under the Texas Tort Claims Act or any similar law or judicial decision. Such insurance will provide, to the extent feasible and practicable, for the restoration of damaged or destroyed properties and equipment, to minimize the interruption of the services of such facilities. All premiums for such insurance shall constitute just and reasonable operation and maintenance expense. The insurance coverage referenced herein does not extend to any facility owned by Customer.

Section 13. REGULATORY BODIES AND LAWS. This Contract is subject to all applicable Federal and State laws and any applicable permits, ordinances, rules, orders, and regulations of any local, state or federal governmental authority having or asserting jurisdiction, but nothing contained herein shall be construed as a waiver of any right to question or contest any such law, ordinance, order, rule, or regulation in any forum, having jurisdiction.

Section 14. NOTICES. Unless otherwise provided herein, any notice, communication, request, reply, or advice (herein severally and collectively, for convenience, called "Notice") herein provided or permitted to be given, made, or accepted by any party to any other party must be in writing and may be given or be served by depositing the same in the United States mail, addressed to the party to be notified and sent via first-class mail and by certified mail/return-receipt requested, or by delivering the same to an

officer of such party. Notice deposited in the mail in the manners hereinabove described shall be deemed to be effective, unless otherwise stated herein, from and after the expiration of three (3) days after it is so deposited. Notice given in any other manner shall be effective only if and when received by the party to be notified. For the purposes of Notice, the addresses of the parties shall, until changed as hereinafter provided, be as follows:

If to NTMWD, to:

Executive Director/General Manager
North Texas Municipal Water District
P.O. Box 2408
Wylie, Texas 75098

If to Customer, to:

_____
_____
_____
_____

The parties hereto shall have the right from time to time and at any time to change their respective addresses and each shall have the right to specify as its address any other address by at least fifteen (15) days written notice to the other parties hereto.

Section 15. SEVERABILITY. The parties hereto specifically agree that in case any one or more of the sections, subsections, provisions, clauses, or words of this Contract or the application of such sections, subsections, provisions, clauses, or words to any situation or circumstance should be, or should be held to be, for any reason, invalid or unconstitutional, under the laws or constitutions of the State of Texas or the United States of America, or in contravention of any such laws or constitutions, such invalidity, unconstitutionality, or contravention shall not affect any other sections, subsections, provisions, clauses, or words of this Contract or the application of such sections, subsections, provisions, clauses, or words to any other situation or circumstance, and it is intended that this Contract shall be severable and shall be construed and applied as if any such invalid or unconstitutional section, subsection, provision, clause, or word had not been included herein, and the rights and obligations of the parties hereto shall be construed and remain in force accordingly.

Section 16. VENUE. All amounts due under this Contract including, but not limited to, payments due under this Contract or damages for the breach of this Contract, shall be paid and be due in Collin County, Texas, which is the County in which the principal administrative offices of NTMWD are located. It is specifically agreed among the parties to this Contract that Collin County, Texas, is a principal place of performance of this Contract.

Section 17. OPERATING CONDITIONS AND PROVISIONS.

(a) Operation and Maintenance of System. NTMWD will continuously operate and maintain the System in an efficient manner and in accordance with good business and engineering practices, and at reasonable cost and expense.

(b) Title to Water; Indemnification. NTMWD shall retain title to all water supplied to Customer up to the Point(s) of Delivery, at which point title to such water shall pass to Customer. NTMWD and Customer shall save and hold each other harmless from all

claims, demands, and causes of action that may be asserted by anyone on account of the transportation and delivery of said water while title remains in such party. As between the parties, Customer shall have the first right to use all effluent produced from any wastewater treatment plant that treats the wastewater resulting from the use of the water made available under this Contract for direct reuse, but solely for its own purposes, and not for sale to, or use by, any customer of the Customer. To the extent that effluent produced by a wastewater treatment plant that treats the wastewater resulting from the use of water made available under this Contract is discharged to water courses of the State, the right of Customer to reuse such effluent produced from such wastewater treatment is terminated, and NTMWD shall have the right, as between the parties, pursuant to any necessary authorization of the State, to indirectly reuse said effluent. Customer shall ensure via any wholesale contract with a subsequent customer, entered into after the Contract Date, to maintain NTMWD's right to indirectly reuse treated effluent, the underlying source of which is water from NTMWD made available under this Contract.

(c) Operating Expenses of Customer. **[LANGUAGE FOR CITY CUSTOMERS]** Customer represents and covenants that all payments to be made by it under this Contract shall constitute reasonable and necessary "operating expenses" of its system, as defined in Section 1502.056, Texas Government Code, and that all such payments will be made from the revenues of its system. Customer represents and has determined that the potable water supply to be obtained from the System is absolutely necessary and essential to the present and future operation of its water system and is the only available and adequate source of supply of potable water. Accordingly, all payments required by this Contract to be made by Customer shall constitute reasonable and necessary operating expenses of its respective system as described above, with the effect that the obligation to make such payments from revenues of such system shall have priority over any obligation to make any payments from such revenues (whether of principal, interest, or otherwise) with respect to all bonds or other obligations heretofore or hereafter issued by Customer.

[LANGUAGE FOR NON-CITY CUSTOMERS] Customer represents and covenants that all payments to be made by it under this Contract shall constitute reasonable and necessary operating expenses of its system and that all such payments will be made from the revenues of its system. Customer represents and has determined that the potable water supply to be obtained from the System is absolutely necessary and essential to the present and future operation of its water system and is the only available and adequate source of supply of potable water. Accordingly, all payments required by this Contract to be made by Customer shall constitute reasonable and necessary operating expenses of its respective system as described above, with the effect that the obligation to make such payments from revenues of such system shall have priority over any obligation to make any payments from such revenues (whether of principal, interest, or otherwise) with respect to all bonds or other obligations heretofore or hereafter issued by Customer.

(d) Customer's Rate for Waterworks System. Customer agrees throughout the term of this Contract to continuously operate and maintain its waterworks system, and to fix and collect such rates and charges for water services to be supplied by its waterworks system as aforesaid as will produce revenues in an amount equal to at least (i) all of its payments under this Contract; and (ii) all other amounts required to be paid from said revenues by the provisions of the ordinances or resolutions authorizing its revenue bonds or other obligations now or hereafter outstanding and to file appropriate financial reports related to the Customer's system including annual audits.

(e) Equity. Customer acknowledges that it will accrue no equity or any other interest in the System or any other assets of NTMWD as a result of payment or other performance pursuant to this Contract.

Section 18. WATER CONSERVATION. Customer acknowledges that as a regional wholesale supplier, NTMWD is subject to regulatory and legal requirements regarding the promotion of water conservation and drought contingency planning for the System that allow it to make a water supply available to Customer. NTMWD's water conservation and drought contingency program is developed in adherence with TCEQ public participation requirements and in consultation with other area regional providers to promote consistency throughout the North Texas region. Customer agrees to adopt, implement, and enforce any and all ordinances and policies related to water conservation and drought management as required by the Texas Water Code, the rules of the TCEQ and any ordinance or policy related to water conservation and/or drought management proposed by the Board of Directors of NTMWD consistent with the above-described regional planning effort. NTMWD's obligations pursuant to this Contract shall be subject to Customer preparing and implementing a water conservation plan or water conservation measures, as well as implementing any water conservation plans and drought contingency plans adopted by NTMWD and required or approved by the TCEQ, the Board, or any other federal, state, or local regulatory authority with power to require or approve water conservation and drought contingency plans. Upon execution of this Contract, Customer shall submit its water conservation plan or water conservation measures, and drought contingency plan, to NTMWD for review and approval, and Customer agrees to amend its water conservation plan or water conservation measures, and drought contingency plan as requested by NTMWD in order to comply with requirements of NTMWD's water conservation plan and drought contingency plan, program and/or rules as described in this Section. Customer shall also submit any changes or amendments to its water conservation plan or water conservation measures, and drought contingency plan, to NTMWD for review and approval.

NTMWD has adopted a water conservation plan and a drought contingency plan, and may amend both from time to time.

If Customer fails to implement NTMWD's and its own drought contingency plan when trigger conditions occur, NTMWD may implement rationing and collect the rate for water withdrawn as provided in Section 8(h) of this Contract, as well as enforce any contractual, statutory, or common law remedies available. The amount of water that is provided pursuant to this Contract when Customer is not in compliance with NTMWD's water conservation plan and drought contingency plan will be reduced to the amount estimated as necessary to satisfy Customer's demand if Customer was operating in compliance with both NTMWD's and Customer's drought contingency plans.

If NTMWD authorizes Customer to resell water from the System pursuant to the conditions included herein, Customer shall require through a contract condition that any successive user(s) of water from the System must implement water conservation measures that comply with NTMWD's and Customer's water conservation plans, measures, programs, and/or rules.

Section 19. DEMAND ASSESSMENT. The location of the Point(s) of Delivery and any quantity set forth in this Contract are intended to meet the water needs of Customer. The needs of Customer are independently determined by Customer, and NTMWD has conducted no independent evaluation of the Customer's water system.

Section 20. SOLE AGREEMENT. This Contract constitutes the sole and only agreement of Customer and NTMWD and supersedes any prior understanding or oral or written agreements between Customer and NTMWD with respect to the subject matter of this Contract.

Section 21. NO THIRD PARTY BENEFICIARIES. This Contract shall inure only to the benefit of the parties hereto and third persons not privy hereto shall not, in any form or manner, be considered a third-party beneficiary of this Contract. Each party hereto shall be solely responsible for the fulfillment of its customer contracts or commitments, and NTMWD shall not be construed to be responsible for Customer's contracts or commitments by virtue of this Contract or any provision contained herein.

Section 22. WAIVER. Failure to enforce or the waiver of any provision of the Contract or any breach or nonperformance by the Customer or NTMWD shall not be deemed a waiver by the Customer or NTMWD of the right in the future to demand strict compliance and performance of any provision of this Contract.

Section 23. DISPUTES OTHER THAN RATE OR FEE DISPUTES; ABATEMENT. In accordance with the provisions of Subchapter I, Chapter 271, Texas Local Government Code, the parties agree that, prior to instituting any lawsuit or other proceeding arising from a dispute under this Contract, the parties will first attempt to resolve the dispute as provided as follows:

(a) The dissatisfied party shall deliver a written notice substantially describing the nature of the dispute to the other party, requesting the other party to deliver a written response within ten (10) business days after receipt of the notice of dispute;

(b) If the response does not, in the opinion of the dissatisfied party, reasonably resolve the dispute, the dissatisfied party shall notify the other party in writing. Each party shall then appoint a person having authority over the activities of the respective parties who shall promptly meet, in person or via a virtual meeting, in an effort to resolve the dispute; and

(c) If those persons cannot or do not resolve the dispute, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person or via a virtual meeting, in an effort to resolve the dispute.

Any lawsuit filed prior to performing these steps shall be abated pending completion of this dispute resolution process. This section shall not apply to any disputes regarding rates or fees NTMWD charges Customer. The provisions of this section are a condition precedent to the filing of any other action or complaint with any regulatory authority, governing body, or state or federal court.

Section 24. RATE OR FEE DISPUTES. Customer agrees that, as a condition precedent to instituting any lawsuit or other proceeding arising from a rate or fee dispute (including any other charges NTMWD may assess) under this Contract, Customer shall first attempt to resolve the dispute as provided as follows:

(a) Customer shall deliver a written notice substantially describing the nature of and reasons for the dispute to NTMWD;

(b) NTMWD shall respond to the dispute notification in writing within ten (10) business days after receipt of the notice of dispute;

The provisions of this section are a condition precedent to the filing of any other action or complaint with any regulatory authority, governing body, or state or federal court.

Section 25. TERMINATION AND MATERIAL BREACH. Any material breach of the duties or obligations of this Contract, or failure to faithfully keep and perform any of the terms, conditions and

provision hereof shall be subject to the remedies provided in Section 26, including but not limited to termination. The non-breaching party shall provide the breaching party ninety (90) days written notice of its intention to terminate this Contract if the breaching party fails to cure the material breach. The written notice shall include a reasonable description of the breach. If the Customer is the breaching party, and fails or refuses to cure the breach, then NTMWD shall have the right, with five (5) years advance written additional notice to Customer and without any liability whatsoever on the part of NTMWD, to declare the Contract terminated. In the event of termination of this Contract, all rights, powers, and privileges of Customer pursuant to this Contract shall cease and terminate and Customer shall make no claim of any kind whatsoever against NTMWD, its agents or representatives, by reason of such termination or any act incident thereto. In any event, the non-breaching party shall advise the alleged breaching party in writing immediately upon acceptance of the cure of any default. The following shall, without limitation, be considered to be a material breach:

(a) Customer's failure to adopt and enforce reasonable policies or standards related to the System necessary to enforce any applicable NTMWD policies related to the protection and operation of the System for the benefit of all Members and Customers, contractual requirements, or any applicable state or federal laws or regulations;

(b) Customer's failure to pay any bill, charge or fee as provided for in this Contract;

(c) Customer's failure to provide NTMWD ingress and egress for purposes of sampling and operation and maintenance of any metering or any sampling facility; and

(d) NTMWD's failure to timely provide water to Customer in an amount sufficient to serve existing customers of the Customer, up to the Annual Maximum set forth in Sections 2 and 8.

Section 26. REMEDIES. It is not intended hereby to specify (and this Contract shall not be considered as specifying) an exclusive remedy for any default, but all such other remedies, including termination as provided in Section 25, existing at law or in equity may be availed of by any party hereto and shall be cumulative.

Section 27. INDEMNITY. TO THE EXTENT ALLOWED BY LAW, CUSTOMER AGREES TO INDEMNIFY, HOLD HARMLESS, AND DEFEND NTMWD, ITS OFFICERS, AGENTS, AND EMPLOYEES FROM ANY AND ALL LIABILITY, INCLUDING CLAIMS, DEMANDS, DAMAGES, LIENS, ACTIONS OR CAUSES OF ACTION, TOGETHER WITH ANY AND ALL LOSSES, COSTS, OR EXPENSES, INCLUDING REASONABLE ATTORNEY FEES, ARISING OUT OF OR RELATING TO THIS CONTRACT, INCLUDING THE DELIVERY OF WATER UNDER THIS CONTRACT, CAUSED BY OR RESULTING FROM THE WILLFUL MISCONDUCT AND/OR GROSSLY NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF CUSTOMER, ITS EMPLOYEES, AGENTS, CONTRACTORS, OR SUBCONTRACTORS.

TO THE EXTENT ALLOWED BY LAW NTMWD AGREES TO INDEMNIFY, HOLD HARMLESS, AND DEFEND CUSTOMER, ITS OFFICERS, AGENTS, AND EMPLOYEES FROM ANY AND ALL LIABILITY, INCLUDING CLAIMS, DEMANDS, DAMAGES, LIENS, ACTIONS OR CAUSES OF ACTION, TOGETHER WITH ANY AND ALL LOSSES, COSTS, OR EXPENSES, INCLUDING REASONABLE ATTORNEY FEES, ARISING OUT OF OR RELATING TO THIS CONTRACT, INCLUDING THE DELIVERY OF WATER UNDER THIS CONTRACT, CAUSED BY OR RESULTING FROM THE WILLFUL MISCONDUCT AND/OR GROSSLY NEGLIGENT ACTS, ERRORS, OR OMISSIONS OF NTMWD, ITS EMPLOYEES, AGENTS, CONTRACTORS, OR SUBCONTRACTORS.

Section 28. ASSIGNMENT. Customer shall not assign this Contract or any of its rights hereunder without first obtaining the express prior written consent of NTMWD.

[OPTIONAL LANGUAGE FOR ASSIGNMENT] This Contract may be assigned by the Customer to the United States of America, acting by and through the Rural Utilities Service, its successors or assigns, as security for a certain loan to be made by the Rural Utilities Service to the Customer.

Section 29. RECITALS AND EXHIBITS INCORPORATED. The recitals contained in the preamble hereof and the exhibit(s) hereto are hereby found to be true, and such recitals and exhibit(s) are hereby made a part of this Contract for all purposes.

IN WITNESS WHEREOF, the parties hereto acting under authority of their respective governing bodies have caused this Contract to be duly executed in several counterparts, each of which shall constitute an original, all as of the day and year first above written, which is the Contract Date.

(*Signatures on following pages*)

[CUSTOMER NAME]

By: _____ _____

_____, _____ Date

ATTEST:

_____

_____, Secretary

STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on this _____ day of _____, 2025, by _____, _____ of [CUSTOMER NAME], a [TYPE OF ENTITY] of the State of Texas, on behalf of said[TYPE OF ENTITY].

_____

Notary Public, State of Texas
Printed Name of Notary:

_____

My Commission Expires: _____

NORTH TEXAS MUNICIPAL WATER DISTRICT

By: _____ _____
INSERT, President Date

ATTEST:

_____
INSERT, Secretary

STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on this _____ day of _____, 2025, by INSERT, President of the Board of Directors of North Texas Municipal Water District, a conservation and reclamation district and political subdivision of the State of Texas, on behalf of said conservation and reclamation district.

_____
Notary Public, State of Texas
Printed Name of Notary:

_____

My Commission Expires: _____

EXHIBIT A

Customer Rate Premium Methodology Examples

Annually, District staff will calculate the Customer Rate for each Customer, beginning in FY29, as follows

1. Calculate Annual Minimum Volume using Rolling Average Methodology (See Exhibit D)
2. Compare Annual Minimum Volume to Legacy Volume to determine Growth Volume
3. Apply Member City Rate + $0.05 to Legacy Volume to calculate Legacy Charges. If Annual Minimum Volume is less than Legacy Volume, only apply Member Rate + 5-cents to Annual Minimum Volume.
4. Apply Member City Rate +10% to Growth Volume to calculate Growth Charges
5. Calculate the Customer's Effective Premium Rate
6. If the Effective Premium Rate is less than or equal to 2.8%, calculation is complete
7. If the Effective Premium Rate is greater than 2.8%, recalculate charges (Member City Rate + 2.8%) * Annual Minimum Volume

Example 1

- Customer's Legacy Volume (1,000 gallons) = 1,716
- Customer's FY30 Annual Minimum Volume (1,000 gallons) = 1,599
- FY30 Projected Member City Rate = $6.45/1,000 gallons

	Step	**Calculation**	**Result**
1	Calculate Annual Minimum Volume using Rolling Average Methodology		1,599
2	Compare Annual Minimum Volume to Legacy Volume to determine Growth Volume	1,599<1,716	Annual Minimum Volume is less than Legacy Volume, no Growth Volume
3	Apply Member City Rate + $0.05 to Legacy Volume (or Annual Minimum Volume if less than Legacy Volume)	($6.45+0.05) *1,599	$10,394 Legacy Charges ($80 premium)
4	Apply Member City Rate +10% to Growth Volume	0	No Growth Charges
5	Calculate the Customer's Effective Premium Rate	$0.05/$6.45=1%	Effective premium is $0.05 and 1% of Member City Rate
6	If the Effective Premium Rate is less than or equal to 2.8%, calculation is complete	Yes – 1%< 2.8%	Calculation Complete – Customer pays $10,394 ($80 premium)
7	Not Applicable to Example 1		

Example 2

- Legacy Volume (1,000 gallons) = 2,174 gallons
- FY30 Annual Minimum Volume (1,000 gallons) = 2,338
- FY30 Projected Member City Rate = $6.45/1000 Gallons

	Step	**Calculation**	**Result**
1	Calculate Annual Minimum Volume using Rolling Average Methodology		2,338
2	Compare Annual Minimum Volume to Legacy Volume to determine Growth Volume	2,338> 2,174 -> 2,338-2,174	Growth Volume = 164
3	Apply Member City Rate + $0.05 to Legacy Volume (or Annual Minimum Volume if less than Legacy)	($6.45+.05) * 2,174	$14,131 ($109 premium)
4	Apply Member City Rate +10% to Growth Volume	($6.45*1.1)*164	$1,164 ($106 premium)
5	Calculate the Customer's Effective Premium Rate	($215/2,338)=$.09 $0.09/$6.45=1.4%	Effective Premium is $0.09/1,000 gallons and 1.4% of Member City Rate
6	If the Effective Premium Rate is less than or equal to 2.8%, calculation is complete	Yes –1.4% < 2.8%	Calculation complete – Customer pays $15,295 ($215 premium)
7	Not Applicable to Example 2		

Example 3

- Legacy Volume (1,000 gallons) = 2,174 gallons
- FY30 Annual Minimum Volume (1,000 gallons) = 4,000
- FY30 Projected Member City Rate = $6.45/1000 Gallons

	Step	**Calculation**	**Result**
1	Calculate Annual Minimum Volume using Rolling Average Methodology		4,000
2	Compare Annual Minimum Volume to Legacy Volume to determine Growth Volume	4,000> 2,174 -> 4,000-2,174	Growth Volume = 1,826
3	Apply Member City Rate + $0.05 to Legacy Volume (or Annual Minimum Volume if less than Legacy)	($6.45+.05) * 2,174	$14,131 ($109 premium)
4	Apply Member City Rate +10% to Growth Volume	($6.45*1.1)*1,826	$12,955 ($1,178 premium)
5	Calculate the Customer's Effective Premium Rate	($1,287/4,000)=$0.32 $0.32/$6.45=5%	Effective Premium is $0.32/1000 gallons and 5% of Member City Rate
6	If the Effective Premium Rate is less than or equal to 2.8%, calculation is complete	No - Effective Premium 5% > 2.8%	Recalculate
7	If the Effective Premium Rate is greater than 2.8%, recalculate charges at (Member Rate + 2.8%) * Annual Minimum Volume	($6.45*1.028)*4,000	Customer pays $26,522 ($722 premium)

Note: Once Customer reaches the 2.8% Effective Premium Cap, all volumes will be charged the Member City Rate + 2.8%

EXHIBIT B

CURRENT WHOLESALE CUSTOMERS

EXHIBIT C

POINTS OF DELIVERY

EXHIBIT D

EXPLANATION OF ANNUAL MINIMUM CALCULATION

The following is an explanation of the how the method for calculating Customer's Annual Minimum will follow the same method currently used for Member Cities as outlined in the First Amendment to North Texas Municipal Water District Regional Water Supply Facilities Amendatory Contract.

Method	**Timeframe**
Natural Drawdown	October 1, 2020 – September 30,2028
Phase-in to 5 Year Rolling Averages	October 1, 2028 – September 30, 2032
5 Year Rolling Averages	October 1, 2032 and forward

Natural Drawdown Method

- This method provides a reduction in the upcoming year's Annual Minimum to any entity that is under its current year Annual Minimum. One-third of the excess usage is reduced on a pro-rata basis from those entities' current Annual Minimum. The proration is based on each entity's percent of the total under usage.
- An Annual Minimum cannot be reduced below prior year's actual volume.
- An entity establishing a new annual minimum by contract may not be eligible to participate, depending on contract terms.

Example on following page.

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Natural Drawdown Example

Step 1: Calculate the Excess Usage and Drawdown Volume Amount

- Sum the actual usage amounts for Entities that exceed the annual minimums – Column E's Total = 90 Gallons
- The Drawdown to be allocated is one-third of the Excess Usage [90/3 = 30 Gallons]

	A	B	C=B-A	D	E
	Current Year's Annual Minimum	**Actual Usage**	**Excess/ (Under)**	**Under Usage**	**Excess Usage**
Entity A	150.0	140.0	(10.0)	(10.0)	
Entity B	120.0	190.0	70.0		70.0
Entity C	30.0	50.0	20.0		20.0
Entity D	80.0	60.0	(20.0)	(20.0)	
Entity E	340.0	300.0	(40.0)	(40.0)	
Total	**720.0**	**740.0**	**20.0**	**(70.0)**	**90.0**

Step 2: Allocate the Drawdown Volume to the Eligible Entities

- Reduce the Annual Minimums by the 30 Drawdown gallons to Entities A, D, and E proportionately to calculate the next year's Annual Minimums. Entities B and C are not eligible to receive a drawdown due to being over their Annual Minimum.

	A	B	C=B-A	D		E	F = %D * 30	G = A + F
	Current Year's Annual Minimum	**Actual Usage**	**Excess/ (Under)**	**Under Usage**		**Excess Usage**	**Drawdown (1/3rd of Over Usage)**	**Next Year's Annual Minimum**
Entity A	150.0	140.0	(10.0)	(10.0)	14%		(4.3)	145.7
Entity B	120.0	190.0	70.0			70.0		190.0
Entity C	30.0	50.0	20.0			20.0		50.0
Entity D	80.0	60.0	(20.0)	(20.0)	29%		(8.6)	71.4
Entity E	340.0	300.0	(40.0)	(40.0)	57%		(17.1)	322.9
Total	**720.0**	**740.0**	**20.0**	**(70.0)**	**100%**	**90.0**	**(30.0)**	**780.0**

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Rolling Averages

The phase in of Rolling Averages begins on October 1, 2028 (FY28-29). Each of the phase in years is an average of a combination of FY28 Annual Minimums and Actual Water Year Usage. The schedule is below.

Year	Annual Minimum Volume - 5 Year Average Comprised of	
	Actual Usage	**FY28 Annual Minimums**
Year 1 - FY28-29	WY 28	WY28 * 4
Year 2 - FY29-30	WY28, WY29	WY28 * 3
Year 3 - FY30-31	WY28, WY29, WY30	WY28 * 2
Year 4 - FY31-32	WY28, WY29, WY30, WY31	WY28
Year 5 – FY32-33	WY28, WY29, WY30, WY31, WY32	

WY=Water Year August 1 – July 31. The Water Year is the 12-month period that the volume calculation applies to.

All years following FY32-33 shall be composed of the average of the previous 5 Water Years' actual usage.

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NORTH TEXAS MUNICIPAL WATER DISTRICT

FAQs for Customer Entities Regarding 2025 Customer Potable Water Supply Contract Template

Customer Benefits of New 2025 Contract Template

1. Who does this document apply to?

Answer: All Non-Member City potable water customers of the North Texas Municipal Water District ("NTMWD"), which includes any city, special district, water supply corporation, or other entity who currently has a contract with NTMWD and entities that contract with NTMWD for treated water service in the future. NTMWD refers to such entities as "Customers" for the purposes of this FAQ document.

2. How does the 2025 Customer Contract Template benefit Customers and the region served by NTMWD?

Answer: The new template provides certainty regarding the Customer Premium for years to come. It allows for a portion of a Customer's Annual Minimum[1] to remain at the current Customer Premium (Member City Rate plus five cents) and sets out the methodology to be used in rate-setting moving forward. It allows for a phased transition into the new rate method and also allows Customers to take advantage of the new method of calculating Annual Minimum Volume so that Annual Minimum Volumes are ultimately based on a five-year rolling average of actual use rather than highest ever historic use. The new rolling average based annual minimum volume incentivizes conservation, which benefits the region as a whole.

New Customer Premium

3. How did NTMWD decide on the Customer Premium Methodology used to calculate the Customer Rate?

Answer: NTMWD worked with a rate consultant along with a Working Group made up of several Customers and Member Cities between 2022 and 2024 to develop the Customer Premium Methodology that was adopted by the Board of Directors in November 2024. The Working Group also was involved in reviewing and providing input to the Board approved 2025 Customer Contract Template.

[1] See Question No. 5 for definition of Annual Minimum.

4. How does the new Customer Rate work?

Answer: For those Customers that adopted the 2025 Customer Contract Template the methodology is included. Initially the Customer Rate will be equal to the rate set by the Board of Directors for Member Cities plus five cents. Beginning Fiscal Year 2029 (Oct 1, 2028) the Customer Rate will be made up of two tiers and a cap that includes the Legacy Premium Component, Growth Premium Component, and an Effective Premium Cap as described below.

a. Legacy Premium Component: For that portion of Customer's Annual Minimum equal to its FY 2028 Annual Minimum plus 5% ("Legacy Volume") the Customer Rate applied shall be the Member City Rate plus 5-cents ("Legacy Charge").
b. Growth Premium Component: For that portion of the Customer's Annual Minimum greater than the Legacy Volume ("Growth Volume"), the Customer Rate applied shall be the Member City Rate plus 10% ("Growth Charge").
c. Effective Premium Cap: means the amount to be paid by Customer per 1,000 gallons resulting from aggregating the Legacy Premium Component and the Growth Premium Component together. If the Customer's calculated Effective Rate exceeds the Member City Rate by 2.8% or more, the Customer Rate shall be adjusted to result in payment by Customer that equals the Member City Rate plus 2.8%. After a Customer reaches the Effective Premium Cap, the Customer Rate cannot fall below the Effective Premium Cap.

For additional details there are also key sections of the 2025 Contract Template and its Exhibits that provide examples. We recommend reviewing Section 1(h) (definition of Customer Rate), Exhibit A (Customer Rate Premium Methodology Examples), and Exhibit D (Explanation of Annual Minimum Calculation with examples).

Annual Minimum Methodology

5. What is the Annual Minimum Volume and how is it used?

Answer: The Annual Minimum Volume is the amount of potable water for the fiscal year for which the Customer must compensate NTMWD. The annual compensation is the *same* if the annual potable water use is at or below the Annual Minimum Volume.

6. How is a Customer's Annual Minimum Volume determined now under its current contract?

Answer: For nearly all Customers, the current Annual Minimum Volume is the highest annual water consumption the Customer has experienced. Some Customers set their Annual Minimum Volume several years ago and others set

new Annual Minimum Volume every year as growth and usage increase. The Annual Minimum Volume does not automatically reset once it is established.

7. What is the new Annual Minimum Volume Methodology the Member Cities and District agreed to in 2020?

Answer: The new methodology provides for a gradual resetting of a Member City's Annual Minimum over a 13-year period, starting with usage measured beginning in 2020 for Member Cities. The first 8 years of the 13-year period are referred to as the "Natural Drawdown Method" in which under-using Member Cities can experience a reduction in their Annual Minimum Volume in proportion to Member Cities and Customers (together, the "System Users") who use more than their Annual Minimum amounts. Over the remaining 5-year period, a rolling average of actual usage over a 5-year period is phased in. The "Natural Drawdown Method" would apply the same way to Customers until the end of FY 2028 when all Members and Customers will move toward the phase in of a 5-year rolling average. In 2025 NTMWD's Board of Directors approved an updated Customer Contract template that includes EXHIBIT D: EXPLANATION OF ANNUAL MINIMUM CALCULATION that provides further guidance.

8. Describe in more detail the Natural Drawdown Method that exists for the first 8 years.

Answer: For the first 8 years with usage beginning in 2020 (or the year a Customer enters into the 2025 Customer Contract) a System User's Annual Minimum Volume will be reduced if (1) the System User's annual usage is less than its Annual Minimum Volume, and (2) usage by other System Users exceeds their own Annual Minimum Volume in the same year. Any reduction in Annual Minimum Volume would be applied to charges owed to NTMWD in the following Fiscal Year (i.e., reductions in usage measured in Water Year 2020 would be applied to a System User's payments to NTMWD for Fiscal Year 2021). The cumulative total of Excess Water Usage among all System Users will be divided among "under using" System Users on a proportionally prorated basis to draw down their respective Annual Minimum volumes by a 3:1 ratio (for every 3 gallons of excess water used, 1 gallon of water is drawn down for under-using System Users). Exhibit D includes a Natural Drawdown Example.

9. Describe in more detail the 5-year Rolling Average that is part of the new Annual Minimum Methodology.

Answer: Beginning FY 2029 (1 October, 2028) for those Customers on the 2025 Customer Contract template, Annual Minimums will gradually transition to a 5-year rolling average of actual usage. For the first five years the 5-year rolling average is calculated using the updated Annual Minimum Volume combined with actual usage volumes. In the first transition year, a five year "average" will be calculated by adding four years' worth of an entity's Water Year 2028 Annual Minimum Volume added to the most recent Water Year's actual usage, then

divided by 5. An additional year of actual usage will be added to the calculation each year until there are 5 consecutive years of actual usage. Customers who wish to remain on their existing contract after 31 July, 2028 will continue to have Annual Minimum Volume determined in accordance with their active contract.

10. How does the new Annual Minimum Methodology give Customers an opportunity to exert control over how Annual Minimum Volumes are determined?

Answer: The new methodology incorporates each Customer's recent actual consumption rather than relying on Highest Historical Average (HHA). This provides the opportunity for a Customer's Annual Minimum Volume to reset downward. Even for Customers who regularly exceed their previous Annual Maximum Volume, a rolling average methodology will have a smoothing effect on high-demand years. Additionally, all System Users have more control over future payment obligations if they develop and implement effective conservation strategies.

11. Now that you mention it, what is the Annual Maximum and how is it determined?

Answer: It is the Annual Maximum volume of potable water that NTMWD agrees to sell and deliver to Customer under the Customer Contract. The Annual Maximum volume is determined based on Customer population projections, associated water demand usage, NTMWD's available water supply, and modeling of NTMWD's treated water transmission system. Typically determination of the Annual Maximum involves meetings and discussions using evaluations and data with the Customer. The Annual Maximum helps NTMWD monitor growth to inform planning for capital improvements in the system.

In the past NTMWD would include the tap size in the Contract for a Customer and when a Customer desired additional volume, a new Contract would be required increasing the tap size and assisting NTMWD to understand growth and demands in the system. The approach relying on tap size is no longer used.

Other Contract Language Updates

12. What other terms and conditions have been updated in the 2025 Customer Contract Template?

Answer: The number of additional and updated provisions depend on the effective date of a Customer's current contract, particularly if the current contract was entered into prior to 2012.

In 2021 the Board adopted a new Customer contract template with the new Annual Minimum Volume Methodology and most recently adopted the latest

Customer Contract Template in 2025 that will be used for all potable water supply contracts. Additional and updated provisions include, but are not limited to, the following:

- Establishing an Annual Maximum amount of potable water to sell and deliver; exceeding the Annual Maximum requires a Customer to enter into a new contract;

- Establishing a maximum rate of delivery of 2.2 times the Daily Average of potable water supplied; exceeding the maximum rate of delivery can result in the Customer paying three (3) times the Water Rate for such exceedance except during certain emergency conditions or when NTMWD solely determines to provide water in excess of the maximum rate of delivery of 2.2 times the Daily Average;

- Inclusion of a requirement for Customers to construct and operate adequate water distribution, storage, and pump station facilities to comply with the maximum rate of delivery;

- Inclusion of requirements for compliance with NTMWD's water conservation and drought contingency plan that have been incorporated to comply with water conservation provisions in the Bois d'Arc Lake state water rights permit and a settlement agreement that issuance of the Bois d'Arc Lake state water rights permit was contingent upon;

- Updating language covering contract disputes; and

- Inclusion of termination and material breach, indemnity, and remedies provisions.

13. Describe the Highest Historical Average (HHA) and what it would be used for.

When the Customer Contract template was amended in 2021 to include the opportunity for Customers' Annual Minimum Volume to decrease, the concept of the Highest Historical Average (HHA) was introduced to provide additional protection to the Customers from maximum rate of delivery penalty. There is also significant value in protecting our system that supports the entire region.

The HHA means the higher of (1) amount of water per day calculated as 1/365 of the Annual Minimum as provided in Section 8 of this Contract at the Point(s) of Delivery, or (2) 1/365 of the highest annual amount of potable water delivered to the Customer at the Point(s) of Delivery in a Water Year during the term of the Customer Contract.

Customers with multiple Point(s) of Delivery will have volume percentages to help prevent Customers from peaking off one or more of Point(s) of Delivery that would

impact the system. If peaking off the system occurs, NTMWD may assess 3 times the water rate (refer to Item 14 for additional details).

To avoid peaking, the percentage split can be adjusted each year as the Customer requests and as recommended by NTMWD. If there is an emergency or planned work which may cause the Customer to take higher volumes from one vs the other Point(s) of Delivery, NTMWD will assist the Customer to address the situation.

14. What happens if the Customer exceeds the maximum rate of delivery (2.2 times)?

Answer: The "2.2 times" is associated with the performance standard for the entire regional potable water system and has been the standard rate of delivery for all Customer Contracts since 2012. Any time a Customer exceeds the maximum rate of delivery of 2.2 times the HHA at the Point(s) of Delivery as determined by NTMWD, the Customer pays three (3) times the Customer Rate for such water. NTMWD calculates the volume of such water using Supervisory Control and Data Acquisition (SCADA) data.

When NTMWD observes such exceedance, it attempts to contact and notify the Customer to provide awareness. If contact is unsuccessful NTMWD will use appropriate notices to engage the Customer. If contact is successful NTMWD will discuss whether there are unusual conditions before moving forward with assessment of a penalty under the contract.

15. How can the Customer address this exceedance beyond the maximum rate of delivery?

Answer: Options available to Customers to manage their rates of delivery include water conservation education, balancing outdoor watering days, implementing drought-tolerant landscaping, temporarily reducing water use in construction, and other similar measures, adding storage capacity, adjusting outdoor watering schedules, optimizing pump station operations, etc. In some circumstances, NTMWD may deliver water that exceeds the maximum rate of delivery in order to manage the Regional Transmission System during high demand periods. When these conditions occur, this is a result of NTMWD's action and will not be attributed to the Customer's action or Customer's system deficiencies and will not trigger additional charges.

Next Steps

16. How can a Customer opt into the new Customer Premium and Annual Minimum Methodology?

Answer: Implementing the new methodology requires a Customer to adopt the 2025 Customer Contract Template. Note that Customers are not *required* to enter into the 2025 Customer Contract; however, adoption is the only way to have the

new Customer Premium methodology apply to a Customer. Note that the Legacy Volume portion of the methodology does expire after July 31, 2028 (Refer to item 17 below for additional details).

17. When do the contractual provisions recognizing Legacy Volume expire?

Answer: After July 31, 2028, the contractual provisions recognizing a Legacy Volume will not be available and all of a Customer's Annual Minimum Volume will be subject to the Customer Rate of the Member City Rate plus 2.8% for the fiscal year beginning October 1, 2028.

18. If a Customer wants to adopt the 2025 Customer Contract Template with NTMWD, when should it do so?

Answer: Please contact NTMWD to initiate the discussion.

RAFTELIS

April 22, 2025

Mr. John Whitsell
City Manager
City of Lucas
Via email: Jwhitsell@lucastexas.com

Subject: Phase II – Rate Study and Final NTMWD Impact Analysis

Dear John:

Thank you for reaching out to begin this next phase in our On-Call Services agreement. In the first phase, Raftelis summarized the relationship between the City of Lucas and the North Texas Municipal Water District (NTMWD) in a presentation to the City Council.

As requested, Raftelis is providing a scope of work for the second phase of work for the On-call Services. In this next phase, Raftelis will complete a rate study and update you on the impact of the latest proposal from NTMWD. I provide the scope of work for this next phase in Attachment A.

The budget for this phase is estimated at $29,900. We bill monthly based on actual time and expenses. Total fees and expenses will be limited to the not-to-exceed amount unless specific approval for an adjustment is received. We estimate that the study will take three to four months from the notice to proceed and will be influenced by how quickly we receive data.

If the terms of this letter are acceptable, please sign below and provide us a copy. We look forward to continuing our work with you. If you have any questions, please contact me at 512.790.2108 or aflores@raftelis.com.

Sincerely,

Angie Flores

Angie Flores
Vice President

The City of Lucas accepts the terms of this engagement letter:

Approved: _____	Date: _____
Name of Signatory: _____	Title: _____

ATTACHMENT A
SCOPE OF WORK

The following proposed work plan is based on our experience completing studies throughout Texas. Our tailored approach includes reviewing each utility's operations, capital plans, and budgets, and recent annual reports to ensure the final product meets your needs.

Task 1: Project Initiation and Management

Executing a productive kick-off meeting is the most effective way to begin a project of this nature. The goals for this meeting include:

- Providing a forum to refine the scope of the project, work plan, and schedule with City staff
- Discussing the City's preliminary pricing objectives
- Ensuring that we understand the overall goals of the study
- Providing an opportunity for City staff to meet and become comfortable with the project staff from Raftelis
- Reviewing the data needs for the project

Before the kick-off meeting, we will prepare a detailed data request list to identify the information needed to complete the various analyses. Some of this information will be readily available, while other components may require more detailed analyses of operational data, customer billing information, and costs. In this meeting, Raftelis will determine the City's main goals and objectives for the rate study.

Project Management

Raftelis will communicate with City staff regarding data requests, data validation, data decisions, and reviewing preliminary and final results. Much of this can be accomplished through conference calls, emails, and demonstrations using collaboration tools like Microsoft Teams or Zoom. These efforts provide for consistent and competent project management to ensure that all deadlines and objectives are met promptly and efficiently. We believe in a no-surprises approach so that the City is always aware of the project status.

Task 2: Customer Service Characteristics

One of the most difficult tasks a utility can face each year is projecting future demand and developing realistic per capita consumption estimates. This task is critical to developing water and wastewater projections. This data is used to develop the revenue projections in the revenue requirement and the service units in the cost-of-service analysis.

Water Use Customer Demand Account Characteristics

- Tabulate and summarize monthly billing data by customer class
- Tabulate number of bills/accounts by meter size by class
- Develop the bill frequency to determine the number of bills and volume billed in each tier (if possible, separate analysis by class for rate design alternatives)

- Calculate the number of bills and accounts by meter size (if available) for the rate structure alternative analysis
- Project water demands considering growth and changes in use per account using
- Identify customers or a group of customers that may warrant a specific class based on the demand characteristics analysis
- Identify trends of changes in water usage due to increased conservation, efficient water fixtures, and other active and passive water savings
- Using the water master plan, incorporate other assumptions that may affect future water use projections

Wastewater Customer Class Contributed Flow and Account Characteristics

- Tabulate and summarize monthly billing data by customer class
- Calculate the estimated residential billable flow and contribute commercial flow to the wastewater treatment plant
- Calculate the number of bills and accounts by meter size (if available) for the rate structure alternative analysis
- Project billable wastewater flows considering changes as a result of changes in water use

Task 3: Development of Financial Plans

An important element in conducting a comprehensive rate study is establishing comprehensive short- and long-term financial plans for the City's utilities. In preparing these plans, we will analyze the City's current policies and practices for funding its operations, capital facilities plans, and debt service requirements. As appropriate, and as discussed with City staff, we will consider various financing options or a combination of options, such as operating revenue, new debt issuances, and miscellaneous fees.

We will assist the City in achieving a suitable balance among the financing options when developing the proposed financial plans, which will accomplish the following:

- Ensure financial sufficiency to meet operating and capital costs as well as prudent reserves
- Meet the City's service policies and objectives
- Fairly distribute financing responsibility to appropriate users
- Result in an appropriate capital structure so that the City maintains a high rating with bond rating agencies
- Establish rate adjustments adequate for two years and the rate schedule to maintain its integrity for at least five years

The financial plans for each utility will include a capital improvement financing component that ensures each utility can fully finance the City's proposed capital improvement program while minimizing impacts to existing ratepayers and complying with existing revenue bond covenants.

Develop Revenue Requirements

This task will include projecting budget items, such as annual costs related to labor, power, materials, capital expenditures, O&M expenses, transfers, reserve contributions, and debt service coverage, using assumptions based on different economic factors and growth trends. In this task, Raftelis will develop a detailed forecast of costs from the North Texas Municipal Water District as developed through the most recent analyses with the Customer Cities.

We will develop forecasts of revenue requirements over the multi-year planning period. Revenue requirements will be projected over the rate-setting period based on historical results, the current budget, capital improvement plans, master planning studies, existing debt service, other obligations, and current economic trends. We will examine the effect of variations in factors that impact the utility's revenue requirements and provide comparisons of potential revenue requirement scenarios for review with the City to identify the most appropriate revenue requirements for proposed rates. Projecting revenue adjustments over a multi-year planning horizon can illustrate future rate impacts and potential challenges to the City's financial situation. This will allow the City to adjust its expenses, transfers, and reserve balances or schedule capital projects to smooth rate impacts and maintain financial stability.

Task 4: Cost-of-Service Analysis and Rate Calculation

Although we tailor a utility's cost-of-service analysis to meet the needs of the individual utility, we always make sure to follow the basic premise of cost-of-service.

Water Utility Cost of Service

We will develop the water cost of service using industry standard approaches and the principles promulgated by the American Water Works Association, and Raftelis' local and nationwide experience.

- Determine the test year revenue requirement
- Assign operation and maintenance costs to functions or unit processes (e.g., water: source of supply, treatment, pumping, transmission and distribution, storage, and fire protection)
- Allocate functional costs to parameters which most influence the cost (e.g., average day demand, peak demands, customer costs)
- Functionalize and allocate capital and debt costs in a similar manner, and allocate costs based on the proportionate share of replacement cost assets by function
- Allocate non-rate revenues to cost components
- Determine unit cost of service and proportionately distribute costs to customer classes (irrigation will be included as a customer class within the water cost of service analysis)
- Provide a comparison of class cost of service to revenue at existing rates for the selected test year

Wastewater Utility Cost of Service

We will develop the wastewater cost of service using industry standard approaches and the principles promulgated by the Water Environment Federation, and Raftelis' local and nationwide experience.

- Determine the test year revenue requirement

- Assign operation and maintenance costs to functions or unit processes (e.g., headworks, collection system, primary treatment, secondary treatment, tertiary treatment, customer)
- Allocate functional costs to parameters which most influence the cost (e.g., contributed flow, BOD, TSS, customer)
- Functionalize and allocate capital and debt costs in a similar manner, and allocate costs based on the proportionate share of replacement cost assets by function
- Allocate non-rate revenues to cost components
- Determine unit cost of service and proportionately distribute costs to customer classes
- Provide a comparison of class cost of service to revenue at existing rates for the selected test year

Rate Design

We will develop proposed rates under the existing structure and proposed rate structure based on the pricing objectives exercise in Task 1. All rate structures developed in this task are designed to recover class cost of service and overall utility revenue requirements.

Update rates under existing rate structure:

- Develop cost-of-service rates under the current rate structure
- Develop customer bill impacts to show change in customer's bill based at various levels of consumption (water and wastewater only)

Develop rates under proposed rate alternatives:

- Based on the study objectives in Task 1, develop rate alternatives based on the customer class cost of service
- Test proposed rate structure alternatives against the objectives and billing system requirements
- Rate alternatives will incorporate those factors affecting the financial plan such as inflation, capital repair and replacement levels, changes in operational demands, replacement schedule for asset infrastructure, and impacts of different funding strategies for capital improvements
- Prepare a bill and customer impact for every bill and customer to show the change in bills under existing and proposed rates and show the total change in annual customer bills
- Consider phasing-in of rates over a period of time in order to minimize impacts to customers

Task 5: Rate Model Development

At the heart of any successful cost-of-service and rate study is the computer model that is used to develop revenue requirements, perform cost functionalization, classification, and allocation, and calculate rates. The model must be sophisticated enough to perform the complex calculations involved in a comprehensive cost-of-service and rate analysis and yet still be intuitive enough to allow for future updates by City staff.

During the project, City staff will be provided with working copies of rate model drafts in Microsoft Excel so that they can provide input into the development of the model. Once the project is complete, the City

will be provided with fully functioning copies of the model, and Raftelis personnel will train members of the City staff in its use.

Task 6: Reports and Presentations

Rate Comparison

Raftelis will prepare a comparative analysis of the City's current and proposed water and wastewater rates to comparable peer utilities. This comparison will be used in the reports and presentations of the findings of the study to provide a frame of reference for stakeholders and decision makers.

Draft Report

The draft report will document the rate development process, describe any recommended changes to the existing rate structures and the reason for such changes, and present the results of the costofservice and rate study. An electronic copy of the draft report will be presented to City staff for their review and comment.

Final Report

Raftelis will incorporate the City staff's comments of the draft report into a final report. Upon finalization of the report, the City will be provided an electronic copy of the report. In addition to the final report, the City will also be provided with electronic copies of the final rate model in Microsoft Excel. Raftelis will also deliver a model training workshop for City staff.

Presentations

Communicating results and recommendations of the rate studies to elected officials requires a strategic approach that accomplishes two objectives – first, it must clearly communicate key messages that resonate with decision makers who are not likely to be experts in utility management or finance. Second, the presentation must balance the need to provide sufficient detail to give council confidence of the study's legitimacy, while not diving too deeply into the weeds and causing undo confusion.

Item No. 06

City of Lucas
City Council Agenda Request
May 1, 2025

Requester: City Manager John Whitsell

Agenda Item Request

Consider amending the current Interlocal Agreement between Collin County and the City of Lucas for Law-Enforcement Services.

Background Information

The current ILA with Collin County for Law-Enforcement Services only allows Collin County to purchase vehicles. This amendment will allow the City of Lucas to purchase vehicles and have Collin County outfit them per their specifications. This will make the vehicle buying process cleaner and easier for the City.

Attachments/Supporting Documentation

ILA Amendment

Budget/Financial Impact

N/A

Recommendation

Approve as presented.

Motion

I make a motion to approve/deny the amendment to the Interlocal Agreement between Collin County and the City of Lucas for Law-Enforcement Services.

Amendment No. _ to
Interlocal Agreement between Collin County and
the City of Lucas for Law-Enforcement Services

1. **Current Agreement**. Under Commissioners Court Order No. 2021-898-09-20, Collin County and the City of Lucas entered an interlocal agreement for the County to provide deputy sheriffs to patrol and provide law-enforcement services in the City of Lucas (the current agreement). *See* Interlocal Cooperation Act, Texas Gov't Code, Chapter 791. The parties have signed at least one amendment to the agreement.

2. **Vehicle Option**. At its option, the City of Lucas may purchase any vehicle and related equipment, which the Sheriff's Office will use to perform under the current agreement. The City will confer with the Sheriff's Office, and the parties will discuss and select a vehicle and the related equipment that are suitable for law enforcement and performance under the agreement. The Sheriff's Office maintains a list of equipment that comes with each vehicle put into service (*e.g.*, emergency-responder make ready, mobile data computer, radio, internet connection, various licenses, lights, radar, ALPR, and various tools) and the Sheriff's Office will confer with the City in selecting the equipment for each vehicle the City purchases. The parties will comply with the current agreement's provisions on equipping and marking the vehicle and on removing equipment and markings when the vehicle reaches end of service. Where feasible, the County will use removed equipment on any replacement vehicle that the Sheriff's Office will use to perform under this or a similar agreement with the City. Where re-use isn't feasible, the County will return the piece of equipment or other property to the City, unless a law or license prohibits such a transfer. If the County retains a piece of equipment or other property, which the City purchased, then the County will pay a reasonable reimbursement amount at the time.

3. **Title and Coverage**. The City will retain title to a vehicle it purchases under this option, and the City will insure or otherwise cover the vehicle for property damage. Alternatively, the City may ask the County to insure or cover the vehicle for damage. If the County is able to do so and does so, then the County may add an appropriate reimbursement amount to the City's fee. *See* Gov't Code, § 791.011(e). The County will insure or cover the risks associated with a County employee's operation of the vehicle.

4. **Term**. This amendment will remain effective as long as the current agreement remains effective.

5. **Additional Documents**. In addition to this amendment, the County and the City will adopt this amendment by its own form of order, resolution, or ratification within the meaning of Section 791.011(d), Gov't Code.

Agreed to:

Collin County

_____

Judge Chris Hill Date
2300 Bloomdale Road
McKinney, TX 75071

City of Lucas

_____

Name Title Date
City of Lucas
665 Country Club Road
Lucas, TX 77002

Item No. 07

City of Lucas
City Council Agenda Request
May 1, 2025

Requester: CIP Manager Patrick Hubbard

Agenda Item

Receive a presentation on the final plans for the Water System Improvements: Estates Waterline Replacement and Water Line Loop at North Pump Station and Provide Direction to the City Manager.

Background Information

This item provides a presentation of the final plans for the Water System Improvements: Estates Waterline Replacement and Water Line Loop at North Pump Station project and is presented to provide transparency in with regard to the project and an opportunity to provide feedback on the project prior to proceeding to bid.

This project combines two previously funded CIP projects into a single design. These are "Estates Road Eight-Inch Waterline Replacement (W-03)" and "North Pump Station 12-inch water line (W-06)". W-06 replaces an asbestos water line and W-03 provides looping on a 12-inch water line at the North Pump Station site, thereby improving efficiency and water quality.

Attachment/Supporting Documentation

1. Final Plans – Water System Improvements: Estates Waterline Replacement and Water Line Loop at North Pump Station
2. Opinion of Probable Construction Cost

Budget/Financial Impact

The estimated cost for these two projects according to the estimates provided in the 2023 Capital Improvement Plan by BHC Engineering was $353,998. The updated Engineer's Opinion of Probable Construction Cost (EOPCC) provided by SPI Engineering based on the final design is $801,308.75.

Recommendation

Staff recommend proceeding to bid for this project.

Motion

There is no motion required.

CITY OF LUCAS

CONSTRUCTION PLANS FOR

WATER SYSTEM IMPROVEMENTS

ESTATES ROAD WATER LINE REPLACEMENT AND WATER LINE LOOP AT NORTH PUMP STATION

BID NO. 036-25

MAYOR
DUSTY KUYKENDALL

CITY COUNCIL

CHRIS BIERMAN — PHILIP LAWRENCE

DEBBIE FISHER — NEIL PETERSON

TIM JOHNSON — BRIAN STUBBLEFIELD

CITY MANAGER
JOHN WHITSELL

DEVELOPMENT SERVICES DIRECTOR
JOE HILBOURN

CAPITAL IMPROVEMENT PROJECTS MANAGER
PATRICK HUBBARD, MPA

DIRECTOR OF PUBLIC WORKS
JEREMY BOGLE, CPWP–M

VICINITY MAP

SPI JOB NO. 24–2183 AND 24–2184

APRIL 2025

SHEET INDEX

OWNER:
CITY OF LUCAS
665 COUNTRY CLUB ROAD
LUCAS, TEXAS 75002

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
Michael R. Burge 4-24-25

ENGINEER:
SCHAUMBURG & POLK, INC.
BEAUMONT | HOUSTON | RICHARDSON
KYLE | PORT ARTHUR | TERRELL | TYLER
2201 N. CENTRAL EXPRESSWAY
SUITE 205
RICHARDSON, TEXAS 75080
Firm Registration No. F-520

GENERAL NOTES:

1. It is the CONTRACTOR's responsibility to maintain neat and accurate plans of record.
2. The CONTRACTOR is responsible for maintaining adequate site drainage throughout the duration of this project.
3. The CONTRACTOR is responsible for obtaining all necessary permits and approvals before construction begins.
4. The CONTRACTOR shall replace all fence removed during construction in as good as or better condition than before construction.
5. The CONTRACTOR shall take all necessary precautions to ensure that electric power and telephone poles are either moved to a safe location by the affected utility company or not disturbed during construction. All costs incurred for moving electric power and telephone poles shall be included in the price bid for the construction of the project.
6. The CONTRACTOR shall restore all property including driveways, public streets, sidewalks, public utilities, franchise utilities, private utilities, and all other improvements removed or damaged inside and outside the project limits during construction to as good as or better condition than before construction. Restoration shall be made immediately after the property no longer interferes with construction. All costs incurred for restoring any of the above items shall be included in the price bid for the construction of the project.
7. The information shown on these drawings concerning type and location of underground and other utilities is not guaranteed to be accurate or all–inclusive. The CONTRACTOR is responsible for making his own determinations as to the type and location of underground utilities and other utilities as may be necessary to avoid damage thereto.
8. The CONTRACTOR shall not place fill or waste material on any private property without prior written permission from the ENGINEER. No excess excavated material shall be deposited in low areas or along natural drainage ways that will restrict the natural flow of water. If the CONTRACTOR places excavated material in low areas that will cause flood damage, CONTRACTOR will be responsible for all damage resulting from such fill, and he shall remove the fill at CONTRACTOR's expense.
9. All streets within the scope of the Contract shall be kept accessible to fire trucks, ambulances and other emergency vehicles.
10. The CONTRACTOR shall be responsible for public safety during the duration of construction. All barricades, warning signs, lights, devices, etc., for the guidance and protection of traffic and pedestrians must conform to the installation shown in 1980 Texas Manual of Uniform Traffic Control Devices, as currently amended by the Texas Department of Transportation. CONTRACTOR shall at all times provide barricades, warning signs and lighting adequate to safeguard the public from any hazards resulting from open trenches during non–work hours.
11. Filter fabric fence for erosion control shall be provided in accordance with specifications and as shown on the plans and in accordance with the EPA regulations.
12. The CONTRACTOR shall use the public right–of–ways and existing utility easements for access to the job site.
13. The CONTRACTOR shall select the subcontractor to be utilized for testing and lab work. The CONTRACTOR shall be responsible for paying for testing and lab work. Selection of subcontractor for this purpose will be subject to approval by the OWNER. Testing referred to herein includes compaction and water pressure testing, which shall be required on this project.
14. The CONTRACTOR shall keep excavated trenches free of groundwater during construction. If necessary, the CONTRACTOR shall utilize dewatering procedures in order to control groundwater during construction such that it does not affect his construction work.
15. The CONTRACTOR shall provide means for adequately controlling and avoiding soil erosion during construction. The CONTRACTOR shall not store spoil in drainage ways during construction.
16. All disturbed earth areas are to be finish graded to original or proposed contours, fertilized and either hydromulched with bermuda seed or covered with block sod according to NCTCOG specifications immediately after construction. Backfill to be select material free of rock and other debris. CONTRACTOR shall thoroughly water the hydromulch or block sod immediately after placement. Block sod shall match the existing type of grass on a case by case basis. There shall be no separate pay for matching each type of grass. The CONTRACTOR shall also be responsible for continued maintenance and watering of the newly hydromulched or sodded areas until the entire project is completed and accepted by the City of Lucas. Watering of the bermuda hydromulch or block sod shall be done in a manner and quantity as directed by City of Lucas field representative.
17. No existing sprinkler/irrigations systems have been shown on the plans; however, they may exist in certain areas. It is the CONTRACTORS responsibility to locate any existing irrigation systems within the project limits and determine if they will be affected by this construction. If CONTRACTOR encounters any sprinkler systems during construction, he shall repair and/or replace in as good as or better condition than before construction. All costs incurred for restoring any sprinkler/irrigation systems shall be included in the price bid for the construction of the project.
18. The CONTRACTOR shall maintain adequate sanitary facilities for use by workers throughout construction.
19. The CONTRACTOR shall conform to the Occupational Safety and Health Administration's (OSHA) standards for trench safety that are in effect during the period of construction.
20. All materials and workmanship shall conform to the City of Lucas Standards and Specifications and the North Central Texas Council of Government (NCTCOG) Standards and Specifications, except as noted. In the event of a conflict, the City of Lucas Standards and Specifications shall govern.
21. No existing trees shall be removed without approval of the City of Lucas.
22. CONTRACTOR shall provide all necessary construction staking.
23. CONTRACTOR's working hours shall be in accordance with the provisions of the current City Ordinance governing hours of construction work in the City.
24. The CONTRACTOR shall assume responsibility for protection of public utilities in the construction of this project. All manholes, valve boxes, fire hydrants, etc., must be adjusted to proper line and grade by the CONTRACTOR prior to and/or after placing any permanent paving. The CONTRACTOR shall also be responsible for support of existing utility poles, street signs, etc., when excavating in the vicinity of such poles.
25. Driveways affected by construction shall be replaced with driveway of same type material and surface as that removed for installation of water line. Driveway culverts shall be removed when necessary to allow for construction of water line. Culverts are to be replaced in the same location if condition of culvert is deemed satisfactory by OWNER. If culvert cannot be salvaged, a new culvert of the same type removed will be installed by the CONTRACTOR. Driveways that are disturbed during construction shall be restored to as good as or better condition than they were prior to construction and materials utilized to restore the driveway shall be the same material as what the driveway is presently made of. All costs incurred for removing and replacing driveways and/or driveway culverts shall be included in the price bid for the construction of the project.

GENERAL NOTES CONT'D.:

26. All existing water lines and service lines to remain in service during construction. At times when water has to be cut–off, the CONTRACTOR shall coordinate with the City of Lucas to notify the affected area at least 48 hours prior to water cut–off. Excludes weekends and holidays for the 48 hour notice.
27. The CONTRACTOR shall phase his daily work schedule so that all driveway crossings are to be complete prior to the end of the day. No driveway crossings are to be left open overnight. During installation of the pipeline across driveways, the CONTRACTOR shall be prepared to provide access across trenches and driveways at all times in case of emergency.
28. Proposed water line shall be polyvinyl chloride (PVC) AWWA C900. New water service line shall be poly pipe with compression type fittings. Main line valves and fittings shall be cast iron.
29. CONTRACTOR shall install isolation gate valves and fire hydrants at locations shown on plans unless otherwise directed by OWNER. OWNER may direct CONTRACTOR to locate valves and fire hydrants at locations other than those shown on plans. Also, OWNER may add additional isolation gate valves and fire hydrants as required for operational purposes.
30. The CONTRACTOR is responsible for keeping streets, parking areas, sidewalks, etc., adjacent to the project free of mud and debris from construction.
31. The City of Lucas Public Works Department is to be notified 48 hours (2 working days) prior to any construction of paving and utilities in rights–of–way and easements.
32. Arrangements for construction water shall be made through the City of Lucas.
33. All locations of underground utility lines are approximate. CONTRACTOR shall contact the proper utility companies at least 48 hours prior to construction, shall inform them of beginning of construction and shall make arrangements to have utilities located by flagging. Flagging of utilities shall be completed prior to beginning construction.
34. PVC pipe shall be manufactured from a low filler PVC component capable of meeting the highest performance standards of the ASTM specifications.
35. Construction sites shall be secure at all times. Safety precautions shall be taken to protect the public from any injury which might result from construction activities.
36. As part of bid item, "EROSION CONTROL", the CONTRACTOR shall be responsible for implementing any and all erosion control measures as needed to control runoff of siltation from the project site. This shall include, but is not limited to, silt fencing, rock berms, etc. The CONTRACTOR shall maintain these erosion control measures as required until the construction is completed and sod has been placed over disturbed areas.
37. CONTRACTOR shall expose each existing pipeline to which a proposed pipeline will be connected and shall verify the horizontal and vertical location of the existing pipeline prior to the installation of the proposed pipeline.
38. Proposed water line shall have a minimum cover of forty two inches (42").
39. The fittings for the proposed water line shall be AWWA C153 compact fittings.
40. All materials furnished and installed on this project shall be domestic materials and shall be in compliance with the appropriate AWWA Standards for such items.
41. Hydromulch or block sodding shall be installed to match surrounding areas where the ground is disturbed in the construction area. City reserves the right to provide direction with regard to areas to be hydrolmulched or sodded. The CONTRACTOR will receive payment only for the square yards of area actually hydromulched or sodded in the construction area.
42. If any conflicts with other utilities occur during the construction activities, the CONTRACTOR shall immediately notify the City's representative and shall make adjustments as necessary with City's concurrence.
43. No connections to other City water distribution lines shall be made on Fridays or the day before a holiday for tie–ins.
44. CONTRACTOR is responsible for locating all existing buried lines. Locations of pipelines shown on the plans are approximate (including City's existing 6" water line) and are to the best knowledge of the engineer. CONTRACTOR will make all repairs to existing lines damaged during construction work and will have materials on hand to make such repairs.
45. CONTRACTOR shall take the existing water lines out of service and abandon in place once all service connections are changed over. CONTRACTOR shall cut and plug existing water lines in a sufficient manner to prevent loss of water.
46. Mega–lugs shall be furnished and installed on all bends, valves, joints, and other fittings that are required for the proposed water line.
47. A 3M locator type 1266 shall be furnished and installed no deeper than 4 feet by the CONTRACTOR beside all valves, above all bends and above all corporation stops on the proposed water line.
48. CONTRACTOR shall furnish and install a tracer wire that is compatible with and will allow detection by radio detection corporation's digital PXL–2 pipe locator. The tracer wire shall be installed just above the proposed water lines and throughout the length of the water lines. The tracer wire shall be minimum 14 gauge wire. All water mains and poly water services are required to have tracer wire. The water main line must also have water burial tape placed on top of the 12" of sand (Class B+ Embedment requirement for 12" of sand over the top of the water main).
49. Tracer wire access points must be installed at every main line valve and poured into the concrete valve pads for easy access. These cannot be placed inside the valve stacks. Tracer wire access point by SnakePit® Access Point by Copperhead Industries or approved equal.
50. Water lines and services will be pressure tested at 160 psi for two hours. No drop in pressure will be accepted.
51. Only City of Lucas personnel are authorized to operate any valves in the active water distribution system. Any violation of this rule may result in corrective actions or fines, if applicable.
52. If the CONTRACTOR excavates a trench for the proposed water line to a depth requiring a trench safety plan, CONTRACTOR shall provide a trench safety plan prepared and sealed by a licensed engineer, which shall be in conformance with OSHA requirements. CONTRACTOR shall provide trench safety during construction per the trench safety plan when and where it is required as a result of OSHA requirements, job conditions, site conditions, or soil conditions.
53. There is no separate pay resulting from any of the work required as a result of the requirements included in these general notes, unless otherwise noted. All work required shall be included in the unit price bid for the project.

CONSTRUCTION SEQUENCE:

1. Existing water lines shall remain in service until all new water lines are installed and ready for service. Once new water lines are all installed and ready for service, new water lines shall be placed in service and existing water service connections shall be switched over to the new water line where existing water lines are being replaced by the new water line.

GENERAL TRAFFIC CONTROL NOTES

1. All temporary signs, markings, cones, channelizing devices, warning lights and barricades shall be in accordance with the current State of Texas Manual on Uniform Traffic Control Devices (MUTCD).
2. Type "A" warning lights shall be placed on all advance warning signs. In addition, flags shall be placed on all advance warning signs that detour traffic.
3. Any existing conflicting markings shall be removed prior to shifting traffic.
4. All temporary pavement markings required during construction shall be of the removable type. Temporary markings and striping may be required to transition travel lanes between construction phases. All pavement markings and striping shall be reflective.
5. The spacing of signs and channelization devices may be adjusted to fit the geometric conditions encountered, such as driveways, intersecting roadways, vertical and horizontal alignment, etc., as approved by the City of Lucas.
6. Advance warning signs shall not be displayed more than forty–eight (48) hours before physical construction begins. Signs may be erected up to one week before needed, if the sign face is fully covered.
7. Use of barricades, portable barrier rails, vertical panels, and drums shall be limited to the immediate areas of construction where a hazard is present. These devices shall not be stored along the roadway within thirty (30) feet of the edge of the traveled way before or after use unless protected by guardrail, bridge rail, and/or barriers installed for other purposes. These devices shall be removed from the construction work zone when the City of Lucas determines they are no longer needed. Where there is insufficient right–of–way to provide for this thirty (30) foot setback, the City of Lucas shall approve alternate locations.
8. The posted speed for warning signage is to be determined at the site by the City of Lucas.
9. Reduced speed warning signage should be placed prior to and at regular intervals within the construction zone.
10. As part of the bid item, "Construction Barricading/Signing/Traffic Control," the CONTRACTOR is required to submit a traffic control plan for construction a minimum of 3 days prior to changes in traffic handling or movement, These plans are to be reviewed and approved by the City of Lucas prior to construction of that phase.
11. The CONTRACTOR shall accommodate existing traffic during construction and shall maintain at least one open lane of traffic at all times. Use of flag men, barricades, vertical panels, etc. shall be required and shall be considered subsidiary to "Construction Barricading/Signing/Traffic Control".
12. CONTRACTOR shall be required to place temporary pavement markings and/or buttons as needed to mantain traffic in a safe and efficient manner after removal of existing markings. These temporary markings shall not be paid for separately but shall be considered subsidiary to "CONSTRUCTION BARRICADING/SIGNING/TRAFFIC CONTROL".

SERVICE CONNECTION NOTES:

1. CONTRACTOR shall install new 1" poly pipe service lines from existing water meters to proposed water lines. These new 1" service lines shall replace the existing service lines. Once CONTRACTOR has completed installation of the proposed water lines and the new water lines have been tested and disinfected and once all the bacteriological samples have passed and the water lines have been placed in service, the CONTRACTOR shall disconnect the old service lines and connect the new service lines to the existing water meters. The CONTRACTOR shall provide all labor and materials to install the new 1" service lines and connect the 1" service lines to existing water meters.
   a) Short 1" service lines from proposed water line to existing meters where existing meters are on the same side of the road as the proposed water lines.
   b) Long 1" service lines from proposed water line to existing meters where existing meters are on the opposite side of the road from the proposed water line.
2. For the service connections, CONTRACTOR shall furnish and install Ford brass taps and saddles (double saddles) or approved equal. The cost for the taps and saddles shall be included in the price bid for the service lines.

NTMWD NOTES:

1. North Texas Municipal Water District (NTMWD) 42–inch and 20–inch water transmission pipeline located within limits of construction.
2. Operation of heavy earth moving equipment, compaction equipment or heavy construction equipment, such as concrete trucks, shall be restricted to specific crossing points across NTMWD easements, as approved by the NTMWD. The crossings shall be designated and verified to provide a minimum of five feet of cover.
3. To assure that placing of significant loads over the NTMWD pipeline does not damage the existing pipeline, no materials shall be stockpiled on the NTMWD easement without authorization from the NTMWD. If the CONTRACTOR desires to use NTMWD's easement for stockpile of materials, contact NTMWD Engineering at (972) 442–5405 so your plans for use of NTMWD's easement can be reviewed.
4. Unless otherwise shown or required a minimum of one–foot clearance shall be provided for all utilities crossing the NTMWD pipelines.
5. The CONTRACTOR shall contact NTMWD Engineering at (972) 442–5404 at least 48 hours prior to performing any work in the vicinity of the NTMWD facilities.
6. For open cut where crossing under the NTMWD pipeline, within ten feet either side of centerline of pipeline, the trench width shall be limited to four–foot with vertical walls, no sloping banks and with the appropriate trench safety. The entire excavation within the limits noted above shall be backfilled with sand to one–foot above top of NTMWD pipeline. One foot minimum vertical clearance is required between NTMWD pipeline and proposed utilities.
7. Limits of bore shall be a minimum of the NTMWD easement width.
8. The casing pipe shall terminate outside of the NTMWD easement.
9. Boring and receiving pits shall be located outside of NTMWD easements.
10. A minimum of two–foot horizontal and one–foot vertical clearance is required between proposed water lines and NTMWD pipelines.
11. Water lines crossing the NTMWD easement shall be installed in compliance with the Rules and Regulations for Public Water Systems Paragraph 290.44 (e), Location of Water Lines.

SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED
PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
PROJECT GENERAL NOTES
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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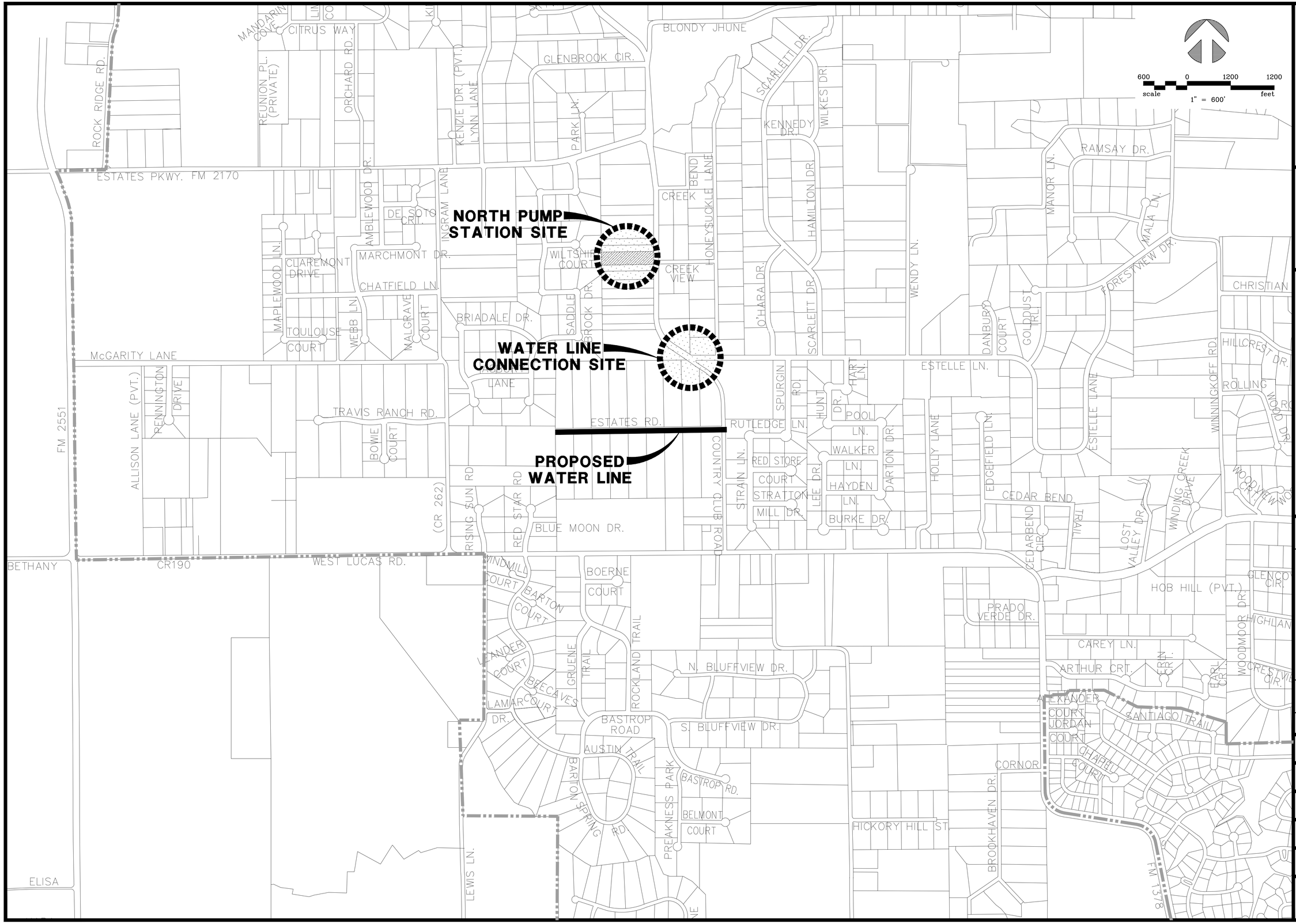
SCALE: NO SCALE
DATE: APRIL 2025
DRAWN BY: SPI
REVIEWED BY: MRB
PROJECT NO: 24-2183
SHEET NO: 2 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183GEN-NOTES



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STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE RELACEMENT
PROJECT LOCATION MAP
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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SCALE: 1" = 600'

DATE: APRIL 2025

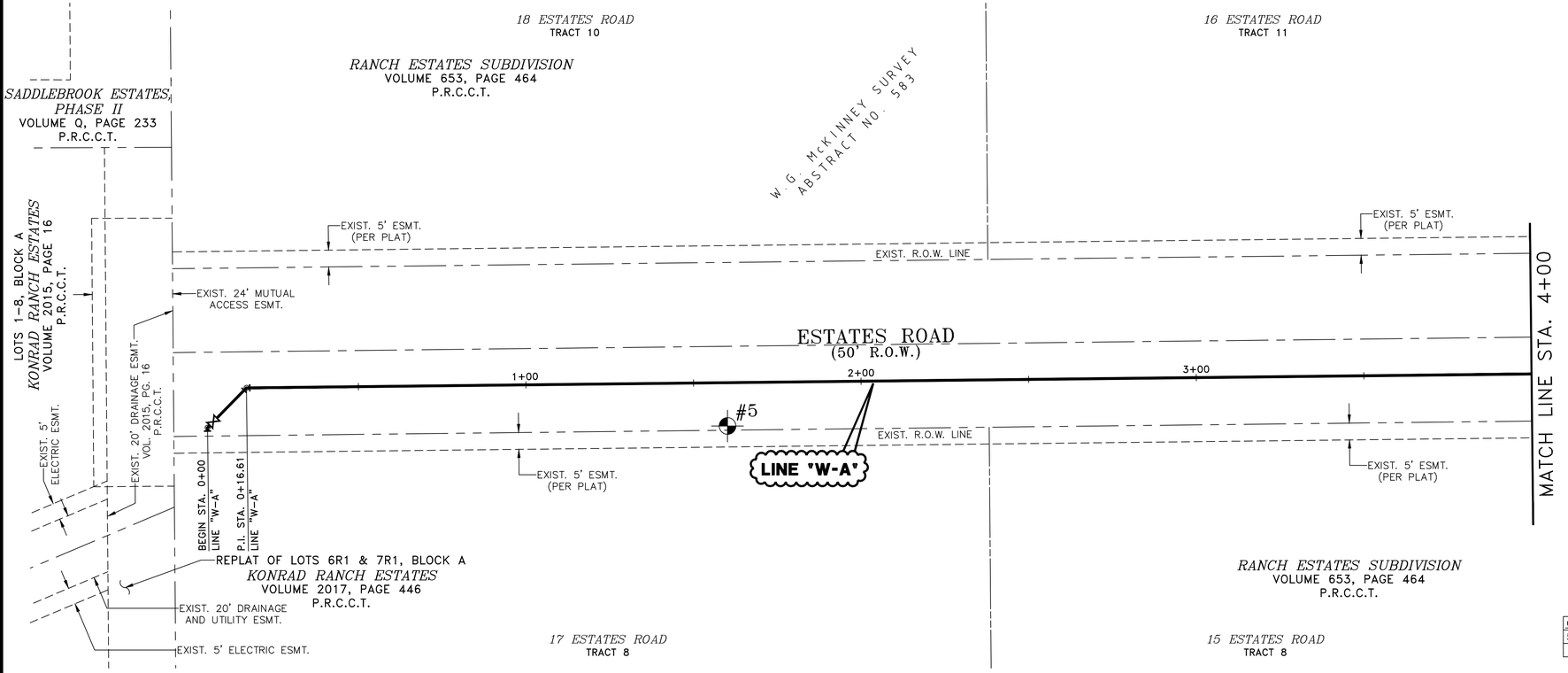
DRAWN BY: SPI

REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 3 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183LOCMAP

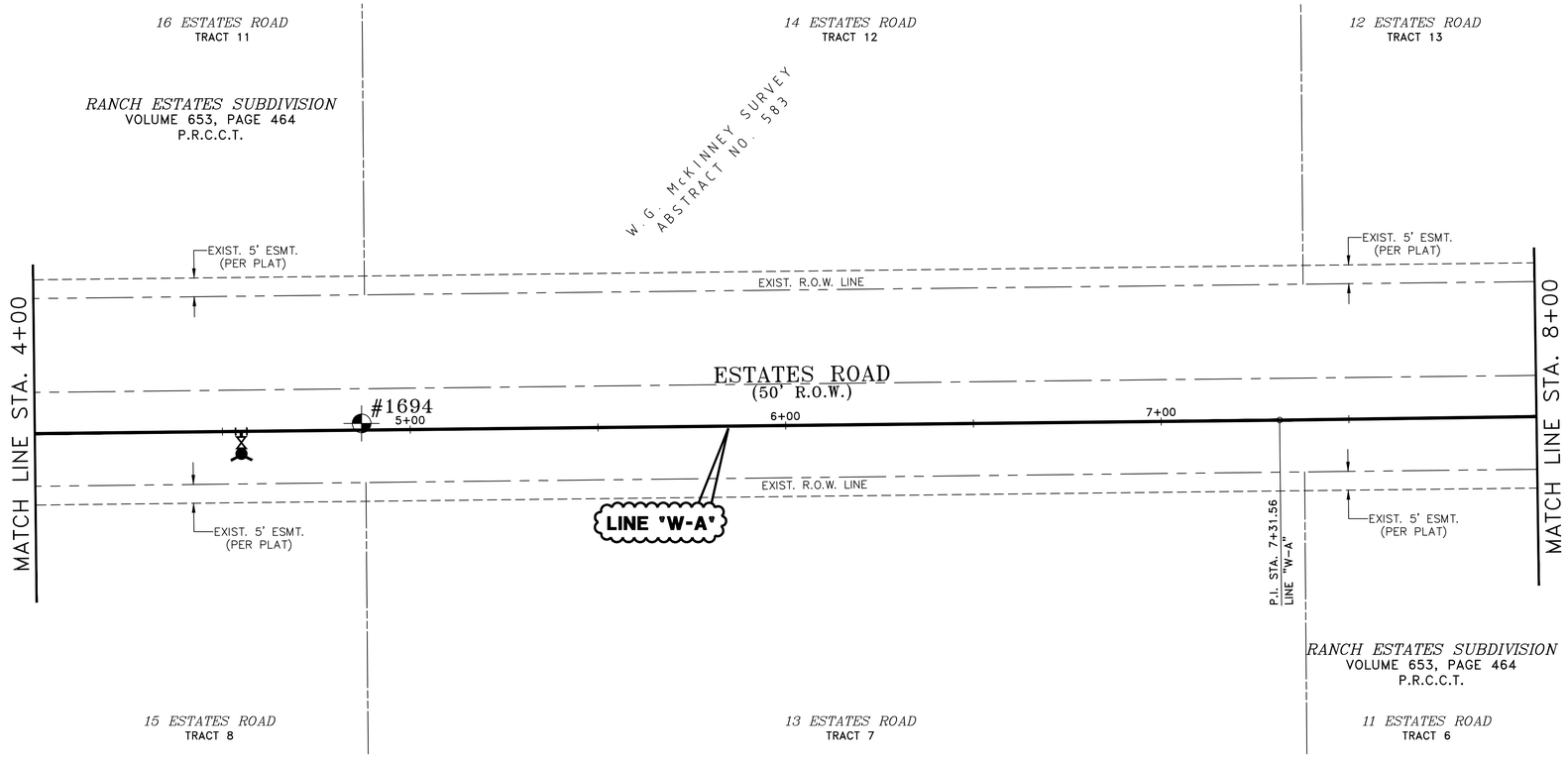


WATER LINE "W-A"

STATION	NORTHING(Y)	EASTING(X)
BEGIN STA. 0+00	7084754.2596	2550841.3843
P.I. STA. 0+16.61	7084766.1319	2550853.0032
P.I. STA. 7+31.56	7084773.8462	2551567.9074

HORIZONTAL AND VERTICAL CONTROL POINTS

CP#	NORTHING(Y)	EASTING(X)	ELEVATION(Z)	DESCRIPTION
5	7084754.7460	2550996.5050	620.08	1/2" I.R. W/CAP
1694	7084772.9680	2551323.3950	620.07	SQUARE CUT



NOTES:

1. BEARINGS AND COORDINATES SHOWN ARE BASED ON TEXAS STATE PLANE COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 ON GRID COORDINATE VALUES, NO SCALE, NO PROJECTION.
2. BASIS FOR VERTICAL CONTROL IS NAVD 88.

!! CAUTION !!

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BEAUMONT | HOUSTON | RICHARDSON
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Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED
PROFESSIONAL ENGINEER
4-24-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
HORIZONTAL AND VERTICAL CONTROL PLAN - SHEET 1
(ESTATES ROAD)

CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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SCALE: 1" = 20'

DATE: APRIL 2025

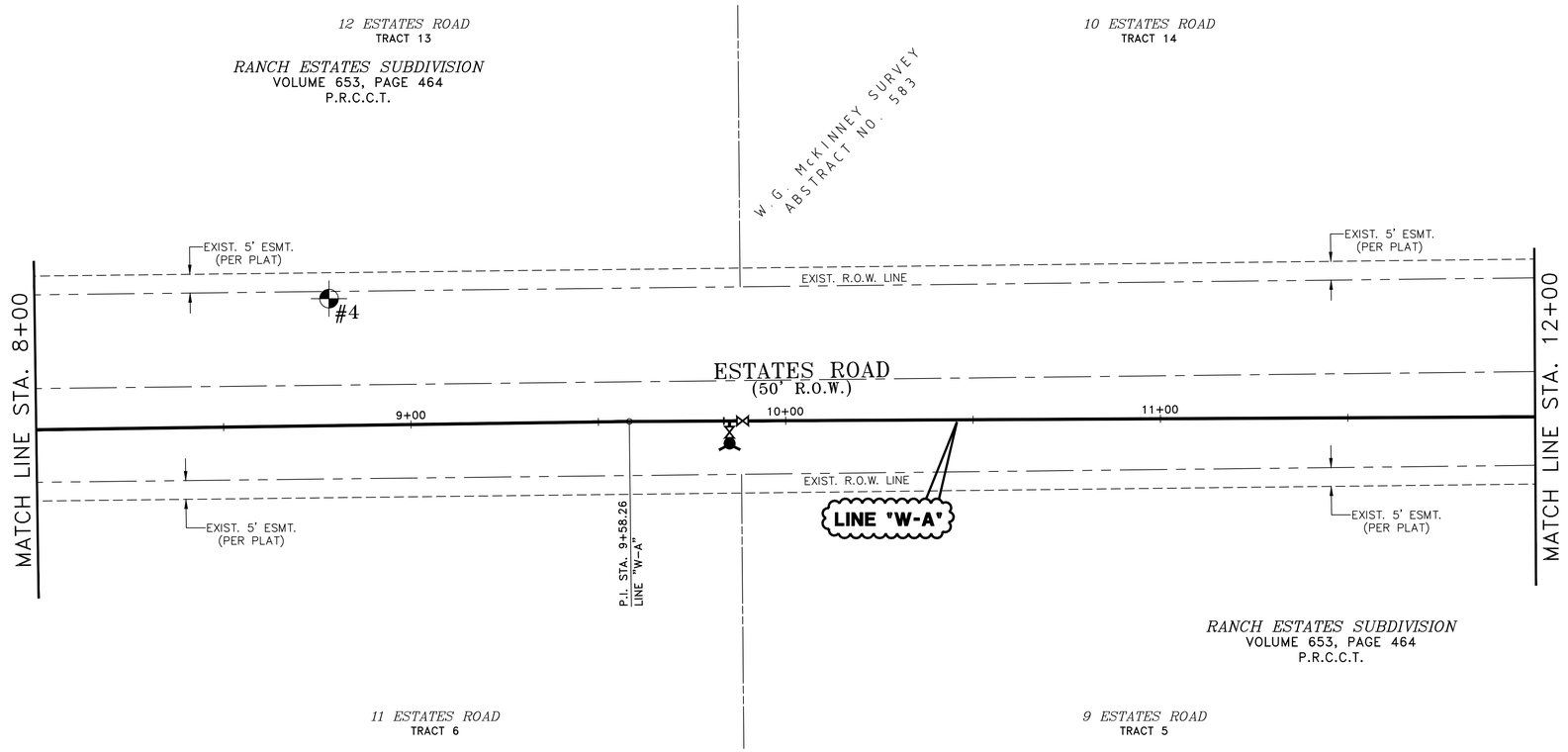
DRAWN BY: SPI

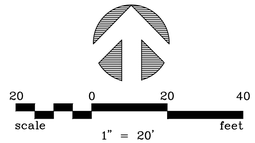
REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 4 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183HORIZCONT-01



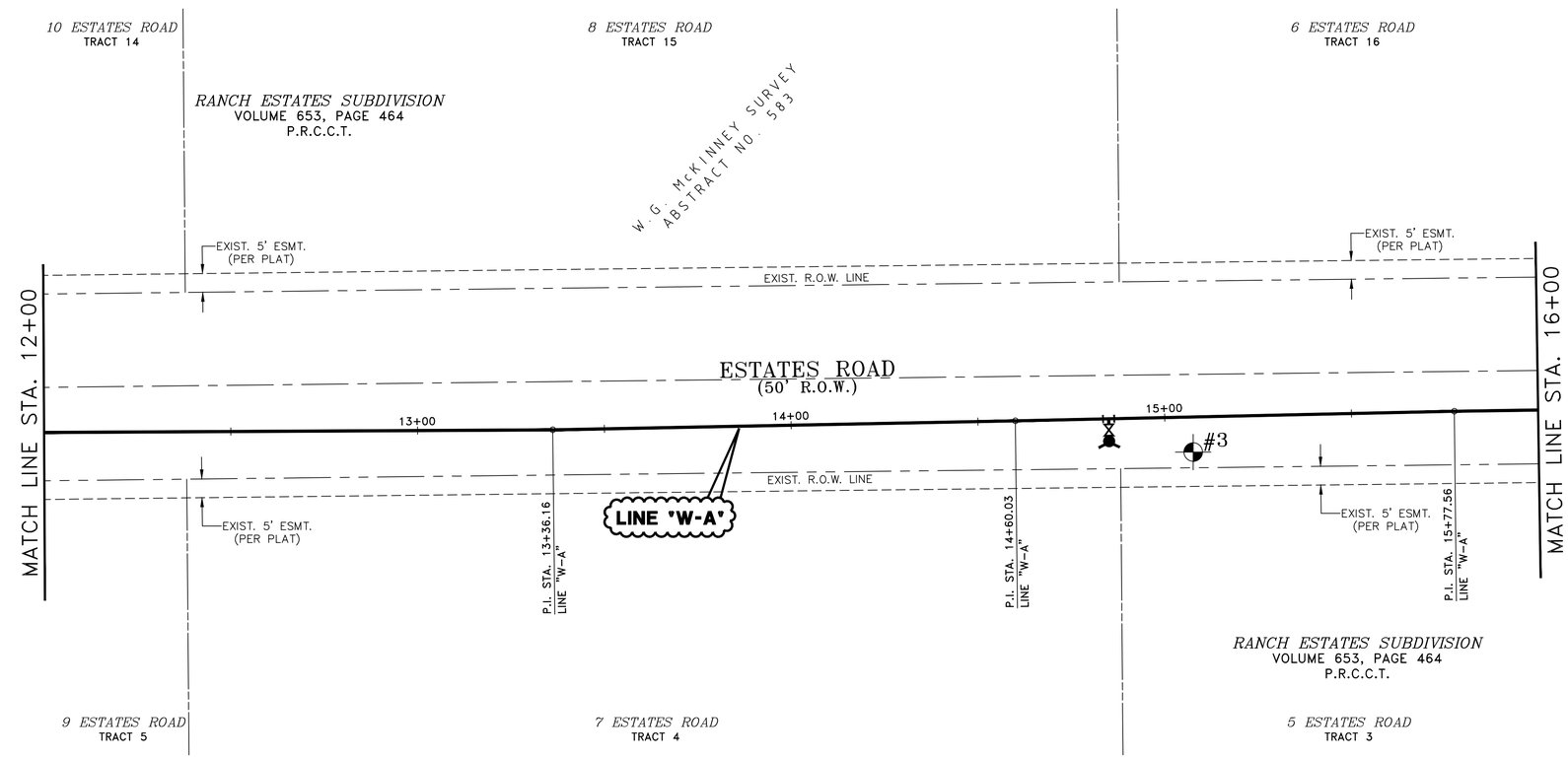


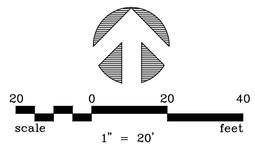
WATER LINE "W-A"

STATION	NORTHING(Y)	EASTING(X)
P.I. STA. 9+58.26	7084776.9905	2551794.5921
P.I. STA. 13+36.16	7084778.9376	2552172.4825
P.I. STA. 14+60.03	7084781.3543	2552296.3252
P.I. STA. 15+77.56	7084783.9177	2552413.8334

HORIZONTAL AND VERTICAL CONTROL POINTS

CP#	NORTHING(Y)	EASTING(X)	ELEVATION(Z)	DESCRIPTION
3	7084772.9670	2552343.9340	621.90	1/2" I.R. W/CAP
4	7084809.7440	2551714.4510	619.62	1/2" I.R. W/CAP





NOTES:

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2. BASIS FOR VERTICAL CONTROL IS NAVD 88.

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BEAUMONT | HOUSTON | RICHARDSON
KYLE | PORT ARTHUR | TERRELL | TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE RELACEMENT
HORIZONTAL AND VERTICAL CONTROL PLAN - SHEET 2
(ESTATES ROAD)
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED
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SCALE: 1" = 20'

DATE: APRIL 2025

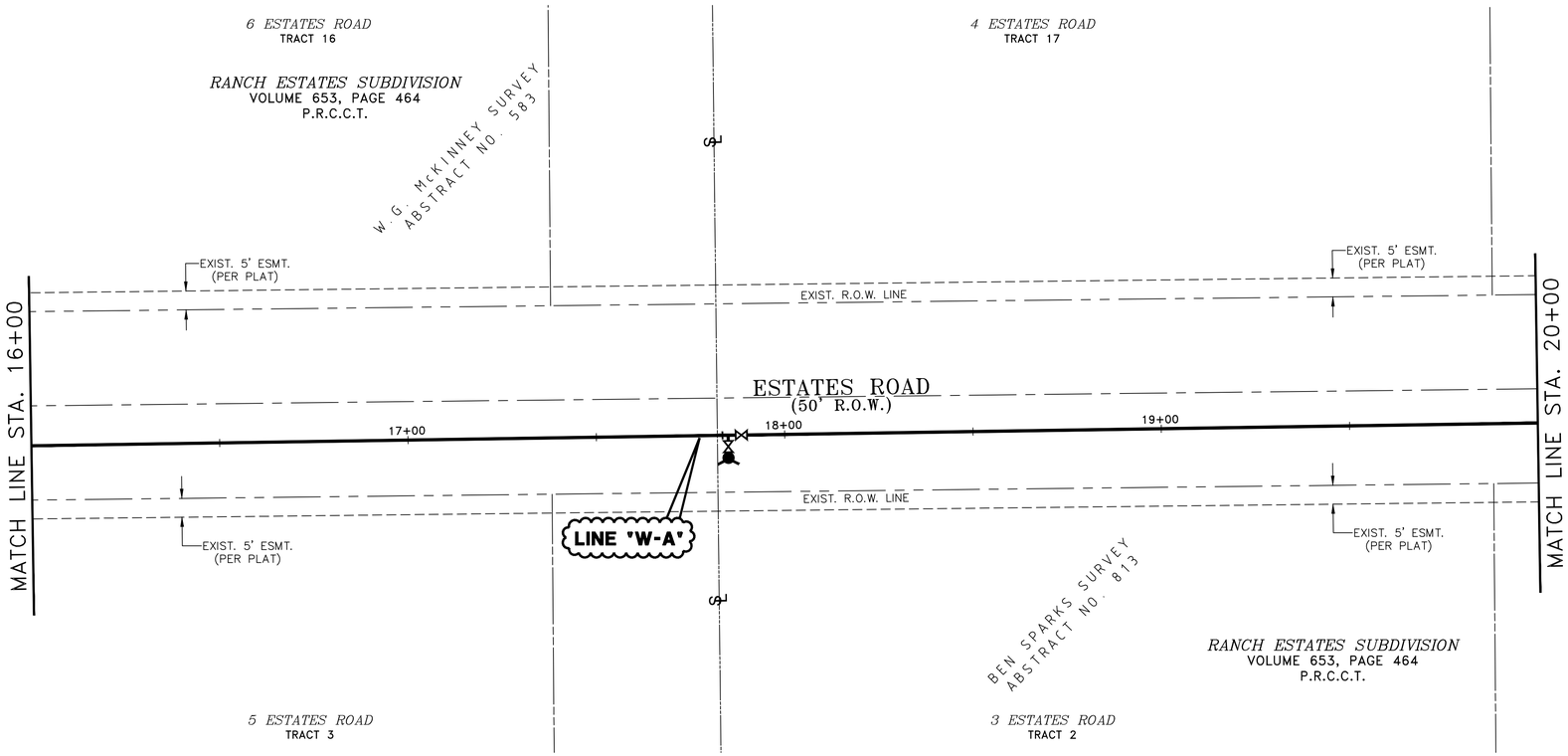
DRAWN BY: SPI

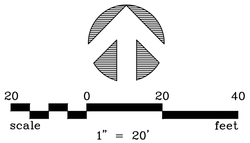
REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 5 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183HORIZCONT-02



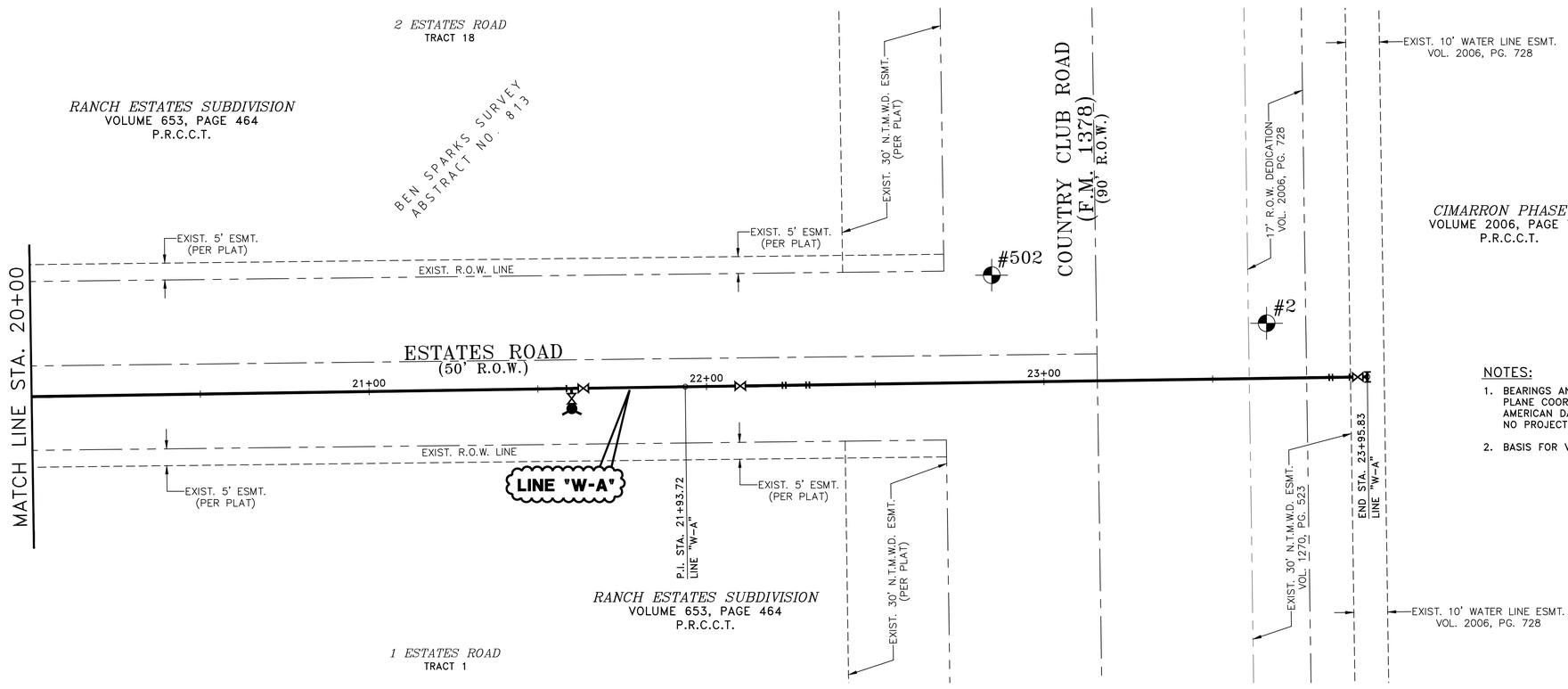


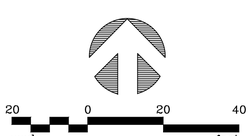
WATER LINE "W-A"

STATION	NORTHING(Y)	EASTING(X)
P.I. STA. 21+93.72	7084793.2016	2553029.9194
END STA. 23+95.83	7084796.1290	2553232.0072

HORIZONTAL AND VERTICAL CONTROL POINTS

CP#	NORTHING(Y)	EASTING(X)	ELEVATION(Z)	DESCRIPTION
2	7084811.9910	2553202.1590	611.12	1/2" I.R. W/CAP
502	7084826.2270	2553120.6990	612.95	SQUARE CUT





NOTES:

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SPI
SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
HORIZONTAL AND VERTICAL CONTROL PLAN - SHEET 3
(ESTATES ROAD)

CITY OF LUCAS

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SCALE:
1" = 20'

DATE:
APRIL 2025

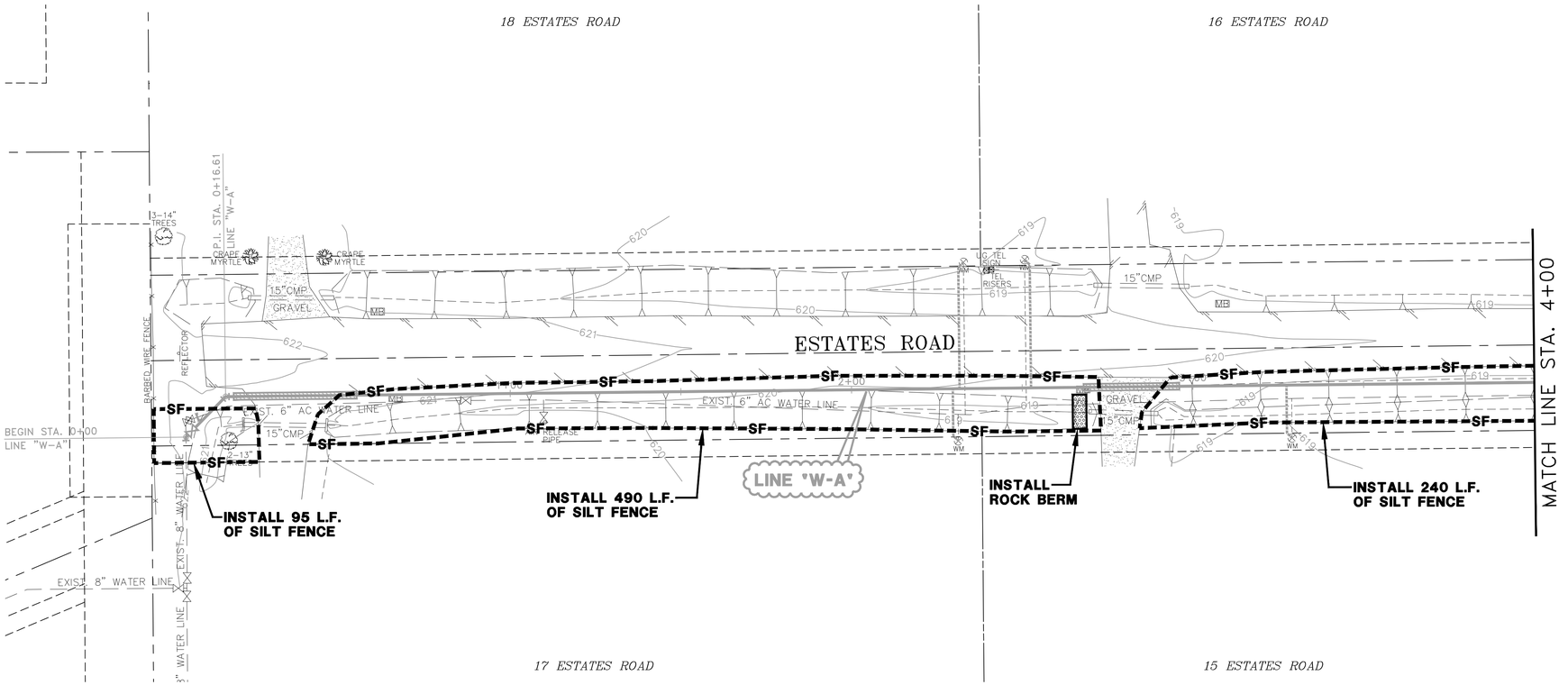
DRAWN BY:
SPI

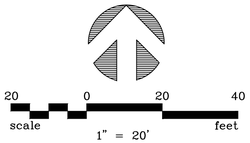
REVIEWED BY:
MRB

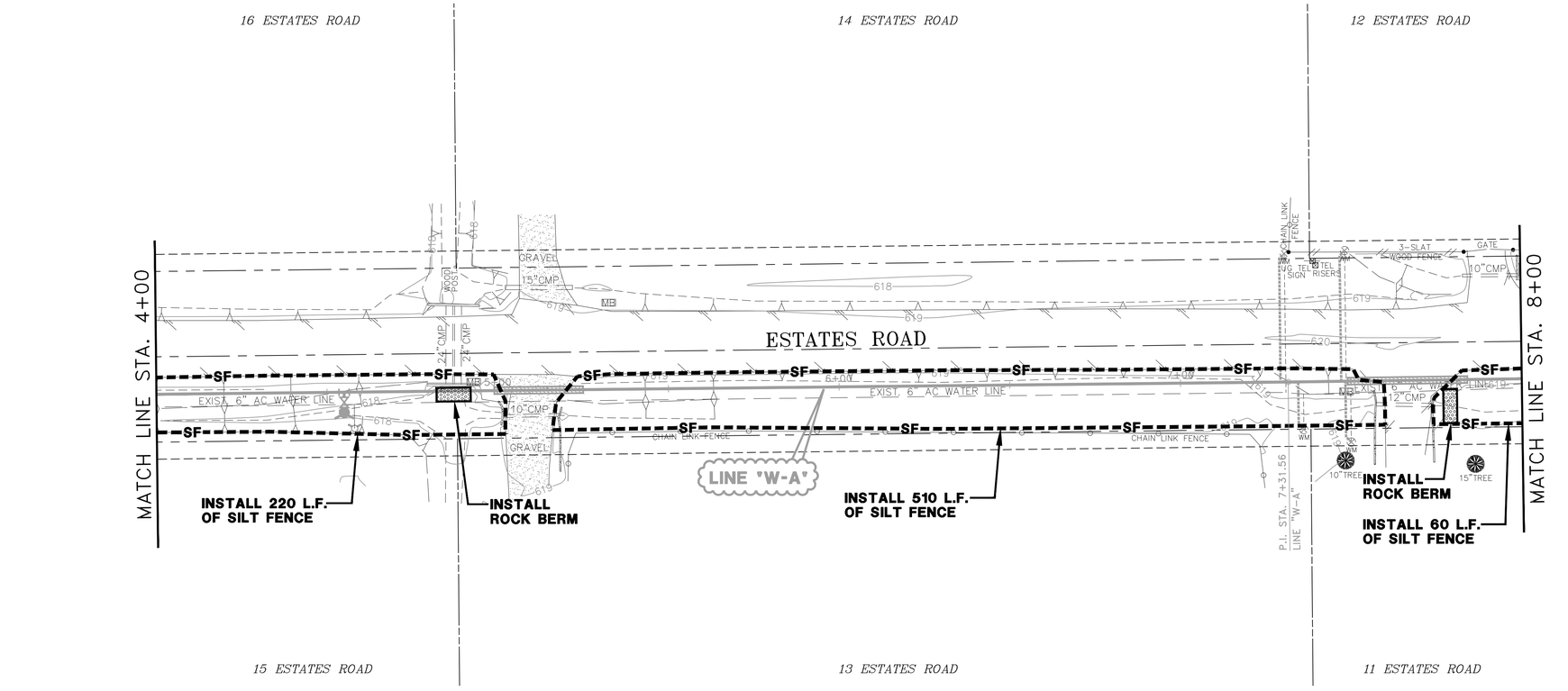
PROJECT NO:
24-2183

SHEET NO:
6 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183HORIZCONT-03







LEGEND:
- SF — SILT FENCE
- ROCK BERM

SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
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Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-23-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
EROSION CONTROL PLAN - SHEET 1
(ESTATES ROAD)

CITY OF LUCAS

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SCALE:
1" = 20'

DATE:
APRIL 2025

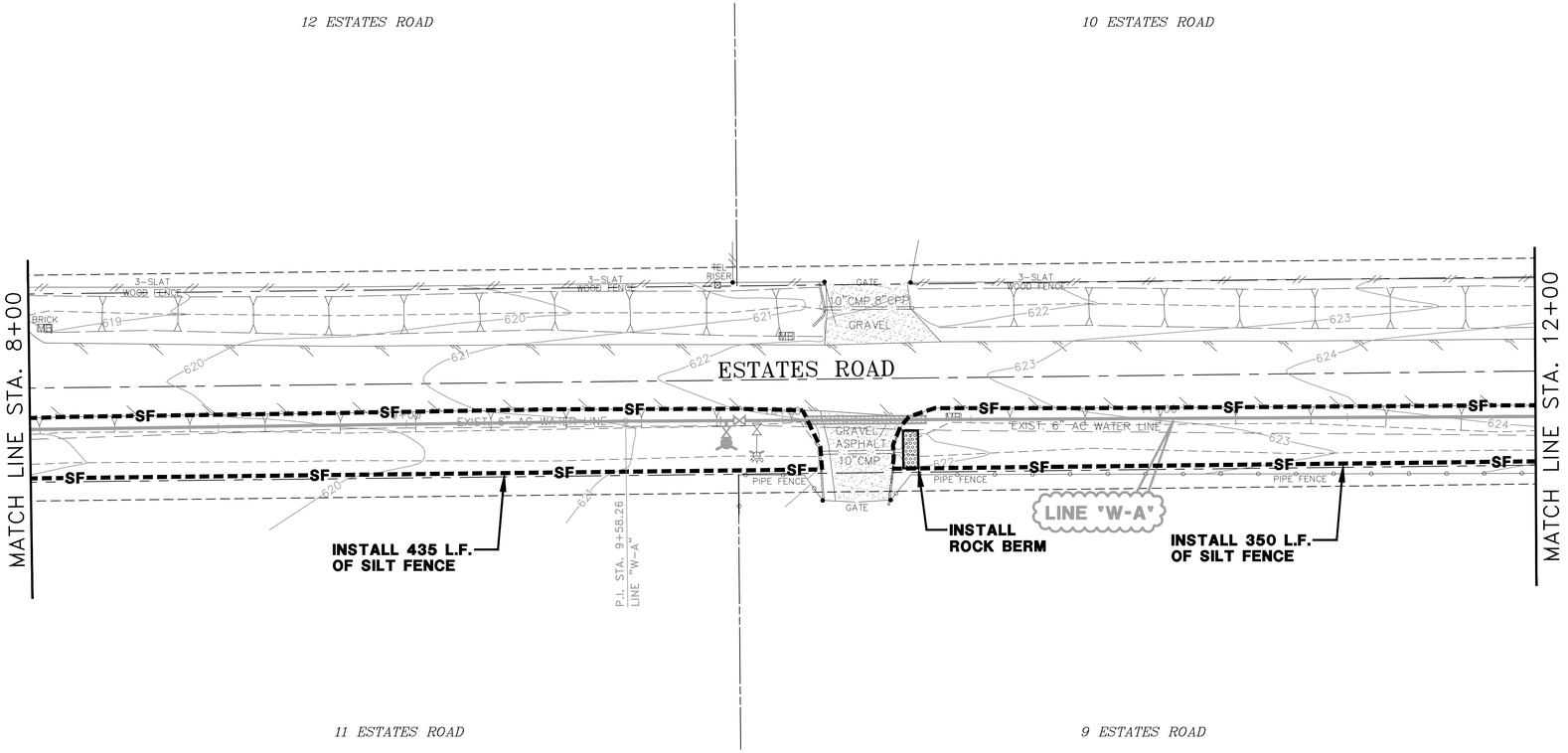
DRAWN BY:
SPI

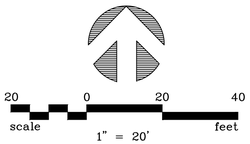
REVIEWED BY:
MRB

PROJECT NO:
24-2183

SHEET NO:
7 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183EROSCONT01





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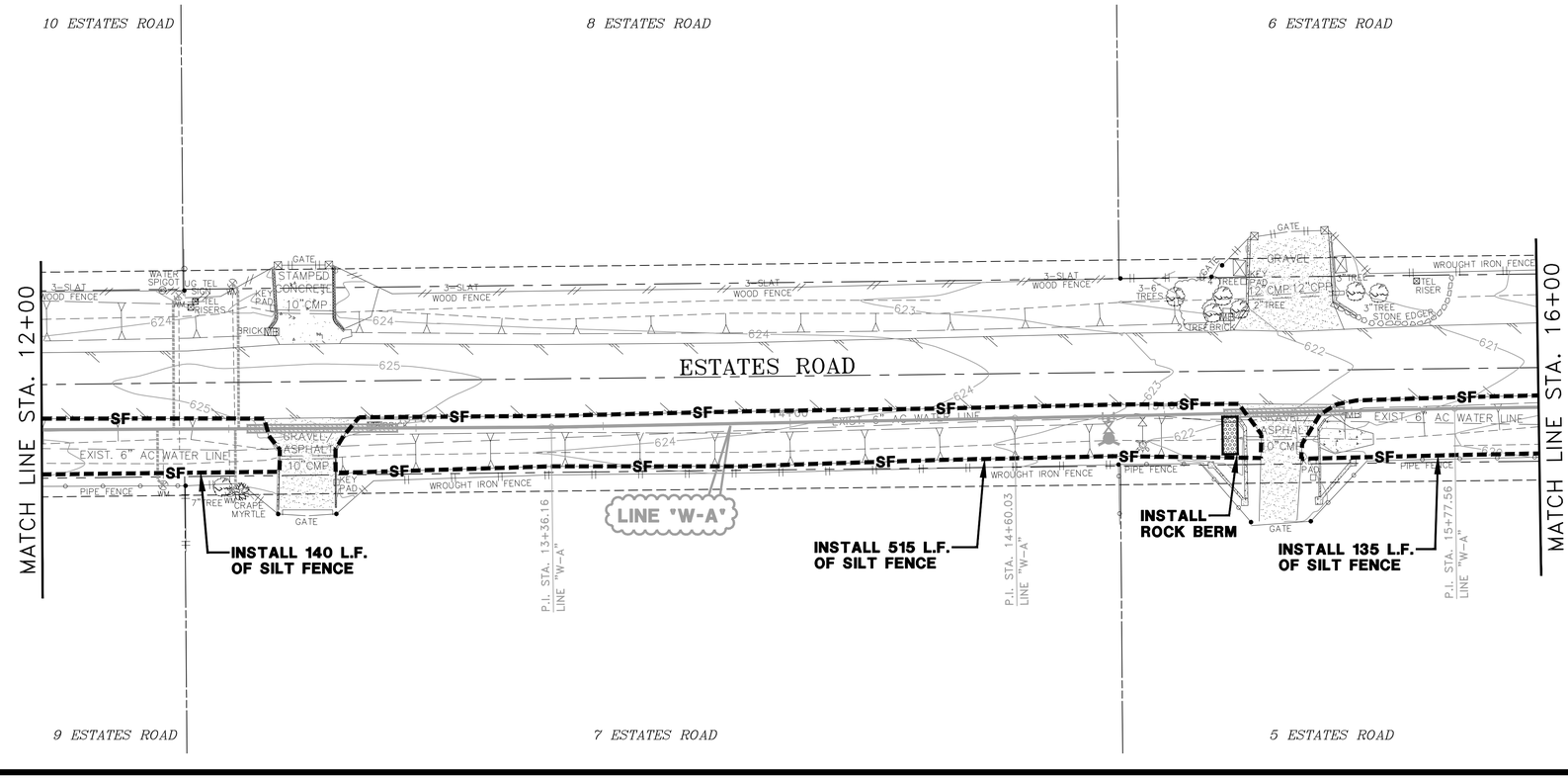
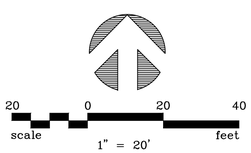
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
REPLACEMENT
EROSION CONTROL PLAN - SHEET 2
(ESTATES ROAD)

CITY OF LUCAS





LEGEND:
--SF-- SILT FENCE
ROCK BERM

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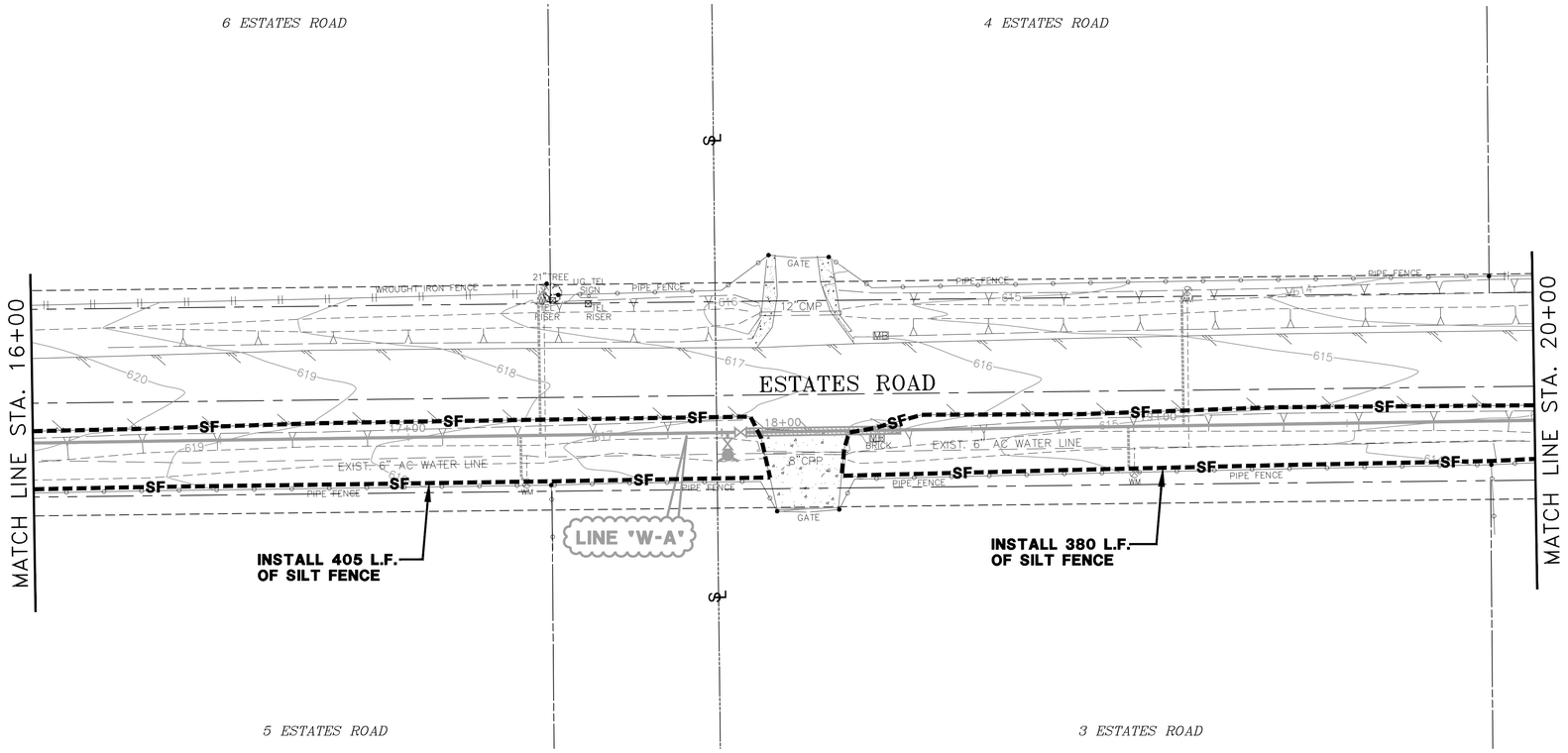
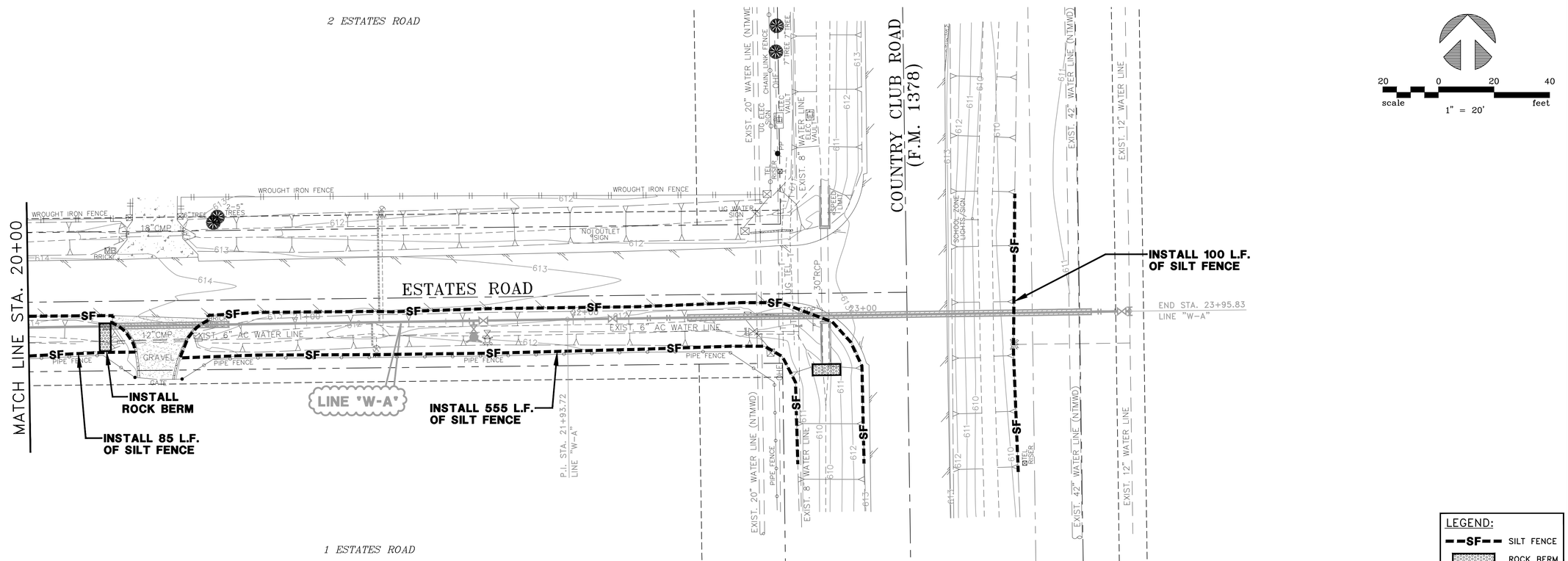
SCALE: 1" = 20'
DATE: APRIL 2025
DRAWN BY: SPI
REVIEWED BY: MRB
PROJECT NO: 24-2183
SHEET NO: 8 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183EROSCONT02





SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE RELACEMENT
EROSION CONTROL PLAN - SHEET 3 (ESTATES ROAD)
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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SCALE: 1" = 20'

DATE: APRIL 2025

DRAWN BY: SPI

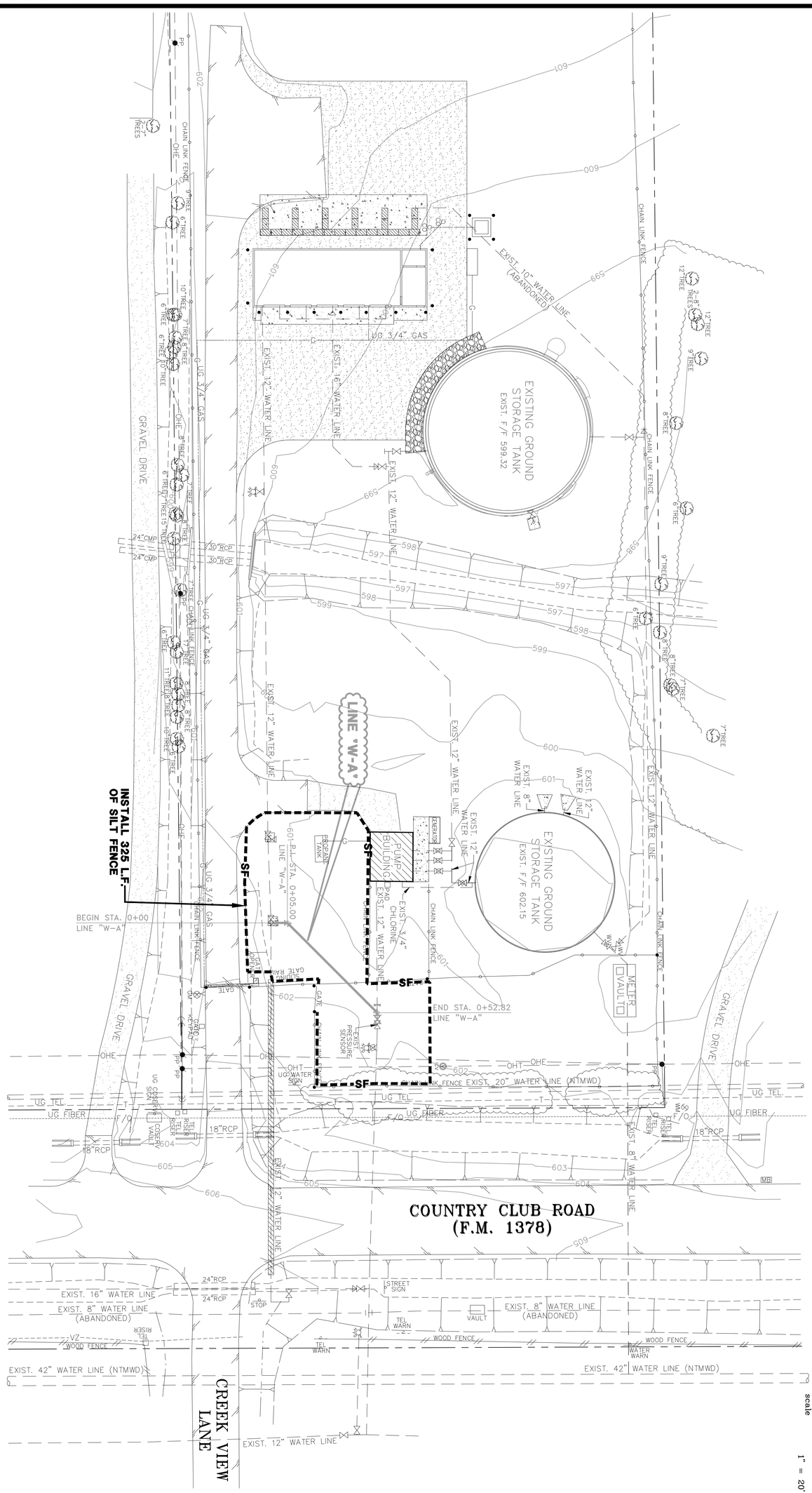
REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 9 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183EROSCONT03

J:\24-2184 LUCAS PUMP STATION\DRAWINGS DWG. NAME: 2184EROSCONT



LEGEND:

--SF-- SILT FENCE

NO.:	DATE:	REVISION:	REVIEWED:
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SCALE: 1" = 20'

DATE: APRIL 2025

DRAWN BY: SPI

REVIEWED BY: MRB

PROJECT NO: 24-2184

SHEET NO: 10 OF 18

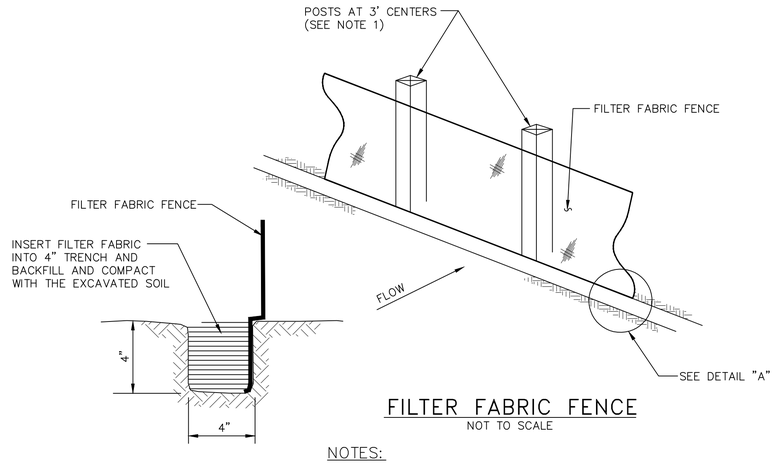
WATER SYSTEM IMPROVEMENTS
WATER LINE LOOP AT NORTH PUMP STATION
EROSION CONTROL PLAN - SHEET 4 (NORTH PUMP STATION)
CITY OF LUCAS

STATE OF TEXAS — REGISTERED — 41290 — MICHAEL R. BURKE — PROFESSIONAL ENGINEER

SPI
SCHAUMBURG & POLK, INC.
BEAUMONT | HOUSTON | RICHARDSON
KYLE | PORT ARTHUR | TERRELL | TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

EROSION CONTROL NOTES:

1. EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBING ACTIVITIES ON THE PROJECT.
2. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND CITY OF LUCAS.
3. IF THE EROSION CONTROL PLANS AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT, THE EROSION CONTROL PLAN WILL BE REQUIRED TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
4. IF OFF-SITE SOIL BORROW OR SPOIL SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THIS INFORMATION SHALL BE DISCLOSED AND SHOWN ON THE EROSION CONTROL PLAN. STAGING, BORROW, AND SPOIL AREAS (INCLUDING THOSE LOCATED OFF-SITE) ARE CONSIDERED A PART OF THE PROJECT SITE AND THEREFORE SHALL COMPLY WITH THE CITY OF LUCAS'S EROSION CONTROL REQUIREMENTS. PERIMETER CONTROLS WILL BE PROVIDED BY THE CONTRACTOR FOR THESE AREAS. THEY SHALL BE STABILIZED WITH PERMANENT GROUND COVER PRIOR TO FINAL APPROVAL OF THE PROJECT.
5. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AND AFTER ALL MAJOR RAIN EVENTS. ANY DEVICES THAT ARE DAMAGED OR DISPLACED WILL BE RESTORED (NO SEPARATE PAY).
6. ALL NON-IMPERVIOUS AREAS AFTER CONSTRUCTION SHALL BE COVERED WITH SOD OR LANDSCAPED IN ACCORDANCE WITH THE LANDSCAPE DRAWINGS. ALL OTHER REMAINING AREAS SHALL BE HYDROMULCHED OR COVERED WITH CURLEX BLANKET (WHERE SHOWN) AND MAINTAINED UNTIL ESTABLISHED.
7. TEMPORARY STONE STABILIZED CONSTRUCTION ENTRANCE SHALL HAVE THE FOLLOWING MINIMUM DIMENSIONS (UNLESS OTHERWISE SHOWN): 25' WIDE X 50' LONG X 8" DEEP. (3"-5" COURSE AGGREGATE). PLACE FILTER FABRIC UNDER STONE PER NCTCOG ITEM 2.23.3.
8. THE STABILIZED CONSTRUCTION ENTRANCE IS TO BE USED AS A VEHICLE WASH DOWN AREA FOR DEBRIS AND SOIL REMOVAL PRIOR TO EXITING THE SITE. THIS STABILIZED ENTRANCE SHALL BE TOP DRESSED WITH ADDITIONAL STONE AS NECESSARY. LOCATION OF STABILIZED ENTRANCE MAY BE MODIFIED IF APPROVED BY CITY OF LUCAS AND THE DESIGN ENGINEER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE, AS THE ENTITY EXERCISING OPERATIONAL CONTROL, FOR ALL PERMITTING AS REQUIRED BY THE EPA/TCEQ. THIS INCLUDES, BUT IS NOT LIMITED TO, MEETING ALL REQUIREMENTS OF TPDES GENERAL PERMIT TXR150000 AND PAYMENT OF ALL ASSOCIATED FEES.
10. IT SHOULD BE NOTED THAT THE AREA OF IMPACT ON THIS PROJECT WILL REQUIRE A SMALL CONSTRUCTION PERMIT THROUGH TCEQ.
11. IT IS VERY IMPORTANT THAT MUD AND OTHER DEBRIS BE KEPT OFF ALL ROADS. CONTRACTOR SHALL IMMEDIATELY REMOVE ANY MUD AND DEBRIS DEPOSITED ON ROADS.
12. CONTRACTOR WILL REPLACE ANY EROSION CONTROL DEVICES THAT ARE DAMAGED AND/OR DISPLACED DURING CONSTRUCTION (NO SEPARATE PAY).

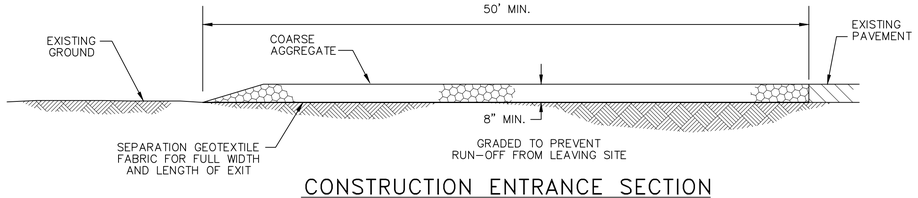


FILTER FABRIC FENCE
NOT TO SCALE

DETAIL "A"
NOT TO SCALE

NOTES:

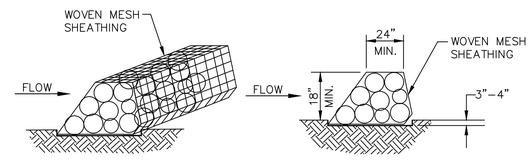
1. IF FACTORY PREASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POSTS MAY INCREASE TO 8' MAXIMUM.
2. FILTER FABRIC SHALL BE AS PER ASTM D4833.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, PROVIDE 6" OF OVERLAP AT THE POST AND FOLD.



CONSTRUCTION ENTRANCE SECTION
NOT TO SCALE

CONSTRUCTION ENTRANCE NOTES:

1. LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET, UNLESS OTHERWISE SHOWN.
2. THICKNESS SHALL NOT BE LESS THAN 8 INCHES.
3. WIDTH SHALL NOT BE LESS THAN 25 FEET, UNLESS OTHERWISE SHOWN.
4. STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION ENTRANCE, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
5. STABILIZED CONSTRUCTION ENTRANCES ARE REQUIRED FOR ANY STAGING, BORROW, AND SPOIL AREAS.



ROCK BERM DETAIL
NOT TO SCALE

SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
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Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED
PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT

EROSION CONTROL NOTES AND DETAILS

CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED
1			
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6			
7			

SCALE:
NOT TO SCALE

DATE:
APRIL 2025

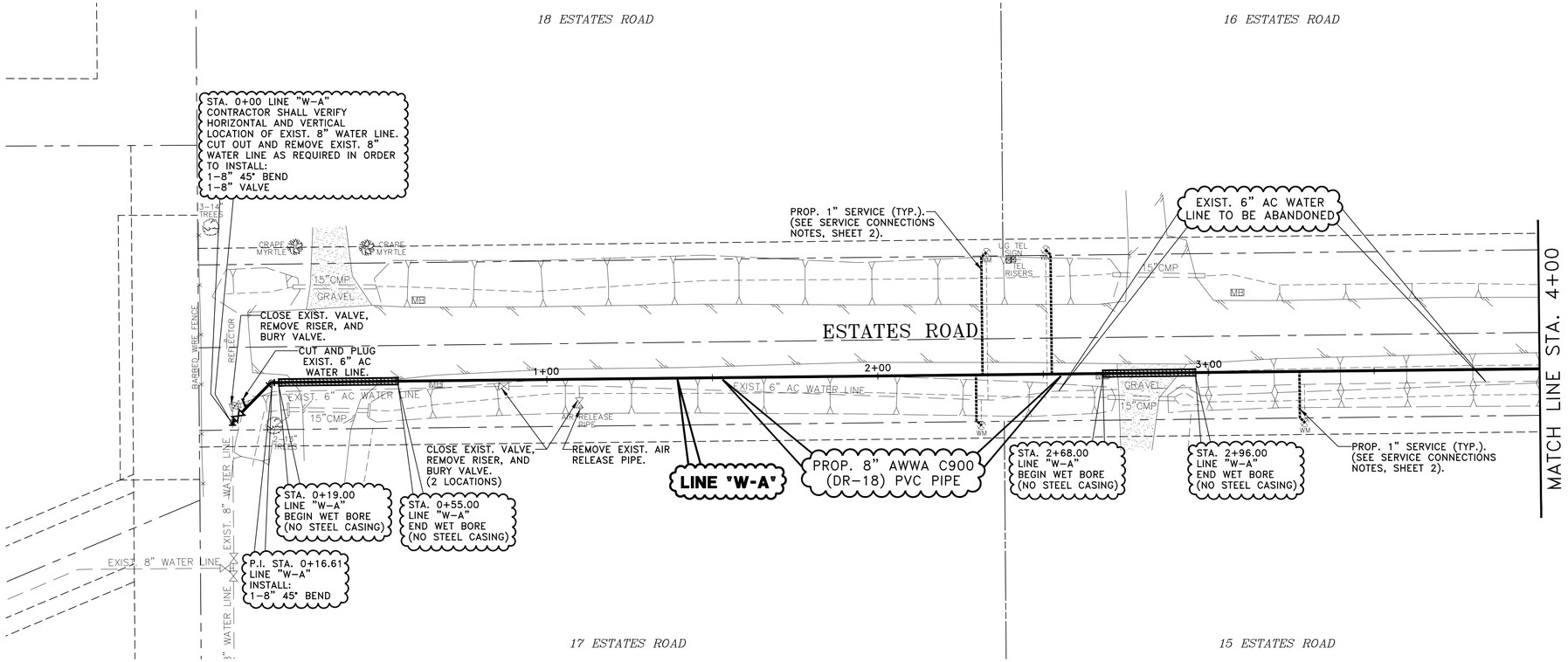
DRAWN BY:
SPI

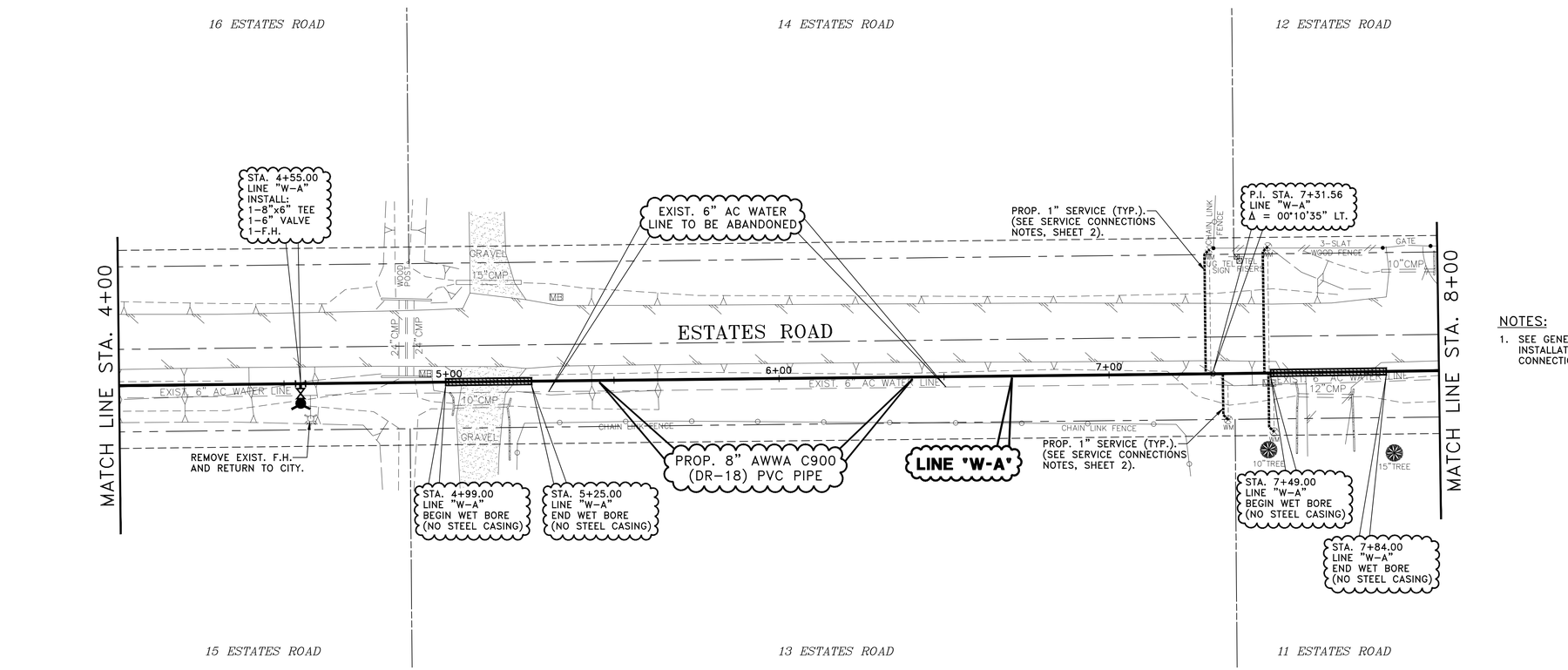
REVIEWED BY:
MRB

PROJECT NO:
24-2183

SHEET NO:
11 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183EROSDET





NOTES:

1. SEE GENERAL NOTES ON SHEET 2 FOR ADDITIONAL REQUIREMENTS FOR INSTALLATION OF PROPOSED WATER LINE AND PROPOSED WATER SERVICE CONNECTION NOTES.

!! CAUTION !!

THERE ARE EXISTING AND/OR PROPOSED UTILITIES IN PROJECT AREA. UTILITY INFORMATION SHOWN ON PLANS REPRESENTS APPROXIMATE LOCATIONS OF EXISTING UTILITIES AND IS NOT NECESSARILY ALL-INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATIONS OF ALL EXISTING UTILITIES AND SHALL BE REQUIRED TO PROTECT UTILITIES TO AVOID DAMAGE.

PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONTACT TEXAS811 AND OTHERS AS REQUIRED TO LOCATE EXISTING UTILITIES.

CONTRACTOR SHALL ALSO CONTACT APPROPRIATE CITY UTILITY DEPARTMENT FOR FIELD LOCATES OF MUNICIPAL INFRASTRUCTURE 48 HOURS PRIOR TO CONSTRUCTION.

SCHAUMBURG & POLK, INC.
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STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-4-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE RELACEMENT
LINE "W-A" - STA. 0+00 TO STA. 8+00 (ESTATES ROAD)
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED
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E			
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G			

SCALE: 1" = 20'

DATE: APRIL 2025

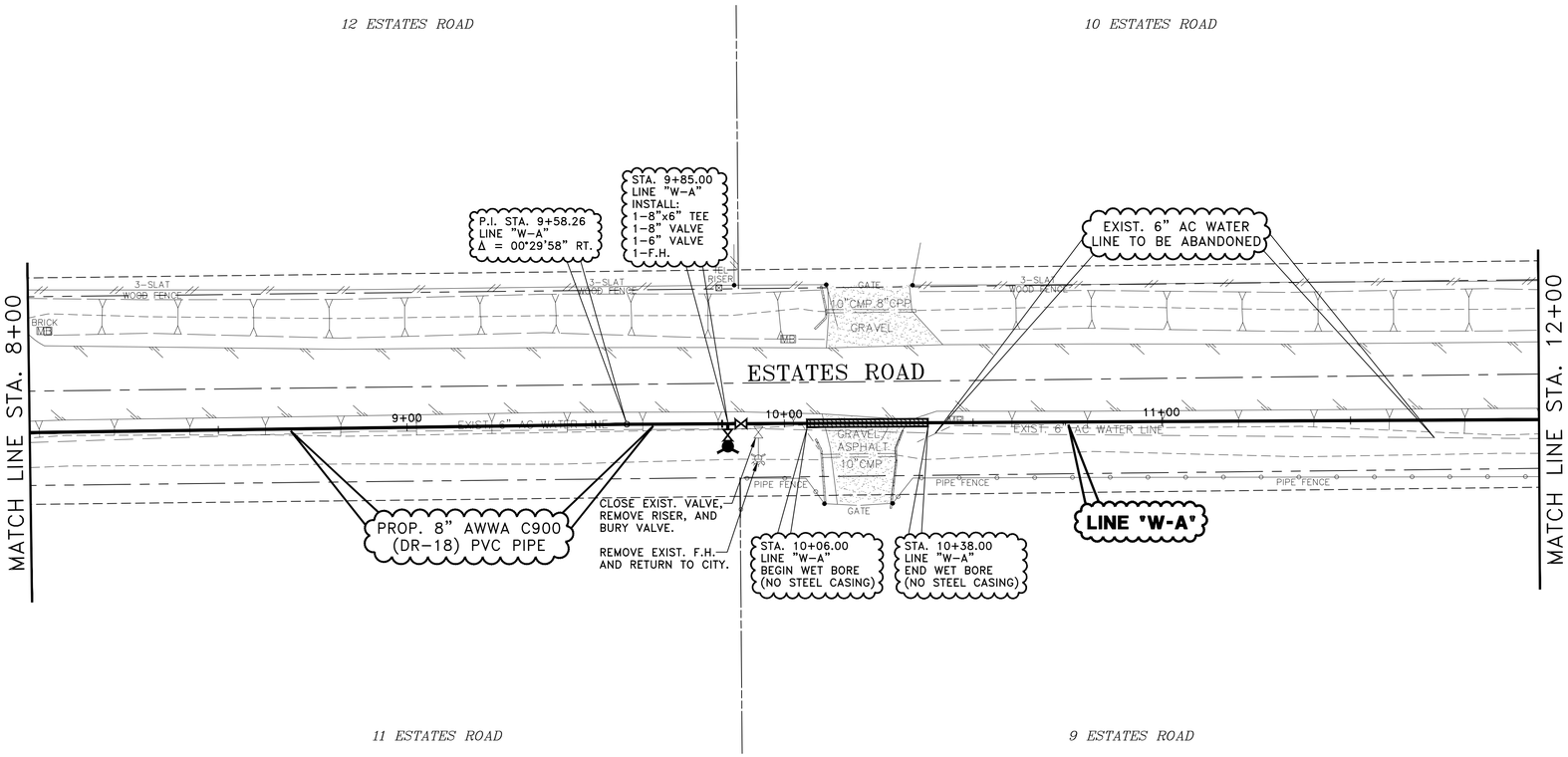
DRAWN BY: SPI

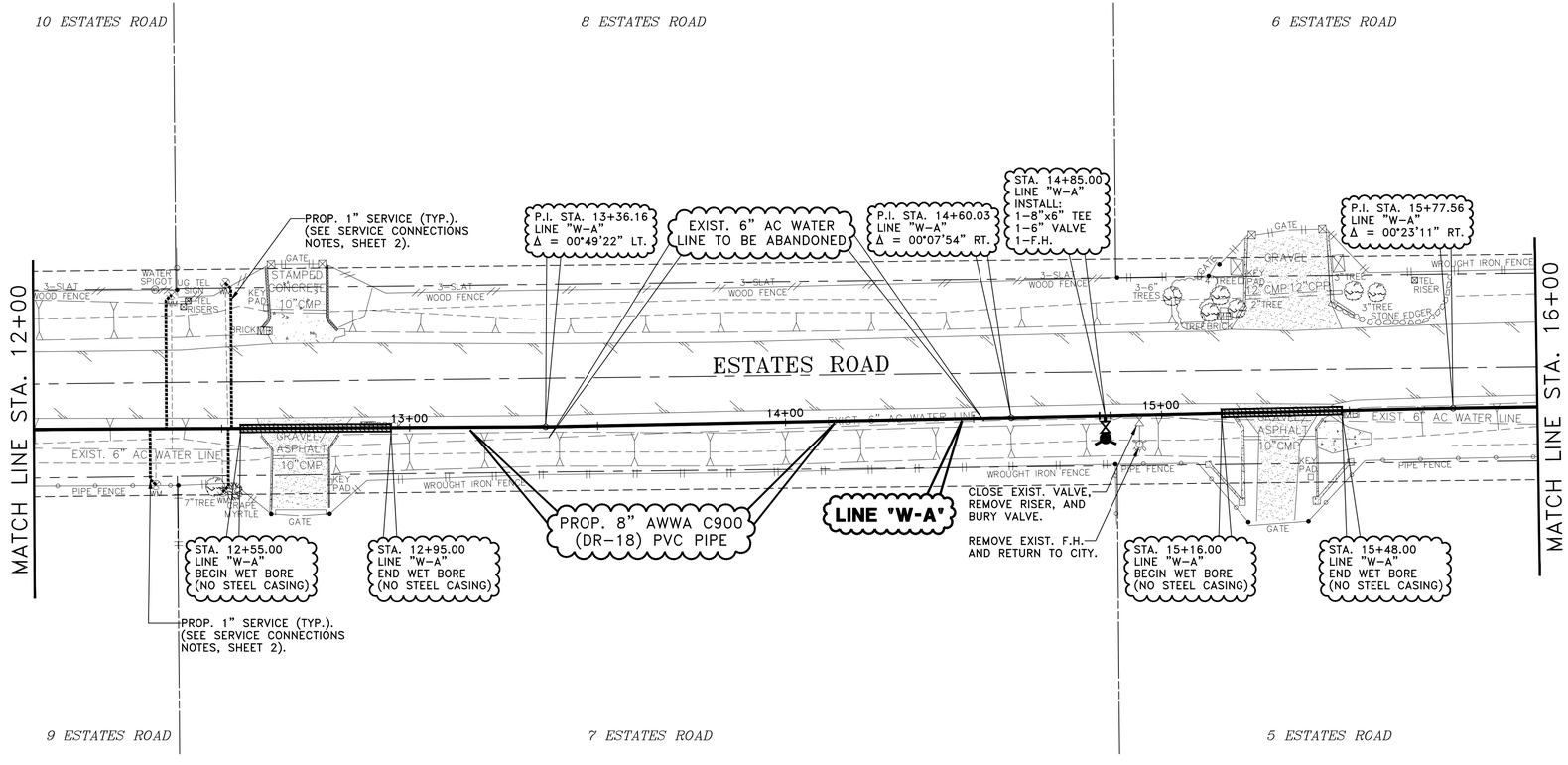
REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 12 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183WTR01ESTATES





NOTES:

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Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
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REGISTERED PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
LINE "W-A" - STA. 8+00 TO STA. 16+00
(ESTATES ROAD)
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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SCALE: 1" = 20'

DATE: APRIL 2025

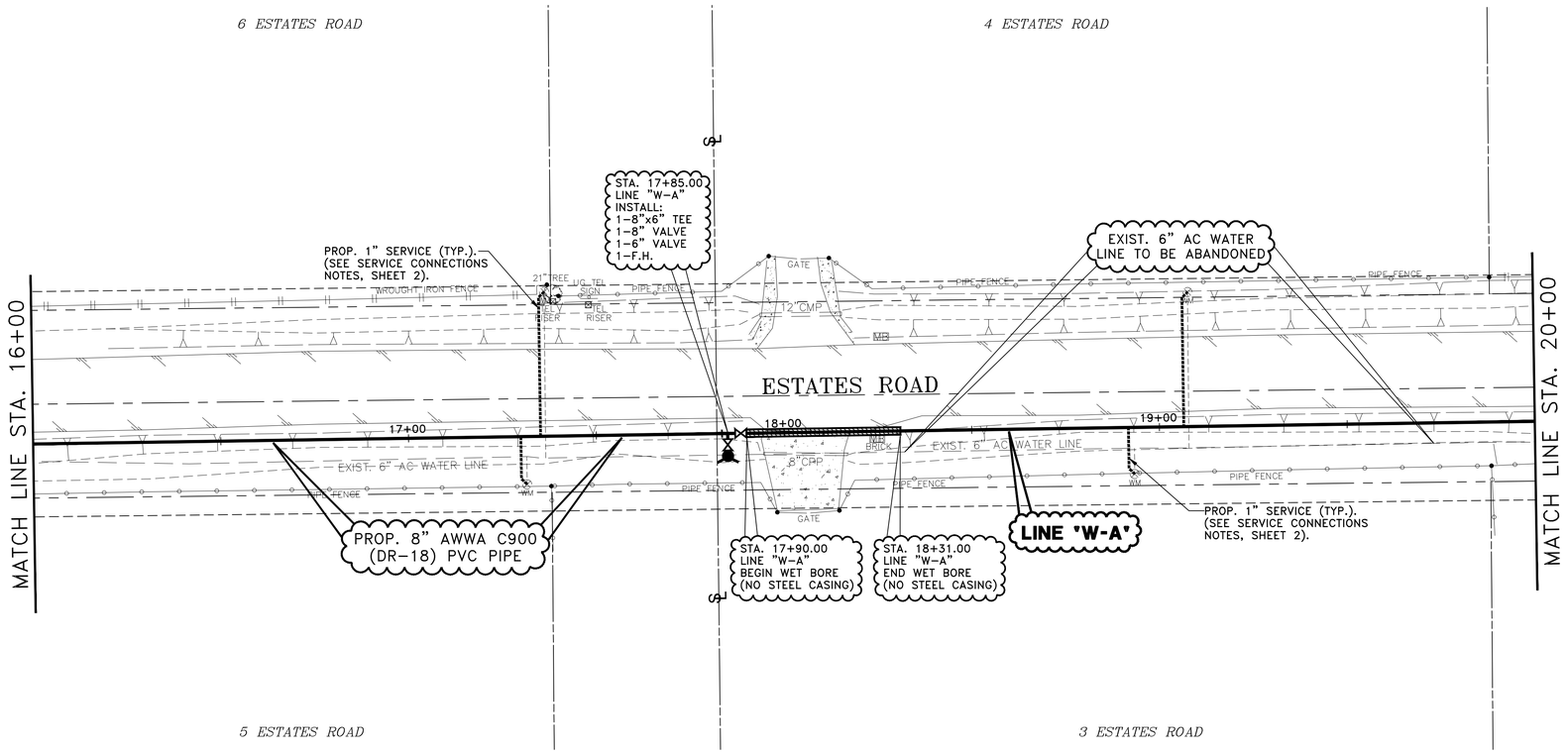
DRAWN BY: SPI

REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 13 OF 18

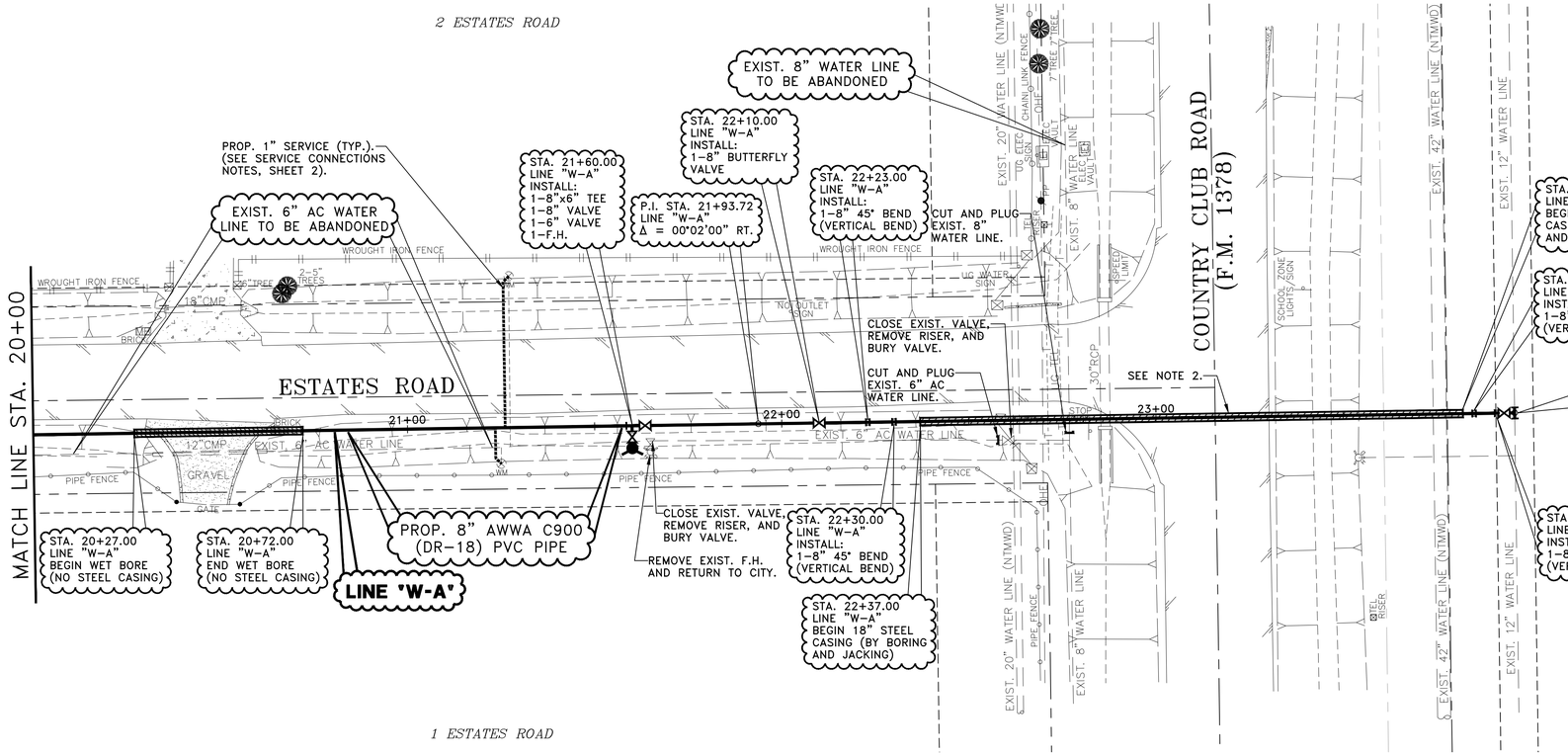
24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183WTR02ESTATES



20 0 20 40
scale 1" = 20' feet

NOTES:

1. SEE GENERAL NOTES ON SHEET 2 FOR ADDITIONAL REQUIREMENTS FOR INSTALLATION OF PROPOSED WATER LINE AND PROPOSED WATER SERVICE CONNECTION NOTES.
2. SEE N.T.M.W.D. WATER LINE CROSSING DETAIL ON SHEET 16 FOR INSTALLATION OF PROPOSED WATER LINE AT COUNTRY CLUB ROAD.
3. SEE WATER LINE CONNECTION DETAIL AT COUNTRY CLUB ROAD AND ESTELLE LANE ON SHEET 16 FOR INSTALLION OF PROPOSED WATER LINE.



20 0 20 40
scale 1" = 20' feet

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STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED
PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
LINE "W-A" - STA. 16+00 TO STA. 23+95.83
(ESTATES ROAD)
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED
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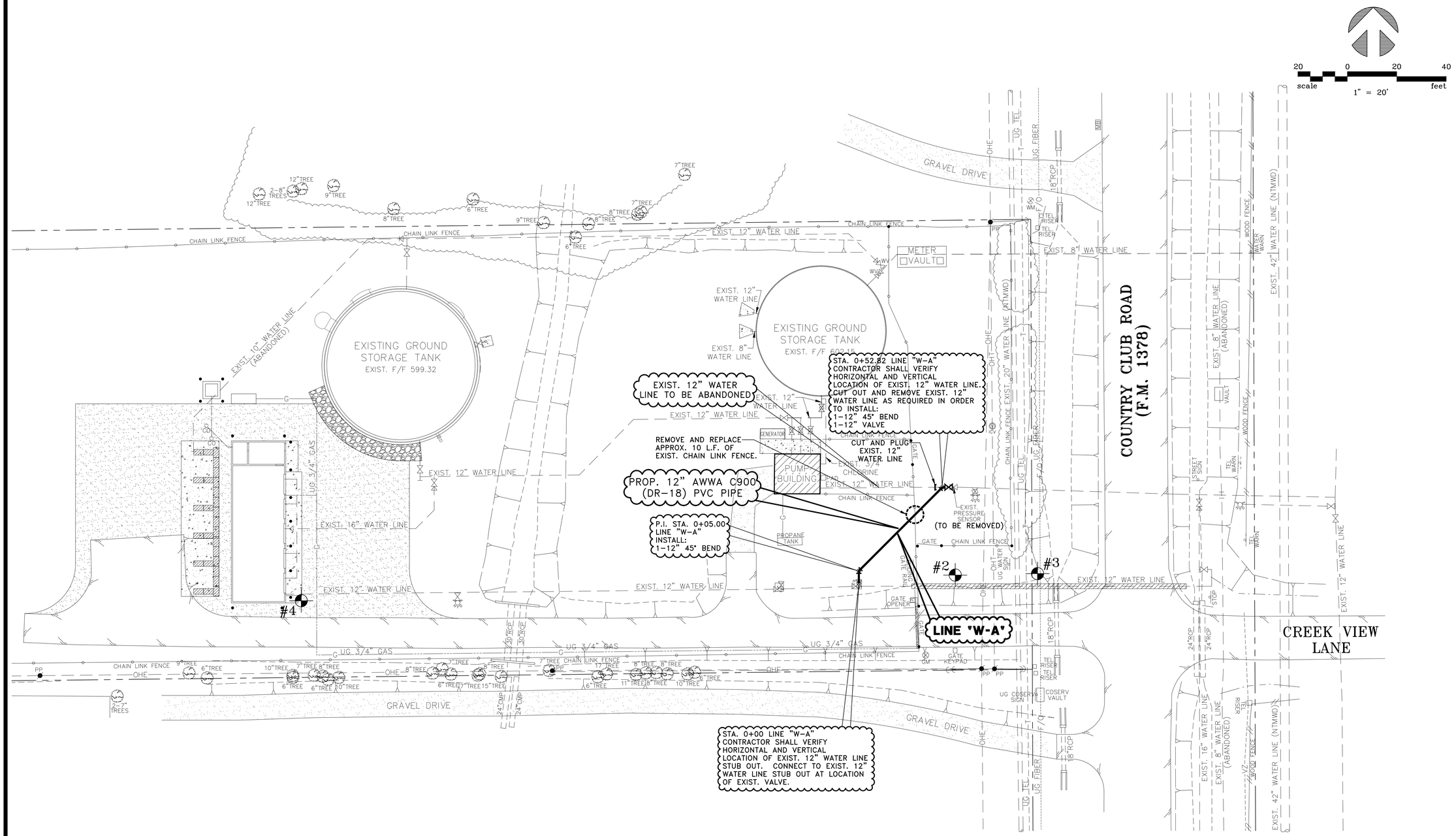
SCALE: 1" = 20'
DATE: APRIL 2025
DRAWN BY: SPI
REVIEWED BY: MRB
PROJECT NO: 24-2183
SHEET NO: 14 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183WTR03ESTATES



WATER LINE "W-A"

STATION	NORTHING(Y)	EASTING(X)
BEGIN STA. 0+00	7088171.9620	2552499.4910
P.I. STA. 0+05.00	7088176.9620	2552499.4910
END STA. 0+52.82	7088210.7786	2552533.3076

HORIZONTAL AND VERTICAL CONTROL POINTS

CP#	NORTHING(Y)	EASTING(X)	ELEVATION(Z)	DESCRIPTION
2	7088175.2610	2552538.4620	602.77	1/2" I.R. W/CAP
3	7088175.8470	2552571.7350	603.93	1/2" I.R. W/CAP
4	7088164.9060	2552274.0590	601.67	X-CUT

NOTES:

1. BASIS FOR HORIZONTAL CONTROL IS NAD 83 STATE PLANE COORDINATE SYSTEM, TEXAS NORTH CENTRAL ZONE (4202). HORIZONTAL CONTROL IS AT SURFACE USING A SCALE FACTOR OF 1.000152710 (COLLIN CO.), ABOUT 0,0.
2. BASIS FOR VERTICAL CONTROL IS NAVD 88.

!! CAUTION !!

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Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS WATER LINE LOOP AT NORTH PUMP STATION

LINE "W-A" - STA. 0+00 TO STA. 0+52.82 (NORTH PUMP STATION)

CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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1			

SCALE: 1" = 20'

DATE: APRIL 2025

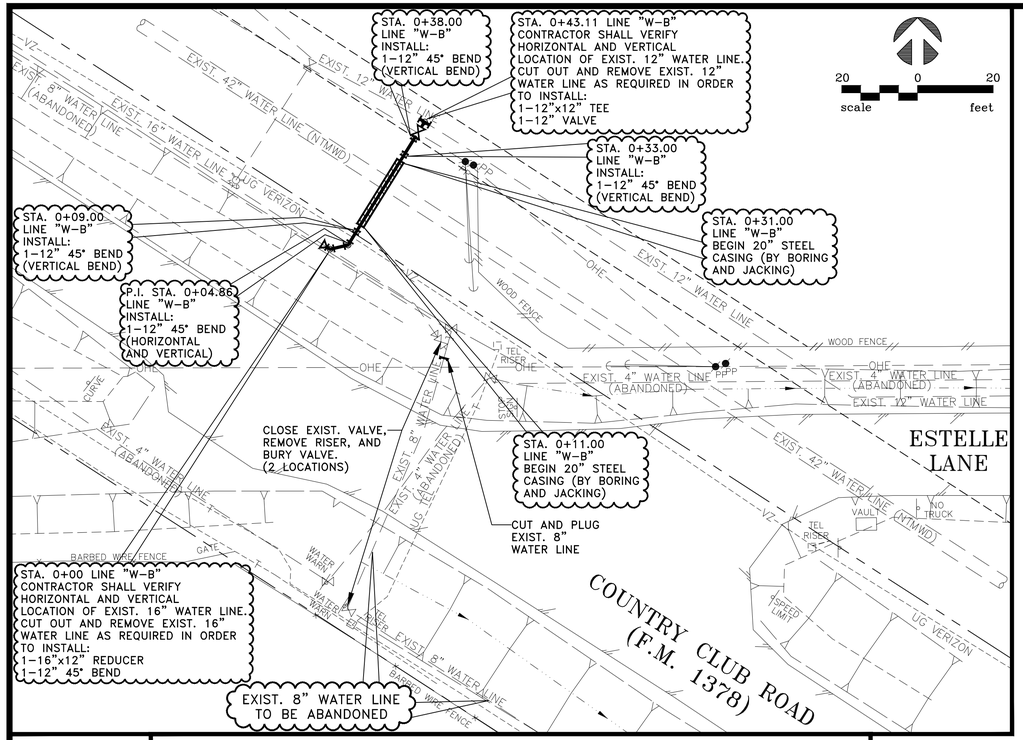
DRAWN BY: SPI

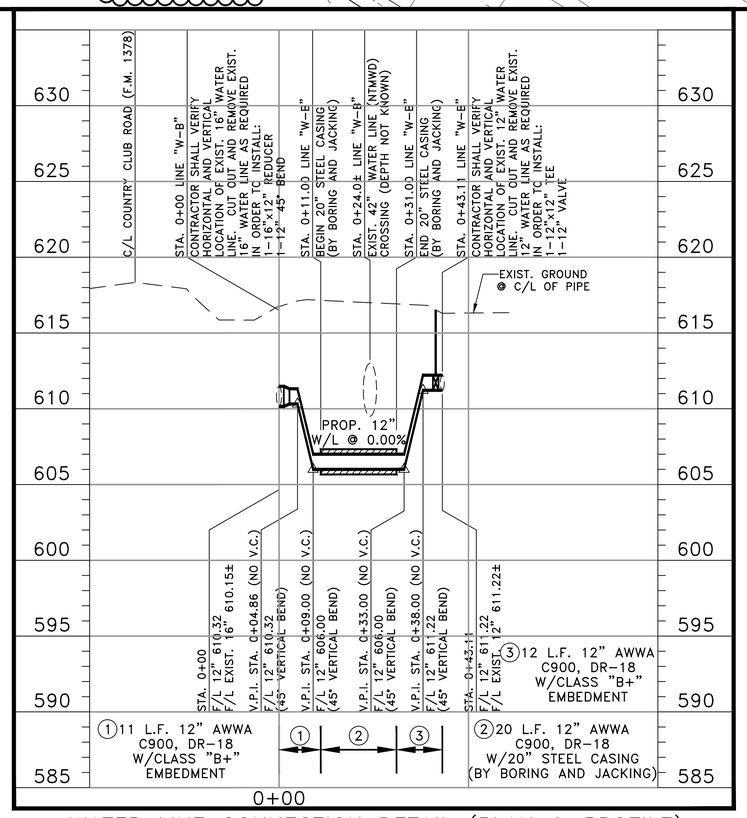
REVIEWED BY: MRB

PROJECT NO: 24-2184

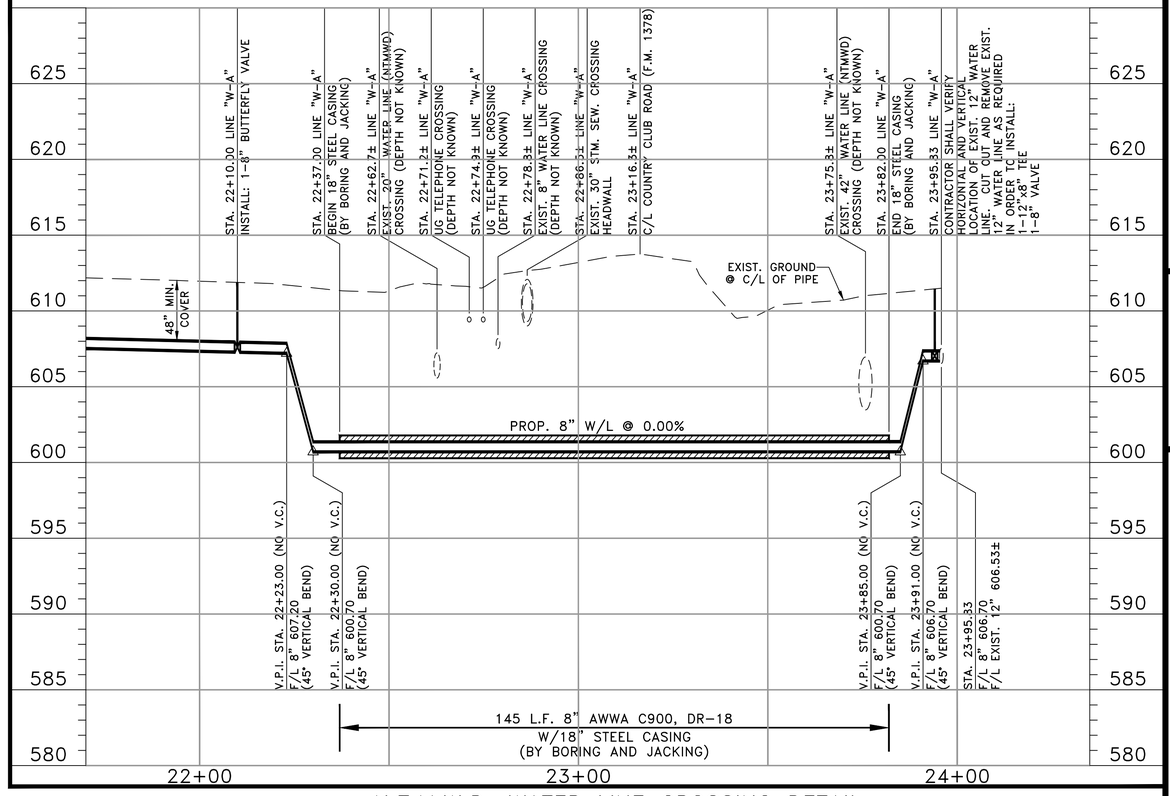
SHEET NO: 15 OF 18

J:\24-2184 LUCAS PUMP STATION\DRAWINGS DWG. NAME: 2184WTR01PUMP





WATER LINE CONNECTION DETAIL (PLAN & PROFILE)
(COUNTRY CLUB ROAD @ ESTELLE LANE)
SCALE: 1"=20'(H), 1"=5'(V)



N.T.M.W.D. WATER LINE CROSSING DETAIL
(COUNTRY CLUB ROAD @ ESTATES ROAD)
SCALE: 1"=20'(H), 1"=5'(V)

WATER LINE "W-B"

STATION	NORTHING(Y)	EASTING(X)
BEGIN STA. 0+00	7085816.8053	2552667.3781
P.I. STA. 0+04.86	7085817.9100	2552672.1116
END STA. 0+43.11	7085850.3981	2552692.3046

NOTES:

1. BEARINGS AND COORDINATES SHOWN ARE BASED ON TEXAS STATE PLANE COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 ON GRID COORDINATE VALUES, NO SCALE, NO PROJECTION.
2. BASIS FOR VERTICAL CONTROL IS NAVD 88.

!! CAUTION !!

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STATE OF TEXAS
MICHAEL R. BURGE
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4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE
RELACEMENT
WATER LINE CONNECTION DETAIL AND
N.T.M.W.D. WATER LINE CROSSING DETAIL
CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
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SCALE:
AS SHOWN

DATE:
APRIL 2025

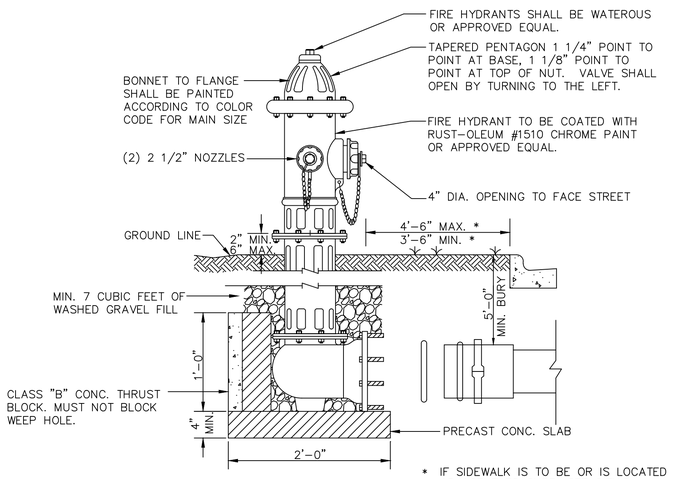
DRAWN BY:
SPI

REVIEWED BY:
MRB

PROJECT NO:
24-2183

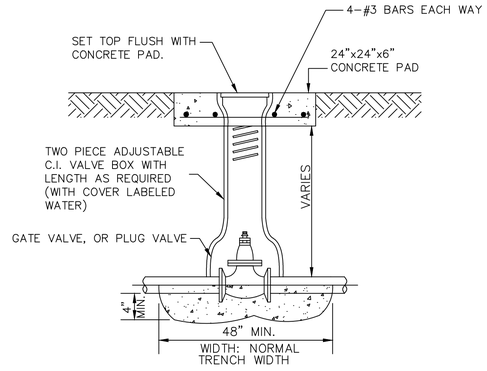
SHEET NO:
16 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183NTMWD-CROSS



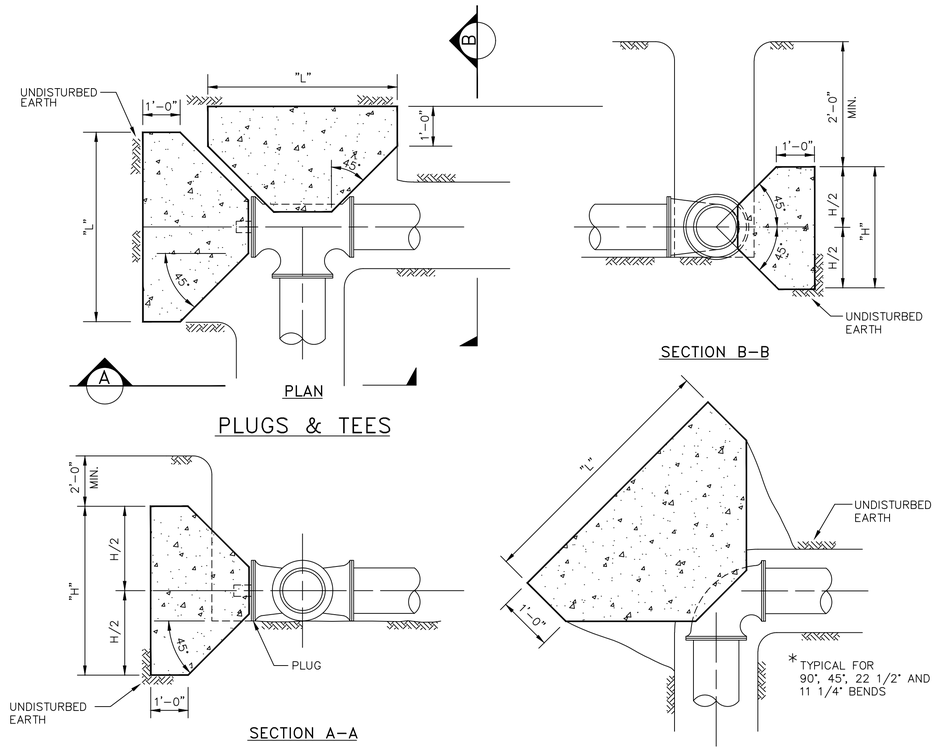
FIRE HYDRANT INSTALLATION

NOT TO SCALE



BURIED VALVE DETAIL

NOT TO SCALE

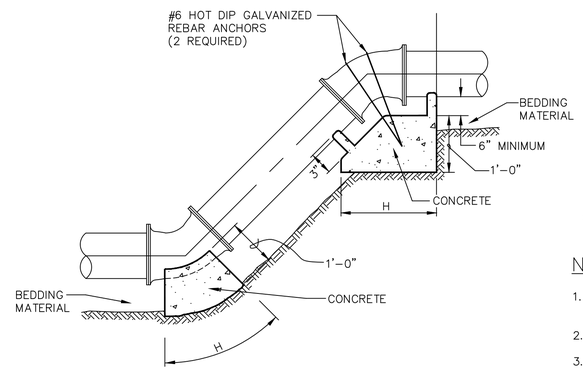


PLUGS & TEES

BENDS

GENERAL NOTES:

1. ALL ANCHOR BLOCKS SHALL BE FORMED, POURED IN PLACE, CLASS "B" CONCRETE.



ELEVATION – VERTICAL BEND

PIPE SIZE	DEGREE OF BEND	MINIMUM CONCRETE ANCHOR BLOCK			
		EARTH (FEET)		ROCK (FEET)	
(INCHES)	(DEGREE)	"L"	"H"	"L"	"H"
6, 8 10, 12* 16 **	11 1/4	1.0	1.5	1.0	1.0
	22 1/2	1.5	1.5	1.0	1.0
	45	2.0	2.0	1.5	1.5
	90	5.0	1.5	2.0	2.0

* FOR 12" LINE ADD 1 FOOT TO ALL DIMENSIONS IN THE TABLE.

** FOR 16" LINE ADD 2 FEET TO ALL DIMENSIONS IN THE TABLE.

NOTES:

1. THE ABOVE TABLE IS BASED ON 2000 PSF SOIL BEARING CAPACITY AND FOR A TEST PRESSURE OF 150 P.S.I.
2. CONCRETE FOR THRUST BLOCKING SHALL BE 2000 PSI CONCRETE.
3. VERTICAL BEND THRUST BLOCKING SHALL HAVE REINFORCING BARS NO. 4 AT 12" C-C.
4. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
5. ALL THRUST BLOCKING SHALL BE AS INDICATED OR AS PER THE MANUFACTURE'S SPECIFICATIONS.

CONCRETE ANCHOR BLOCKS

NOT TO SCALE

SPI
SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-4-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE RELACEMENT
CONSTRUCTION DETAILS - SHEET 1

CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
1			
2			
3			
4			
5			
6			
7			

SCALE: AS SHOWN

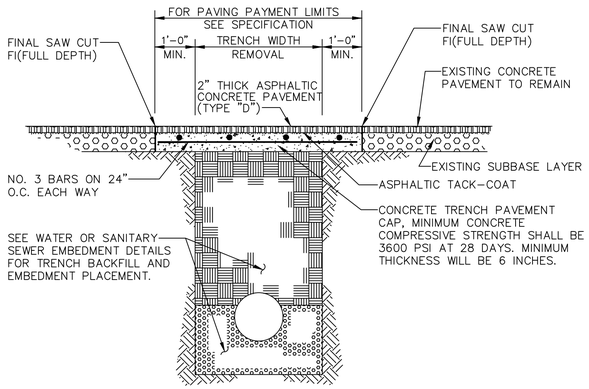
DATE: APRIL 2025

DRAWN BY: SPI

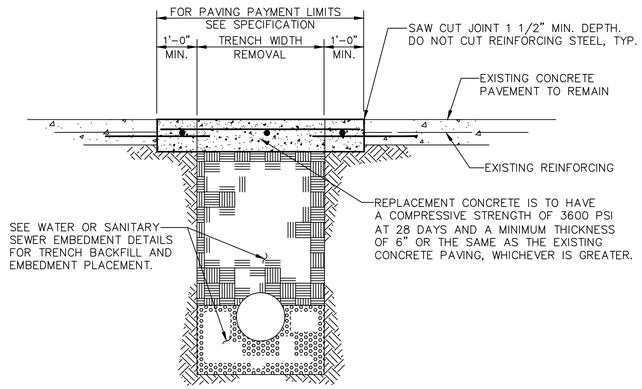
REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 17 OF 18

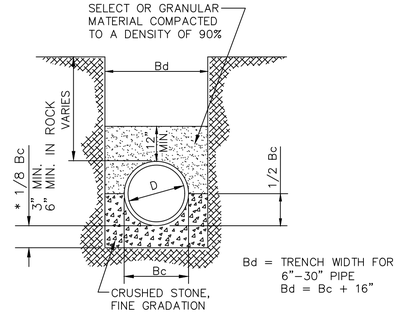


FLEXIBLE BASE AND ASPHALTIC CONCRETE SURFACE

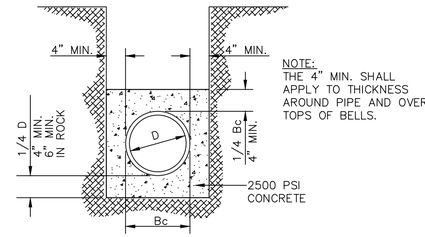


REINFORCED CONCRETE PAVEMENT

TYPICAL PAVEMENT REPAIR DETAILS
NOT TO SCALE



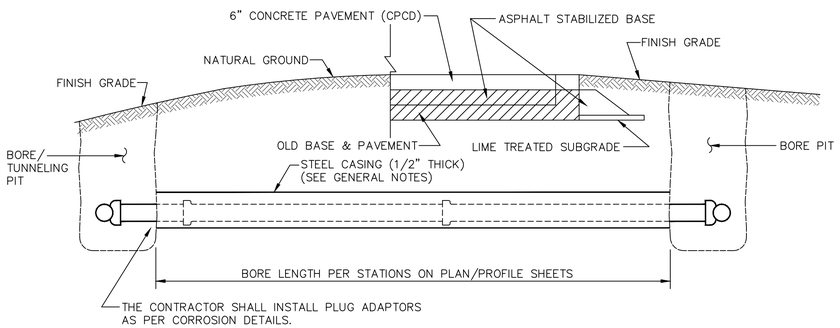
CLASS "B+" EMBEDMENT
N.T.S.



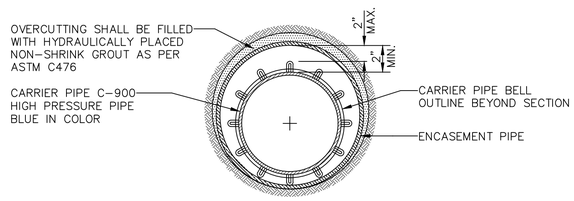
CLASS "G" EMBEDMENT (CONCRETE ENCASEMENT)
N.T.S.

TRENCH BACKFILL AND EMBEDMENT NOTES:

1. UNLESS OTHERWISE NOTED, TRENCH BACKFILL AND EMBEDMENT SHALL BE AS SPECIFIED IN NTCOG SPECIFICATION ITEMS 2.1.8, 6.2.9, AND 6.2.10.
2. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% DENSITY WHEN UNDER PAVEMENT.
3. SAND SHALL BE FREE FROM LUMPS, STONES, CLAY AND ORGANIC MATTER. ALL PARTICLES MUST PASS A NO. 8 SIEVE.
4. GRANULAR MATERIAL SHALL BE DEFINED AS FREE FLOWING RIVER RUN, SANDY MATERIAL, FREE FROM LARGE STONES, CLAY AND ORGANIC MATERIAL. THE EMBEDMENT MATERIAL WILL NOT BE SUCH THAT WHEN WET, THE FINE MATERIAL FORMS MUD OR MUCK. THE EMBEDMENT MATERIAL SHALL BE COMPOSED OF TOUGH DURABLE PARTICLES, REASONABLY FREE FROM THIN, FLAT AND ELONGATED PIECES, AND OF SUITABLE QUALITY TO INSURE PERMANENCE IN THE TRENCH. THE P.I. OF THE FINES SHALL NOT EXCEED 3. LIGHT WEIGHT AGGREGATE IS NOT ACCEPTABLE FOR GRANULAR EMBEDMENT. STONES LARGER THAN 2" IN DIAMETER ARE NOT ALLOWED.
5. STONES LAGER THAN 6" ARE NOT ALLOWED IN THE TRENCH BACKFILL.
6. THE TOP 12" (MINIMUM) OF ALL TRENCHES SHALL BE TOPSOIL. STONES LARGER THAN 2" ARE NOT ALLOWED.



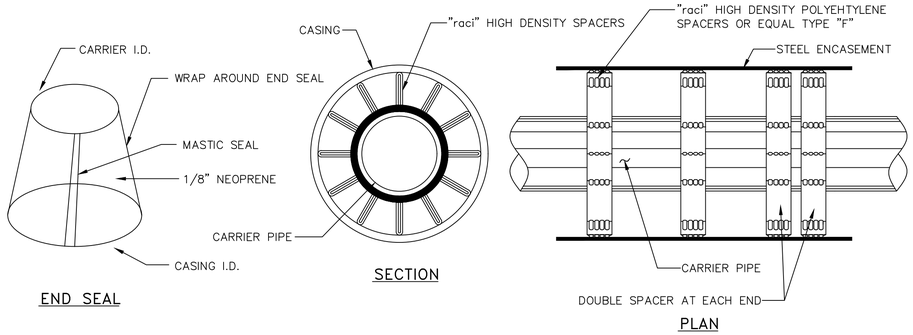
BORING DETAIL
NOT TO SCALE



CROSS-SECTION OF BORE WITH STEEL CASING
NOT TO SCALE

GENERAL NOTES:

1. ALL CONSTRUCTION ACTIVITIES SHALL BE RESTRICTED TO THE EASEMENTS.
2. WHERE A BORE/TUNNELING PIT EXCEEDS FIVE (5) FEET IN DEPTH THE CONTRACTOR SHALL INSTALL SHORING OF THE PIT WALLS AS REQUIRED BY TEXAS STATE LAW (HB 662 AND HB 665) REGARDING THE SAFETY SYSTEMS TO BE USED DURING TRENCH EXCAVATION (AS STATED IN THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS STANDARDS.
3. ALL BORE/TUNNELING PITS SHALL BE BACKFILLED WITHIN FORTY-EIGHT (48) HOURS OF UTILITY INSTALLATION. NO BORE/TUNNELING PIT SHALL REMAIN OPEN IN EXCESS OF SEVENTY-TWO (72) HOURS WITHOUT SHORING TO PREVENT THE CAVING OF PIT WALLS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PHYSICALLY VERIFYING ALL UTILITY CLEARANCES PRIOR TO BEGINNING INSTALLATION.
5. CONTRACTOR SHALL REMOVE UNSTABLE MATERIAL FROM THE BOTTOM OF THE BORE PITS ONCE CONSTRUCTION OF THE TUNNEL IS COMPLETE AND CARRIER PIPE HAS BEEN INSTALLED AND SHALL REPLACE THIS UNSTABLE MATERIAL WITH DRY STABLE MATERIAL THAT WILL ADEQUATELY AND SUFFICIENTLY SUPPORT THE PROPOSED PIPELINE.
6. CONTRACTOR SHALL INSTALL RACI SPACERS (OR EQUAL) IN ANNULAR SPACE BETWEEN CARRIER PIPE AND CASING PIPE.



END SEAL

SECTION

PLAN

PIPE CASING SPACERS DETAIL
NOT TO SCALE

SCHAUMBURG & POLK, INC.
BEAUMONT I HOUSTON I RICHARDSON
KYLE I PORT ARTHUR I TERRELL I TYLER
2201 N. CENTRAL EXPRESSWAY, SUITE 205
Richardson, Texas 75080
(972) 864-8200 (T) (972) 864-8220 (F)
Firm Registration No. F-520

STATE OF TEXAS
MICHAEL R. BURGE
41290
REGISTERED PROFESSIONAL ENGINEER
4-25-25

WATER SYSTEM IMPROVEMENTS
ESTATES ROAD WATER LINE RELACEMENT
CONSTRUCTION DETAILS - SHEET 2

CITY OF LUCAS

NO.:	DATE:	REVISION:	REVIEWED:
7			
6			
5			
4			
3			
2			
1			

SCALE: AS SHOWN

DATE: APRIL 2025

DRAWN BY: SPI

REVIEWED BY: MRB

PROJECT NO: 24-2183

SHEET NO: 18 OF 18

24-2183 ESTATES RD WATER - LUCAS DWG. NAME: 2183DET2

OPINION OF PROBABLE CONSTRUCTION COST

SCHAUMBURG & POLK, INC.
ENGINEERING A BETTER FUTURE

Estates Road Water Line Replacement and Water Line Loop At North Pump Station

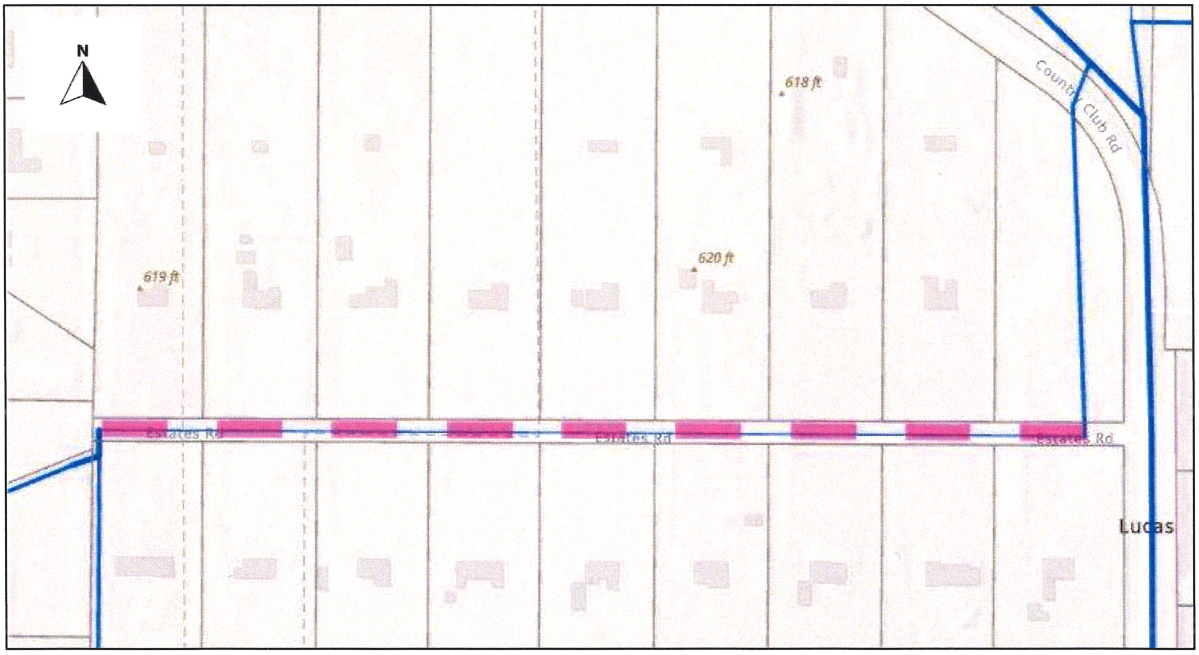
Date: *4/23/2025*

City of Lucas

Item No.	Description	Unit	Est. Quantity	Unit Cost	Cost
1	Mobilization, Bonds, Insurance	L.S.	1	$35,000.00	$35,000.00
2	Traffic Control / Construction Signing	L.S.	1	$17,000.00	$17,000.00
3	Erosion Control	L.S.	1	$20,000.00	$20,000.00
4	Close exist valve	EA.	9	$750.00	$6,750.00
5	Cut and plug exist 6" water line	EA.	2	$1,500.00	$3,000.00
6	Cut and plug exist 8" water line	EA.	2	$1,500.00	$3,000.00
7	Cut and plug exist 12" water line	EA.	1	$1,750.00	$1,750.00
8	Cut and plug exist 16" water line	EA.	1	$2,000.00	$2,000.00
9	Remove Exisiting Air Rellese	L.S.	1	$2,500.00	$2,500.00
10	Remove and replace exist mailbox	EA.	5	$550.00	$2,750.00
11	Remove Exisiting Pressure Sensor	EA.	1	$2,500.00	$2,500.00
12	Remove exist fire hydrant and return to City	EA.	4	$975.00	$3,900.00
13	Irrigation system repairs	Lot	9	$1,000.00	$9,000.00
14	Trench Safety System	L.F.	2011	$2.50	$5,027.50
15	Cut exist 8" water line and install 8" gate valve and 8" 45 degree bend	EA.	1	$5,000.00	$5,000.00
16	Cut exist 12" water line and install 12"x8" tee and 8" gate valve	EA.	1	$7,500.00	$7,500.00
17	Cut exist 12" water line and install 12" 45 degree bend and 12" gate valve	EA.	1	$7,500.00	$7,500.00
18	Connect to existing 12" water line stubout	EA.	1	$2,500.00	$2,500.00
19	Cut exist 12" water line and install 12"x12" tee and 12" gate valve	EA.	1	$10,000.00	$10,000.00
20	Cut exist 16" water line and install 16"x12" tee	EA.	1	$8,500.00	$8,500.00
21	Furnish and Install 8"x6" tee	EA.	5	$1,200.00	$6,000.00
22	Furnish and Install 8" 45 degree bend	EA.	1	$850.00	$850.00
23	Furnish and Install 8" 45 degree vertical bend	EA.	4	$950.00	$3,800.00
24	Furnish and Install 12" 45 degree bend	EA.	1	$1,500.00	$1,500.00
25	Furnish and Install 12" 45 degree vertical bend	EA.	4	$1,550.00	$6,200.00
26	Furnish and Install fire hydrant with 6" lead and 6" valve	EA.	5	$7,500.00	$37,500.00
27	Furnish and Install 8" gate valve	EA.	3	$3,000.00	$9,000.00
28	Furnish and Install 8" butterfly valve	EA.	1	$4,500.00	$4,500.00
29	Furnish and Install short service	EA.	9	$2,250.00	$20,250.00
30	Furnish and Install Long service	EA.	9	$3,250.00	$29,250.00
31	Furnish and Install 8" AWWA C900 DR-18 (with Class "B+" embedment)	L.F.	1,936	$135.00	$261,360.00
32	Furnish and Install 8" AWWA C900 DR-18 by wet bore (no steel casing)	L.F.	315	$250.00	$78,750.00
33	Furnish and Install 8" AWWA C900 DR-18 with 18" steel casing (by boring and jacking)	L.F.	145	$450.00	$65,250.00
34	Furnish and Install 12" AWWA C900 DR-18 (with Class "B+" embedment)	L.F.	75	$185.00	$13,875.00
35	Furnish and Install 12" AWWA C900 DR-18 with 20" steel casing (by boring and jacking)	L.F.	20	$550.00	$11,000.00
36	Remove and replace Chain link fence	L.F.	10	$125.00	$1,250.00
37	Furnish and place block sodding	S.Y.	2,700	$8.50	$22,950.00

Sub-Total:	**$728,462.50**
Contingency (10%)	**$72,846.25**
TOTAL PROBIBLE CONSTRUCTION COST:	**$801,308.75**

ESTATES ROAD EIGHT-INCH WATERLINE REPLACEMENT				
PROJECT SUMMARY				
Starting in Fiscal Year	**Project No.**	**Category**	**Project Status**	**Priority**
2024-2025	W-03	Water	Planning	High
FISCAL OVERVIEW				
Estimated Total Cost (2023 Dollars)			**Possible Sources of Funding**	
$272,638			General Obligation Bonds Certificates of Obligation Proprietary Fund Reserves Outside Agency Interlocal Agreements/Grants	
PROJECT DESCRIPTION				
Replacement of asbestos waterline on Estates Road.				
PROJECT SCHEDULE				
Project Begin Year			**Project End Year**	
2024-2025			2024-2025	
PROJECT MANAGER: Public Works Director				



Item No. 08

City of Lucas
City Council Agenda Request
May 1, 2025

Requestor: Mayor Dusty Kuykendall

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

Item No. 09

City of Lucas
City Council Agenda Request
May 1, 2025

Requester: City Council

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