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MEMORANDUM

To: Mr. Ray Silva-Reyes, City of Farmers Branch

From: Andrew Mata Jr, P.E.

Date: December 17, 2025

Subject: City of Farmers Branch or
Water Distribution System and Wastewater Collection System
2026 Capital Improvement Plan

We have completed our evaluation of the City of Farmers Branch existing water distribution system and wastewater collection system to identify and create the Capital Improvement Plan (CIP). This evaluation consisted of creating the Water and Wastewater CIP for 1-year, 5-year, and 20-year plan. The City provided records of the exiting water lines and wastewater lines in the City's current Water and Wastewater CIP, as well as the current City Streets CIP, service records and GIS access data in order to evaluate these two utility systems.

This memorandum describes the analysis utilized for evaluating the existing water lines and the existing sanitary sewer line in order to rank and determine what utilities would be in each CIP year. It also summarizes the specific list of water line and sanitary sewer line projects for the upcoming first year CIP for year 2026.

WATER DISTRIBUTION SYSTEM ANALYSIS

For the water distribution system, a matrix spreadsheet was created to evaluate and score six (6) factors related to the existing waterlines. This score would rank the waterlines with the highest scores being in the most current CIP. The following is the list of factors used to rank the water lines.

- Year Installed – the water lines were ranked by age, with the oldest pipes given the highest scores. (scale of 0-10).
- Material – the pipe were ranked by pipe materials. The oldest existing pipes are cast iron. The other types of pipe material are asbestos-cement (AC), PVC, and concrete RCCP pipe. Cast iron pipes were ranked the highest, then AC pipe, then concrete and PVC, with these other materials having descending values. (scale of 0-10).
- City Current Water CIP Year – planned projects up to 2030 were considered from the current City Water CIP. City input was valued in based on knowledge of system. (scale 0-5).

- City Street CIP Year – With the current City Streets CIP in place, the intent was to have the water lines replaced before the streets are reconstructed. The streets were listed on the City's street CIP based for their respective project year of reconstruction. (scale of 0-10).
- Serviceability – Pipes were evaluated based on whether a water line had been affected by a previous water main break. City staff input was also weighed in based on their knowledge of the system, the criticalness of certain water lines repaired, and recent major breaks. (scale of 0-3).
- Location – The water lines were grouped in near locations with other water lines in the similar CIP year, within the next 5 years, for construction feasibility purposes. (scale of 0-10).

The final score provided by the matrix spreadsheet is the Water Line Condition Index (WLCI). The maximum score any single water line was 45. The matrix spreadsheet provided the list of waterline needing to be replaced, in priority by CIP year. While concrete RCCP transmission water lines achieved relatively low scores, based on City input, at least one transmission line was included in each CIP year. Capital Improvements costs were also evaluated for each Water CIP year.

WASTEWATER COLLECTION SYSTEM ANALYSIS

A matrix spreadsheet was created to score all the existing City wastewater lines. The following is a list of factors utilized to evaluated the sewer lines.

- Year Installed – the wastewater lines were ranked by age, with the oldest pipes given the highest scores. (scale of 0-10).
- Material – the pipe were ranked by pipe materials. The oldest existing pipes are clay pipes. The other types of pipe material are cast iron, ductile iron, PVC, and concrete RCCP pipe. Clay pipes were ranked the highest, with the other materials having descending values. (scale of 0-10).
- City Current Wastewater CIP Year – planned projects up to 2030 were considered from the City's current Wastewater CIP. City input was valued in based on knowledge of system. (scale 0-5).
- City Street CIP Year – With the current City Streets CIP in place, the intent was to have the wastewater lines replaced before the streets are reconstructed. The CIP streets were listed on the City's street CIP based for their respective project year of reconstruction. (scale of 0-10).

- Serviceability/Pipe Condition – CCTV data provided by the City was used to note the existing condition of the pipe based on video recordings and condition ranking (scale of 0-10).
- City Input – City input based on knowledge of the existing wastewater line was used to denote pipes in those areas. (scale of -20-0).
- New Water CIP – The new Water CIP was used to determine if water lines are in the same street location were the sewer lines are to be replaced, then the sewer lines would be replaced in the same CIP year. (scale of 0-10).

The final score provided by the matrix spreadsheet is the Sanitary Sewer Line Condition Index (SSLCI), with the maximum score of any single pipe can was 50. The matrix was able to provide the wastewater lines that need to be given priority in CIP year. With a substantial amount of the existing wastewater collection system still being clay pipes, a major factor for the wastewater CIP evaluation was to utilize the new Water CIP. Any clay pipe being in the same street as a Water CIP project is to be included that Wastewater CIP to match the CIP year. Capital Improvements costs were also evaluated for each Water CIP year. The 2026 CIP waterline and sanitary sewer line projects were then separated into three main groups; Phase 1, Phase 2, and Phase 3. The purpose of this grouping is prepare three (3) separate packages in order for the City to advertise, bid and construct the utilities with three (3) contractors. These phases would be phased out throughout the physical year.

Water & Wastewater CIP Conclusion

In summary, the results of this analysis in the Matrix spreadsheets for both systems break down the CIP by design and construction year. It describes the evaluation of the existing water lines and the existing sanitary sewer line. The utilities were ranked to determine the utilities to be rehabilitated for that CIP year.

This memorandum summarizes the specific list of water line and sanitary sewer line projects for the upcoming first year CIP for year 2026. Only the 2026 CIP water line and sanitary sewer line projects will be designed and constructed in this fiscal year for 2026 in separate three (3) phases as mentioned above. The following maps and tables illustrate the locations and costs of the 2026 CIP waterlines and sanitary sewer lines, by phase.

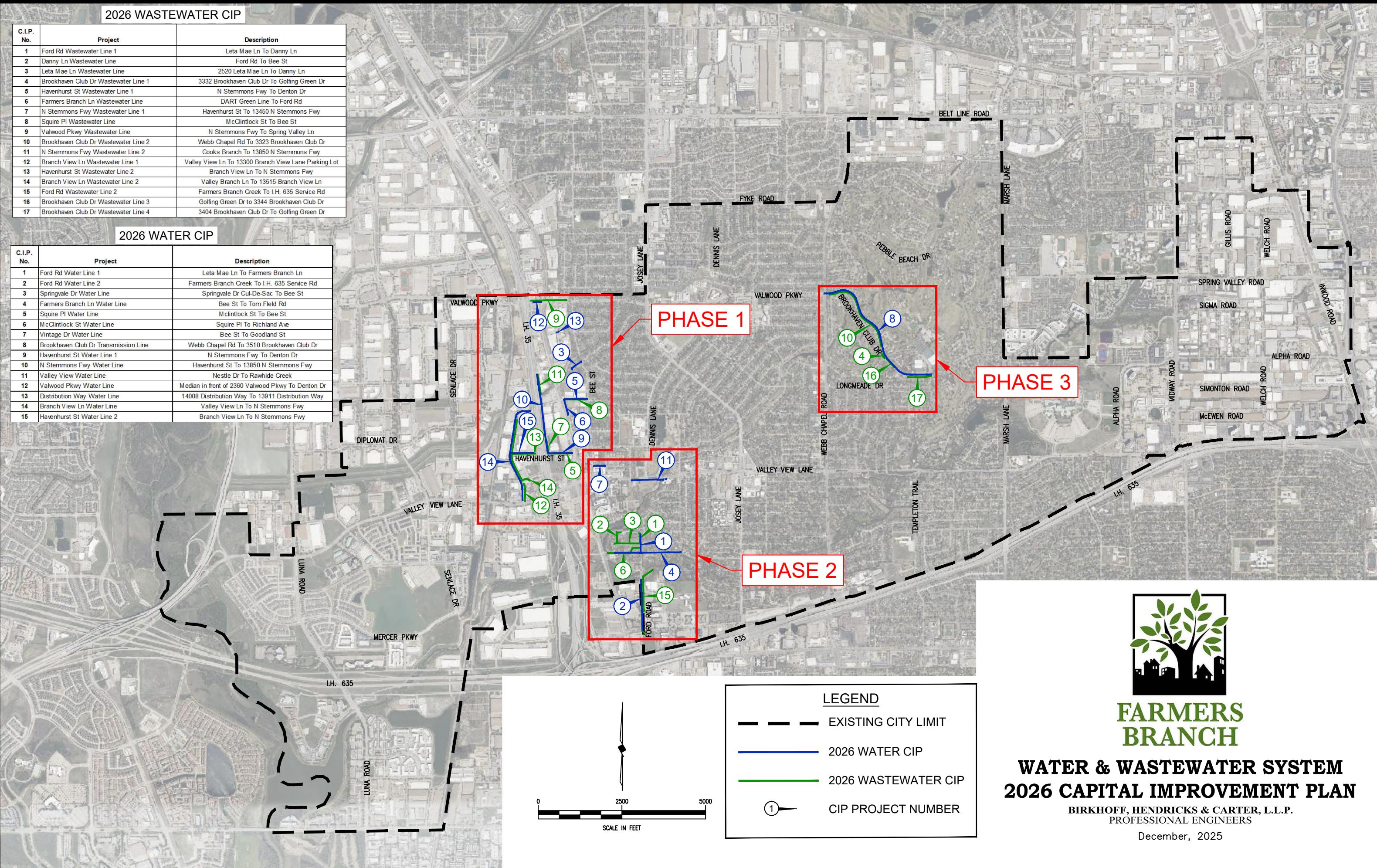
City staff will include an agenda item in the City Council February 2026 meeting and present a Professional Services Agreement from Birkhoff, Hendricks & Carter, LLP for professional design services, bidding assistance, and construction administration assistance services. This agreement will break down the 2026 CIP water line and sanitary sewer line projects into three (3) phases for three (3) construction projects.

2026 WASTEWATER CIP

C.I.P. No.	Project	Description
1	Ford Rd Wastewater Line 1	Leta Mae Ln To Danny Ln
2	Danny Ln Wastewater Line	Ford Rd To Bee St
3	Leta Mae Ln Wastewater Line	2520 Leta Mae Ln To Danny Ln
4	Brookhaven Club Dr Wastewater Line 1	3332 Brookhaven Club Dr To Golfing Green Dr
5	Havenhurst St Wastewater Line 1	N Stemmons Fwy To Denton Dr
6	Farmers Branch Ln Wastewater Line	DART Green Line To Ford Rd
7	N Stemmons Fwy Wastewater Line 1	Havenhurst St To 13450 N Stemmons Fwy
8	Squire Pl Wastewater Line	McClintock St To Bee St
9	Valwood Pkwy Wastewater Line	N Stemmons Fwy To Spring Valley Ln
10	Brookhaven Club Dr Wastewater Line 2	Webb Chapel Rd To 3323 Brookhaven Club Dr
11	N Stemmons Fwy Wastewater Line 2	Cooks Branch To 13850 N Stemmons Fwy
12	Branch View Ln Wastewater Line 1	Valley View Ln To 13300 Branch View Lane Parking Lot
13	Havenhurst St Wastewater Line 2	Branch View Ln To N Stemmons Fwy
14	Branch View Ln Wastewater Line 2	Valley Branch Ln To 13515 Branch View Ln
15	Ford Rd Wastewater Line 2	Farmers Branch Creek To I.H. 635 Service Rd
16	Brookhaven Club Dr Wastewater Line 3	Golfing Green Dr To 3344 Brookhaven Club Dr
17	Brookhaven Club Dr Wastewater Line 4	3404 Brookhaven Club Dr To Golfing Green Dr

2026 WATER CIP

C.I.P. No.	Project	Description
1	Ford Rd Water Line 1	Leta Mae Ln To Farmers Branch Ln
2	Ford Rd Water Line 2	Farmers Branch Creek To I.H. 635 Service Rd
3	Springvale Dr Water Line	Springvale Dr Cul-De-Sac To Bee St
4	Farmers Branch Ln Water Line	Bee St To Tom Field Rd
5	Squire Pl Water Line	McClintock St To Bee St
6	McClintock St Water Line	Squire Pl To Richland Ave
7	Vintage Dr Water Line	Bee St To Goodland St
8	Brookhaven Club Dr Transmission Line	Webb Chapel Rd To 3510 Brookhaven Club Dr
9	Havenhurst St Water Line 1	N Stemmons Fwy To Denton Dr
10	N Stemmons Fwy Water Line	Havenhurst St To 13850 N Stemmons Fwy
11	Valley View Water Line	Nestle Dr To Rawhide Creek
12	Valwood Pkwy Water Line	Median in front of 2360 Valwood Pkwy To Denton Dr
13	Distribution Way Water Line	14008 Distribution Way To 13911 Distribution Way
14	Branch View Ln Water Line	Valley View Ln To N Stemmons Fwy
15	Havenhurst St Water Line 2	Branch View Ln To N Stemmons Fwy



CITY OF FARMERS BRANCH
WATER DISTRIBUTION SYSTEM
2026 CAPITAL IMPROVEMENT PLAN

C.I.P. No.	Project	Description	Size (in)	OBJECT ID	Year	Length (LF)	WLCI*	Total Project Cost (\$)
Phase 1								
3	Springvale Dr Water Line	Springvale Dr Cul-De-Sac To Bee St	4	438	2026	380	25	\$ 152,000
5	Squire PI Water Line	McIntlock St To Bee St	8	2178	2026	715	24	\$ 286,000
6	McClintlock St Water Line	Squire PI To Richland Ave	8	2179	2026	500	24	\$ 200,000
9	Havenhurst St Water Line 1	N Stemmons Fwy To Denton Dr	8	3753	2026	740	21	\$ 296,000
10	N Stemmons Fwy Water Line	Havenhurst St To 13850 N Stemmons Fwy	8	3785, 2174, 2175	2026	2,393	30, 29, 29	\$ 957,000
12	Valwood Pkwy Water Line	Median in front of 2360 Valwood Pkwy To Denton Dr	8	6858	2026	268	20	\$ 107,000
13	Distribution Way Water Line	14008 Distribution Way To 13911 Distribution Way	8	2199	2026	70	20	\$ 28,000
14	Branch View Ln Water Line	Valley View Ln To N Stemmons Fwy	12	5819, 2632	2026	3,123	20	\$ 1,249,000
15	Havenhurst St Water Line 2	Branch View Ln To N Stemmons Fwy	8	3811, 3815	2026	720	20	\$ 288,000
SUBTOTAL:								\$ 3,563,000
Phase 2								
1	Ford Rd Water Line 1	Leta Mae Ln To Farmers Branch Ln	6	4018, 6270	2026	570	35	\$ 228,000
2	Ford Rd Water Line 2	Farmers Branch Creek To I.H. 635 Service Rd	12	4010, 4113, 4611	2026	1,575	37, 37, 32	\$ 630,000
4	Farmers Branch Ln Water Line	Bee St To Tom Field Rd	8	2191, 4039	2026	2,015	25	\$ 806,000
7	Vintage Dr Water Line	Bee St To Goodland St	6	3734, 5809	2026	370	24	\$ 148,000
11	Valley View Water Line	Nestle Dr To Rawhide Creek	8	3968, 3969, 6510	2026	1,033	20	\$ 413,000
SUBTOTAL:								\$ 2,225,000
Phase 3								
8	Brookhaven Club Dr Transmission Line	Webb Chapel Rd To 3510 Brookhaven Club Dr	16	2744, 2758, 4247	2026	5,273	33, 24, 21	\$ 2,109,000
SUBTOTAL:								\$ 2,109,000
TOTAL:								\$ 7,897,000

*Water Line Condition Index

CITY OF FARMERS BRANCH
WASTEWATER COLLECTION SYSTEM
2026 CAPITAL IMPROVEMENT PLAN

C.I.P. No.	Project	Description	Size (in)	OBJECT ID	Year	Length (LF)	SSLCI*	Total Project Cost (\$)
Phase 1								
5	Havenhurst St Wastewater Line 1	N Stemmons Fwy To Denton Dr	8	1245	2026	673	30	\$ 222,000
7	N Stemmons Fwy Wastewater Line 1	Havenhurst St To 13450 N Stemmons Fwy	8	1244	2026	400	30	\$ 132,000
8	Squire PI Wastewater Line	McClintock St To Bee St	6	152	2026	627	29	\$ 207,000
9	Valwood Pkwy Wastewater Line	N Stemmons Fwy To Spring Valley Ln	8	1235, 2213	2026	1,091	29	\$ 360,000
11	N Stemmons Fwy Wastewater Line 2	Cooks Branch To 13850 N Stemmons Fwy	6	2179	2026	603	29	\$ 199,000
12	Branch View Ln Wastewater Line 1	Valley View Ln To 13300 Branch View Lane Parking Lot	6	593	2026	552	29	\$ 182,000
13	Havenhurst St Wastewater Line 2	Branch View Ln To N Stemmons Fwy	6	595	2026	718	29	\$ 237,000
SUBTOTAL:								\$ 1,539,000
Phase 2								
14	Branch View Ln Wastewater Line 2	Valley Branch Ln To 13515 Branch View Ln	6, 8	1071, 1222, 2271, 2883, 2884	2026	2,176	29	\$ 718,000
1	Ford Rd Wastewater Line 1	Leta Mae Ln To Danny Ln	8	1250, 1254	2026	303	43	\$ 100,000
2	Danny Ln Wastewater Line	Ford Rd To Bee St	6	1252, 599	2026	500	33, 28	\$ 165,000
3	Leta Mae Ln Wastewater Line	2520 Leta Mae Ln To Danny Ln	6, 8	1253, 1251	2026	773	33, 28	\$ 255,000
6	Farmers Branch Ln Wastewater Line	DART Green Line To Ford Rd	8	1255, 1749	2026	1,100	30	\$ 363,000
15	Ford Rd Wastewater Line 2	Farmers Branch Creek To I.H. 635 Service Rd	8, 12	1750, 1751, 2334, 2631, 2793	2026	2,152	28	\$ 710,000
SUBTOTAL:								\$ 2,311,000
Phase 3								
4	Brookhaven Club Dr Wastewater Line 1	3332 Brookhaven Club Dr To Golfing Green Dr	6, 8	286	2026	182	34	\$ 60,000
10	Brookhaven Club Dr Wastewater Line 2	Webb Chapel Rd To 3323 Brookhaven Club Dr	6, 8	305, 308, 309, 313, 2595, 928	2026	2,579	29	\$ 851,000
16	Brookhaven Club Dr Wastewater Line 3	Golfing Green Dr to 3344 Brookhaven Club Dr	6	287	2026	348	28	\$ 115,000
17	Brookhaven Club Dr Wastewater Line 4	3404 Brookhaven Club Dr To Golfing Green Dr	6	719, 721, 722	2026	733	28	\$ 242,000
SUBTOTAL:								\$ 1,268,000
								TOTAL: \$ 5,118,000

*Sanitary Sewer Line Condition Index

CITY OF FARMERS BRANCH
2026 CAPITAL IMPROVEMENT PLAN SUMMARY

Description	Total Capital Cost
2026 Water Distribution System Capital Improvement Plan Phase 1	\$3,563,000
2026 Wastewater Collection System Capital Improvement Plan Phase 1	\$1,539,000
PHASE 1 TOTAL:	\$5,102,000
2026 Water Distribution System Capital Improvement Plan Phase 2	\$2,225,000
2026 Wastewater Collection System Capital Improvement Plan Phase 2	\$2,311,000
PHASE 2 TOTAL:	\$4,536,000
2026 Water Distribution System Capital Improvement Plan Phase 3	\$2,109,000
2026 Wastewater Collection System Capital Improvement Plan Phase 3	\$1,268,000
PHASE 3 TOTAL:	\$3,377,000
2026 TOTAL:	\$13,015,000