



Regional Service Through Unity... Meeting our Region's Needs Today and Tomorrow



Wylie Water Treatment Plant

NTMWD BOARD MEETING

September 22, 2022



The Pledge of Allegiance to the Flag of the United States of America

"I pledge allegiance to the Flag
of the United States of America,
and to the Republic for which it stands,
one Nation under God, indivisible,
with liberty and justice for all."



The Pledge of Allegiance to the Texas State Flag

"Honor the Texas flag;
I pledge allegiance to thee,
Texas, one state under God,
one and indivisible."



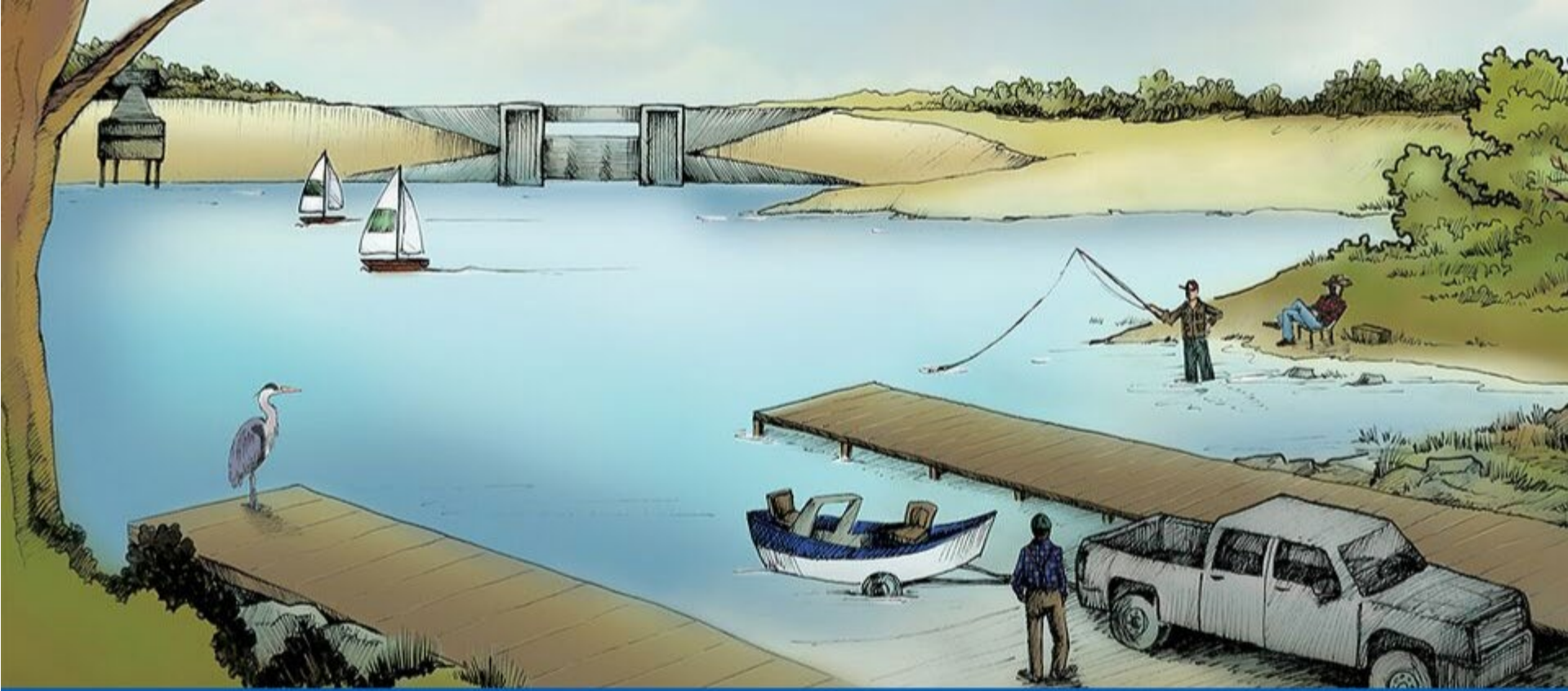
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DISCUSSION ITEMS

VIII. DISCUSSION ITEMS

A. Update on Bois d'Arc Lake



Bois d'Arc Lake



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Board Update
September 22, 2022



BOIS
D'ARC
LAKE



BOIS D'ARC LAKE UPDATE

Agenda

- **CMAR 1: Bois d'Arc Lake Dam**
- **CMAR 5: Treated Water Pipeline – Stiff Creek**
- **CMAR 3:**
 - Raw Water Pump Station
 - High Service Pump Station
 - Leonard Water Treatment Plant



BOIS D'ARC LAKE UPDATE – **DAM & INTAKE STRUCTURE**

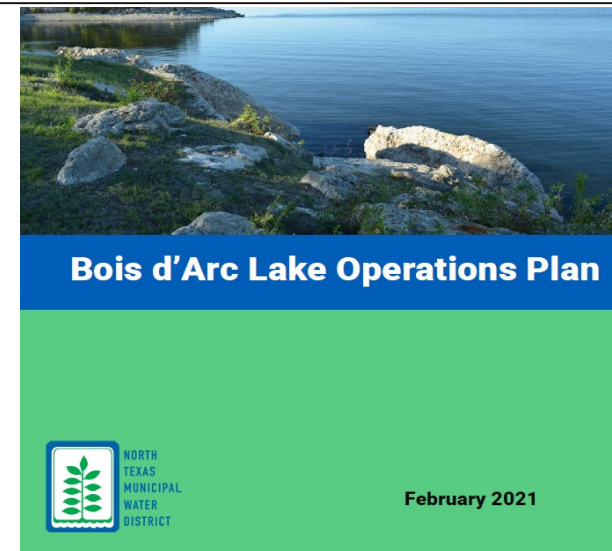
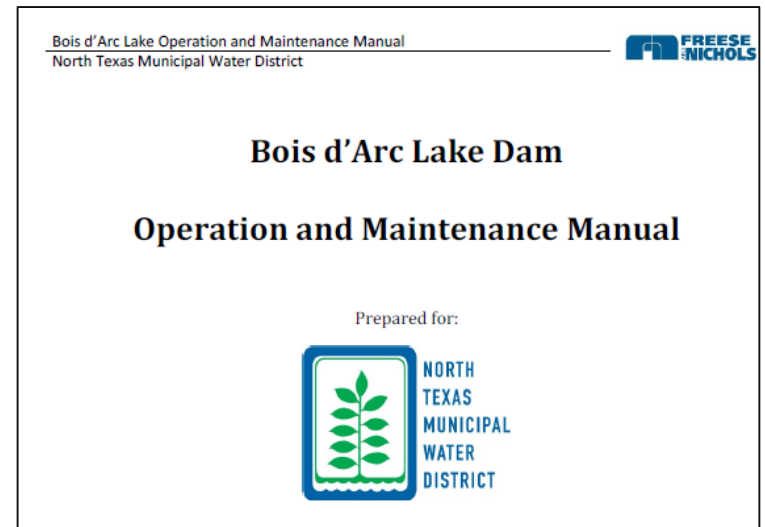
- **Dam – Issued Certificate of Substantial Completion August 26, 2022**
 - Entrance road/CR 2715 – paved
 - Toe berm roads – sediment cleaned up
 - Fencing – complete
 - Additional boat lane clearing - complete
 - Dam permanent power resolved
 - Startup intake/spillway gates – August 25, 2022
- **Final Completion contingent on vegetation growth – 80% coverage**
- **Lake Elevation – 515.24 (September 14th)**



BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Handover to NTMWD Operations

- **Documents:**
 - Lake Operations Plan
 - Lake Emergency Response Plan
 - Dam Operations and Maintenance Plan
 - Dam Emergency Action Plan
 - Equipment Lists (for Maximo/Asset management input)
- **Accounting Plan**
 - Coordination and communications through the process
 - Gate operations
 - Lake levels (USGS gage and SONDE device)





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Boat Lane Regrowth





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Boat Lane Regrowth - Cleared





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Boat Lane Regrowth - Cleared





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Top of Dam Paving





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BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

CR 2715 @ FM 100





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Drought Impact on Vegetation





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Erosion Issues





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Cleanup and Hydro Mulch Reseeding





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Establishing Vegetation





BOIS D'ARC LAKE UPDATE – DAM & INTAKE STRUCTURE

Emergency Spillway Vegetation





BOIS D'ARC LAKE UPDATE – TREATED WATER PIPELINE

Stiff Creek Tunnel Location





BOIS D'ARC LAKE UPDATE – TREATED WATER PIPELINE

Stiff Creek Tunnel Schedule

- **Phase I Early Work – May 16th to July 21st**
 - Dewater pipeline and encasement
 - Remove joint welds by grinding
 - Mobilize excavation equipment
 - Excavate & remove concrete encasement
- **Phase II Pipe Removal & Installation – July 21st to December 16th**
 - Remove carrier pipe - Complete
 - Clean and prep tunnel - Complete
 - Pipe Delivery - September 16, 2022
 - Install carrier pipe
 - Backfill, load, test, and disinfection
- **Weekly meetings to monitor progress**



BOIS D'ARC LAKE UPDATE – TREATED WATER PIPELINE

Stiff Creek Tunnel – Pipe Removed





BOIS D'ARC LAKE UPDATE – PUMP STATIONS & LEONARD PLANT

Raw Water Pump Station - Testing

Testing process – 100hr Run

- Uncoupled test for pumps Sept 12 - 13
- Fill RWPL Sept 14
- Coupled test September
- Pump water to TSR at Leonard until TSR is full.
- Leonard WTP Testing process to start consecutively.





BOIS D'ARC LAKE UPDATE – PUMP STATIONS & LEONARD PLANT

Raw Water Pump Station - Testing





BOIS D'ARC LAKE UPDATE – PUMP STATIONS & LEONARD PLANT

High Service Pump Station

Testing process – 100hr Run

- Uncoupled test for pumps November (after TCEQ submittal)
- Coupled test for pumps November
- Readiness for pumping on TCEQ approval date

Substantial Completion is achieved as the District receives the approval of the Treatment Process – Step-2 Submittal





BOIS D'ARC LAKE UPDATE – PUMP STATIONS & LEONARD PLANT -

Leonard Water Treatment Plant – Milestones

- Operations Administration Building was declared Substantially Complete as of August 15, 2022.
- Leonard Water Operations team moved into facility.
- Control Room completely assembled and utilized as Main Station for process testing and SCADA controls testing.





BOIS D'ARC LAKE UPDATE – PUMP STATIONS & LEONARD PLANT

Leonard Water Treatment Plant – Milestones

- Process Hazard Analysis walkthrough and RMP “What if” scenarios table talk was held at the Leonard WTP Operations Training Room





BOIS D'ARC LAKE UPDATE – PUMPS STATIONS & LEONARD PLANT

Leonard Water Treatment Plant – Milestones

- ✓ HMI SCADA screens for complete BDL system Training and Workshop
- ✓ Maintenance Warehouse substantially complete
- ✓ TCEQ General Discharge Permit Approved
- ✓ Leonard WTP final Operational and Maintenance Manuals
- ✓ Standard Operating Procedures
- ✓ Equipment Lists and Manufacturers O&Ms – preparing handover to Operations and Maintenance teams
 - *CMAR 3 has an approximate total of 4,000 new assets to log in*

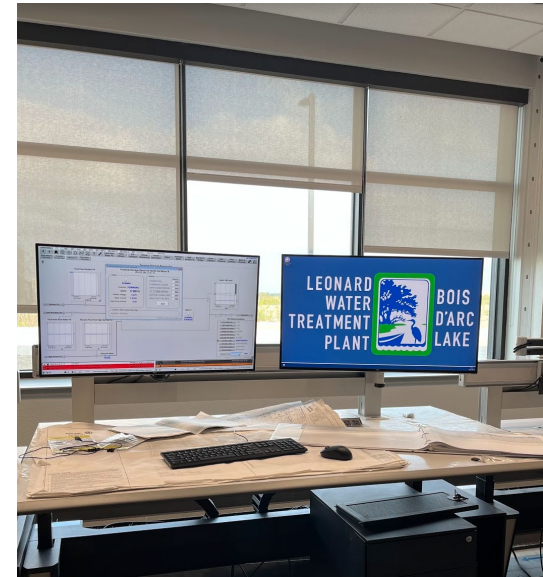


BOIS D'ARC LAKE UPDATE – PUMP STATIONS & LEONARD PLANT

Leonard Water Treatment Plant

Testing process – 100hr Run

- Ozone Generation test Sept 6-9
- Process Hazard Analysis - Workshop Sept 8
- Chemicals on-site September
- Pre-Treatment Run September
- Treatment Process 100hr run October
- **Submit Step-2 Report to TCEQ November**



Step-2 Report Approval of the treatment process by TCEQ expected approx. 120-days after submittal (~ March 1st, 2023). This approval allows the NTMWD to send treated water to the Transmission system.





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EXECUTIVE SESSION

Section 551.074, Personnel Matters

- **Authorizes certain deliberations about officers and employees of the governmental body to be held in Executive Session.**
- **This chapter does not require a governmental body to conduct an open meeting:**
 - to deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee or to hear a complaint or charge against an officer or employee.
- **The section permits Executive Session deliberations concerning an individual officer or employee.**
- **Deliberations about a class of employees, however, must be held in an open session.**
- **Items discussed during Executive Session are privileged and should remain confidential.**

Executive Session



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Adjourn Executive Session



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XII. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION:

GENERAL / ADMINISTRATIVE AGENDA ITEMS

WATER AGENDA ITEMS

WASTEWATER AGENDA ITEMS

LAND ACQUISITION / RIGHT OF WAY AGENDA ITEMS



GENERAL / ADMINISTRATIVE AGENDA ITEMS RESOLUTION NO. 22-41

- A. **Adoption of Resolution No. 22-41 commending Director Brenda Jean Patrick**
- Consider adoption of Resolution No. 22-41 commending Director Brenda Jean Patrick for her service as a member of the NTMWD Board of Directors



ADMINISTRATIVE MEMORANDUM NO. 5857

B. **Amendments to Board Policies Manual - Administrative Memorandum No. 5857**

- Consider authorizing the amendments to NTMWD Board Policies Manual as follows: Section I., District Policy; Section II., Executive Director/General Manager; Section IV., Board of Directors Rules of Procedures; Section VI., Education and Development Expenses; Section VII., Board of Directors Committee Policy; Section VIII., Standards of Conduct; Section IX., Board of Directors Meeting Agenda and Action Items; Section XI., Board Member Retirement Recognition Program and Section XII., Board/Staff Communication Policy



ADMINISTRATIVE MEMORANDUM NO. 5858

- C. **Amendments to Personnel Policies Manual - Administrative Memorandum No. 5858**
- Consider authorizing the amendments to NTMWD Personnel Policies Manual as follows: Section I., Employment Practices; Section II., Employee Conduct and Safety; Section III., Complaint Resolution; Section IV., Compensation and Reimbursement; Section V., Time-Off Benefits; Section VI., Health and Related Benefits



ADMINISTRATIVE MEMORANDUM NO. 5859 – RESOLUTION NO. 22-42

- D. **Adoption of Resolution No. 22-42 approving appropriations for 2022-23 All Systems Annual Budget, amending the 2021-22 Annual Budget and providing rates and charges for system services - Administrative Memorandum No. 5859**
- Consider adoption of Resolution No. 22-42 approving appropriations for the 2022-23 All Systems Budget in the amount of \$670,976,265; amending the 2021-22 Annual All Systems Budget in the amount of \$599,615,905 and providing rates and charges for the system services of the NTMWD



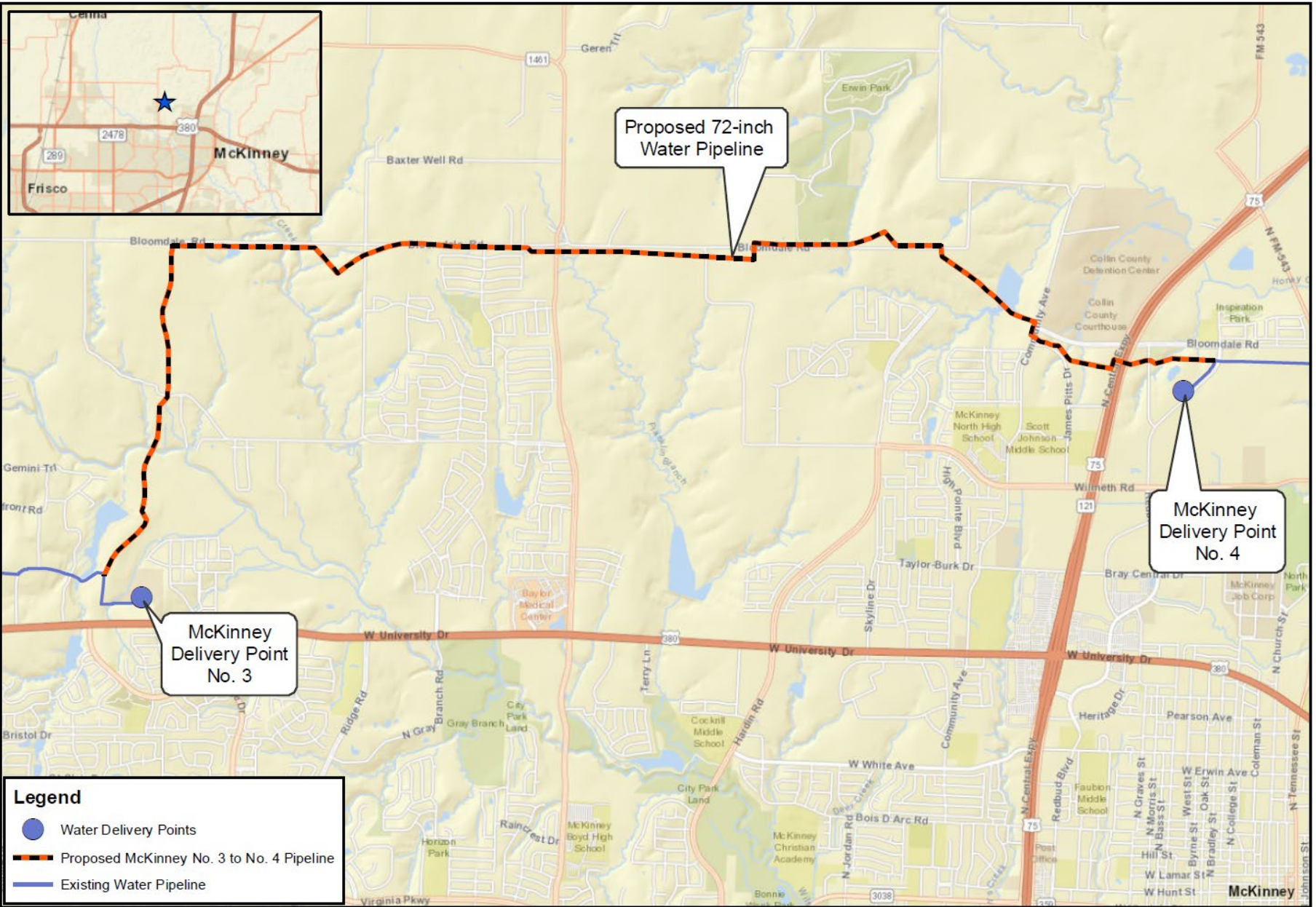
ADMINISTRATIVE MEMORANDUM NO. 5860 – RESOLUTION NO. 22-43

- E. **Adoption of Resolution No. 22-43 authorizing Restatement No. 1 to the Retiree Health Insurance Program - Administrative Memorandum No. 5860**
- Consider adoption of Resolution No. 22-43 authorizing Restatement No. 1 of the Retiree Health Insurance Program for Employees of the NTMWD clarifying eligibility of prior service credits



WATER AGENDA ITEMS ADMINISTRATIVE MEMORANDUM NO. 5861

- F. **Authorize execution of an engineering services agreement (ESA) for the McKinney Delivery Point project - Administrative Memorandum No. 5861**
- Consider authorizing an ESA for additional engineering services with HDR, Inc. in the amount of \$2,182,540 to advance the pipeline design from 60% to 100% level, including bid phase and construction phase services for Project No. 101-0505-18, McKinney Delivery Point No. 3 to McKinney Delivery Point No. 4 Pipeline



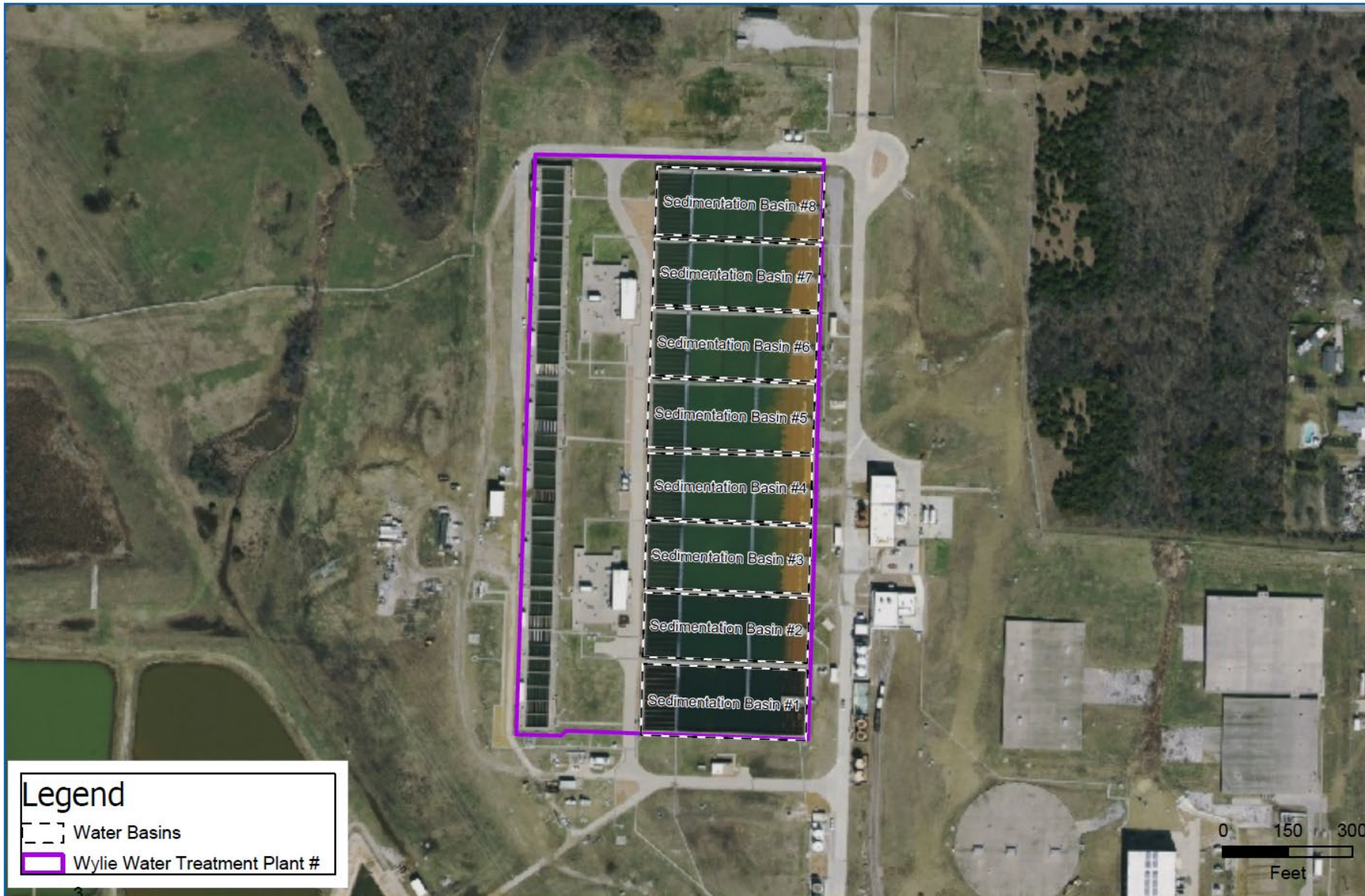
McKinney No. 3 to McKinney No. 4 Pipeline
Project No. 101-0505-18
Administrative Memorandum No. 5861





ADMINISTRATIVE MEMORANDUM NO. 5862

- G. **Authorize Change Order No. 3 for the Wylie Water Treatment Plant (WTP) III Sludge Handling and Reclaimed Water Improvements project - Administrative Memorandum No. 5862**
- Consider authorizing Change Order No. 3 with Archer Western Construction, LLC reducing the scope for all basin work at the Wylie WTP III resulting in a construction credit in the amount of (\$2,677,075) for Project No. 101-0541-19, Wylie Water Treatment Plant III Sludge Handling and Reclaimed Water Improvements



**Wylie Water Treatment Plant III
Sludge Handling and Reclaimed Water Improvements
Project No. 101-0541-19
Administrative Memorandum No. 5862**





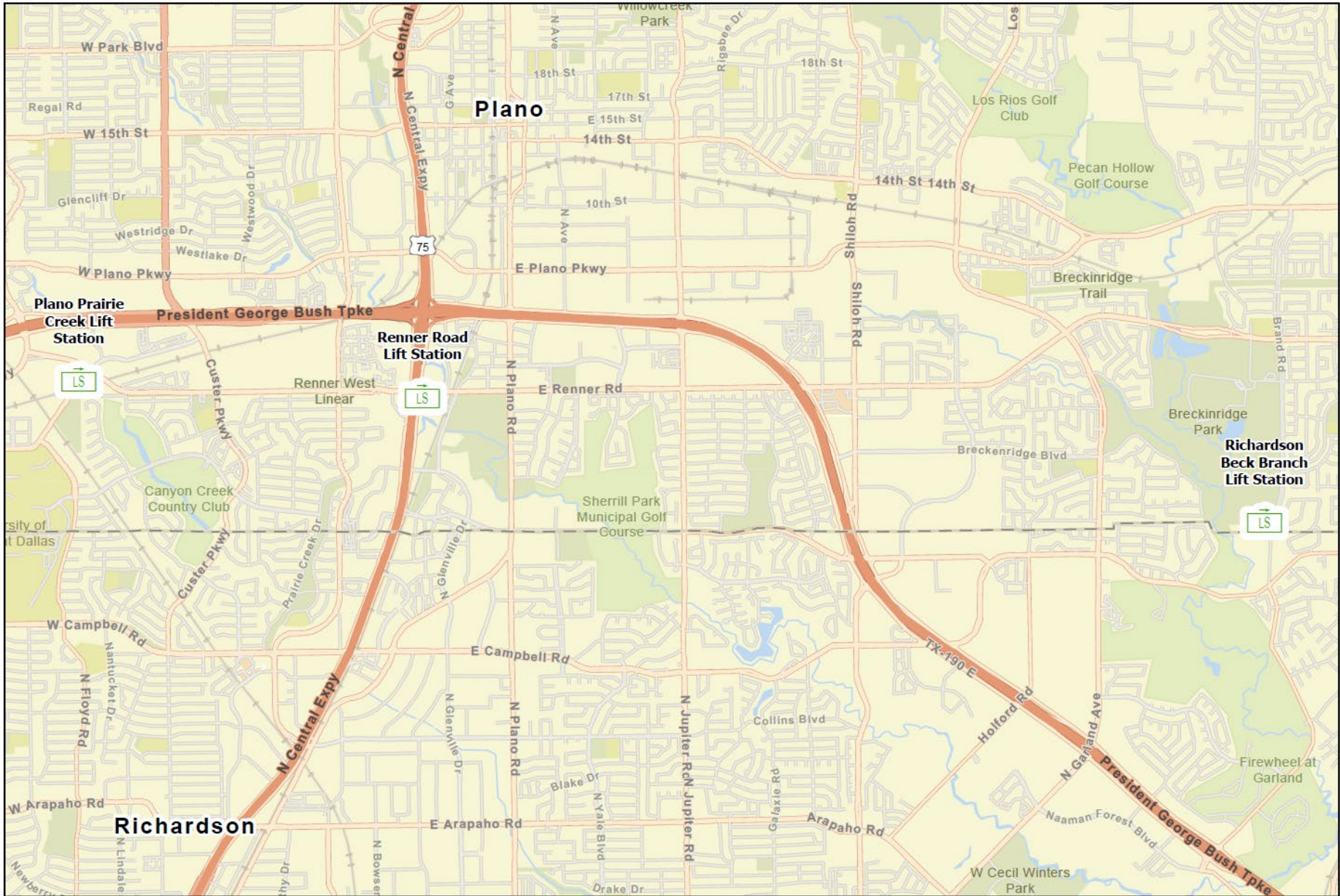
ADMINISTRATIVE MEMORANDUM NO. 5863

- H. **Authorize the amended and restated wholesale water sales agreement between the City of Mesquite and Kaufman County Municipal Utility District (MUD) No. 12 - Administrative Memorandum No. 5863**
- Consider approving the amended and restated wholesale water sales agreement between the City of Mesquite and Kaufman County (MUD) No. 12 for a contract term of 30 years



WASTEWATER AGENDA ITEMS ADMINISTRATIVE MEMORANDUM NO. 5864

- I. **Authorize an engineering services agreement (ESA) for the Beck Branch, Prairie Creek, and Renner Road Lift Station (LS) Improvements project - Administrative Memorandum No. 5864**
 - Consider authorizing the Executive Director to execute an ESA with Wade Trim, Inc. in the amount of \$435,163 for preliminary engineering design for Project No. 501-0616-22, Beck Branch, Prairie Creek, and Renner Road Lift Stations Improvements



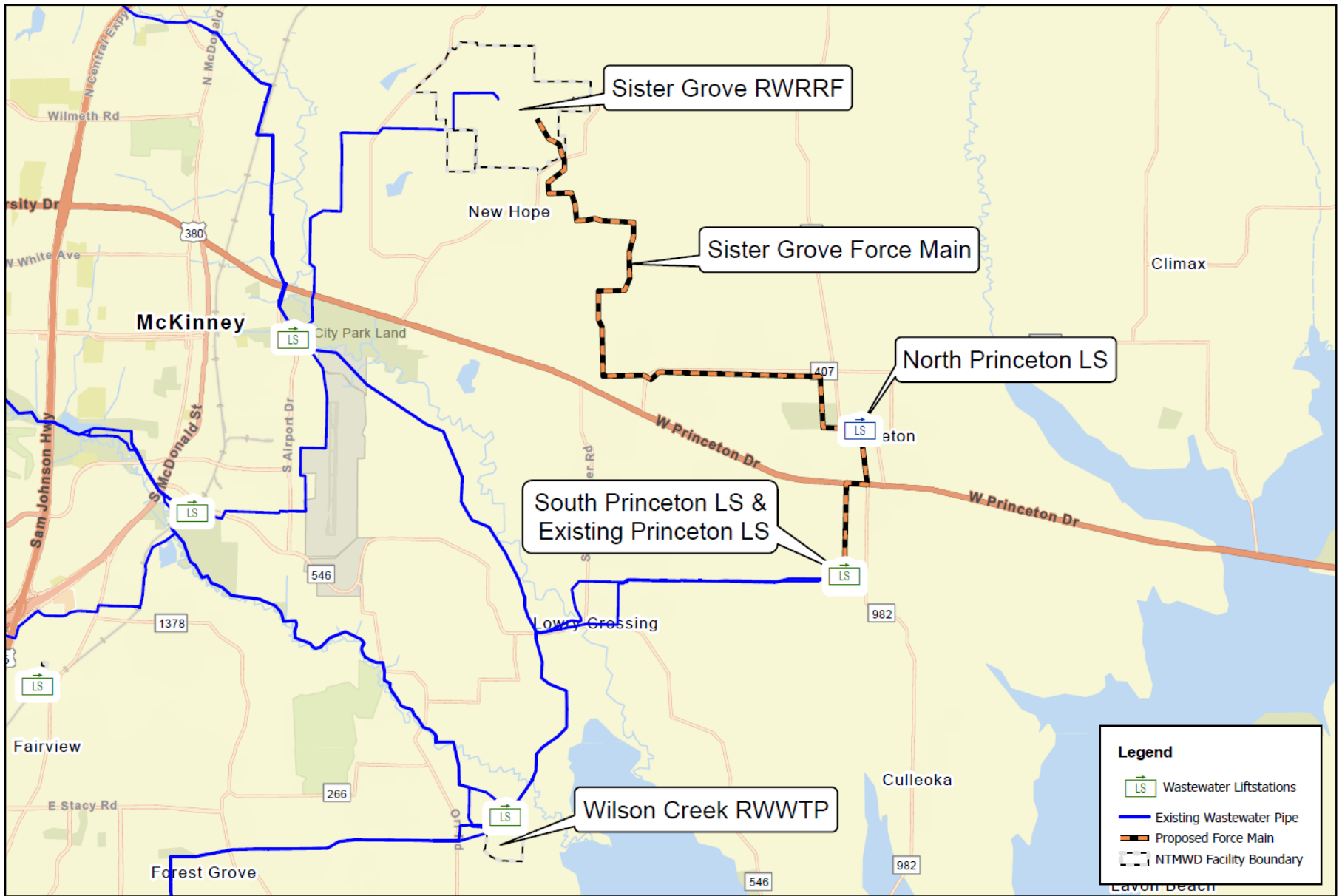
Upper East Fork Interceptor System
Beck Branch, Prairie Creek, and Renner Road Lift Stations Improvements
Project No. 501-0616-22
Administrative Memorandum No. 5864





ADMINISTRATIVE MEMORANDUM NO. 5865

- J. **Authorize an engineering services agreement (ESA) for the Princeton Lift Station Expansion project - Administrative Memorandum No. 5865**
- Consider authorizing the Executive Director to execute an ESA with AECOM Technical Services, Inc. in the amount of \$1,140,000 for preliminary engineering design for Project No. 501-0617-22, Princeton Lift Station Expansion



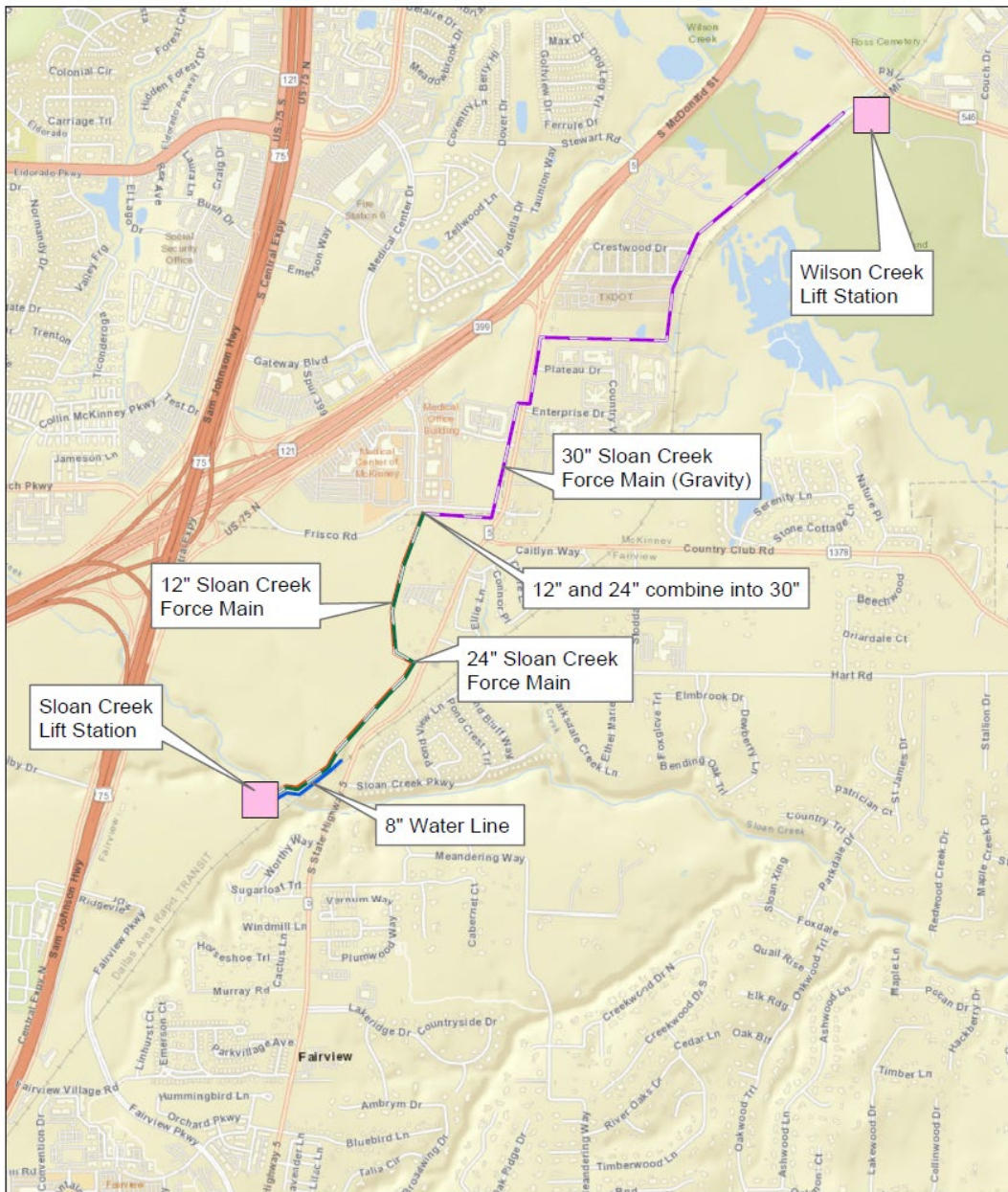
**Upper East Fork Interceptor System
Princeton Lift Station Expansion
Project No. 501-0617-22
Administrative Memorandum No. 5865**





ADMINISTRATIVE MEMORANDUM NO. 5866

- K. **Authorize award of construction contract and inspection services for the Sloan Creek Force Main project - Administrative Memorandum No. 5866**
- Consider authorizing award of construction contract with Wilson Contractor Services, LLC in the amount of \$11,221,632.85, and authorizing an inspection services agreement with TEC Consulting, LLC in the amount of \$434,700 for Project No. 501-0523-18, Sloan Creek Force Main



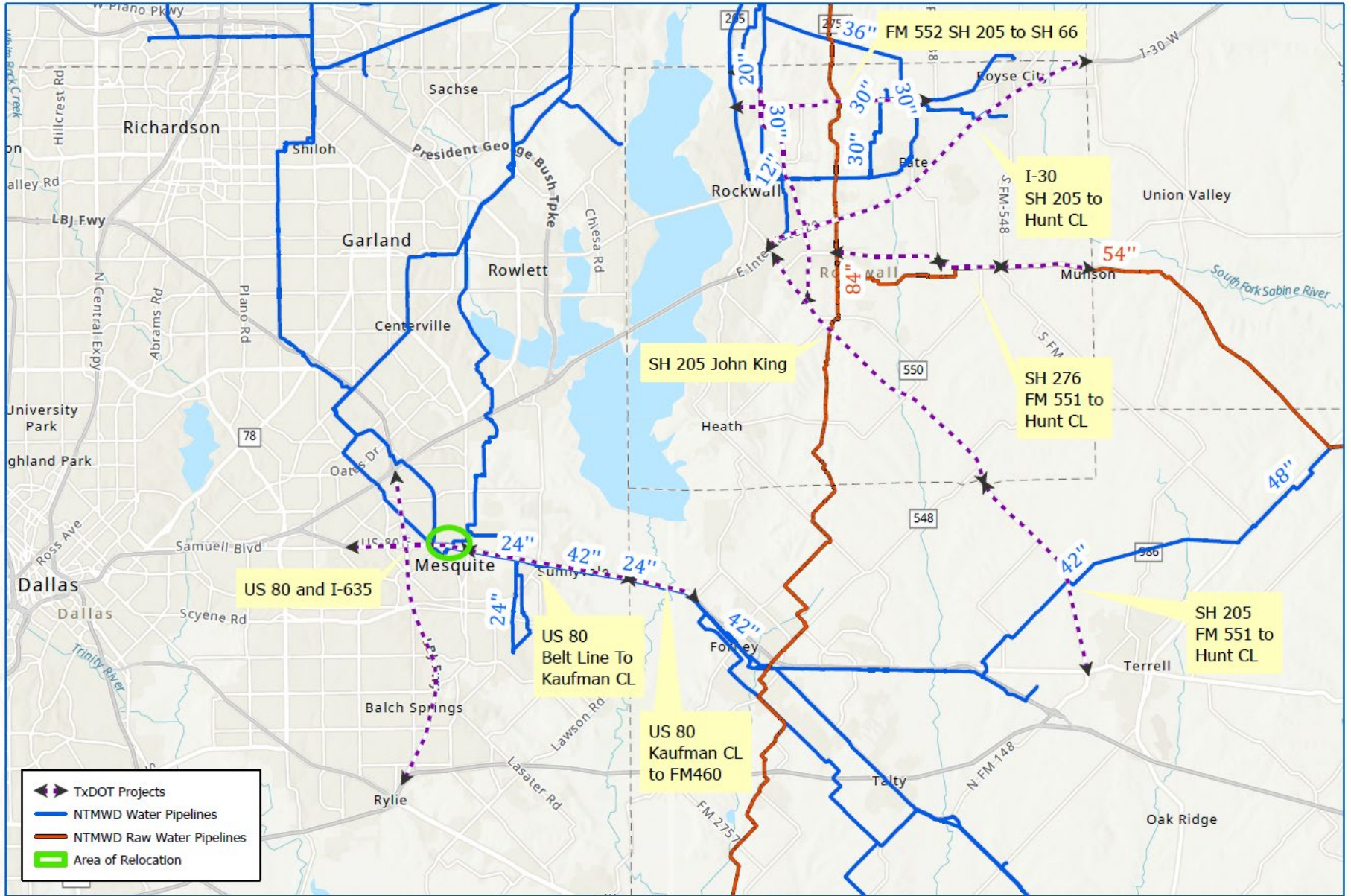
Upper East Fork Interceptor System
Sloan Creek Force Main
Project No. 501-0523-18
Administrative Memorandum No. 5866





LAND ACQUISITION / RIGHT-OF-WAY AGENDA ITEMS ADMINISTRATIVE MEMORANDUM NO. 5867 – RESOLUTION NO. 22-44

- L. **Adoption of Resolution No. 22-44 authorizing the execution of a Right-of-Way acquisition program for Waterline Relocations along State Highways in Dallas, Rockwall, and Kaufman counties - Administrative Memorandum No. 5867**
- Consider adoption of Resolution No. 22-44 authorizing the Executive Director to execute a Right-of-Way acquisition program with a budget of \$200,000; and authorizing the use of eminent domain to acquire easements for Project No. 101-0607-22, Waterline Relocations along State Highways in Dallas, Rockwall, and Kaufman Counties



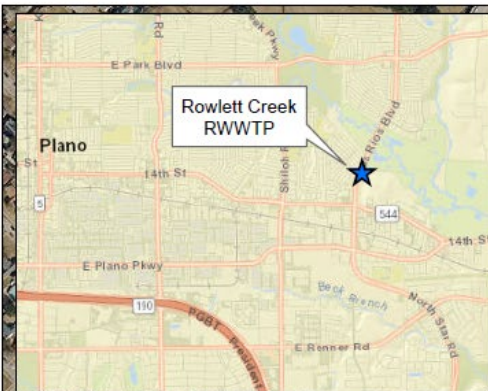
Regional Water System
Waterline Relocations along State Highways in
Dallas, Rockwall, and Kaufman Counties
Project No. 101-0607-22
Administrative Memorandum No. 5867





ADMINISTRATIVE MEMORANDUM NO. 5868 – RESOLUTION NO. 22-45

- M. **Adoption of Resolution No. 22-45 authorizing the amendment to a previously approved property acquisition program and authorizing the execution of a new property acquisition program for the Rowlett Creek Regional Wastewater Treatment Plant Improvements project - Administrative Memorandum No. 5868**
- Consider adoption of Resolution No. 22-45 authorizing the Executive Director to amend a previously approved property acquisition program in the amount of \$1,200,000 of additional funding for Project No. 301-0524-19; and approving a new property acquisition program with a budget of \$50,000 for Project No. 301-0471-17



- Legend**
-  TCE's To Be Acquired
 -  Proposed Property Acquisition
 -  Existing Access Easement
 -  Existing Sanitary Sewer & Utilities Easement
 -  Rowlett Creek WWTP



Rowlett Creek RWWTP Administration Building
 Project No. 301-0524-19
 Rowlett Creek RWWTP Peak Flow Management Improvements
 Project No. 301-0471-17
 Administrative Memorandum No. 5868





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CLOSING ITEMS AND ADJOURNMENT

XIII. CLOSING ITEMS

- A. Opportunity for Board members to provide feedback or request potential future agenda items.

XIV. ADJOURNMENT



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