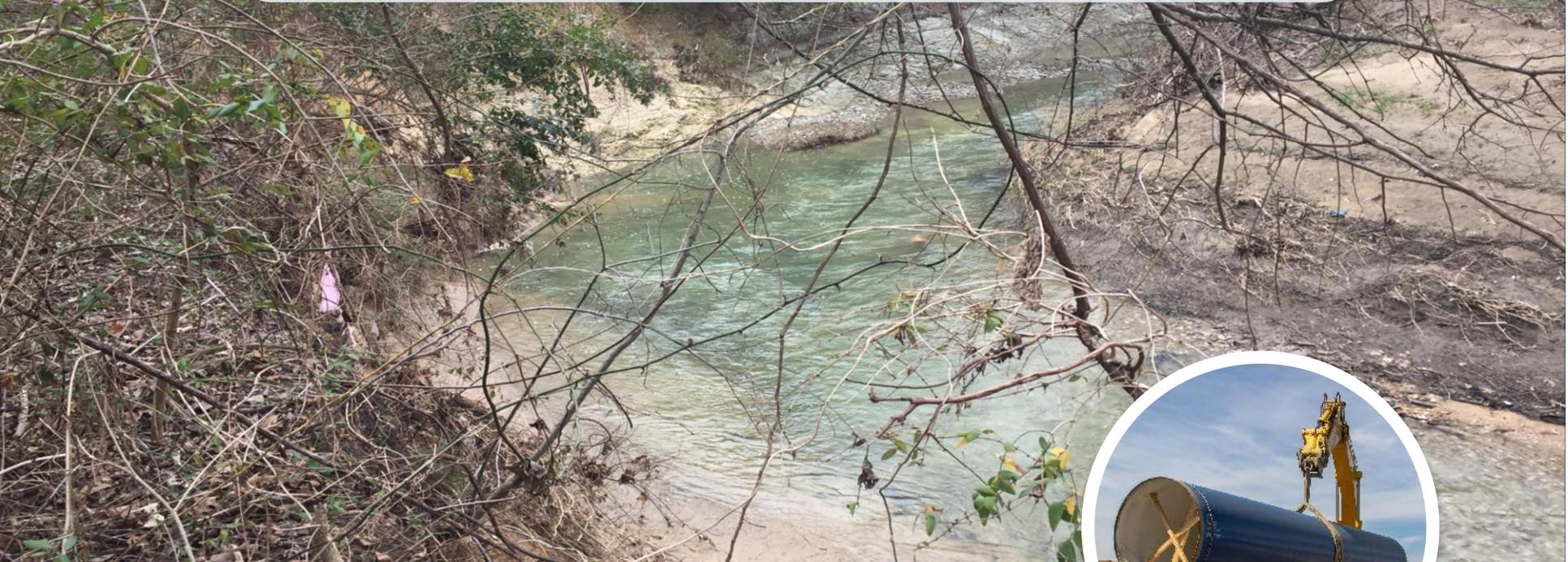




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Regional Service Through Unity... Meeting our Region's Needs Today and Tomorrow



WILSON CREEK TRANSFER FORCE MAINS

November 2022

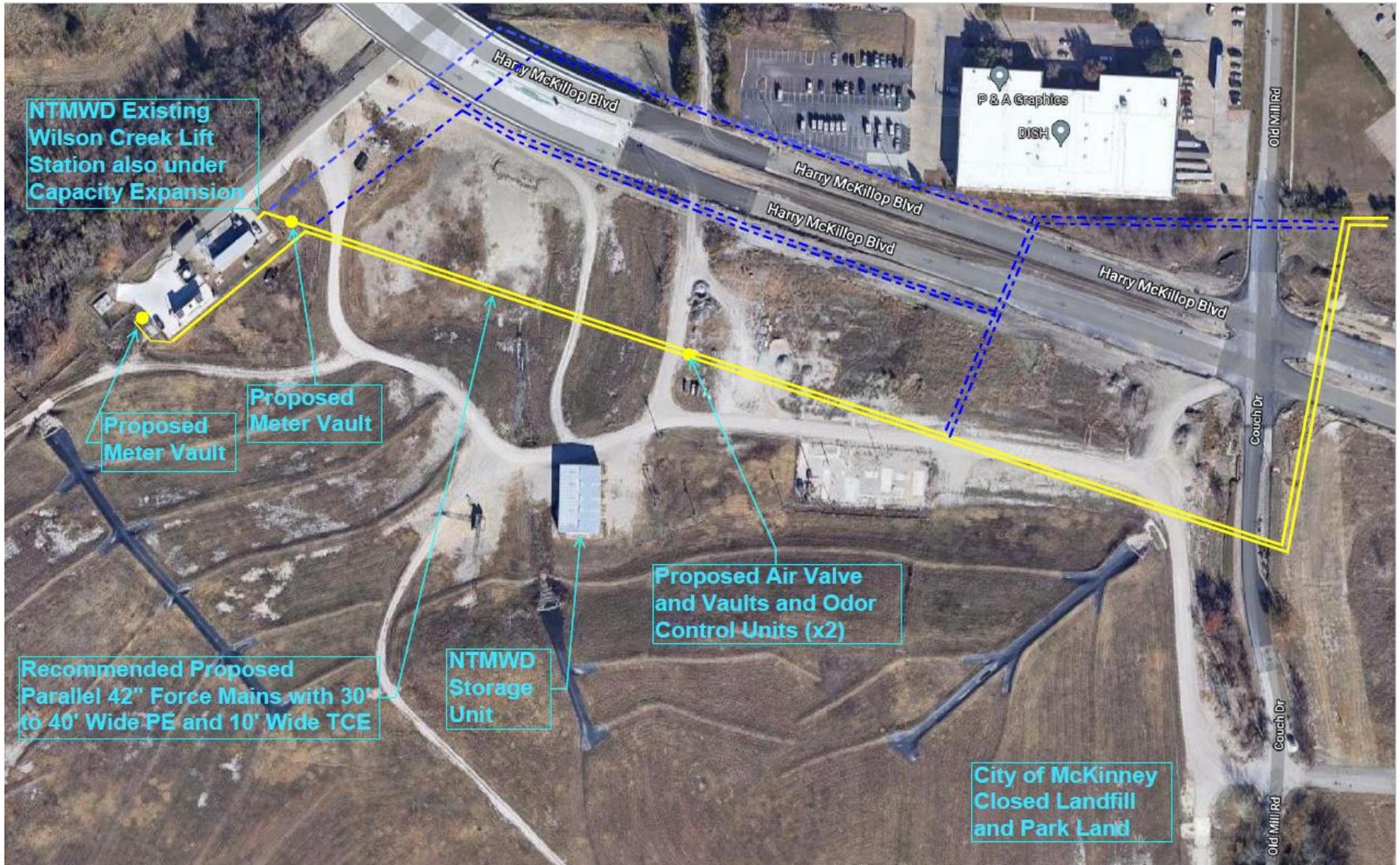
McKinney City Council



- **Project Purpose, Scope, and Schedule**

- The purpose of this project is to provide additional pumping and conveyance capacity due to increased growth and flow projections in the North McKinney and Wilson Creek sub-basins of the North Texas Municipal Water District's (NTMWD) Upper East Fork Interceptor System (UEFIS)
- Proposed conveyance improvements consist of approximately 3-miles of new parallel 42-inch diameter force mains including necessary air valves and odor control improvements
- Ultimate conveyance to NTMWD Sister Grove RWWRF
- Construction anticipated from March 2023 through November 2024

PARK LAND CROSSING LOCATION

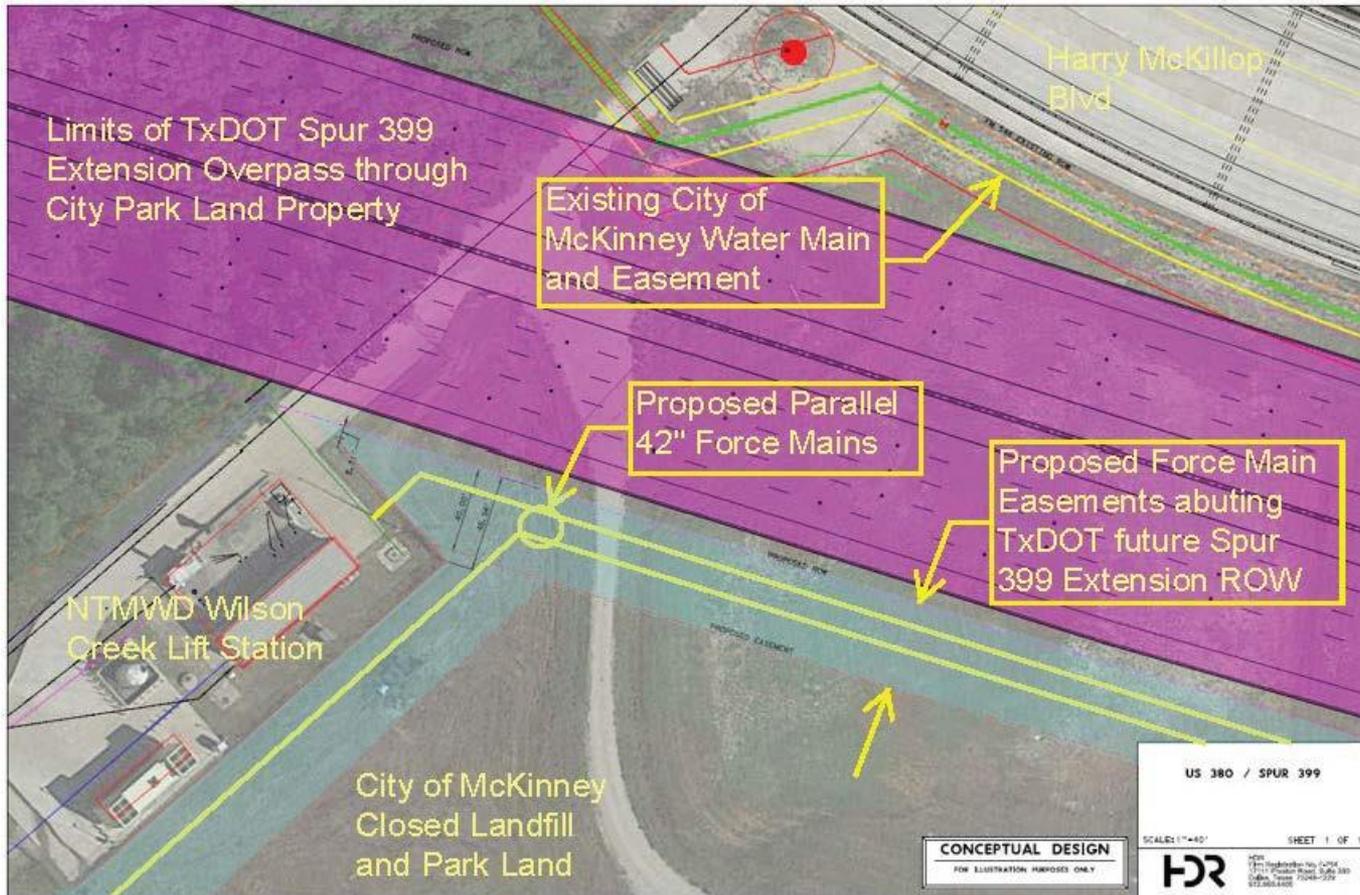


- **Force Mains Alignment**

- Traversing park land is the only viable option to meet goal
- Recommended Alignment (Solid Yellow):
 - Most optimal alignment segment and fiscally responsible use of public funds.
 - Alignment is accessible and constructable
 - Avoids existing and future conflicts (e.g. City of McKinney utilities)
 - Crosses TxDOT future Spur 399 at preferred location between future overpass piers
- Alternative Alignments (Dashed Blue); Evaluated, but not recommended due to:
 - Insufficient construction and maintenance access space
 - Conflicts with existing and future (parallel) below and above-ground utilities and easements
 - Conflicts with existing development/building

Other Future Encumbrance Consideration

- TxDOT future Spur 399 Extension through City closed landfill and park land.
- Proposed force mains and easements abut future Spur 399 ROW. Have coordinated with TxDOT during design and reached verbal acceptance to co-locate to avoid future impacts



- Existing Facilities on Park Land Property

NTMWD
Existing Wilson
Creek Lift
Station

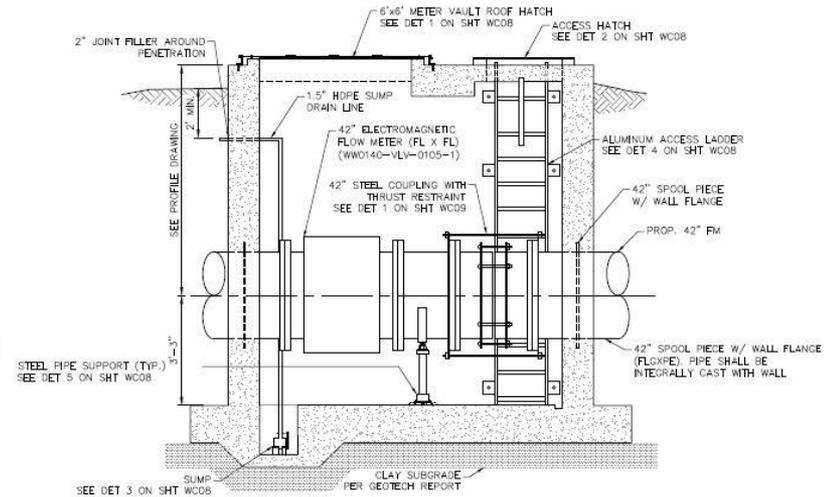


Existing
Landfill,
Landfill Flare
Facility, and
Storage Unit
Building



Proposed Above Grade Appurtenances

- Two flow meter vaults adjacent to lift station to record flow
- Two air release valve vaults and odor control units at force main high point
- Vaults above grade for maintenance accessibility and to minimize deep force mains. Vaults co-located next to other above ground facilities to minimize harm to park land.



Flow Meter Vault



Typical Air Release Valve and Odor Control



Typical Odor Control Canister

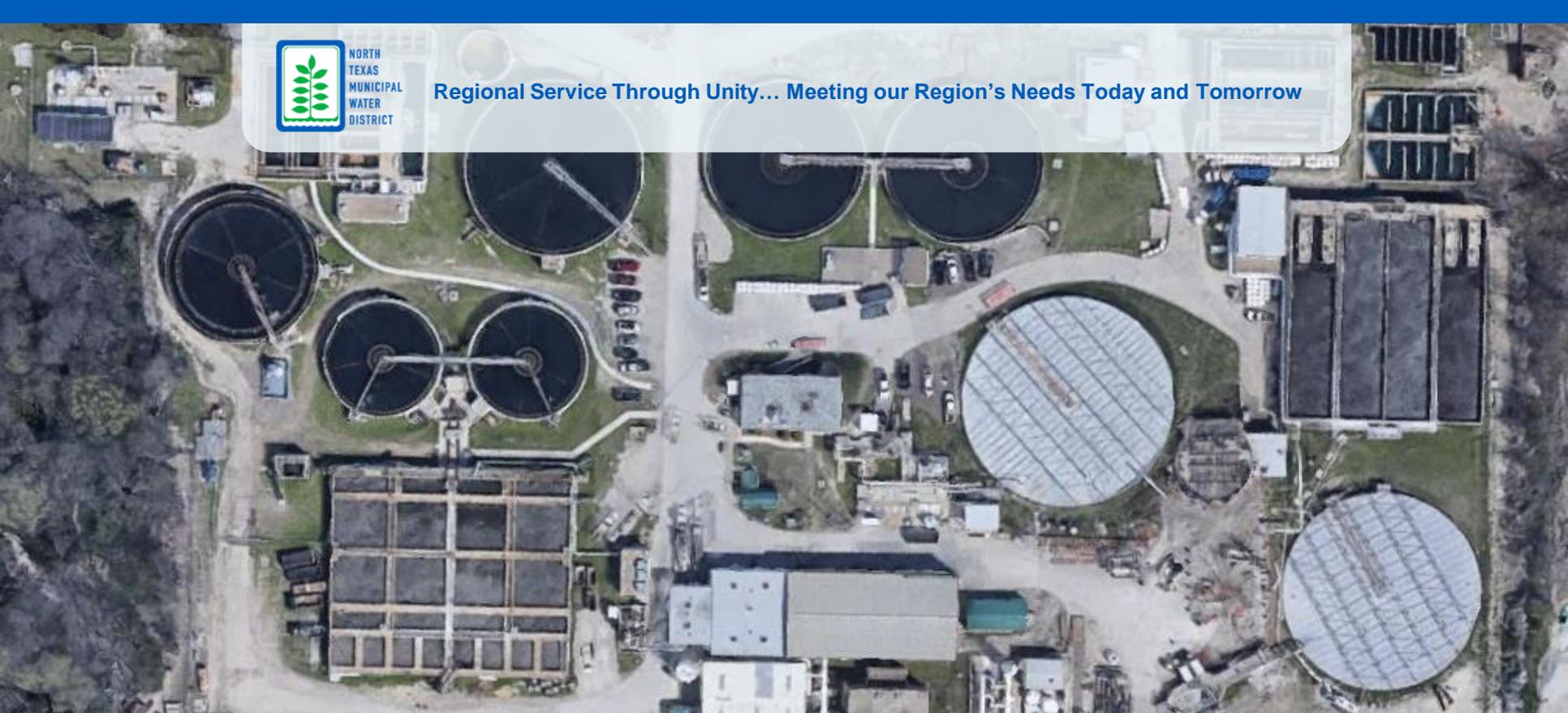
- **Summary**

- Proposed approximately 1.7 acres of permanent easement and 0.5 acres of temporary construction easement on parkland property
- Recommended Alignment is the most optimal alignment segment and fiscally responsible use of public funds.
 - Avoids existing and future conflicts with City of McKinney utilities
 - Crosses TxDOT future Spur 399 at a preferred location between overpass piers



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QUESTIONS?



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