

Public Works and Engineering Update

City Council
July 12, 2022

The logo for the City of Addison, featuring the word "ADDISON" in blue, uppercase, sans-serif font centered within a white circle. The circle is set against a blue background that is part of a larger graphic design on the right side of the slide, which includes a white diagonal line and a grey triangle in the top-left corner.



PUBLIC WORKS & ENGINEERING SERVICES

Organizational Chart 37 Full Time Employees



Shannon Hicks
Director



Todd Weinheimer
Assistant Director

37 Signalized Intersections
167 Lane Miles of Roadway
Over 5,000 Signs
10.5 Million Gallons of Water Storage
96 Miles of Water Mains
1,100 Fire Hydrants

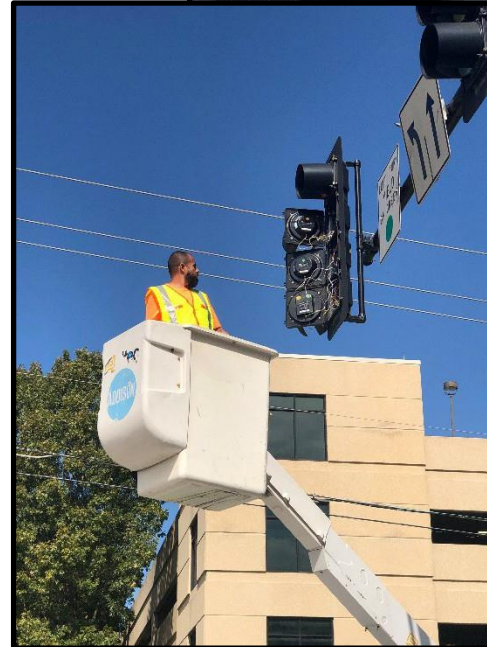
76 Miles of Storm Water Mains
72 Miles of Sanitary Sewer Mains
\$100 Million in Bond Projects
\$8.9 Million in Annual Operational Funds



Operations and Maintenance Projects

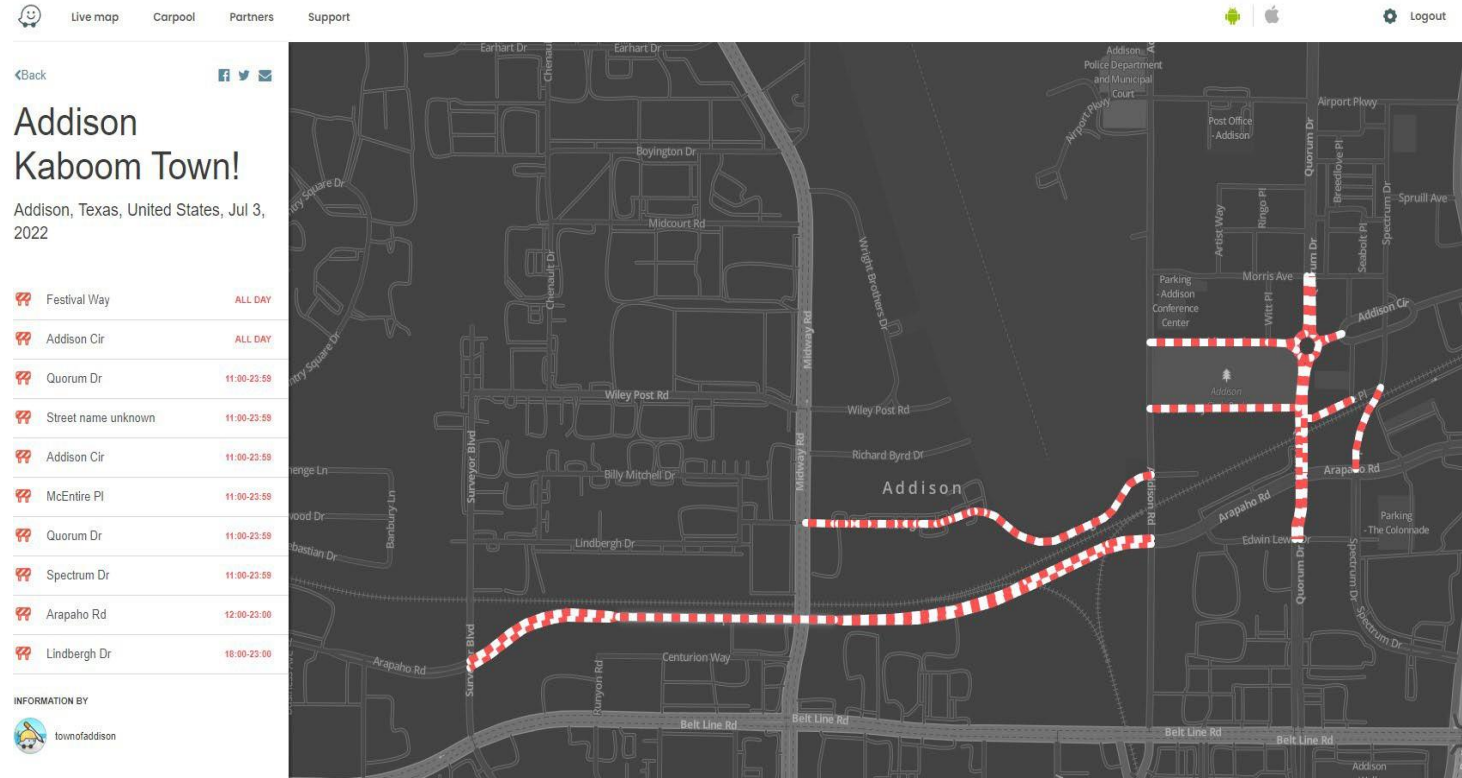
Operational Projects

- Addison Road full depth repairs
 - Executed joint funding agreement with Dallas County for \$496K
- Belt Line Road full depth repairs
- Various concrete panel replacements throughout Town
- Painted Blue Span Arches on Wheeler Bridge
- Installed additional street lighting on Celestial Road
- Annual Pavement Markings
- Replacement of Town wide Malfunction Management Units at traffic signals
- Bulk trash pickup service



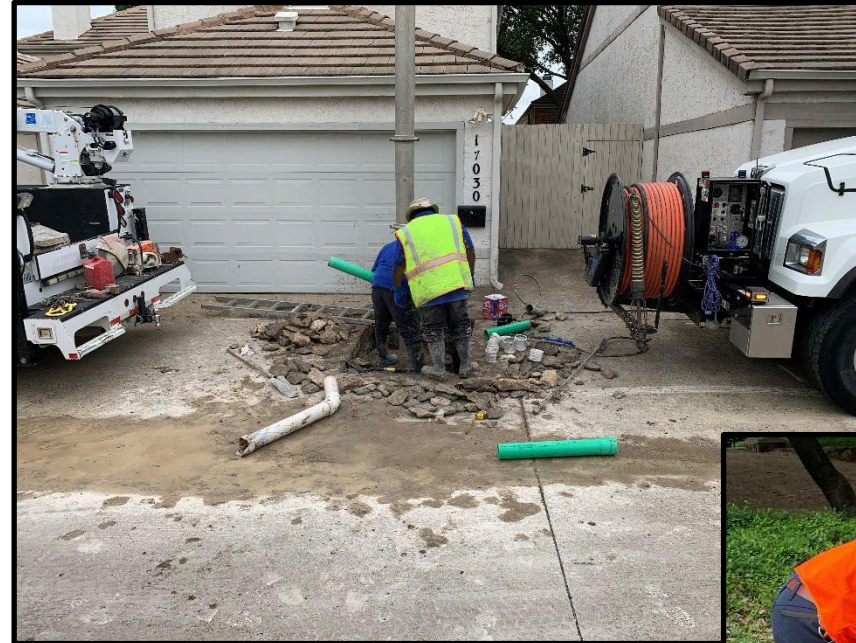
Operational Projects

- Partnering with Waze to warn users of scheduled road closures for Addison's Special Events
 - Provide real time road openings at the conclusion of Kaboom Town
- Kaboom Town Traffic Signal Timing
 - Adjusted traffic signal timings in Addison and coordinated with Dallas and Farmers Branch
 - Found City of Dallas issues with our coordinated timing during this process



Operational Projects

- Completed Emergency Preparedness Plans for Texas Senate Bill 3
- Completed the EPA's Emergency Response Plan
- Updated the Town's Cross Connection Control Ordinance
- Repaired emergency water main line leaks on Celestial Road, Marsh Lane, and Belt Line Road
- Rehabilitated seven sewer manholes



Operational Projects

Fire Hydrant Inspections

- Awarded by City Council on 4-12-2022
- Annual locating, inspecting, flow testing, hydrant flushing, and making any necessary repairs to all of the Town's approximately 1,100 fire hydrants.
- Inspections began at the end of June

Fire Hydrant Painting

- Annual painting of roughly one-third (450) of the Town's fire hydrants
- Adding reflective collars for better visibility at night
- Started at the beginning of June
- Painting fire hydrants "Addison Blue"

Valve Maintenance Program

- Town staff is operating and inspecting mainline valves throughout the Town
- The goal is to exercise each valve yearly



Operational Projects

Contracted Utility Repairs

- City Council awarded Indefinite Delivery/Indefinite Quantity (IDIQ) contract for on-call water and sewer line repairs on 4-12-2022 for \$150,000 annually
- Contractor has completed 12 repairs of water main leaks, service line leaks, a broken valve, and a sewer main leak in three months time
- Allows for Town Utility crews to focus on inspections and maintenance activities that better align with the Town's asset management plan



Operational Projects

- Completed year three of the Town's five-year Municipal Separate Storm Sewer System (MS4) permit with Texas Commission on Environmental Quality
- Hosted Earth Day and Sustainability Day events
- Repairing seven damaged inlet tops
- Creating Town owned drainage ditch maintenance plans



Operational Projects

- Inspecting and cleaning of parallel channel on Midway Road
- Cleared debris from various inlets
- Traced various illicit discharges in the stormwater system
- Stormwater post-construction Best Management Practices (BMP) Ordinance Update as required by State regulations
- Inspecting and cleaning of parallel channel on Midway Road

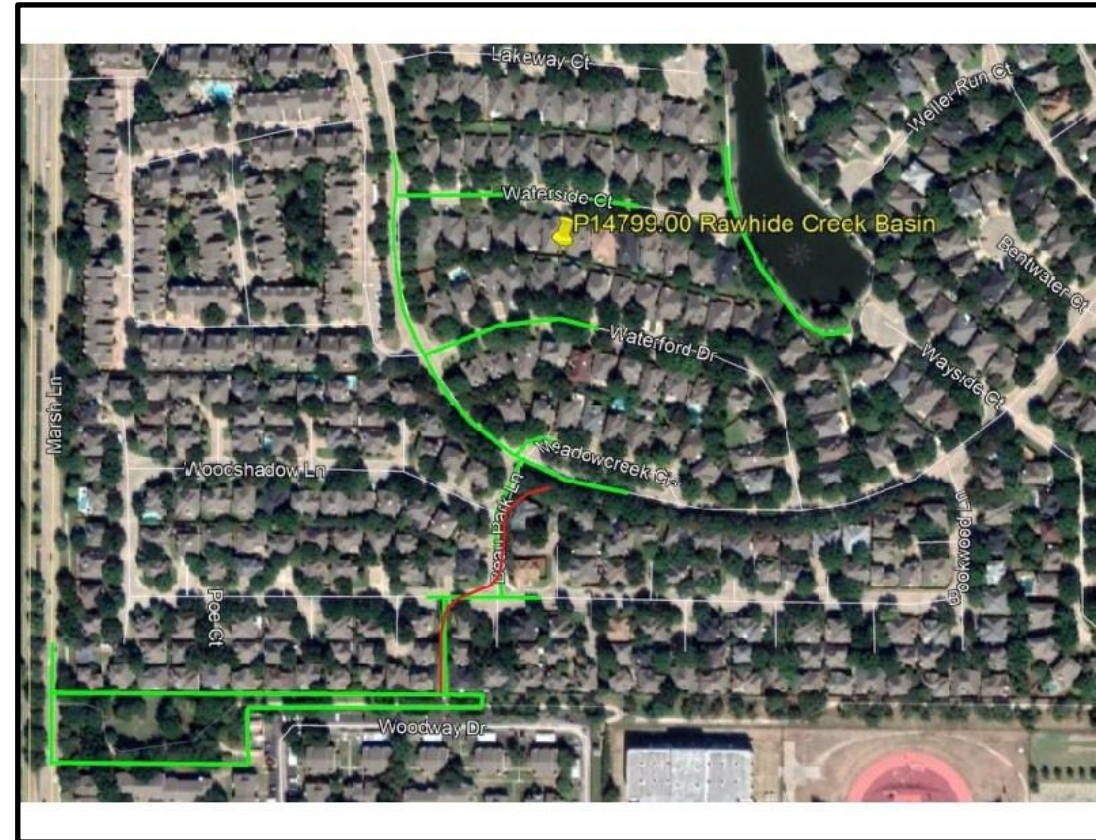


Capital Improvement Projects

Rawhide Creek Drainage Improvements

This project includes the design of drainage improvements along the residential streets of Waterside Court, Waterford Drive, Les Lacs Avenue, Beau Park Lane, and Brookwood Lane. The drainage improvements will follow the trail south from Brookwood Lane and run west along the linear park connecting to the existing storm drain system at Marsh Lane.

- Currently at 100% design
- Anticipate bid opening in late summer of 2022
- Construction to begin in fall of 2022
- Construction estimated to take 12 months to complete
- Project Budget \$3,350,000



Winnwood Bridge Armoring Project

Addition of new riprap concrete apron and gabions will be installed to protect against further scouring and undermining of the wing and toe walls. This project is identified as high risk in the Town's Asset Management Plan.

- Construction anticipated to begin at the began June 2022
- Estimated to take 7 months to complete
- Project Budget \$450,000
- Estimated total cost \$400,000



Capital Improvement Projects

Lake Forest Drive Water and Sewer Improvements

This project includes the replacement of 1,300 feet of water line and 1,047 feet of gravity wastewater mains. Town staff attempted to coordinate with the affected property owners on funding the replacement of the remaining asphalt portion of the private road during construction but was unable to reach an agreement.

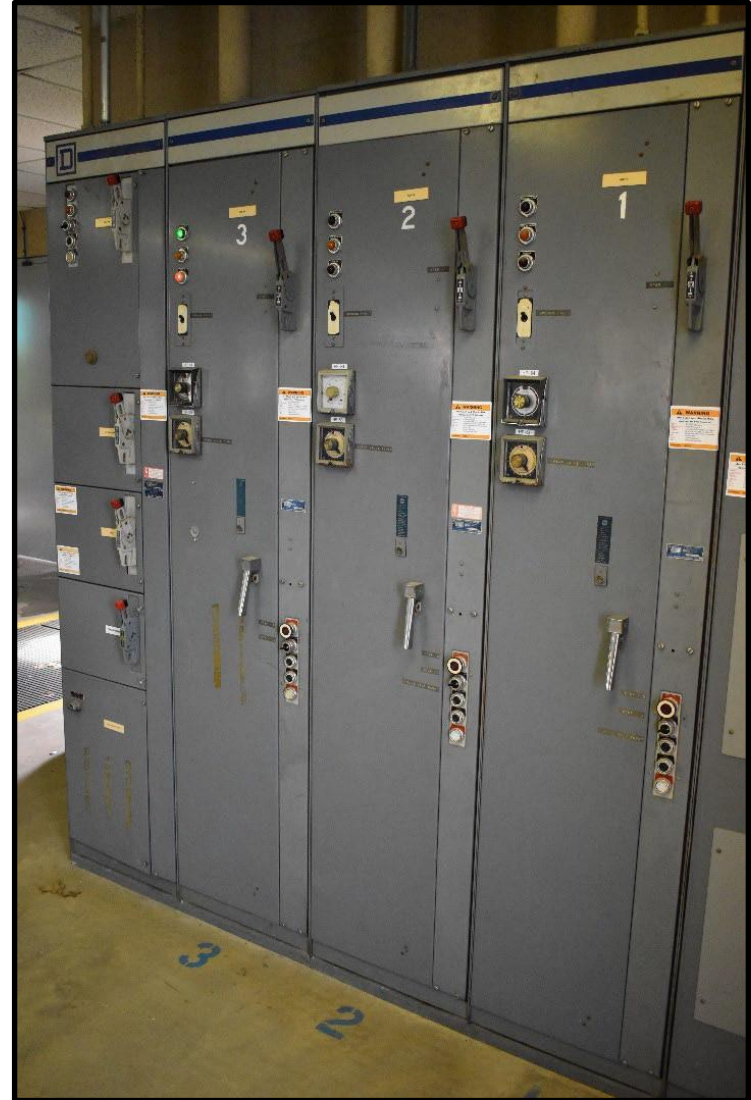
- Currently at 60% design
- Bid advertising in September 2022
- Construction to take 10 months to complete
- Project Budget \$1,199,000



Surveyor Pump Station Electrical Improvements

The scope of this project includes upgrades to the pump station's electrical critical infrastructure and the control system to bring it to the current standard and to improve system reliability and safety. The electrical and the control system for the Surveyor Pump Station was installed in the 1980s and has reached the end of its service life.

- Currently at 60% design
- Added replacement of Pump #2
- Bid opening early fall of 2022
- Construction to begin in late fall of 2022
- Construction estimated to take 6 months to complete
- Project Budget \$1,167,000



Capital Improvement Projects

Kellway Lift Station Bypass Project

The project scope consists of installing a new third pump, valving, piping, a new manhole, adjustments to the wet well, a new wall core, and appurtenances. The changes to the wet well will allow the Town to inspect, drain, and perform maintenance on the wet well. The new third pump will optimize the operational efficiency and effectiveness of the current pumping system.

- Currently under construction
- Most of the project has been completed
- Material shortages are causing delays with the pump and motor installation
- Anticipate construction to be complete at the end of July
- Project Budget \$1,149,000
- Total estimated cost \$1,000,000



Surveyor Chloramine Booster Station

The Town purchases potable water from Dallas Water Utilities. Dallas Water Utilities provides disinfected water with a chlorine residual. This project will provide a way for the Town to inject more chlorine into the distribution system should the residuals fall below a safe level.

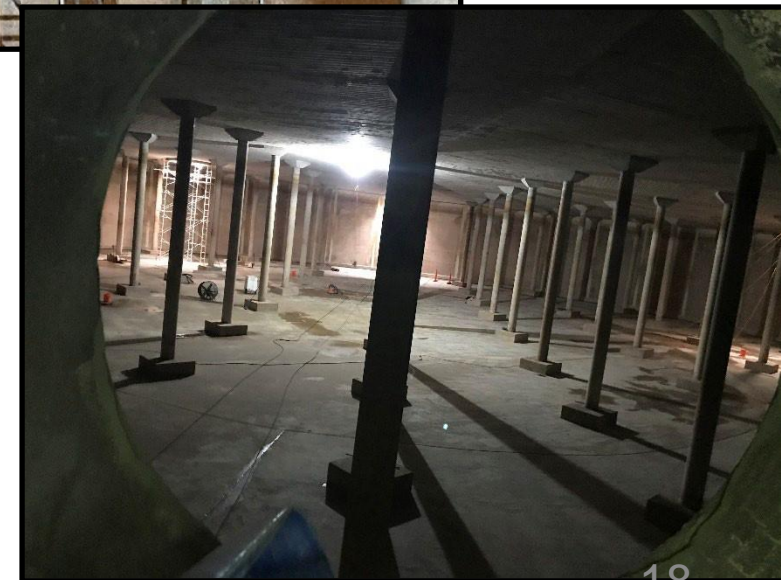
- Currently under construction
- Material shortages caused delays with the chemical building and other components
- Anticipate construction to be complete at the end of July
- Project Budget \$1,333,569
- Estimated Costs \$1,300,000



Celestial Ground Storage Tank Rehabilitation

The project scope consists of the structural rehabilitation of the existing ground storage tank, a new storm drainage swale for erosion control, new sidewalks for accessibility, a section of a new security perimeter fence, and other miscellaneous improvements.

- Had issues with the availability of the tank coating materials
- Construction completed in January 2022
- Total Project Budget \$1,540,000
- Total Project Costs \$1,394,099



Alpha Road Connector Project

Interlocal Agreement between the Town of Addison, Dallas County Community College and City of Farmers Branch. The scope of work includes the design and construction of a new roadway connecting the Vitruvian Park development with Alpha Road and Brookhaven College and a regional detention pond.

- Construction began in April of 2022
- Contractor has begun pavement installation
- Anticipate construction to be completed at the end of March 2023
- Project Budget \$3,680,000
- Estimated Project Costs \$3,531,510

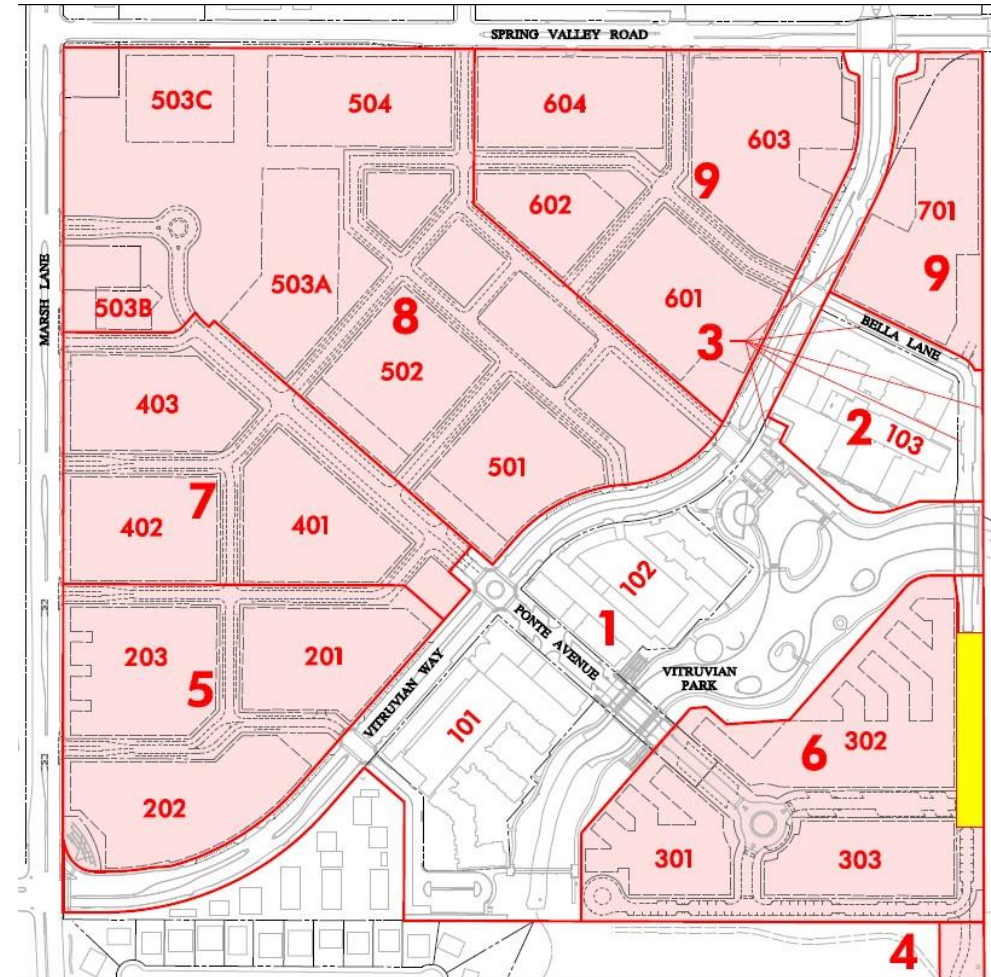


Capital Improvement Projects

Bella Lane North Connector

The project includes demolition of existing asphalt pavement & culvert, construction of new sanitary sewer lines, construction of new water lines, construction of new storm drain lines, facilities across the new roadway, and construction of new 22-foot-wide reinforced concrete pavement.

- Project design was completed and bids for construction were opened in February of 2022
- Recent changes in the updated design of the Vitruvian development affected the design of this project
- Project will have to undergo significant design changes and construction will be re-bid at a later date



Traffic Signal and ADA Improvements

Belt Line Road at Beltway Drive, Belt Line Road at Addison Road, and Addison Road at Sojourn Drive

These intersections are in the high-risk category from the 2018 Asset Management Plan.

- Currently at 100% design
- In depth subsurface utility investigation was required due to the amount of franchise utilities in the right of way
- Easement acquisition required on Sojourn at Addison Road
- Bids for construction have been received and are within the project budget of \$1,500,000
- Council consideration for award in August 2022



Vitruvian Park Public Infrastructure Phase 9, Block 701 Sewer and Water Improvements

The scope of work for the project will include the construction of water and wastewater lines necessary to serve the Vitruvian Townhomes.

- Construction contract awarded by Council on June 14, 2022.
- Construction beginning in July of 2022, supply chain issues may delay up to 16 weeks.
- Budgeted out of the \$2,625,618 allocated for Phase 9 in the Master Facilities Agreement with UDR
- Construction Cost: \$694,970.50
- Construction Estimate \$727,005



Major Bond Projects

Project Scope

- Reconstruction of Midway Road from Spring Valley Road to Keller Springs Road
- Traffic signal, paving, water, sewer, and drainage improvements
- 10' side path trail from Spring Valley to Belt Line Road
- Connection to Cotton Belt Trail at Wheeler Bridge on Arapaho Road
- Total Project Budget \$41M



Midway Road Reconstruction Update

Schedule

- Contract start date was February 8, 2021
- Contractor has 36 months to be substantially complete from Spring Valley Road to Keller Springs Road
- Project was split into three major phases
 - 1st Phase – Belt Line Road intersection
 - 2nd Phase – South Segment, Spring Valley Road to Belt Line Road
 - 3rd Phase – North Segment, Belt Line Road to Keller Springs Road
- Underground water, sewer, and stormwater utility installation is nearing completion
- Main lane paving completed on northbound lanes beginning from Spring Valley to Proton Drive
- Next main lane paving phase will be southbound lanes from Spring Valley to Proton Drive



Property Acquisition

- 25 parcels are to be acquired
- 21 of the acquisitions have been closed
- 2 parcels are still in ongoing negotiations
- 2 parcels are agreed and awaiting closing documents
- Current estimated property acquisition cost is \$4.85M



Current Project Budget Breakdown	
Prior Costs	\$3,526,160
Design Support During Construction	\$825,000
Materials Testing	\$225,289
Right of Way Acquisition (Estimated)	\$4,850,000
Construction	\$30,796,000
In-House Construction Management	\$910,000
Total Current Estimated Costs	\$41,132,449
Project Budget*	\$41,000,000

*Does not include \$2.7M in Dallas County grant funding

Keller Springs Road Reconstruction

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Project Scope and Timeline

- Paving improvements, switching from asphalt to concrete
- Drainage, water, and sanitary sewer line improvements
- Traffic signal upgrades
- Alternate bid to add Belt Line street light poles
- Currently at 100% design completion
- Bid advertising to begin late August with construction to begin in October-November of 2022 and last 18 months.
- Timing dependent on franchise utility relocations

Project Funding

- Funding out of 2019 Bond Election for a total project budget of \$12.9M
- \$4M in available grant funding for construction costs from Dallas County



Keller Springs Road Reconstruction

Current Estimated Project Budget	
Design	\$953,662
Marketing and Communications	\$50,000
Design Support During Construction	\$425,000
Materials Testing	\$200,000
Right of Way Acquisition (Estimated)	\$1,500,000
Estimated Construction Costs	\$9,320,000
In-House Construction Management	\$400,000
Total Current Estimated Costs	\$12,848,662
Project Budget*	\$12,900,000

* Does not include \$4M grant funding from Dallas County

Project Scope, Timeline, and Cost Estimates

- Paving improvements, switching from asphalt to concrete
- Water and sanitary sewer line improvements
- Traffic signal and lighting upgrades
- Currently at 95% design completion
- Funding out of 2019 Bond Election for a total project budget of \$9.4M
- Construction is anticipated to begin immediately following Keller Springs Road Reconstruction Project and last 18 months



Airport Parkway Reconstruction



Current Estimated Project Budget	
Design	\$620,448
Design Support During Construction	\$310,000
Materials Testing	\$180,000
Right of Way Acquisition (Estimated)	\$1,500,000
Estimated Construction	\$5,925,000
In-House Construction Management	\$400,000
Total Current Estimated Costs	\$8,985,448
Project Budget	\$9,400,000

* May have opportunity in grant funding from Dallas County

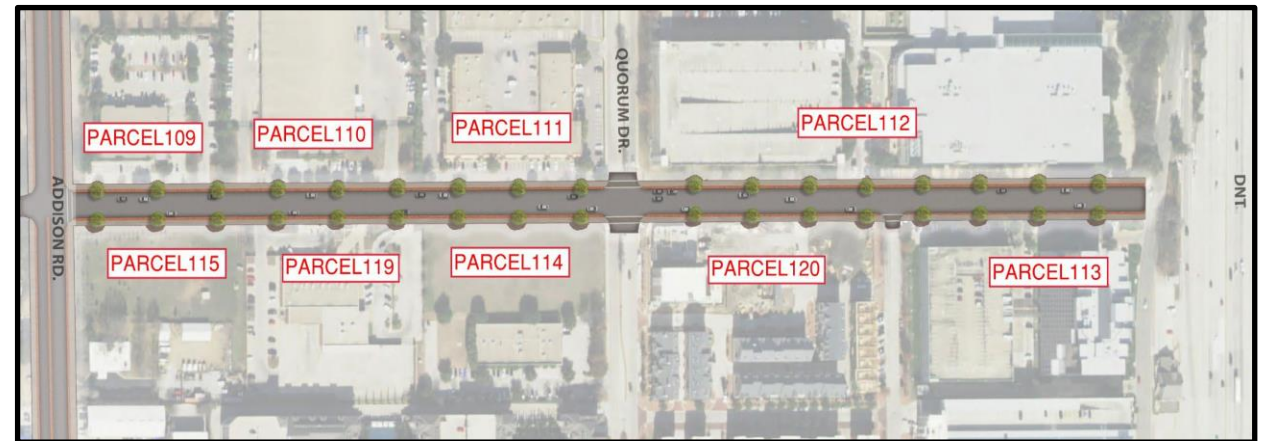
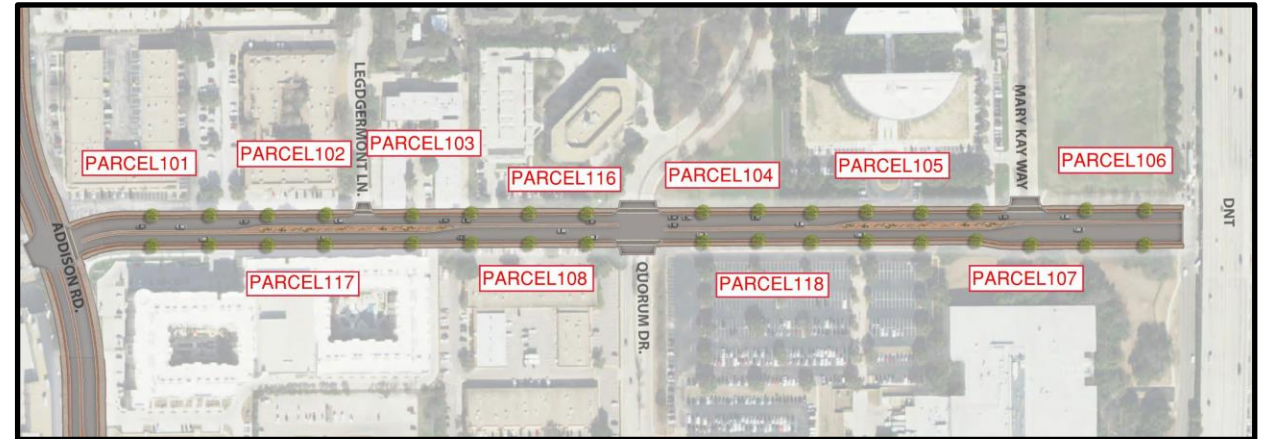
Airport Parkway and Keller Springs Reconstruction

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Property Acquisition

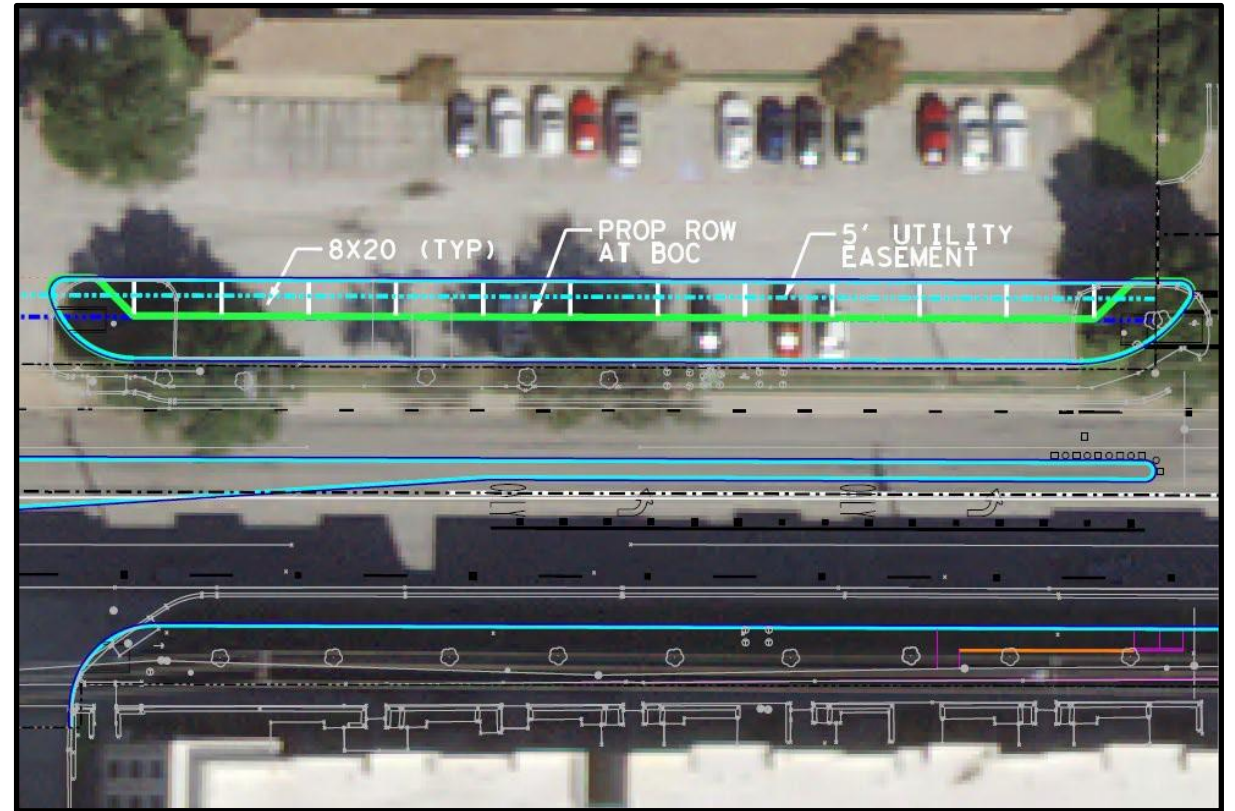
16 properties – fee simple and easement acquisitions

- Range in size from 147 square feet to 6,799 square feet
- 2 Parcels were donated and closed
- 14 left in negotiations
- Anticipate 3 are possible for eminent domain proceedings



Property Acquisition

- Taking a “lessons learned” approach due to the Midway Road Right-of-Way acquisition process
- Optimized the roadway designs to minimize needed Right-of-Way and loss of parking spaces
- Applying the use of easements in lieu of Right-of-Way takes where it makes the most sense and reducing the amount of parking space damages



Property Acquisition

- Coordinated with franchise utilities to relocate their infrastructure into shared duct banks
- Contracted with outside engineering firm to produce high quality visuals to communicate the project vision to the public and property owners



Upcoming Reconstruction Projects

Quorum Drive

- Overall Project Budget of \$26,302,000
- Anticipated Project Design Start 2023



Montfort Road

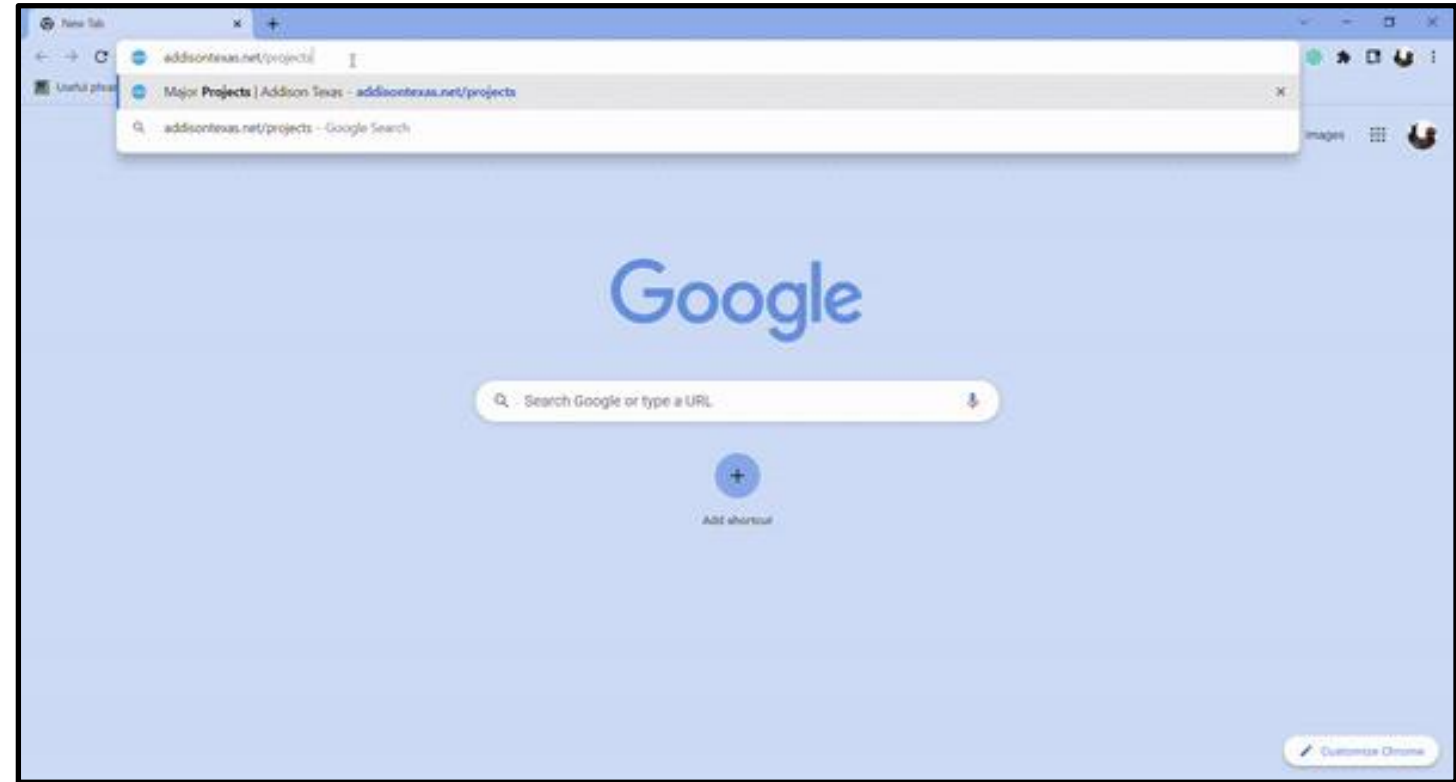
- Overall Project Budget of \$7,300,000
- Anticipated Project Design Start 2024



Projects Updates Website

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- Project updates can be found at addisontx.net/projects
- Website has list of many projects across multiple departments.
- Scan the QR code below for the link!



Questions?