



LEE'S SUMMIT MISSOURI

CITY MANAGER'S MESSAGE

May 21, 2019

Members of the Lee's Summit Planning Commission and City Council:

Pursuant to the City of Lee's Summit Charter, Article XI, Section 11.4. Capital Program, I am pleased to submit the proposed fiscal years (FY) 2020-2024 Capital Improvement Plan (CIP). The CIP represents the multi-year scheduling of public infrastructure improvements and expansion, with much of it largely based on previously adopted master plans such as the Thoroughfare, Waste Water and Water Master Plans.

The benefits of adopting a Capital Improvements Plan are that it:

- Offers a vital link between the Comprehensive Plan and the actual construction of public improvements,
- Ensures that plans for community facilities are carried out,
- Improves coordination and scheduling of public improvements that require more than one year to complete,
- Provides an opportunity for long-range financial planning and management, and
- Offers an opportunity for residents and community interest groups to participate in decisions that impact their quality of life.

The CIP also acts as a public information document to advise residents and property owners of how the City plans to address significant capital needs over the next five years. With growing demands for project expenditures and a limited amount of revenues available, it has become increasingly difficult to predict the availability of future funding for capital projects. As the population in Lee's Summit continues to grow, so do the demands on City services. It is imperative that our organization plan the use of our limited dollars wisely to complete this plan and ultimately benefit all citizens of the City of Lee's Summit. As has been previously reported in various community surveys, infrastructure and growth management continue to be viewed as extremely important to residents.

Administration



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Proposed Plan

The 2020-2024 CIP totals \$276,226,000 (including funding from prior years), down from \$321,975,000 in the 2019-2023 plan. The decrease in the total is due primarily to the completion of several large projects. Significant changes to the CIP include:

Completed Projects

- Airport Platting and Zoning
- Construct Pavement Taxiway Extension
- Construct Replacement T-Hangars (northwest corner)
- Extend North Parallel Taxiway
- Blackwell Road Interchange with US50
- M291 South Interchange with US50
- Ward Road – Tudor Road to Blue Parkway
- Woods Chapel Road & Channel Drive Signal
- Pryor Road & Scherer Road Signal
- Community Center #4
- Hartman Park Trailhead
- Howard Park Renovation
- FY16 – FY 19 Flow Monitoring Projects
- SCADA Radio Communications
- FY17 – FY18 Water Main Rehabilitation

New Projects

- Reseal Joint and Marking of Runway 11-29 and Taxiway Bravo
- Reseal Joint and Marking of South Apron
- Reseal Joint and Marking of Taxiway Charlie and East Apron
- Tree Removal in South Avigation Easement Area
- Hamblen Road & Bailey Road Signal
- Main Street – Chipman Road to Commerce Drive
- Pryor Road & Hook Road Signal
- Pryor Road – M150 Hwy to Hook Rd
- Residential Curb Replacements (2017 CIP Sales Tax)
- Sidewalk Improvements
- NE Maybrook Drainage Improvements
- Large Diameter Sewer and Force Main Projects
- Sewer Main Cathodic Protection
- West Prairie Lee Sewer Capacity Study
- FY24 Water Main Rehabilitation

Administration



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Deleted Projects

- Harris Park Restrooms (included with Wave Pool at Summit Waves)
- Langsford/Ruiz Trail Extension
- Trash Transfer Station
- Little Cedar Force Main (moved to out years)

Renamed Projects

- Mill & Overlay Hangar Taxilanes Alpha and Bravo*
- Rehabilitate Hangar Access Taxiways Alpha and Bravo*

* Projects were renamed to match the re-designation of taxiways Charlie and Delta to Alpha and Bravo, respectively.

The following table depicts the proposed annual appropriations for the five-year period in each of the major project areas plus the Public Works and Water Utility Programs, which are primarily major maintenance activities on roads and bridges.

Expenditures by Year (in \$1000's)

	PW and WU Programs	Airport	Bridges Street & Signals*	Facilities	Park & Recreation	Solid Waste	Stormwater	Sanitary Sewer	Water	Total
Prior Years	-	12,224	37,810	14,100	1,1895	3,418	6,005	9,156	9,632	94,240
2020	8,580	4,901	14,959	-	5,530	1,667	2,102	5,850	6,154	49,753
2021	9,100	3,684	15,431	-	835	-	3,000	1,100	5,231	38,381
2022	7,892	3,652	4,035	-	2,935	-	3,000	1,100	6,702	29,316
2023	8,470	2,030	7,235	-	8,510	-	3,000	950	6,765	36,960
2024	8,001	1,235	2,115	-	8,410	-	-	1,850	5,965	27,576
Total	42,043	27,726	81,585	14,100	28,115	5,095	17,107	20,006	40,449	276,226

*Costs include water and sewer funding associated with road construction.

As you can see, the majority of the capital funding continues to be allocated to the Bridges, Streets, and Signals section which includes 25 projects around the community. Programs, airport, parks, water, sanitary sewer and stormwater continue to comprise significant portions of the plan. Among the major revenue sources for the various capital projects included in the plan are:

- Capital Improvements Sales Tax (transportation / stormwater)
- Bond Proceeds (roads, facilities, stormwater)
- Park Sales Tax (parks)

Administration



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- Road & Bridge Sales Tax (roads)
- State & Federal Grants (airport, roads, parks, sanitary sewer)
- TIF/TDD (roads)
- Sewer & Water Tap Fees (water & sewer system expansion)
- Sewer & Water User Fees (water & sewer system improvements)

It is important to emphasize that the CIP is a flexible plan that can be altered as conditions, funding, priorities, and regulations change. Although capital projects are scheduled throughout the five year plan, only those projects with activity scheduled during the first year are financed and adopted as part of the City's Annual Operating Budget. Projects slated for subsequent years may be adjusted to reflect changes in priority or funding.

Preparation of the CIP is a result of considerable effort from staff in all departments in the City. Each year, staff attempts to reassess overall goals for capital improvements, and the means for accomplishing them. Every project has been considered for its financial feasibility, environmental impact, conformance to previously adopted plans, priorities established from the citizen input process via committees and voter approval, and to meet the public need. Their commitment to providing accurate and understandable information is greatly appreciated.

Respectfully submitted,

Stephen A. Arbo
City Manager

CITY OF LEE'S SUMMIT, MISSOURI

CAPITAL IMPROVEMENT PLAN 2020-2024



Capital Improvement Plan Summary
Fiscal Year 2020-2024
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Public Works Programs	6,410	7,993	7,223	7,437	7,746	7,952	38,351
Water Utilities Programs	364	587	1,877	455	724	49	3,692
Airport	12,224	4,901	3,684	3,652	2,030	1,235	27,726
Bridges, Streets and Signals*	37,810	14,959	15,431	4,035	7,235	2,115	81,585
Facilities	14,100	-	-	-	-	-	14,100
Parks and Recreation	1,895	5,530	835	2,935	8,510	8,410	28,115
Solid Waste	3,418	1,677	-	-	-	-	5,095
Storm Water	6,005	2,102	3,000	3,000	3,000	-	17,107
Sanitary Sewer	9,156	5,850	1,100	1,100	950	1,850	20,006
Water	9,632	6,154	5,231	6,702	6,765	5,965	40,449
Total	101,014	49,753	38,381	29,316	36,960	27,576	276,226

*Costs include water and sewer funding associated with road construction.

PUBLIC WORKS PROGRAMS
(Costs in \$1,000s)

Programs	2019	2020	2021	2022	2023	2024
Overlay & Slurry Seal	3,520	3,800	4,300	4,400	4,500	4,600
Annual Curb and Gutter Replacement Program	1,650	2,897	1,700	1,750	1,800	1,850
Neighborhood Traffic Safety Program	60	80	50	50	50	50
Bridge Rehab/ Maintenance	50	50	50	50	50	50
Capital Project Planning	35	40	45	45	50	50
Pavement Marking	543	550	425	461	587	613
Crack Sealing	235	240	300	310	320	330
Community Bus Service - ATA/OATS	317	336	353	371	389	409
TOTAL	6,410	7,993	7,223	7,437	7,746	7,952

WATER UTILITIES PROGRAMS
(Costs in \$1,000s)

Programs	2019	2020	2021	2022	2023	2024
Equipment Replacement/Rehab	364	587	1,877	455	724	49
TOTAL	364	587	1,877	455	724	49



CAPITAL IMPROVEMENTS PLAN IMPLEMENTATION

When a project on the CIP schedule is funded, it is assigned to a project manager who will assume oversight responsibilities. A number of steps are required before a project is complete.

DESIGN

The project manager will coordinate and participate in the selection process for an engineering or architectural design firm, as appropriate. Architectural and engineering services contracts, unlike commodities contracts, are awarded to firms strictly on the qualifications and expertise of the firm in the particular type of project. The project manager is responsible for negotiating a detailed scope and fee for the design services with the selected consultant. Design for some projects may be completed by City staff or awarded to consultants through annual on-call contracts.

The design process is typically divided into several phases: concept and/or preliminary design, right-of-way plans, right-of-way appraisal and acquisition, and final design. Plans and cost estimates are prepared, either by the consultant or City staff, for review at least at these project milestones. If state or federal funding is involved, plans and estimates are also provided to the appropriate agency for review. As more refined information on project scope and cost is developed, the CIP document is revised accordingly during the next annual update. Occasionally, projects may be deferred or deleted from the plan based on information gathered during the design process that indicates significant problems with pursuing the project.

Typically, one or more public meetings are held for major projects that have significant impacts on property owners and the public to obtain feedback and comments from the community. A meeting is often held at the completion of preliminary plans in order to let residents abutting the project know how the design will affect their properties. Comments made at the meetings are considered by City staff and the design firm for inclusion in revised plans, if appropriate, prior to appraisals and property acquisition. Other meetings may be held before any design is started and just before construction begins.

Right-of-way plans define the nature and extent of property required to complete a project. Property acquisition may be in the form of right-of-way, permanent easements or temporary construction easements. The City hires professional appraisers to determine fair market value of the acquisitions, which is the basis for

initial offers to property owners. The City's right-of-way agent and/or contract agents complete the negotiation and acquisition process for the projects.

Once all property is acquired, final plans and specifications can be completed. During this time, any necessary relocation of private utilities (gas, phone, power) is also accomplished. Typically, all relocations are complete prior to bidding a capital project.

ADVERTISEMENT, BID AND AWARD

Capital projects are publicly advertised through the City's Purchasing Division. City and consultant staff members evaluate all bids for completeness and correctness, and references for the low bidder are checked. Based on the review and references, the consultant or the City's project manager makes a recommendation for award to the lowest and best bidder. The award of the construction contract is made by City Council.

DESIGN/BUILD

As an alternative to the typical design-bid-build process described above, the design/build process may be used. For these projects, a Design/Build Team is selected using a qualifications based selection process. This delivery method can minimize risk and reduce the overall delivery schedule for a project by overlapping the design and construction phases of the work.

SCHEDULE

The construction contract sets forth the required completion time for the project. Time is counted from the date of the "Notice to Proceed" to the point of substantial completion and final completion. The duration is determined by the design consultant and/or City staff based on the scope of work, seasonal constraints, coordination with property owners, and impacts on the traveling public. The order and duration of specific tasks within the allotted contract time is typically determined by the contractor. The assessment of liquidated damages is included in construction contracts for failure to meet required completion dates.

CONSTRUCTION ADMINISTRATION

The City's project manager for the design process or a project manager from the construction management group is typically responsible for performing or coordinating project administration during construction. Such tasks generally include monitoring project progress, schedule and costs; coordinating and facilitating communications between the design consultant, inspections staff, contractor and City staff; negotiating and coordinating approval of changes in the project scope or cost; reviewing and approving regular progress payments; and reporting on the construction progress to City Council and the public through the City's publications and website. Changes to the contract totaling up to five percent of the original bid price may be approved administratively by the appropriate Department Director. Changes that increase the cost in excess of that amount must be approved by the City Council.

SUBSTANTIAL COMPLETION

Substantial completion is defined as the time at which the project has progressed to the point where it is sufficiently complete that it can be utilized for the intended purpose. At this time, a comprehensive inspection is performed by City staff and the design consultant to create a list of all incorrect or outstanding items (a “punch list”) remaining to be completed or corrected. The punch list items and all other deficiencies must be completed before final acceptance of the project by the City, and final payment to the contractor.

FINAL ACCEPTANCE

Final acceptance is realized when the contractor has completed all work on the project, including punch list items, has provided the City with a maintenance bond, and has submitted all other close-out documents in accordance with the construction contract. The project manager is responsible for preparing a final project report and submitting it to city and department management staff as well as to City Council. Any unspent funds authorized for a project will be returned to the appropriate funding source for reallocation to future projects.

CAPITAL IMPROVEMENT PLAN FUNDING

Revenue Sources

All funding sources that may be used for various capital improvements are reviewed each year. Much of the work to develop the CIP focuses on the balancing of available resources with the identified capital needs. Consideration must be given to factors such as annual revenue projections from various sources, restrictions on the uses of certain funds, legal limitations on debt capacity, and City policies relative to project funding. The following is a list of existing funding sources and definitions for each:

TAXES

Property Tax- Revenue from the ad valorem tax levied on all real and personal property, based upon the assessed valuation established by the County Assessor on January 1st of each year. Real property assessed valuation is determined by applying the “market value” times the appropriate assessment ratios. As follows:

- Commercial/Industrial: 32%
- Residential: 19%
- Agricultural: 12%
- Personal Property assessed valuation is set at 33% of market value and is determined by the State Tax Commission.

Sales Tax- The City imposes a total sales tax of 2.25% (Capital Improvement: 0.50%, General fund: 1.0%, Parks and Recreation: 0.25%, Transportation: 0.50%) on all goods and commodities sold within the City limits with the exception of drugs and farm machinery. The tax is also levied on all vehicles registered by residents of the City, regardless of where those vehicles were purchased. Transportation tax is not levied on utilities and is earmarked specifically for use in funding transportation projects only. The State of Missouri receives the tax from the respective business and distributes the funds monthly to the City.

Parks & Recreation 1/4-Cent Sales Tax- Initially approved in November 1997 for 3/8-cent and renewed in 2016 for 1/4-cent, this revenue source is dedicated to Parks and Recreation improvements including completion of Legacy Park facilities, new park development, the Senior Center, and greenway development.

Transportation 1/2-Cent Sales Tax- Approved initially in the 1980s, this tax is available to pay for transportation and traffic infrastructure improvements and major maintenance, such as overlay and slurry seal, curb and gutter replacement, crack sealing and pavement marking. This sales tax also provides funding for several other Public Works Programs including bridge rehabilitation, thoroughfare and traffic master plan studies, community bus services and the Neighborhood Traffic Safety Program.

Capital Improvement 1/2-Cent Sales Tax- Originally approved in November 1997, this tax has been used in conjunction with the Road Excise tax to fund road improvements related to the “10-year road plan” adopted in 1997. The sales tax was renewed in April 2007 with collection beginning in 2008 and ending in 2018. This renewal of the sales tax will fund a second “10-year road plan” comprising 6 major projects. In April, 2017, voters approved a 15 year extension with collection beginning in April, 2018. In all, seven major road projects were identified as well as six transportation related projects. Additionally, this renewed tax will also be used to fund stormwater infrastructure projects throughout the City.

Road Excise Tax- Excise Tax is paid for development that generates new traffic in the City in the form of a license tax on building contractors. This revenue source is available for road improvements throughout the City that are required due to growth to at least some degree.

Transportation Development Districts A geographic area may be designated to levy an additional sales or property tax assessment to pay for transportation related infrastructure improvements.

Tax Increment Financing Provides for the capture of 50% of the Economic Activity Taxes (Sales and Franchise) generated within the boundaries of a designated area to be used to finance infrastructure improvements. All of the incremental increases in real estate taxes are also captured from all taxing jurisdictions until the infrastructure is paid off.

BOND PROCEEDS

General Obligation (G.O.) Bonds- Bonds which are backed by the full faith and credit of the City and require either a 2/3rds or 4/7ths voter approval. Limitations for bonding capacity are set by state statute.

Revenue Bonds- Bonds which are backed by the fees and charges of a business-like government function, payable only from a specific source of revenue. Simple majority voter approval required. Limitations for bonding capacity are not set by state statute but rather the entity's ability to repay the debt.

Certificates of Participation- Bonds which are backed by general revenues or fees and charges of a government. No voter approval is required. Limitations for bonding capacity are determined by the market and the entity's ability to repay the debt.

Special Obligation Bonds- Bonds which are backed by general revenues or fees and charges of a government. No voter approval is required. Limitations for bonding capacity are determined by the market and the entity's ability to repay.

GRANT FUNDING

Grants may be received from federal, state or county governments. Grants are typically available for transportation, airport improvements, parks, and public safety equipment. The City also receives community development block grants (CDBG) for use in low-to-moderate income areas within the community. Equipment purchases and CDBG projects are not included in the CIP.

FEES AND CHARGES

Fees for direct receipt of public service by the parties who benefit from the service

Parks and Recreation Activity Fees- Collected by Parks & Recreation Department for participation in various sports and recreation programs, aquatic instruction, and the Camp Summit and Club Summit daycare programs at the Recreation Center.

Recreation Memberships- Membership fees collected for the Lee's Summit Pool and the Legacy Park Community Center.

Water Sales- Charges for supplying water to residential, commercial, industrial and wholesale customers.

Sewer Charges- Charges for providing wastewater collection and disposal services to residential, commercial and industrial customers.

Sewer Tap- The charge for a new sanitary sewer connection based on the number of drains in a structure and assessed at the time of building permit issuance.

Water Tap- The charge for a new water service connection based on the size of water meter required. Also included in the water tap fee is an amount which is intended to provide capital for the development of the City’s water transmission capacity.

PRIVATE FUNDING

Amounts paid by developers, generally for specific infrastructure improvements, pursuant to development agreements between the City and those developers.

CAPITAL IMPROVEMENT PLAN FUNDING

The FY 2020-2024 Capital Improvement Plan has been divided into eight major categories, plus the Public Works and Water Utility Programs. The total estimated cost of all projects included in the five-year plan, including prior years, is \$276,226,000. A summary of the costs by category is summarized below.

**2020-2024 CIP SUMMARY
(Costs in \$1000s)**

Category	Prior Yrs	% of Total	2020-24	% of Total
PW & WU Programs	0	0.0%	42,043	23.1%
Airport	12,224	13.0%	15,502	8.5%
Bridges, Streets, Signals	37,810	40.1%	43,775	24.1%
Facilities	14,100	15.0%	-	0.0%
Parks and Recreation	1,895	2.0%	26,220	14.4%
Solid Waste	3,418	3.6%	1,677	0.9%
Stormwater	6,005	6.4%	11,102	6.1%
Sanitary Sewer	9,156	9.7%	10,850	6.0%
Water	9,632	10.2%	30,817	16.9%
TOTAL	94,240	100.0%	181,986	100.0%

CIP IMPACT ON OPERATING BUDGET

As part of the Capital Improvement Plan, the impact of each project on the City’s operating budget is identified. As capital improvement projects are completed, operation and maintenance of these facilities must be absorbed into the appropriate department operating budget, which provides ongoing services to citizens. These operating costs, which may include salaries, equipment, regular maintenance, and repairs, are adjusted annually to accommodate growth and inflation in maintaining or improving service levels. In some cases, elimination of high-maintenance facilities may also reduce these operating costs. It is the City of Lee’s Summit’s philosophy that new projects should not be constructed if operating revenues are unavailable to cover the operating costs. These must be funded with

recurring (ongoing) revenues. As a result, the availability of recurring revenues must be considered in the decision to include projects in the plan.

CIP IMPACT ON LIVABLE STREETS

In accordance with Resolution 10-17, A Resolution Establishing the Livable Streets Policy for the City of Lee's Summit, the Capital Improvement Plan shall include a summary or description of the Livable Streets Elements of all Public Improvement Projects. If a Livable Streets Element identified in and required by adopted public plans or ordinance is not incorporated in the project, such omission shall be documented in the Livable Streets Summary.

Livable Streets is not applicable to all capital improvement projects. Some capital improvement projects, including water, sewer, airport, storm water and solid waste, typically do not have relevant elements to Livable Streets nor do these projects inhibit or advance the Livable Streets initiative. Consequently, water, sewer, airport, storm water and solid waste projects have not been identified in the Livable Streets Summary unless a positive or negative Livable Streets impact exists.

The Livable Streets concept and Livable Streets Elements have been considered in all Capital Improvement Projects for all modes and abilities. The following Livable Streets Summary identifies each capital improvement project that has a potential impact to Livable Streets as well as a description of the included and omitted Livable Streets Elements (elements that have been identified with an asterisk are not required, but have been included in the project scope).

Bridges, Streets and Signals

Browning Street Extension – Browning Street to Hamblen Road:

Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Local Roadway), Facilitates Access Management, Economic Development and Safety Improvements

Livable Streets Elements Omitted: None

Chipman Road - Bent Tree Dr. to View High Dr.:

Livable Streets Elements Included: Continuous Street Lighting*, Shared-Use Path, ADA Compliance, Vehicular Safety and Capacity Improvements (Reconstructed Two-Lane Arterial with Turn Lanes)

Livable Streets Elements Omitted: Sidewalk. Sidewalk has been omitted from one side of the road (south side) along a portion of the project due to disproportionate cost compared to probable use. Adding sidewalk would require additional right-of-way and larger rock cut areas with larger retaining wall structures. Pedestrian use is severely limited from adjacent property due to constrained terrain. Future development opportunity is minimal due to constrained terrain, utility and environmental impact. If developed sidewalk may be required for connectivity and probable use. In lieu of a sidewalk, a shared-use path has been proposed along the north side of the road that provides network connectivity to meet projected pedestrian and bicycle needs. This path will connect to the Rock Island Trail and share connections along the corridor. The existing bridge across Cedar Creek and the proposed RR crossing accommodate the proposed shared-use path along the north side of the road and the possibility of future sidewalk along the south side of the road.

Colbern Road – M350 Hwy to Douglas Street:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management, ADA Compliance, Traffic Signal Improvements.

Livable Streets Elements Omitted: None

Commerce Drive - Tudor Road to Main Street:

Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Collector Roadway with Turn Lanes), Bike Route

Livable Streets Elements Omitted: None

Douglas Street – Chipman Road to Second Street:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance, Streetscape Elements

Livable Streets Elements Omitted: None

Downtown Public Parking:

Livable Streets Elements Included: ADA Compliance, Promotes a more walkable downtown with support for greater land use density.

Livable Streets Elements Omitted: None

Gateway Drive - Delta School Road to Georgian Drive:

Livable Streets Elements Included: Sidewalk, Street Gap Connectivity, ADA Compliance, Vehicular Capacity Improvements (New Collector Roadway), Bike Route, Enhanced Neighborhood and School Accessibility.

Livable Streets Elements Omitted: None

Hamblen Road & Bailey Road Traffic Signal:

Livable Streets Elements Included: Intersection Lighting, Traffic Signal Control with Pedestrian Actuation and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, Vehicular Capacity Improvement, and Pedestrian Safety Improvement

Livable Streets Elements Omitted: None

Hook Road Shoulders - West City Limits to Ward Road:

Livable Streets Elements Included: Paved Shoulders*

Livable Streets Elements Omitted: This project only involves paved shoulders, a direct improvement in travel conditions for cyclists and pedestrians. Vehicular and maintenance benefits are ancillary. Hook Road, when constructed to urban standards will include additional elements, such as Street Lighting, Curb and Gutter, Sidewalk, and Shared-Use Path.

Independence Avenue and Town Centre Blvd Intersection Improvements:

Livable Streets Elements Included: Roundabout, Vehicular Safety Improvements, Vehicular Capacity Improvements, Pedestrian and Bicycle Safety Improvements, ADA Compliance, Sidewalk

Livable Streets Elements Omitted: None

Jefferson Street - Persels Road to Oldham Parkway:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management (Driveway Consolidation and Access Restrictions), and ADA Compliance.

Livable Streets Elements Omitted: None

Langsford Road Bridge Rehabilitation:

No Construction Activity related to Livable Streets

Main Street - Chipman Road to Commerce Drive:

Livable Streets Elements Included: Sidewalk, ADA Compliance, Vehicular Safety Improvements, And Vehicular Capacity Improvements.

Livable Streets Elements Omitted: None

Pryor Road & Hook Road Traffic Signal:

Livable Streets Elements Included: Intersection Lighting, Traffic Signal Control with Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, and Vehicular Capacity Improvement

Livable Streets Elements Omitted: Pedestrian Actuation has been deferred on this span wire traffic signal installation until the permanent traffic signal installation. In the interim, pedestrian service will be timed concurrent with non-conflicting vehicular service phases.

Pryor Road – M150 Hwy to Longview Road (Project is split at Hook Road into two Phases):

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Shared-Use Path, Vehicular Safety Improvement, Vehicular Capacity Improvement, Access Management, ADA Compliance, Traffic Signal Improvements.

Livable Streets Elements Omitted: None

Streetlights – Lakewood Boulevard:

Livable Streets Elements Included: Continuous Street Lighting*

Livable Streets Elements Omitted: None

Streetlights – Shenandoah Drive:

Livable Streets Elements Included: Continuous Street Lighting*

Livable Streets Elements Omitted: None

Third Street Improvements – Jefferson Street to Blue Parkway:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Access Management (Driveway Consolidation and Access Restrictions), Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance, Streetscape Elements.

Livable Streets Elements Omitted: None

Third Street Improvements - Murray Road to Pryor Road:

Livable Streets Elements Included: Continuous Street Lighting*, Sidewalk, Traffic Signal Control with Pedestrian Actuation* and Bicycle Friendly Signal Detection* (i.e. Video or Radar), Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance.

Livable Streets Elements Omitted: None

Traffic Signal Communication Master Plan:

No Construction Activity related to Livable Streets

Ward Road - M150 to Raintree Parkway:

Livable Streets Elements Included: Sidewalk, Continuous Street Lighting*, Shared-Use Path* (Existing), Share-The-Road* (Existing), ADA Compliance, Vehicular Safety and Capacity Improvements

Livable Streets Elements Omitted: None

Ward Road – O'Brien Road to Blue Parkway:

Livable Streets Elements Included: Sidewalk, Safe Routes to School, Bike Route Accommodation, Bike Safety Improvement, Vehicular Safety Improvement, Vehicular Capacity Improvement, ADA Compliance

Livable Streets Elements Omitted: None

Facilities:

Although there are no particular Livable Streets elements planned within the City's streets rights-of-way as part of the facilities projects, the following projects foster active living and may include multimodal accommodations on-site and/or connectors to off-site multimodal facilities:

- Downtown Performing Arts Space and Farmers Market Pavilion

Parks:

Although there are no particular Livable Streets elements planned within the City's streets rights-of-way as part of the parks projects, the following projects foster active living and may include multimodal accommodations on-site and/or connectors to off-site multimodal facilities:

- Arts in Parks
- Bailey Park Development
- Eagle Creek / Park West Development
- Fieldhouse
- Hartman Park Splashpad
- Lowenstein Park Improvements
- Pleasant Lea Park Improvements
- Summit Park Renovation
- Wave Pool at Summit Waves

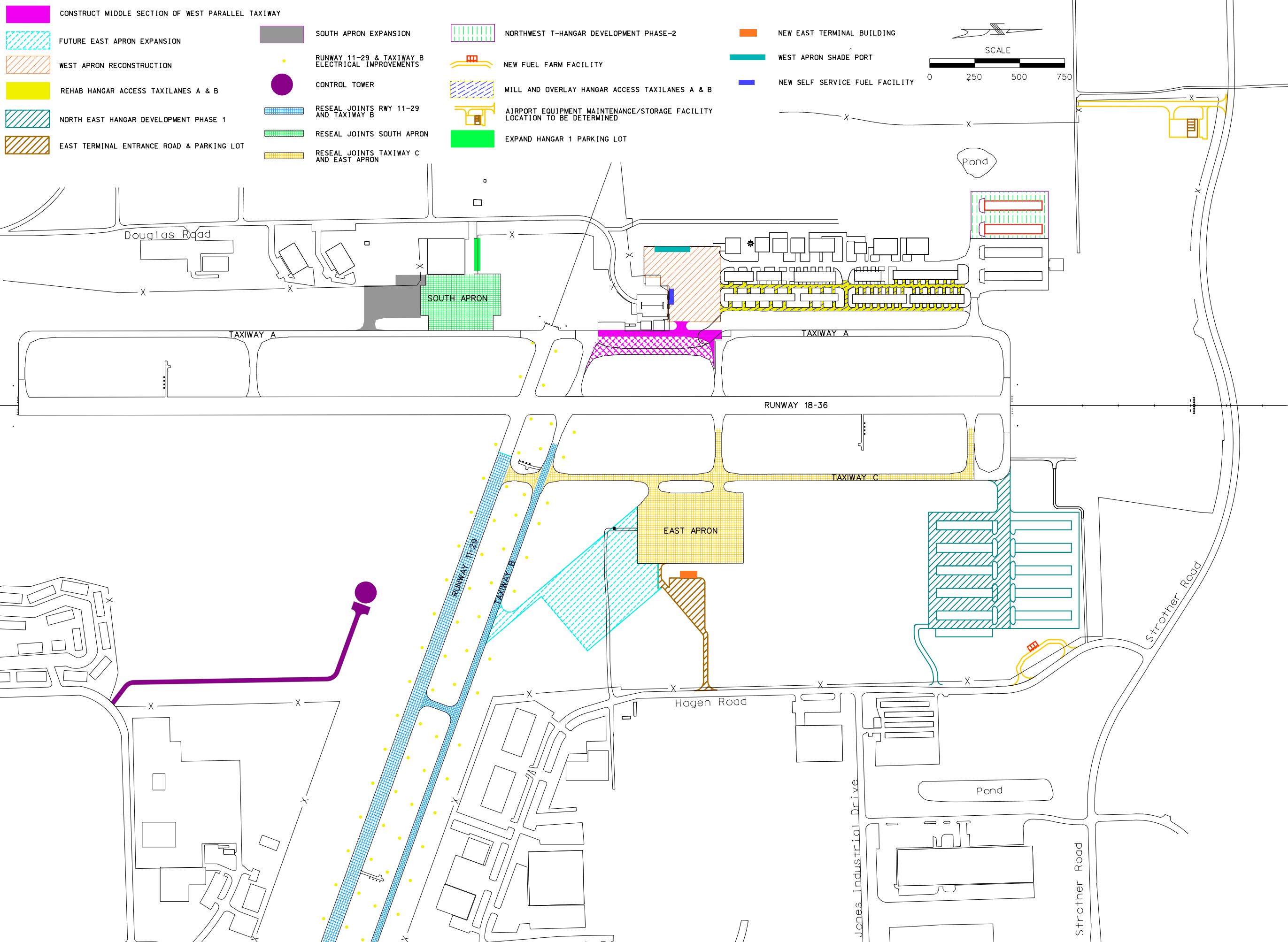
Capital Improvement Project	No Construction/No Livable Street Impact	Pedestrian Capacity Impact	Pedestrian Safety Impact	Bicycle Capacity Impact	Bicycle Safety Impact	Vehicular Capacity Impact	Vehicular Safety Impact	Transit Impact	Pedestrian Furniture	Sidewalk	ADA Compliance	Shared-Use Path	Paved Shoulder	Share-The-Road /Signed Bike Route	Wide Curb Lane (14-16 ft)	Paved Shoulder Adjacent to Curb	Official Bicycle Lane	Street Gap Connectivity	Access Management (e.g. Raised Median)	Transit Facility/Transit Stop	Transit Operation	Bicycle Parking	Residential Traffic Calming	Continuous Street Lighting	Intersection Street Lighting	Landscaping	Roundabout(s) Intersection Control	Pedestrian Signal Improvements	Traffic Signal Improvements	Signal Improvements w/Pedestrian Detection	Signal Improvements w/Bike Friendly Detection		
	Pryor Road & Hook Road Traffic Signal			+	+	+	+	+																		●					★	★	
Pryor Road, M150 to Longview Road		+	+	+	+	+	+	+		●	●	●							●					★						★	★		
Streetlighting – Lakewood Boulevard			+		+		+																	★									
Streetlighting – Shenandoah Drive			+		+		+																	★									
Third Street Improvements, Jefferson Street to Blue Pkwy		+	+			+	+	+	★	●	●								●					★		★							
Third Street Improvements, Murray Road to Pryor Road		+	+			+	+	+		●	●								●					★					★	★			
Traffic Signal Communication Master Plan																																	
Ward Road, M150 to Raintree Parkway	■	+	+	+	+	+	+	+		●	●	●		★										★									
Ward Road, O'Brien Road to Blue Parkway		+	+	+	+	+	+			●	●			★	★																		
Facilities																																	
Downtown Cultural Arts Facilities																																	
Parks																																	
Miscellaneous Projects		+	+	+	+				●	●	●	●													●								
Water, Sewer, Storm Water, Solid Waste, Airport																																	
Miscellaneous Projects																																	

- +** - *Project may have a positive impact to the Livable Streets transportation mode choice.*
- - *Project may have a negative impact to the Livable Streets transportation mode choice.*
- ★** - *Livable Streets Element is included in project scope although it is not required by Ordinance or Adopted Plan.*
- - *Livable Streets Element is included in project scope in accordance with Ordinance requirement or Adopted Plan.*
- - *Livable Streets Element is omitted from project scope otherwise required by Ordinance or Adopted Plan. See Project Information listed in the Livable Streets Summary for an explanation of the omitted Livable Streets Element.*

CAPITAL IMPROVEMENT PLAN 2020-2024

AIRPORT



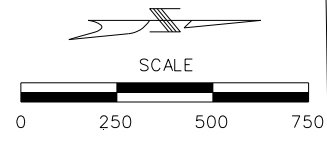


- CONSTRUCT MIDDLE SECTION OF WEST PARALLEL TAXIWAY
- FUTURE EAST APRON EXPANSION
- WEST APRON RECONSTRUCTION
- REHAB HANGAR ACCESS TAXILANES A & B
- NORTH EAST HANGAR DEVELOPMENT PHASE 1
- EAST TERMINAL ENTRANCE ROAD & PARKING LOT

- SOUTH APRON EXPANSION
- RUNWAY 11-29 & TAXIWAY B ELECTRICAL IMPROVEMENTS
- CONTROL TOWER
- RESEAL JOINTS RWY 11-29 AND TAXIWAY B
- RESEAL JOINTS SOUTH APRON
- RESEAL JOINTS TAXIWAY C AND EAST APRON

- NORTHWEST T-HANGAR DEVELOPMENT PHASE-2
- NEW FUEL FARM FACILITY
- MILL AND OVERLAY HANGAR ACCESS TAXILANES A & B
- AIRPORT EQUIPMENT MAINTENANCE/STORAGE FACILITY LOCATION TO BE DETERMINED
- EXPAND HANGAR 1 PARKING LOT

- NEW EAST TERMINAL BUILDING
- WEST APRON SHADE PORT
- NEW SELF SERVICE FUEL FACILITY



REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).
PLOT 1

LEE'S SUMMIT MUNICIPAL AIRPORT
LEE'S SUMMIT, MISSOURI

PRELIMINARY

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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PROFESSIONAL ENGINEERING - 000631

FILE: Prop_FY2020CIP_Combined.dgn
DESIGN BY:
DRAWN BY:
CHECKED BY: TCS
APPROVED BY: TCS
DATE: APRIL 24, 2017
JOB No: 16443-01
PROPOSED FY 2020 CIP
SHEET OF SHEETS

4/23/2019 Prop_FY2020CIP_Combined.dgn

AIRPORT
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Construct Middle Section of West Parallel Taxiway	155	-	-	1,190	-	-	1,345
Expand Hangar 1 Parking Lot	100	-	-	-	-	-	100
Land Acquisition of ALP Properties Phase 2	6,350	-	-	-	-	-	6,350
Land Acquisition of ALP Properties Phase 3	320	1,725	-	-	-	-	2,045
Mill and Overlay Hangar Taxilanes Alpha and Bravo	288	-	-	-	-	-	288
New Airport Equipment Maintenance/Storage Facility	150	-	-	544	-	-	694
New Fuel Farm Facility	325	-	1,555	-	-	-	1,880
New Fuel Self Serve Facility	-	450	-	-	-	-	450
New Terminal Building	-	283	817	-	-	-	1,100
Rehabilitate Airfield Lighting Runway 11/29 and Taxiway Bravo*	-	-	-	-	50	-	503
Rehabilitate Hangar Access Taxiways Alpha and Bravo	-	150	1,182	-	-	-	1,332
Reseal Joint and Marking Runway 11-29 and Taxiway Bravo	-	-	30	563	-	-	593
Reseal Joint and Marking South Apron	-	-	-	15	157	-	172
Reseal Joint and Marking Taxiway Charlie and East Apron	-	-	-	-	30	366	396
Site Development - East Side Terminal Area	510	2,143	-	-	-	-	2,653
Site Development - Northeast Side	3,476	-	-	-	-	-	3,476
South Apron Expansion	-	-	-	240	400	869	1,509
Tree Removal in South Avigation Easement	-	-	-	-	300	-	300
Update Airport Master and Business Plans	550	150	100	-	-	-	800
West Apron Reconstruction	-	-	-	600	1,093	-	1,693
West Apron Shade Ports	-	-	-	500	-	-	500
Total	\$12,224	\$4,901	\$3,684	\$3,652	\$2,030	\$1,235	\$28,179

* Indicates future funding beyond the current CIP

Project Title: Construct Middle Section of West Parallel Taxiway

Type: Airport	Activity #16832172
---------------	--------------------

Project Description

This project consists of the construction of the middle section of the relocated west parallel Taxiway A, demolition of the existing terminal building, demolition of the existing fuel farm and demolition of two rows of T-Hangars. The north and south ends of the relocated west parallel taxiway have been constructed earlier in the Airport CIP. This section will be constructed later because it requires that the new east side terminal and fuel facility be constructed first. The taxiway is to be relocated 400' from Runway 18-36 as shown on the Airport Layout Plan which is the standard separation distance for a Class C runway.

Project Purpose

This section of the parallel taxiway is located at 225' from Runway 18-36, which is less than the 400' FAA standard separation for a Class C runway.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2022

Funding Sources

Transportation Sales Tax	\$68,000
State/Federal	\$1,277,000
Total Lifetime Budget	\$1,345,000

Estimated Annual Operating and Maintenance

\$1,100

Project Title: Expand Hangar 1 Parking Lot

Type: Airport

Activity #56432185

Project Description

This project consist of the expansion of the existing automotive parking to include an additional parking spaces to meet the daily parking demand for employees, customers and businesses located at Hangar 1.

Project Purpose

The existing automotive parking area is inadequate to meet the daily demand for customers and businesses that use this facility. Currently daily overflow is being provided by parking automobiles on the aircraft ramp areas. This is only a short term solution until this space is needed to park aircraft on a regular basis.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2019

Funding Sources

Transportation Sales Tax	\$100,000
Total Lifetime Budget	\$100,000

Estimated Annual Operating and Maintenance

\$1,500

Project Title: Land Acquisition ALP Properties Phase 2

Type: Airport

Activity #293211

Project Description

This project involves the purchase of approximately 40 acres of land and 100 acres of aviation easement for future airport development, runway safety areas, and runway protection zones. Over \$13 million of the funding comes from federal grants, with local funds coming from the Brisben property reimbursement. Two aviation easements remain to be acquired.

Project Purpose

This land is required to provide for future airport development, runway safety areas, and runway protection zones. The land is necessary to preserve the ability of the airport to develop in the future as the surrounding areas are developing. The properties to be acquired are shown on the Airport Layout Plan approved in March 2000.

Estimated Schedule

Design and Right of Way Acquisition	2015
Construction	N/A

Funding Sources

Airport Construction	\$275,000
Transportation Sales Tax	\$43,000
State/Federal	\$6,032,000
Total Lifetime Budget	\$6,350,000

Estimated Annual Operating and Maintenance

\$3,000

Project Title: Land Acquisition ALP Properties Phase 3

Type: Airport

Activity #56532185

Project Description

This project involves the purchase of approximately 10 acres of land and 5 acres of avigation easement for future airport development, runway safety areas, and runway protection zones. Over \$1.6 million of the funding comes from federal grants, with local funds coming from the Airport Construction Fund. Two avigation easements remain to be acquired.

Project Purpose

This land is required to provide for future airport development, runway safety areas, and runway protection zones. The land is necessary to preserve the ability of the airport to develop in the future as the surrounding areas are developing. The properties to be acquired are shown on the Airport Layout Plan approved in March 2000 and the Airport Business Plan approved in 2010.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	N/A

Funding Sources

Transportation Sales Tax	\$102,250
State/Federal	\$1,942,750
Total Lifetime Budget	\$2,045,000

Estimated Annual Operating and Maintenance

\$3,000

Project Title: Mill & Overlay Hangar Taxiways A & B

Type: Airport

Activity #56632185

Project Description

This project consists of temporary rehabilitation of two asphalt hangar access taxiways Alpha and Bravo (1,407 feet by 20 feet), one cross taxiways one 90 feet by 25 feet and a taxi lane 220 feet by 40 feet,

Project Purpose

The existing asphalt taxiways are over 25 years old and are in need of rehabilitation. There are two taxiways are 1,407 feet long and 20 feet wide with one 90 foot by 25-foot cross taxiway and an apron lane that is 220 feet long and 40 feet wide. These taxiways support over 50% of the airport based aircraft. Further deterioration becomes a safety concern of Foreign Object Damage (FOD) to aircraft. These two hangar access taxiways have exceeded their projected 25-year life cycle and are in need of major rehabilitation. Federal and State funds to provide a total rebuild and improve the storm water drainage system aren't expected in immediate near future.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2019

Funding Sources

Transportation Sales Tax	\$288,000
Total Lifetime Budget	\$288,000

Estimated Annual Operating and Maintenance

No additional impact to operating costs

Project Title: New Airport Equipment Maintenance/Storage Facility

Type: Airport

Activity #17732172

Project Description

This project includes a new Airport Equipment Maintenance/Storage facility to be constructed as part of the new. The location of the facility will be determined as part of the Master Plan Update. This project includes the funding for infrastructure development for the Airport Equipment Facility.

Project Purpose

The relocation of the west parallel taxiway resulted in the demolition of two rows of existing hangars, some of which are used for equipment storage and maintenance. This project provides the new facility to replace the existing spaces that were lost.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2022

Funding Sources

Transportation Sales Tax	\$694,000
Total Lifetime Budget	\$694,000

Estimated Annual Operating and Maintenance

\$16,000

Project Title: New Fuel Farm Facility

Type: Airport

Activity #17832172

Project Description

This project includes a new fuel farm facility to be constructed as part of the new development of the terminal area and hangars on the east side of Runway 18-36.

Project Purpose

The relocation of the west parallel taxiway results in the demolition of the existing fuel facility. This project replaces the fuel facility.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2021

Funding Sources

Transportation Sales Tax	\$1,880,000
Total Lifetime Budget	\$1,880,000

Estimated Annual Operating and Maintenance

No change to current maintenance costs.

Project Title: New Fuel Self Serve Facility

Type: Airport

Activity #56732185

Project Description

This project includes the replacement of the two existing underground fuel tanks and dispensing systems that are located North and East of the existing Terminal building. Both tanks would be replaced with above ground self contained automated dispensing fuel systems. The two existing tanks must be removed as part of the middle taxiway project as well as the removal of the existing Terminal building project. One of the existing underground tanks will be over 40-years old and the other 35-years by the time they are replaced. Both existing tanks are of the age that they are subject to denile of their annual operations renewal by the State Agriculuture Department.

Project Purpose

The construction of the middle section of Taxi way Alpha and the relocation of the existing Terminal building to the east side of the Airport results in the requirement of the removal of the two underground fuel systems. This project provides the replacement of two new fuel dispensing systems that will be removed.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources

Transportation Sales Tax	\$450,000
Total Lifetime Budget	\$450,000

Estimated Annual Operating and Maintenance

\$3,500

Project Title: New Terminal Building

Type: Airport

Activity #17932172

Project Description

This project is the construction of a new terminal building to be constructed as part of the new development of the terminal area and hangars on the east side of Runway 18-36. This project may be eligible for some types of federal funding but the maximum permitted is \$600,000 for the eligible portion of the terminal. The remainder of the funding will be local.

Project Purpose

The relocation of the west parallel taxiway results in the demolition of the existing terminal. This project replaces the terminal.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources

Transportation Sales Tax	\$1,100,000
Total Lifetime Budget	\$1,100,000

Estimated Annual Operating and Maintenance

\$12,500

Project Title: Rehabilitate Airfield Lighting for Runway 11/29 and Supporting Taxiway Bravo

Type: Airport	Activity #44032172
---------------	--------------------

Project Description

This project consist of replacing the airfield lighting on Runway 11/29 and supporting Taxiway Bravo. The regulators and wiring for the airfield lighting will be over 30-years old by 2020.

Project Purpose

The existing airfield lighting for Runway 11/29 and supporting taxiway will be reaching the end of its useful life by 2020. Planned replacement will provide a system that is modern, energy efficient and less cost to maintain.

Estimated Schedule

Design and Right of Way Acquisition	2023
Construction	2025

Funding Sources

Transportation Sales Tax	\$50,000
State/Federal	\$453,000
Total Lifetime Budget	\$503,000

Estimated Annual Operating and Maintenance

\$1,500

Project Title: Rehabilitate Hangar Access Taxiways Alpha and Bravo

Type: Airport	Activity #44132172
---------------	--------------------

Project Description

This project consists of the rehabilitation of two asphalt hangar access taxiways Alpha and Bravo, 74 hangar access drives and 90 foot by 25 foot cross taxiway and improve storm drainage. These two hangar access taxiways have exceeded their projected 25-year life cycle and are in need of major rehabilitation. In addition to the pavement rehabilitation, improvements to the storm drainage is needed to control and direct proper drainage of water away from the pavement to prolong the life of the pavement.

Project Purpose

The existing asphalt taxiways are over 35 years old and are in need of rehabilitation and improvements to the storm water drainage system. These taxiways are 1,407 feet long and 25 feet wide with one 90 foot by 25-foot cross taxiway. These taxiways support over 50% of the airport based aircraft. Further deterioration becomes a safety concern of Foreign Object Damage (FOD) to aircraft. Rehabilitation of Hangar Access Taxiway Charlie will correct design flaws from an experimental FAA design that proved to be flawed.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources

Transportation Sales Tax	\$133,000
State/Federal	\$1,199,000
Total Lifetime Budget	\$1,332,000

Estimated Annual Operating and Maintenance

\$1,100

Project Title: Reseal Joint and Marking of Runway 11-29 and Taxiway Bravo

Type: Airport	Activity #70932172
---------------	--------------------

Project Description

This project consists of the removal and replacement of joint material, spalling repairs and remarking for Runway 11-29 and Taxiway Bravo.

Project Purpose

The existing concrete for both of these pavements are over twenty-eight years old and as part of the airport's pavement maintenance program the joint seal material requires replacement periodically throughout the life of the pavement. Daily pavement inspections provide feedback on the condition of pavement conditions. Based on observations of both of these pavements they are nearing that period which will require the replacement of the joint seal material, spall repair of any concrete areas that are breaking up and remarking of the pavement. Similar work was performed on both of these pavements over the last 10 years.

Estimated Schedule

Design and Right of Way Acquisition	2021
Construction	2022

Funding Sources

Transportation Sales Tax	\$59,000
State/Federal	\$534,000
Total Lifetime Budget	\$593,000

Estimated Annual Operating and Maintenance

\$1,500

Project Title: Reseal Joint and Marking of South Apron

Type: Airport	Activity #71032172
---------------	--------------------

Project Description

This project consists of the removal and replacement of joint seal material, spall repairs and remarking of South Apron area.

Project Purpose

The existing concrete apron is over nineteen years old and as part of the airport's pavement maintenance program the joint seal material requires replacement periodically throughout the life of the pavement. Daily pavement inspections provide feedback on the condition of pavement conditions. Based on observations this apron area is nearing that period which will require the replacement of the joint seal material, and spall repair of any concrete areas that are breaking up as well as the remarking of the pavement. Activity on this apron was light to moderate until the purchase of Hangar 1 in late 2016. This apron area now handles the majority of all transient traffic including all corporate jet aircraft traffic. This work is necessary to prevent Foreign Object Damage (FOD) from becoming an issue which could result in damage to jet aircraft engines.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources

Transportation Sales Tax	\$ 17,000
State/Federal	\$155,000
Total Lifetime Budget	\$172,000

Estimated Annual Operating and Maintenance

\$1,500

Project Title: Reseal Joint and Marking of Taxiway Charlie and East Apron

Type: Airport	Activity #71132172
---------------	--------------------

Project Description

This project consists of the removal and replacement of joint seal material, spall repair and remarking of Taxiway Charlie and East Apron.

Project Purpose

The existing concrete pavement for taxiway Charlie and East apron are over nine years old and as part of the airport's pavement maintenance program the joint seal material requires replacement periodically throughout the life of the pavement. Daily pavement inspections provide feedback on the condition of pavement conditions. Based on observations this taxiway is nearing that period which will require the replacement of the joint seal material, spall repair of any concrete areas that are breaking up and remarking of the pavement. This work also includes the marking of the pavement. Construction traffic activity over the last two years crossing sections of the pavement to access construction sites has advanced the need for the planned repairs stated.

Estimated Schedule

Design and Right of Way Acquisition	2023
Construction	2024

Funding Sources

Transportation Sales Tax	\$40,000
State/Federal	\$356,000
Total Lifetime Budget	396,000

Estimated Annual Operating and Maintenance

\$800

Project Title: Site Development – East Side Terminal Area

Type: Airport	Activity #47732185
---------------	--------------------

Project Description

This project consists of the construction of infrastructural to support development of the east side Terminal area.

Project Purpose

Provide infrastructural development of the East Terminal area to support development of the new Terminal building and aviation facilities in the south quadrant. Improvements consist of water, sewer, gas, road access and parking area.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources

Transportation Sales Tax	\$265,000
State/Federal	\$2,388,000
Total Lifetime Budget	\$2,653,000

Estimated Annual Operating and Maintenance

\$600

Project Title: Site Development – Northeast Side

Type: Airport

Activity #17232172

Project Description

This project consists of the construction of infrastructure to support development of aviation facilities and hangars on the northeast side of the Airport.

Project Purpose

This project will provide infrastructure for the development of the Airport's northeast side to support the building development of future aviation facilities and hangars. The improvements consist of grading, water, sanitary sewer, gas, access road, and parking area.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2019

Funding Sources

Transportation Sales Tax	\$348,000
State/Federal	\$3,128,000
Total Lifetime Budget	\$3,476,000

Estimated Annual Operating and Maintenance

\$600

Project Title: South Apron Expansion

Type: Airport

Activity #47832185

Project Description

This project consists of the construction of additional aircraft apron parking area on the apron area south of Hangar 1. The relocation of Taxiway Alpha resulted the loss of 40% of the airports aircraft parking area. Increase in airport usage due ot runway improvements requires the need for additional parking area.

Project Purpose

The extension of the south apron to accommodate larger aircraft parking area at Hangar 1. Loss of 40 percent of apron tiedowns related to new taxiway Alpha relocation in 2018 requires need to add additional apron space.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources

Transportation Sales Tax	\$151,000
State/Federal	\$1,358,000
Total Lifetime Budget	\$1,509,000

Estimated Annual Operating and Maintenance

\$300

Project Title: Tree Removal in South Avigation Easement Area

Type: Airport	Activity #71232172
---------------	--------------------

Project Description

This project consists of the removal of trees and any obstructions deemed as hazards to aviation by the Federal Aviation Administration (FAA) from property involved with the of avigation easements on ALP Properties Phase 3 acquisition.

Project Purpose

This project is required to provide for future airport runway safety areas, and runway protection zones. The tree removal is the final phase of the ALP Properties Phase 3 land acquisition to remove obstructions in the avigation easement area. The properties associated with the tree removal are shown on the Airport Layout Plan approved in March 2000

Estimated Schedule

Design and Right of Way Acquisition	2023
Construction	2023

Funding Sources

Transportation Sales Tax	\$30,000
State/Federal	\$270,000
Total Lifetime Budget	\$300,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Update Airport Master & Business Plan

Type: Airport

Activity #44232172

Project Description

This project consist of updating the Airport's Master Plan and Business Plan. Completion of many of the Airport improvement projects by 2020 warrants the need to update the Airport's Master Plan and Business Plans.

Project Purpose

The existing Airport Master Plan and Business Plan are two documents that provide guidance and vision for the Airport, City and supporting agencies. Both documents will need to be reviewed and updated by 2021 to address the many changes that have taken place at the Airport since their inception and provide guidance for the future.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	N/A

Funding Sources

Transportation Sales Tax	\$80,000
State/Federal	\$720,000
Total Lifetime Budget	\$800,000

Estimated Annual Operating and Maintenance

\$0

Project Title: West Apron Reconstruction

Type: Airport

Activity #32832172

Project Description

This project is the reconstruction of the existing apron to the north and east of the airport terminal building. The apron is old and has been rehabilitated

Project Purpose

In 2014, MoDOT funded a Pavement Management Report for the Lee's Summit Municipal Airport . This report indicated that the Pavement Condition Index for the existing terminal apron was 10 out of a possible 100, indicating that it was in need of reconstruction.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources

Transportation Sales Tax	\$169,000
State/Federal	\$1,524,000
Total Lifetime Budget	1,693,000

Estimated Annual Operating and Maintenance

\$1,100

Project Title: West Apron Shade Ports

Type: Airport

Activity #44332172

Project Description

This project consists of the constructing approximately 12 shade port hangar units on the west side of the existing asphalt Airport Terminal Apron area. These units are designated as replacement units for similar hangar units removed for the Taxiway Alpha improvements that requires it to be relocated 400' from Runway 18-36 as shown on the Airport Layout Plan which is the standard separation distance for a Class C runway.

Project Purpose

Provide replacement hangars for based customers previously in Open-T hangars and better utilize apron space that is not producing any revenues for the airport on a regular basis.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2022

Funding Sources

Transportation Sales Tax	\$500,000
Total Lifetime Budget	\$500,000

Estimated Annual Operating and Maintenance

\$1,500

CAPITAL IMPROVEMENT PLAN 2020-2024

BRIDGES, STREETS AND SIGNALS



CONSTRUCTION 2019

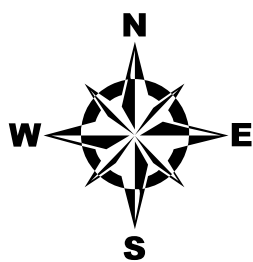
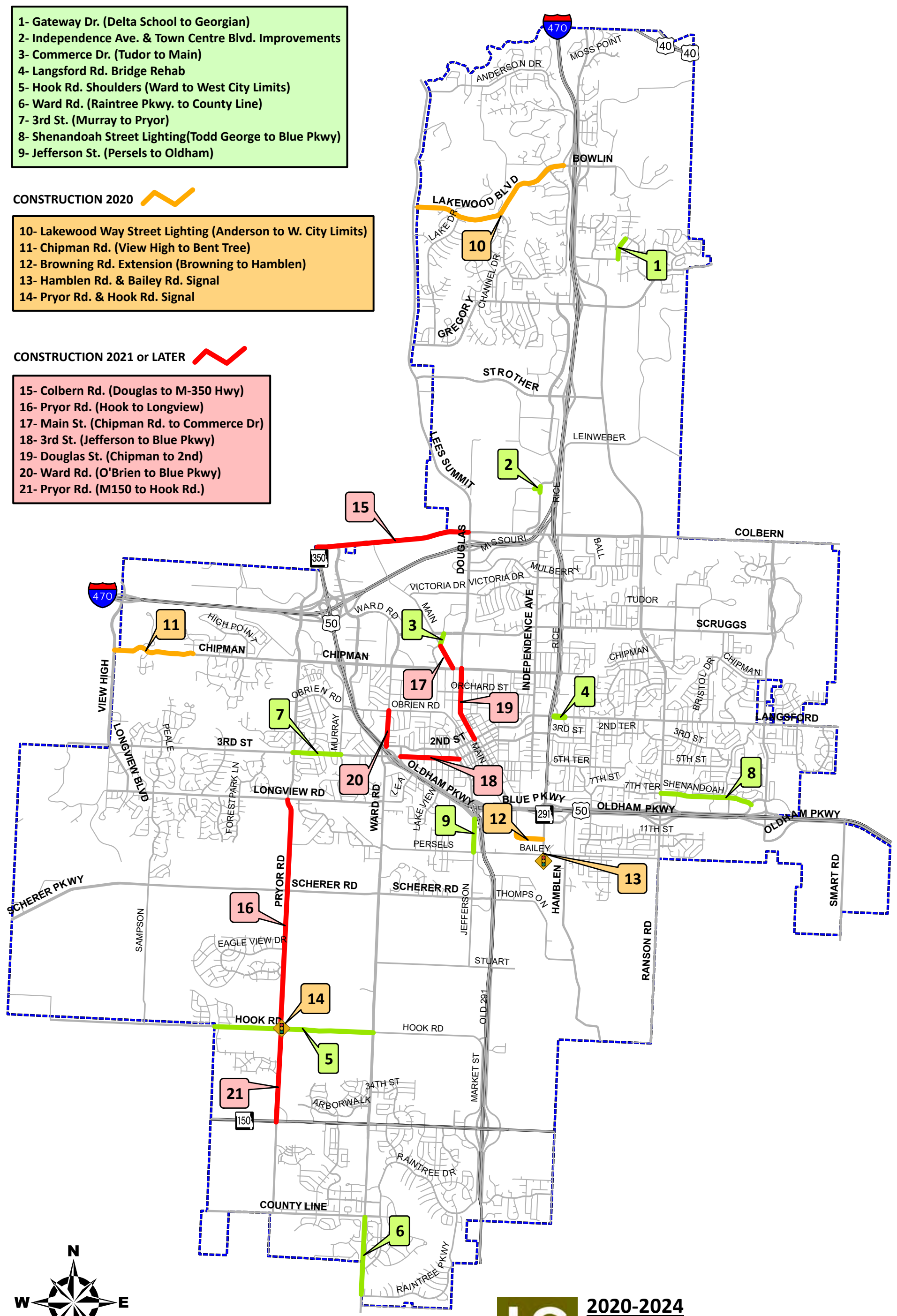
- 1- Gateway Dr. (Delta School to Georgian)
- 2- Independence Ave. & Town Centre Blvd. Improvements
- 3- Commerce Dr. (Tudor to Main)
- 4- Langsford Rd. Bridge Rehab
- 5- Hook Rd. Shoulders (Ward to West City Limits)
- 6- Ward Rd. (Raintree Pkwy. to County Line)
- 7- 3rd St. (Murray to Pryor)
- 8- Shenandoah Street Lighting (Todd George to Blue Pkwy)
- 9- Jefferson St. (Persels to Oldham)

CONSTRUCTION 2020

- 10- Lakewood Way Street Lighting (Anderson to W. City Limits)
- 11- Chipman Rd. (View High to Bent Tree)
- 12- Browning Rd. Extension (Browning to Hamblen)
- 13- Hamblen Rd. & Bailey Rd. Signal
- 14- Pryor Rd. & Hook Rd. Signal

CONSTRUCTION 2021 or LATER

- 15- Colbern Rd. (Douglas to M-350 Hwy)
- 16- Pryor Rd. (Hook to Longview)
- 17- Main St. (Chipman Rd. to Commerce Dr)
- 18- 3rd St. (Jefferson to Blue Pkwy)
- 19- Douglas St. (Chipman to 2nd)
- 20- Ward Rd. (O'Brien to Blue Pkwy)
- 21- Pryor Rd. (M150 to Hook Rd.)



April 2019



2020-2024
BRIDGE, STREET, AND SIGNAL
CAPITAL IMPROVEMENTS

BRIDGES, STREETS & SIGNALS

(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Browning Street Extension - Browning to Hamblen Rd	330	1,393	-	-	-	-	1,723
Chipman Road, Bent Tree Dr. to View High Dr.	10,414	5,359	-	-	-	-	15,773
Colbern Road - M350 to Douglas Street	1,500	1,600	7,900	-	-	-	11,000
Commerce Drive - Tudor Road to Main Street	1,316	-	-	-	-	-	1,316
Douglas Street - Chipman Road to 2nd Street	-	-	-	528	5,480	-	6,008
Downtown Public Parking	1,000	-	-	-	-	-	8,000 *
Gateway Drive - Delta School Road to Georgian Drive	910	-	-	-	-	-	910
Hamblen Road & Bailey Road Signal	-	380	-	-	-	-	380
Hook Road Shoulders - West City Limits to Ward Road	1,350	272	-	-	-	-	1,622
Independence Ave & Town Centre Blvd Intersect Imp	1,760	-	-	-	-	-	1,760
Jefferson Street - Persels Road to Oldham Parkway	3,718	374	-	-	-	-	4,092
Langsford Road Bridge rehabilitation	1,100	-	-	-	-	-	1,100
Main Street - Chipman Road to Commerce Drive	-	1,200	-	-	-	-	1,200
Pryor Road & Hook Road Signal	-	115	-	-	-	-	115
Pryor Road Widening Phase 1 - Hook to Longview	-	2,000	7,000	-	-	-	9,000
Pryor Road Widening Phase 2 - M150 to Hook	-	-	-	-	-	615	6,150 *
Residential Curb Replacements	-	-	-	-	-	1,000	5,000 *
Sidewalk Improvements	-	-	-	-	-	500	2,500 *
Streetlights - Lakewood Boulevard	-	750	-	-	-	-	750
Streetlights - Shenandoah Drive	750	-	-	-	-	-	750
Third Street Improvements - Jefferson St to Blue Parkway/US50	-	-	531	2,987	-	-	3,518
Third Street Improvements - Murray Road to Pryor Road	4,347	1,516	-	-	-	-	5,863
Traffic Signal Communication Master Plan	295	-	-	-	-	-	295
Ward Road - Route 150 to Raintree Parkway	9,020	-	-	-	-	-	9,020
Ward Road Phase 1 - NW O'Brien Road to Blue Parkway	-	-	-	520	1,755	-	2,275
Subtotal	37,810	14,959	15,431	4,035	7,235	2,115	100,120
Less water and sewer funds included in totals	1,649	1,283	931	535	735	15	5,148
Total	36,161	13,676	14,500	3,500	6,500	2,100	94,972

* Indicates future funding beyond the current CIP

Project Title: Browning Street Extension – Browning St to Hamblen Rd

Type: Bridges, Streets & Signals	Activity #56832272
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Project Description

This project will extend an existing commercial/industrial roadway, Browning Street, along a planned alignment to Hamblen Road. The project will include sidewalks, curb and gutter, turn lanes, etc. Total project length is approximately 2,100 feet.

Project Purpose

This project completes a roadway network gap that will improve access to the area between Hamblen Road and the UPRR, south of US 50 Highway and north of Bailey Road area, serving as an alternate route in lieu of Oldham Parkway. The new roadway will not only improve access to existing industrial and commercial development, but promote re-development and facilitate access management along Hamblen Road at Oldham Parkway in support of future improvements at the M-291 North Junction and US 50 Highway interchange. The project was identified in the Thoroughfare Master Plan. Right of Way for the project has been acquired in support of the project by adjacent development that has occurred in the last 5 years, including the Water Utilities Facility. The proposed Browning Street extension was recommended by the License Tax Committee.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources

License (Excise) Tax	\$1,430,000
Sewer Construction	\$67,000
Water Construction	\$226,000
Total Lifetime Budget	\$1,723,000

Estimated Annual Operating and Maintenance

\$15,500

Project Title: Chipman Road – Bent Tree to View High

Type: Multi Funded Project

Activity #733221

Project Description

The project includes reconstruction of the existing roadway as a three-lane facility with curb & gutter, sidewalk, a multi-use trail, and streetlighting, as well as removal of the existing railroad tunnel. This project also involves relocating approximately 4,700 feet of water main and 1,400 feet of sanitary sewer.

Project Purpose

This project was identified in the City's 2006 Thoroughfare Master Plan as a needed improvement. The project was included for funding from the 10-Year Sales Tax Renewal approved by voters in April 2007.

Estimated Schedule

Design and Right of Way Acquisition	Design is 90% complete. Finalizing design and ROW acquisition .
Construction	2020 - 2012

Funding Sources

CIP Sales Tax Renewal (2007)	\$15,000,000
Sewer Construction	\$134,000
Water Construction	\$639,000
Total Lifetime Budget	\$15,773,000

Estimated Annual Operating and Maintenance

\$12,480

Project Title: Colbern Road – M350 Hwy to Douglas St

Type: Bridges, Streets & Signals	Activity #56932272
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Project Description

This project will widen Colbern Road as a four lane facility with turn lanes, sidewalk, shared-use path, curb, and street lighting from M350 Highway to Douglas Street. Project improvements include bridge work for bicycle/pedestrian accommodations over the UPRR. The shared-use path will be extended to the existing path along Colbern Road east and west of the project limits.

Project Purpose

This project supports improved safety, operations, economic investment within the nearby area, and livability. The project is identified in the Thoroughfare Master Plan. The path is also included in the Greenway Master Plan and Bicycle Transportation Plan. Nearby roadways have been improved, including Lee's Summit Road and Blue Parkway, both of which intersect the project. Interchanges on the east and west end of the project have also been improved. Much of Colbern Road and the surrounding property was annexed by the City from Unity Village within the last decade and improvements to Colbern Road are necessary to accommodate existing traffic demand and any future property development.

Estimated Schedule

Design and Right of Way Acquisition	2019-2021
Construction	2021-2023

Funding Sources

CIP Sales Tax Renewal (2017)	\$6,025,000
Water Tap Fee	\$1,000,000
STP Funding	\$3,975,000
Total Lifetime Budget	\$11,000,000

Estimated Annual Operating and Maintenance

\$35,000

Project Title: Commerce Drive – Tudor Road to Main Street

Type: Bridges, Streets & Signals	Activity #41532272
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Project Description

This project will construct a planned commercial/industrial collector roadway, Commerce Drive, between Tudor Road and Main Street. The new roadway will begin at the existing intersection of Commerce Drive and Main Street to the south and end at the existing intersection of Tudor Road and Sloan Street to the north. The project will include sidewalks, curb and gutter, turn lanes, etc. A portion of existing Main Street south of Tudor Road will be removed with the project. Total project length is approximately 800 feet.

Project Purpose

This project completes a roadway network gap that will improve access to the area as an alternate route to Douglas Street between Tudor Road and Chipman Road. This road connection also provides new opportunities for economic activity. Recent projects in support of the proposed Commerce Drive connection include the extension of Sloan Street north of Tudor Road, Tudor Road extension between Ward Road and Douglas Street, and a traffic signal installation at the Commerce Drive and Chipman Road intersection. The new road will also improve access to and from Tudor Road for traffic from the south in place of the existing Main Street intersection that has an undesirable intersection alignment without lane capacity along Tudor Road for separate turning movements.

Estimated Schedule

Design and Right of Way Acquisition	2017
Construction	2018 - 2019

Funding Sources

CIP Sales Tax Renewal	\$1,231,000
Water Tap Fee	\$20,000
Sewer Tap Fee	\$65,000
Total Lifetime Budget	\$1,316,000

Estimated Annual Operating and Maintenance

\$12,500

Project Title: Douglas Street Improvements – Chipman Road to 2nd Street

Type: Bridges, Streets & Signals	Activity #57232272
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Project Description

This project will improve Douglas Street from 2nd Street to Chipman Road. The project includes, but is not limited to, paving, sidewalks, curb, storm drainage work, street lighting.

Project Purpose

This project will re-construct the existing infrastructure that has been deteriorated over the long life of the pavement. Records do not indicate when the street was built, but the recorded plats and home building permits date from 1887 through the 1920's. Over time, filling the underlying curb with asphalt, soil settlement, tree root damage, and age have created failed sidewalks and poor drainage in this area. The street was built long before the City adopted a livable streets policy and the recent downtown revitalization efforts identified gateways to downtown. Douglas Street is one of the downtown gateway projects approved by voters as part of the 2017 CIP Sales Tax renewal. The project supports the City's Livable Streets Policy.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources

CIP Sales Tax Renewal (2017)	\$5,500,000
Water Construction	\$508,000
Total Lifetime Budget	\$6,008,000

Estimated Annual Operating and Maintenance

\$30,000

Project Title: Downtown Public Parking

Type: Bridges, Streets & Signals	Activity #57032272
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Project Description

This project will result in additional public parking in the downtown central business district.

Project Purpose

Provide additional public parking within the downtown area to meet current and future parking demand. More public parking will also better accommodate downtown economic growth and re-development activity. Additional public parking has consistently been recommended in various downtown parking studies and downtown master plans since 2001.

Estimated Schedule

Right of Way Acquisition	2019
Design	2019 & Future Years CIP
Construction	Future Years CIP

Funding Sources

CIP Sales Tax Renewal (2017)	\$8,000,000
Total Lifetime Budget	\$8,000,000

Estimated Annual Operating and Maintenance

\$3,850

Project Title: Gateway Drive – Delta School Road to Georgian Drive

Type: Bridges, Streets & Signals	Activity #41732272
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Project Description

This project will construct a portion of Gateway Drive, a residential collector, between Delta School Road and Georgian Drive. The project will include approximately 800 feet of roadway with sidewalk on each side.

Project Purpose

This project will significantly improve access throughout the area as an alternate route to and from Woods Chapel Road and Lakewood Way to the south and east, respectively, for many residents. Currently, limited options are available for the residents of several subdivisions to access nearby major thoroughfares. Furthermore, a middle school is located along Delta School Road without convenient access to subdivisions along and east of Gateway Drive. This livability project provides a more complete road network with new opportunities for active living, community, and better access for everyone, emergency services and school transportation included. This roadway gap would not otherwise be constructed as normal through development activity due to the mature surroundings of constructed subdivisions. This road connection has been planned in the Thoroughfare Master Plan as well as throughout the development of surrounding subdivisions.

Estimated Schedule

Design and Right of Way Acquisition	2017
Construction	2018 -2019

Funding Sources

CIP Sales Tax Renewal	\$850,000
Water Tap Fee	\$60,000
Total Lifetime Budget	\$910,000

Estimated Annual Operating and Maintenance

\$6,500

Project Title: Hamblen Road & Bailey Road Signal

Type: Bridges, Streets & Signals

Activity #71332272

Project Description

This project is the installation of a traffic signal at Hamblen Road and Bailey Road.

Project Purpose

The existing all-way stop intersection meets traffic signal warrant criteria. The traffic signal will address safety and operational needs and accommodate increased traffic associated with continued development activity and city growth.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources

CIP Sales Tax Renewal (2017)	\$380,000
Total Lifetime Budget	\$380,000

Estimated Annual Operating and Maintenance

\$3,358

Project Title: Hook Road Shoulders – West City Limits to Ward Road

Type: Bridges, Streets & Signals	Activity #41832272
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Project Description

This project will construct six-foot wide paved shoulders along each side of Hook Road from approximately Arthur Drive (West City Limit) to Ward Road. Total project distance is approximately 9,200 feet.

Project Purpose

This project will provide safer facilities for pedestrian and bicycle traffic using Hook Road. Paved shoulders also provide a paved surface for emergency situations and reduce ongoing maintenance of the turf shoulders that are regularly rutted by traffic.

Estimated Schedule

Design and Right of Way Acquisition	2016 – 2018
Construction	2019

Funding Sources

CIP Sales Tax Renewal (2007)	\$1,350,000
Developer Contribution	\$272,000
Total Lifetime Budget	\$1,622,000

Estimated Annual Operating and Maintenance

\$3,200

Project Title: Independence/Town Centre Intersection Improvements

Type: Bridges, Streets & Signals	Activity #263241
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Project Description

This project involves roundabout construction at Independence Avenue and Town Centre Blvd to better manage intersection operations and route thru-traffic along Town Centre Blvd rather than along Independence Ave, to and from Colbern Road. A traffic signal has been installed at Colbern and Town Centre intersection along with turn lanes and a raised median on Colbern with earlier phases of the project.

Project Purpose

Traffic at the intersection of Independence and Town Centre should be directed to the signalized intersection at Colbern and Town Centre for safer, full access in consideration of limited access along Colbern Road at Independence Ave.

Estimated Schedule

Design and Right of Way Acquisition	Complete
Construction	2019

Funding Sources

CIP Sales Tax Renewal	\$1,535,000
TIF/TDD	\$225,000
Total Lifetime Budget	\$1,760,000

Estimated Annual Operating and Maintenance

\$3,358

Project Title: Jefferson Street – Persels Road to Oldham Parkway

Type: Bridges, Streets & Signals	Activity #41932272
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Project Description

This project will widen and reconstruct Jefferson Street as a two and three lane facility with sidewalk, shared-use path, and street lighting from Persels Road to Oldham Parkway.

Project Purpose

This project supports improved safety, operations, economic reinvestment within the nearby area, and livability. The City is improving Jefferson Street south of Persels, constructed Bailey Road east of M-291 Highway and partnered with MoDOT for the interchange reconstruction at M-291 Highway at US 50 with improvements to Oldham Parkway contiguous to the proposed improvements.

Estimated Schedule

Design and Right of Way Acquisition	2017 - 2018
Construction	2019

Funding Sources

CIP Sales Tax Renewal (2007)	\$1,379,000
2014 Bond Funds	\$2,000,000
Sewer Construction	\$319,000
Water Construction	\$394,000
Total Lifetime Budget	\$4,092,000

Estimated Annual Operating and Maintenance

\$10,000

Project Title: Langsford Road Bridge Rehabilitation

Type: Bridges, Streets & Signals

Activity #42032272

Project Description

This project involves significant repair of the existing culvert bridge under Langsford Road near Ridgeview Drive.

Project Purpose

An evaluation of culvert bridge condition and recommended improvements have been completed with the determination significant repairs are needed. A failure of the culvert bridge across Langsford Road would have major impacts to storm water management, traffic and public safety.

Estimated Schedule

Design and Right of Way Acquisition

2016 - 2017

Construction

2018 - 2019

Funding Sources

CIP Sales Tax Renewal

\$1,100,000

Total Lifetime Budget

\$1,100,000

Estimated Annual Operating and Maintenance

No change to current maintenance costs.

Project Title: Main Street – Chipman Road to Commerce Drive

Type: Bridges, Streets & Signals	Activity #71432372
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Project Description

This project will improve Main Street from Chipman Road to Commerce Drive. The project includes, but is not limited to, widening, paving, sidewalks, curb, and storm drainage work.

Project Purpose

This project will re-construct existing infrastructure that has deteriorated and improve the existing road conditions that are generally rural (or unimproved), narrow lanes, uncurbed with roadside ditches, and no shoulder. This section of unimproved road is located between Chipman Road, an improved major arterial, and Commerce Drive, an improved commercial collector. This unimproved section of Main Street is the only unimproved section of roadway in the immediate area and an impediment to adjacent development. This project will enhance access to several undeveloped or underdeveloped properties (including property owned by the City) and encourage economic activity. Any adjacent property development would otherwise require these improvements to Main Street. The project will also improve roadway safety and capacity. This project was identified in the Thoroughfare Master Plan and has been recommended by the License Tax Committee.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2021

Funding Sources

License (Excise) Tax	\$1,200,000
Total Lifetime Budget	\$1,200,000

Estimated Annual Operating and Maintenance

\$15,500

Project Title: Pryor Road & Hook Road Signal

Type: Bridges, Streets & Signals

Activity #71532272

Project Description

This project is the installation of a span wire traffic signal at Pryor Road and Hook Road.

Project Purpose

The existing intersection meets traffic signal warrant criteria. On-going development in the area will increase the traffic signal need. The existing roads are constructed to an interim road standard and are planned for expansion to full urban standards within 5 to 10 years. The span wire traffic signal will address immediate safety and operational needs for the interim period until a permanent signal is constructed and allow for increased traffic associated with continued development activity. Improvement to a permanent signal will take place when Pryor Road or Hook Road is improved to urban standards.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources

CIP Sales Tax Renewal (2017)	\$115,000
Total Lifetime Budget	\$115,000

Estimated Annual Operating and Maintenance

\$3,358

Project Title: Pryor Road – Hook Rd to Longview Rd

Type: Bridges, Streets & Signals	Activity #57132272
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Project Description

This project is the first of two phases to complete committed improvements to Pryor Road from M-150 Highway to Longview Road. This first phase project will widen Pryor Road as a four lane facility with turn lanes, sidewalk, shared-use path, curb, and street lighting from Hook Road to Longview Road. The project will also include permanent traffic signal installations at the Hook Road and Scherer Road intersections along Pryor Road, with interconnect to the traffic signal at Longview. The permanent traffic signals may be preceded by temporary traffic signals.

Project Purpose

This project supports improved safety, operations, community growth in southwest Lee's Summit, and livability. The project is identified in the Thoroughfare Master Plan. The path is also included in the Greenway Master Plan and Bicycle Transportation Plan. Pryor Road has already been improved from Longview Road to Interstate 470 and provides a major arterial route between I-470 and M-150 Highway. Increased traffic demand and use by cyclists and pedestrians along this corridor is cause for its forthcoming capacity issues and impediment to further adjacent development.

Estimated Schedule

Design and Right of Way Acquisition	2020-2021
Construction	2021-2022

Funding Sources

CIP Sales Tax Renewal (2017)	\$9,000,000
Total Lifetime Budget	\$9,000,000

Estimated Annual Operating and Maintenance

\$65,000

Project Title: Pryor Road – M150 Hwy to Hook Rd

Type: Bridges, Streets & Signals	Activity #71632272
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Project Description

This project is the second of two phases to complete committed improvements to Pryor Road from M-150 Highway to Longview Road. This second phase of the project will widen Pryor Road as a four-lane facility with turn lanes, sidewalk, shared-use path, curb, and street lighting from M-150 Highway to Hook Road.

Project Purpose

This project supports improved safety, operations, community growth in southwest Lee's Summit, and livability. The project is identified in the Thoroughfare Master Plan. The path is also included in the Greenway Master Plan and Bicycle Transportation Plan. Pryor Road has already been improved from Longview Road to Interstate 470 and phase one of the project includes Hook Road to Longview Road. The corridor provides a major arterial route between I-470 and M-150 Highway. Increased land development, traffic demand and use by cyclists and pedestrians along this corridor is cause for its forthcoming capacity issues and impediment to further community growth.

Estimated Schedule

Design and Right of Way Acquisition	2024
Construction	2025

Funding Sources

CIP Sales Tax Renewal (2017)	\$6,000,000
Water Construction	\$150,000
Total Lifetime Budget	\$6,150,000

Estimated Annual Operating and Maintenance

\$45,000

Project Title: Residential Curb Replacements

Type: Bridges, Streets & Signals

Activity #71732272

Project Description

This project includes curb and gutter replacement within residential areas.

Project Purpose

Existing curb and gutter within residential areas have deteriorated beyond repair. Many of these areas are not in need of a mill & overlay and do not currently fall within the normal Pavement Maintenance Program. The condition of curb and gutter along these residential streets sections fails to properly function as intended for storm water management and consequently also contributes to pavement damages. The condition is becoming a public safety hazard if not mitigated. The curb and gutter needs replacement.

Estimated Schedule

Design and Right of Way Acquisition

2023

Construction

2024-2028

Funding Sources

CIP Sales Tax Renewal

\$5,000,000

Total Lifetime Budget

\$5,000,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Sidewalk Improvements

Type: Bridges, Streets & Signals	Activity #71832272
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Project Description

This project to complete sidewalk gaps throughout the City.

Project Purpose

Over the years, as property developed throughout the City, a variety of different policies toward requirements for sidewalk construction resulted in disconnected or gaps in the sidewalk system. The intent of this program is to connect many of these gaps to the existing sidewalk system, resulting in a safer circulation path for those using the sidewalk system. The project supports the City's Livable Streets Policy and the City's Americans with Disabilities (ADA) Transition Plan For Public Rights-of-Way.

Estimated Schedule

Design and Right of Way Acquisition	2023
Construction	2024-2028

Funding Sources

CIP Sales Tax Renewal	\$2,500,000
Total Lifetime Budget	\$2,500,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Street Lighting – Lakewood Boulevard

Type: Bridges, Streets & Signals	Activity #57332272
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Project Description

This project involves the installation of street lighting along Lakewood Boulevard from Anderson Drive to Lee's Summit Road. This project budget may also include improvements and energy efficiency upgrades to the existing street light inventory with remaining funds not used for the installation of corridor lighting identified in the CIP.

Project Purpose

Lakewood Boulevard is a minor arterial. Installation of a continuous street light system along arterials and commercial collectors moves the City towards a long-term street lighting goal described by the City's adopted street lighting policies and standards. Street lighting also supports the City's Livable Streets Policy. Street lights can improve roadway safety and quality of life. Other street light improvements and energy efficiency upgrades lower cost and further improve the quality of lighting.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2020

Funding Sources

CIP Sales Tax Renewal (2017)	\$750,000
Total Lifetime Budget	\$750,000

Estimated Annual Operating and Maintenance

\$18,000

Project Title: Street Lighting – Shenandoah Drive

Type: Bridges, Streets & Signals	Activity #57432272
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Project Description

This project involves the installation of street lighting along Shenandoah Drive from Todd George Parkway to Blue Parkway. This project budget may also include improvements and energy efficiency upgrades to the existing street light inventory with remaining funds not used for the installation of corridor lighting identified in the CIP.

Project Purpose

Shenandoah Drive is a commercial collector. Installation of a continuous street light system along arterials and commercial collectors moves the City towards a long-term street lighting goal described by the City's adopted street lighting policies and standards. Street lighting also supports the City's Livable Streets Policy. Street lights can improve roadway safety and quality of life. Other street light improvements and energy efficiency upgrades lower cost and further improve the quality of lighting.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2019

Funding Sources

CIP Sales Tax Renewal (2017)	\$750,000
Total Lifetime Budget	\$750,000

Estimated Annual Operating and Maintenance

\$6,000

Project Title: 3rd Street Improvements – Jefferson Street to Blue Parkway/US50

Type: Bridges, Streets & Signals	Activity #57532272
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Project Description

This project will improve 3rd Street from Jefferson Street to Blue Parkway. The project includes, but is not limited to, paving, sidewalks, curb and storm sewer work, street lighting and access management. The project may include additional streetscape elements along 3rd Street similar to those within the downtown central business district; and could provide those same elements such as brick pavers, landscape/street trees, etc. along portions of Market Street and West Main Street between 2nd Street and 4th Street with available project funds.

Project Purpose

This project will enhance safety and operations by improving the 3rd Street corridor through access management, sidewalk, lighting, etc. This project will promote economic activity and reinvestment along the arterial corridor. The corridor is also a principal gateway into downtown Lee's Summit. The project supports the City's Livable Streets Policy.

Estimated Schedule

Design and Right of Way Acquisition	2021
Construction	2022

Funding Sources

CIP Sales Tax Renewal (2017)	\$3,000,000
Water Construction	\$518,000
Total Lifetime Budget	\$3,518,000

Estimated Annual Operating and Maintenance

\$20,000

Project Title: 3rd Street Improvements – Murray Road to Pryor Road

Type: Bridges, Streets & Signals	Activity #42232272
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Project Description

This project will construct turn lanes and a traffic signal at the intersection of Murray Road and 3rd Street. The project also includes widening of 3rd Street east of Pryor Road to Murray Road to complete the 4/5 lane section with sidewalk on each side of the road.

Project Purpose

This project will enhance safety and operations by improving the 3rd Street corridor and the intersection of 3rd Street and Murray Road. Traffic signal warrants have been previously met at the intersection of 3rd Street and Murray which currently operates as an all-way stop. Left-turn lanes are necessary at this intersection for improved safety and operation in consideration of anticipated traffic growth within the next 10 years. Left-turn lanes at this intersection are needed for efficient traffic management under signal control. Widening of 3rd Street to a four or five lane section consistent with the design of 3rd Street west of Pryor Road and 3rd Street east of Murray Road is recommended in the Thoroughfare Master Plan to address current and projected traffic demand at an adequate level of service. Sidewalk connections should be provided for pedestrian access along the corridor. 3rd Street is a major arterial road.

Estimated Schedule

Design and Right of Way Acquisition	2017 – 2019
Construction	2019 – 2020

Funding Sources

CIP Sales Tax Renewal (2007)	\$5,100,000
Water Construction Fund	\$713,000
Sewer Construction Fund	\$50,000
Total Lifetime Budget	\$5,863,000

Estimated Annual Operating and Maintenance

\$18,900

Project Title: Traffic Signals Communication Master Plan

Type: Bridges, Streets & Signals	Activity #603241
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Project Description

The first phase of this project developed a traffic signal communication master plan with recommendations for prioritized implementation of signal and signal communication infrastructure improvements. Remaining project funds will be used to implement improvements identified in the plan.

Project Purpose

A communication master plan improves the City's maintenance, response and level of service in regards to traffic signal operations. Remote communications will improve efficiency and customer service. This project benefits multiple stakeholders including public safety agencies, ITS and school districts.

Estimated Schedule

Design and Right of Way Acquisition	Complete
Construction	Ongoing

Funding Sources

Transportation Sales Tax	\$295,000
Total Lifetime Budget	\$295,000

Estimated Annual Operating and Maintenance

N/A

Project Title: Ward Road - M150 to Raintree Pkwy

Type: Bridges, Streets & Signals	Activity #18532272
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Project Description

This project will widen Ward Road from Route 150 to Raintree Parkway, approximately 9,900 feet. The original project in the 2005 Thoroughfare Master Plan called for building a 5-lane road with medians. Recently updated traffic information and planning studies show that only 2 lanes, plus turn lanes, are necessary for Ward Road south of M-150 Highway. The project has been re-scoped appropriately, and subdivided into 2 distinct phases to allow an earlier construction startup. Phase 1 will add sidewalks, curb, and storm drains to the east side of Ward Road between County Line Road and M-150. Phase 2 will reconstruct Ward Road between Raintree Parkway and County Line Road.

Project Purpose

This project was identified in the City's 2006 Thoroughfare Master Plan as a needed improvement. The project was included for funding from the 10-Year Sales Tax Renewal approved by voters in April 2007. City Council prioritized this project to later years of the funding program until traffic demands warrant additional improvements. Existing improvements address current traffic levels and safety.

Estimated Schedule

Design and Right of Way Acquisition	2015-2016
Construction	2016-2018

Funding Sources

CIP Sales Tax Renewal	\$8,875,000
Water Construction	\$145,000
Total Lifetime Budget	\$9,020,000

Estimated Annual Operating and Maintenance

\$30,000

Project Title: Ward Road Improvements – NW O'Brien Road to NW Blue Parkway

Type: Bridges, Streets & Signals	Activity #59932272
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Project Description

This project will improve Ward Road from NW O'Brien to Blue Parkway. The project includes, but is not limited to, paving, sidewalks, curb and enclosed storm drains, street lighting and other livable street components.

Project Purpose

This project will enhance safety and operations by improving the Ward Road corridor to include livable street components that will accommodate vehicles, cyclists and pedestrians. The project supports the City's Livable Streets Policy.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2023

Funding Sources

CIP Sales Tax Renewal (2017)	\$2,000,000
Water Construction	\$275,000
Total Lifetime Budget	\$2,275,000

Estimated Annual Operating and Maintenance

\$10,000

CAPITAL IMPROVEMENT PLAN 2020-2024

FACILITIES



FACILITIES
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Central Fuel Site	500	-	-	-	-	-	500
Downtown Performing Arts Space and Farmers Market Pavilion	600	-	-	-	-	-	600
Fire Station 3 Replacement	5,000	-	-	-	-	-	5,000
Radio System Upgrade	8,000	-	-	-	-	-	8,000
Total	14,100	-	-	-	-	-	14,100

Project Title: Central Fuel Site

Type: infrastructure

Activity # 49561087

Project Description

Relocation of the current central fuel site to a more suitable location. Replacement of aging and failing fuel equipment and tanks.

Project Purpose

To provide a central fuel site for all city owned vehicles that will be up to date and compliant with current environmental regulations. Also due to the current underground tanks not constructed to handle the corrosiveness of the ethonal blend of fuel the state Insurance tank fund will no longer allow these tanks to remain in service. Replacement with above ground steel tanks will eliminate this issue.

Estimated Schedule

Design

2017

Construction

2017

Funding Sources

Fleet Fund Account

\$500,000

Total Lifetime Budget

\$500,000

Estimated Annual Operating and Maintenance

\$3500

Project Title: Downtown Performing Arts Space and Farmers Market Pavilion

Type: Facilities	Activity #25934671
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Project Description

The downtown performing arts space and farmers market pavilion project includes two primary components. First, is the development of a performing arts space to provide for outdoor music and arts productions. Envisioned is development of a performance stage to include audio/visual equipment and both hardscaping and landscaping. Second, is the development of a farmers market pavilion. The pavilion is envisioned to accommodate 40-50 market booths under a covered vertical structure. The scope for this project includes funding for design. A future project will be established once a construction budget and funding plan is finalized.

Project Purpose

The Citizen Cultural Arts Facility Task Force presented its recommendations to the City Council in January, 2013 for projects to be funded through a General Obligation (G.O.) bond issuance with the April, 2013 election. These projects included renovation of the downtown historic post office, which has been completed, and development of a downtown outdoor performance venue. The bond issue was approved by the voters.

Estimated Schedule

Design and Right of Way Acquisition	2014-2018
Construction	

Funding Sources

Cultural Arts Bonds 2013	\$600,000
Total Lifetime Budget	\$600,000

Estimated Annual Operating and Maintenance

50,000

Project Title: Fire Station 3 Replacement

Type: Facilities

Activity #46335274

Project Description

In November of 2016, the citizens voted on and approved a \$14.5million dollar bond initiative. Out of that \$14.5 million approximately \$5 million was appropriated to replace the existing fire station #3 at 3rd and Pryor. An MOU has been reached with JKV that lists out terms for the City do certain infrastructure improvements to a parcel of land west of Pryor around the area of Shamrock and in return JKV will convey a parcel of land for the construction of the new fire station. These improvements include improvements to Pryor Rd, Extension of Shamrock Dr to the west of Pryor, and utility extensions that would support the fire station and other future development in that immediate area.

Project Purpose

Station 3 has been in need of replacement for many years and was approved in the 2016 November "No Tax Increase" bond election. The purpose of this is to replace station 3 with a modern facility in a new location to better serve the citizens and to be better able to handle future growth of the City and resultant demands placed on the fire department.

Estimated Schedule

Design and Right of Way Acquisition	2017
Construction	2017-2018

Funding Sources

2016 Public Safety Bond	\$5,000,000
Total Lifetime Budget	\$5,000,000

Estimated Annual Operating and Maintenance

\$10,000

Project Title: Radio System Upgrade (MARRS)

Type: Facilities	Activity #46235273
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Project Description

The project will provide the City of Lee's Summit with the design, procurement and implementation of equipment necessary to join the MARRS radio network.

Project Purpose

By joining the MARRS radio system, our first responders will be joining a robust, reliable public safety grade system. Joining this radio system will solve interoperable communications concerns between jurisdictions and improves communication during significant emergencies. The system upgrade will also assist our City with future Federal compliance of operating on a fully digital system. Planning and completing this project will ensure sustainability of our community.

Estimated Schedule

Design and Right of Way Acquisition	2017-2018
Construction	2018

Funding Sources

2016 Public Safety Bond	\$ 8,000,000
Total Lifetime Budget	\$ 8,000,000

Estimated Annual Operating and Maintenance

\$104,000

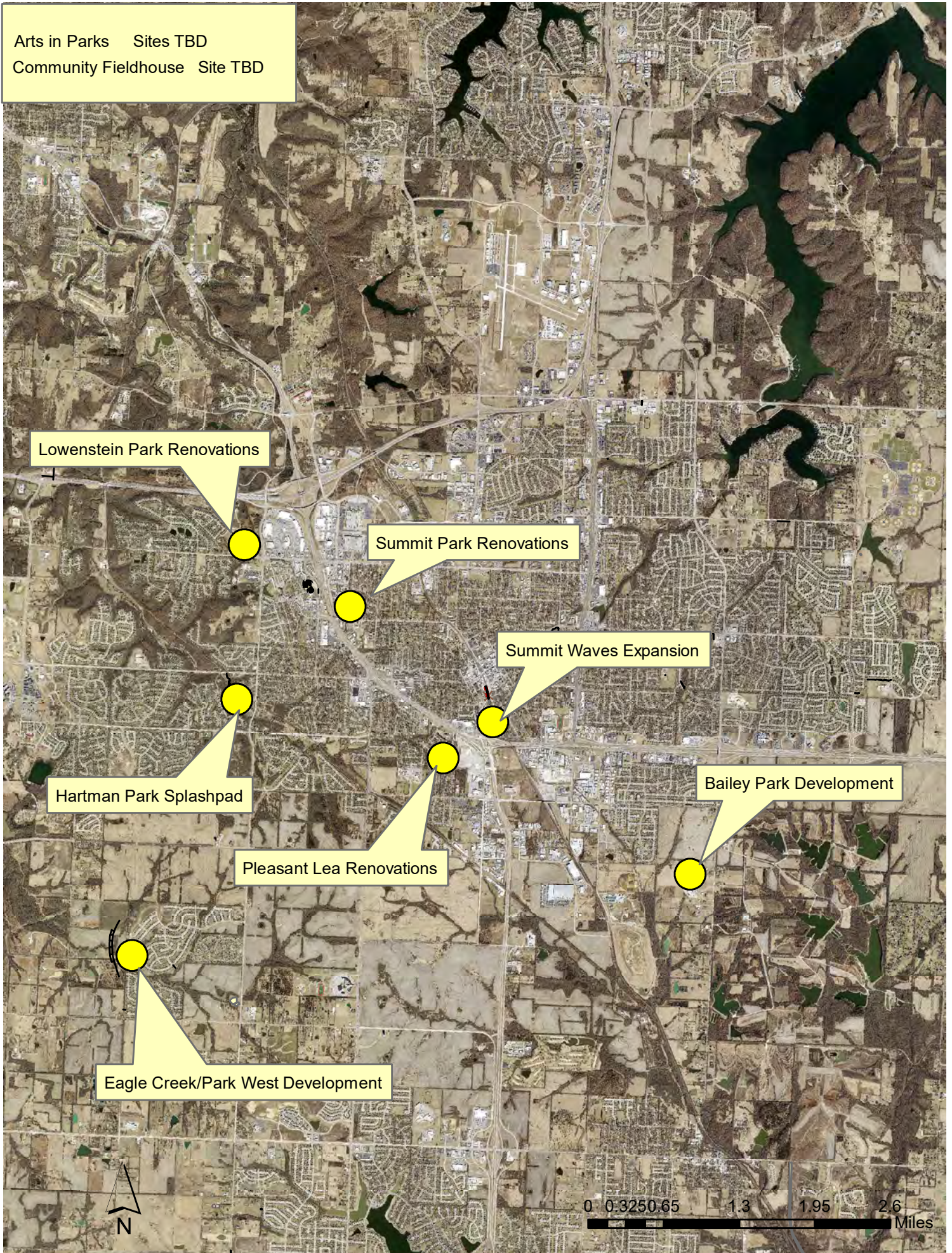
CAPITAL IMPROVEMENT PLAN 2020-2024

PARKS AND RECREATION



FY 2020 Parks and Recreation Capital Improvement Plan

Arts in Parks Sites TBD
Community Fieldhouse Site TBD



PARKS
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Arts in Parks	10	10	10	10	10	10	60
Bailey Park Development	-	-	-	400	5,100	-	5,500
Eagle Creek/Park West Development	-	-	175	2,325	-	-	2,500
Field House	-	-	-	200	3,400	8,400	12,000
Hartman Park Splashpad	-	-	300	-	-	-	300
Lowenstein Park Improvements	-	515	-	-	-	-	515
LSPR Greenway Master Plan Update	20	-	-	-	-	-	20
Pleasant Lea Park Improvements	-	50	350	-	-	-	400
Summit Park Renovation	1,335	375	-	-	-	-	1,710
Wave Pool at Summit Waves *	530	4,580	-	-	-	-	5,110
Total	1,895	5,530	835	2,935	8,510	8,410	28,115

* Includes 110 prior year funding from Harris Park Restrooms Project

Project Title: Arts in Parks

Type: Parks & Recreation

Activity #47532784

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ¼ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign was Arts in Parks. This project serves as a placeholder for arts in parks as opportunities arise.

Project Purpose

Provide Arts in Parks as opportunities arise and as committed to the voters in August 2016.

Estimated Schedule

Design & Construction

TBD

Funding Sources

Park Sales Tax FY 19 \$ 10,000

Park Sales Tax FY 20 \$ 10,000

Park Sales Tax FY 21 \$ 10,000

Park Sales Tax FY 22 \$ 10,000

Park Sales Tax FY 23 \$ 10,000

Park Sales Tax FY 24 \$ 10,000

Total Lifetime Budget \$ 60,000

Estimated Annual Operating and Maintenance

\$1,000

Project Title: Bailey Park Development

Type: Parks & Recreation

Activity #33032784

Project Description

Development of Park on 50 acre site

Project Purpose

Follow through on commitment to Legacy for Tomorrow and Beyond Park Sales Tax initiative. A master plan of improvements was completed by consulting firm BBN Architects in February of 2017. Construction to begin during FY2022. Project costs for development of the park were estimated at approximately \$5,500,000.

Estimated Schedule

Design

January-June 2022

Phase I Construction

June 2022-July 2023

Funding Sources

Park Sales Tax FY 2022

\$ 400,000

Park Sales Tax FY 2023

\$5,100,000

Total Lifetime Budget \$5,500,000

Estimated Annual Operating and Maintenance

\$100,000

Project Title: Eagle Creek/Park West Development

Type: Parks & Recreation

Activity #33632784

Project Description

Construct approximately 8,000 lf of trail east and west of Eagle Creek greenway. Develop neighborhood park space on east side of Park West property. Prepare preliminary plans and infrastructure improvements for the development of rest of 50 acre parcel

Project Purpose

To provide additional trail and park amenities along Mouse Creek stream corridor for southern portion of Lee's Summit. Trail would connect from Sampson Road through Park West and Eagle Creek Park and east to Pryor Road.

Estimated Schedule

Planning and Design

July 2020-October 2020

Construction

October 2020-January 2022

Funding Sources

Park Sales Tax FY 2021

\$ 175,000

Park Sales Tax FY 2022

\$2,325,000

Total Lifetime Budget \$2,500,000

Estimated Annual Operating and Maintenance

\$10,000

Project Title: Field House

Type: Parks & Recreation

Activity #47232784

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ¼ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign was construction of an indoor field house for competitive and recreational sports and year-round training. Construction of a field house would be approximately 80,000-100,000 square feet. Final location to be determined.

Project Purpose

Project is necessary to serve demands of growing youth sports associations in Lee's Summit and for year round training and practice.

Estimated Schedule

Design	July 2021-January 2022
Construction	March 2022-June 2023

Funding Sources

Park Sales Tax FY 22	\$ 200,000
Park Sales Tax FY 23	\$ 3,400,000
Park Sales Tax FY 24	\$ 8,400,000
Total Lifetime Budget	\$12,000,000

Estimated Annual Operating and Maintenance

\$250,000

Project Title: Hartman Park Splashpad

Type: Parks & Recreation

Activity #55232784

Project Description

Construct splashpad in Hartman Park

Project Purpose

Neighborhood park improvements were a commitment in the Legacy for Tomorrow and Beyond Park Sales Tax program in 2008.

Estimated Schedule

Planning and Design

July-Nov 2020

Construction

January-May 2021

Funding Sources

Park Sales Tax FY 2021

\$ 300,000

Total Lifetime Budget \$ 300,000

Estimated Annual Operating and Maintenance

\$20,000

Project Title: Lowenstein Park Improvements

Type: Parks & Recreation

Activity #33332784

Project Description

Replace existing park shelters, provide shade structures adjacent to playground, and update playground equipment. Project is deferred until a FY2021 awaiting the outcomes of proposed development plans adjacent to the park.

Project Purpose

Existing wood shelters are in disrepair and require routine maintenance. Metal shelters are lower maintenance and durable. New shade structures and playground equipment will modernize the park and complement the trail renovation.

Estimated Schedule

Planning and Design

January-April 2019

Construction

September 2019-March 2020

Funding Sources

Park Sales Tax FY 20

\$ 400,000

Developer Contribution

\$ 115,000

Total Lifetime Budget \$ 515,000

Estimated Annual Operating and Maintenance

\$2,000

Project Title: LSPR Greenway Master Plan Update

Type: Parks & Recreation

Activity #55132784

Project Description

Plan update to greenway and trails master plan. Previous plan was prepared in 2008

Project Purpose

Update current and planned route map for trails and greenways to update citywide comprehensive plan

Estimated Schedule

Planning

October 2018-February 2019

Funding Sources

Park Sales Tax FY 2019

\$ 20,000

Total Lifetime Budget \$ 20,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Pleasant Lea Park Improvements

Type: Parks & Recreation

Activity #47032784

Project Description

Construct new park shelter, provide shade structures adjacent to playground, and update playground equipment. Renovate and upgrade park amenities, tennis courts, site furnishings

Project Purpose

Existing park is aging and requires routine maintenance. Metal shelters are lower maintenance and durable. New shade structures and playground equipment will modernize the park and improve the appearance. Trail renovations may be required.

Estimated Schedule

Planning and Design

July 2019-June 2020

Construction

Sept 2020-May 2021

Funding Sources

Park Sales Tax FY 20

\$ 50,000

Park Sales Tax FY 21

\$ 350,000

Total Lifetime Budget \$ 400,000

Estimated Annual Operating and Maintenance

\$ 10,000

Project Title: Summit Park Renovation

Type: Parks & Recreation

Activity #33832784

Project Description

Replace aging infrastructure in park. Park shelter was demolished in spring 2017 making way for future improvements. Improvements include new park shelter, restrooms, ball field and tennis court fencing, playground equipment and additional parking.

Project Purpose

Reduce on-going maintenance and care for aging park infrastructure.

Estimated Schedule

Design

July 2018-Dec 2018

Construction

January 2019-October 2019

Funding Sources

Park Sales Tax FY 2019

\$1,325,000

Park Sales Tax FY 2020

\$ 375,000

Total Lifetime Budget \$1,700,000

Estimated Annual Operating and Maintenance

\$20,000

Project Title: Wave Pool at Summit Waves

Type: Parks & Recreation

Activity #47132784

Project Description

In August 2016, Lee's Summit voters approved a continuation of the ¼ cent sales tax for parks capital projects through 2033. One of the projects identified in the capital campaign were upgrades and improvements to Summit Waves Aquatics Center. Construction of a wave pool with open water was originally part of the scope of the project but because of budget concerns the project was put on hold. Improvements will be located adjacent to the current facility and will consist of approximately 8,000 SF of open water play with a shallow depth entry, artificially created waves and restroom improvements to Harris Park.

Project Purpose

Project is necessary to make the facility competitive and current with other local and regional facilities.

Estimated Schedule

Design	July 2018-June 2019
Construction	July 2019-May 2020

Funding Sources

Park Sales Tax FY 19	\$ 530,000
Park Sales Tax FY 20/Financing	\$ 4,580,000
Total Lifetime Budget	\$ 5,110,000

Estimated Annual Operating and Maintenance

\$100,000

CAPITAL IMPROVEMENT PLAN 2020-2024

SOLID WASTE



SOLID WASTE
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Landfill Closure	3,418	1,677	-	-	-	-	5,095
Total	3,418	1,677	-	-	-	-	5,095

Project Title: Landfill Closure	
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Type: Solid Waste	Activity #40252086
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Project Description

<p>This project involves the closure of the landfill. Components include leveling settled areas of the landfill, applying final cover according to Missouri Department of Natural Resources specifications, and testing soil densities to make sure specifications are achieved. Other activities include leachate and methane system management.</p>

Project Purpose

<p>The City's landfill operating permit requires proper closure of the landfill after the landfill has reached capacity.</p>
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Estimated Schedule

Landfill Closure	2019-2020

Funding Sources

Landfill Closure Fund	\$5,094,987
Total Lifetime Budget	\$5,094,987

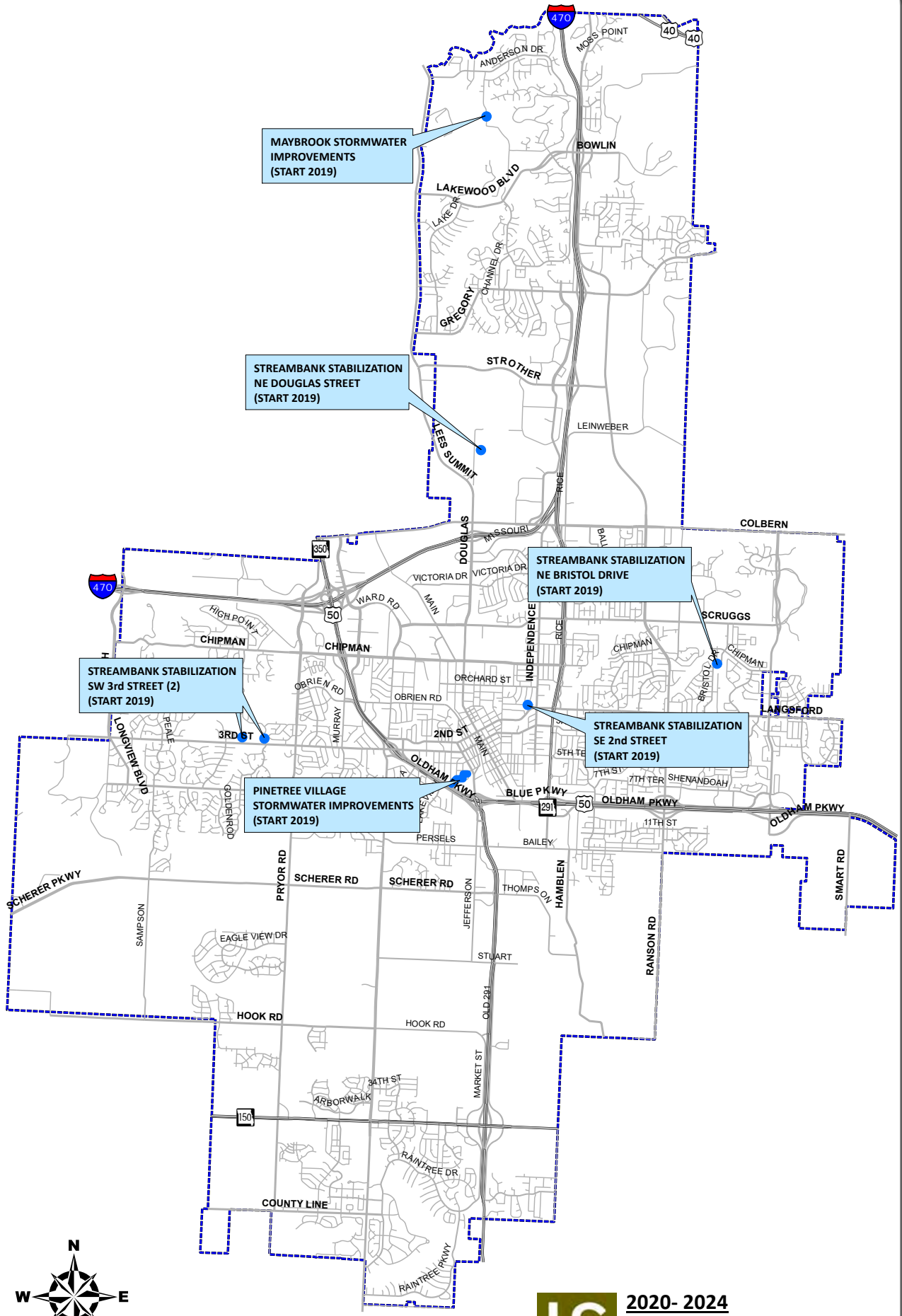
Estimated Annual Operating and Maintenance

\$10,000

CAPITAL IMPROVEMENT PLAN 2020-2024

STORMWATER IMPROVEMENTS





March 2019



2020- 2024
STORMWATER BOND
CAPITAL IMPROVEMENTS

STORM WATER
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
NE Maybrook Rd Drainage Improvements	-	102	-	-	-	-	102
Stormwater Infrastructure Improvements	3,005	-	-	-	-	-	3,005
Stormwater Infrastructure Improvements	1,500	2,000	3,000	3,000	3,000	-	12,500
Streambank Stabilization	1,500	-	-	-	-	-	1,500
Total	6,005	2,102	3,000	3,000	3,000	-	17,107

Project Title: NE Maybrook Road Drainage Improvements

Type: Stormwater

Activity #73232272

Project Description

Install inlets and pipe to collect and convey water to nearby stream.

Project Purpose

A portion of Maybrook Road is regularly inundated, and impassible, during relatively small storm events. Due to the lack of drainage, standing water ponds on the roadway for several days which creates a safety issue for traffic along the road.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2020

Funding Sources

CIP Sales Tax Renewal (2017)	\$102,000
Total Lifetime Budget	\$102,000

Estimated Annual Operating and Maintenance

\$3,500

Project Title: Stormwater Infrastructure Improvements	
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Type: Stormwater, Public Works	Activity #5433813
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Project Description	
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<p>This program will upgrade and/or improve the existing City stormwater system to relieve structural flooding throughout the City of Lee's Summit. Funding for this program was approved by the voters in the November 2007 "No Tax Increase" bond election. The final project currently scheduled in this program will be in the Pine Tree Village area. Additional work may be programmed if there are sufficient funds after completing this project.</p>	
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Project Purpose	
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<p>To reduce or eliminate structural flooding throughout the City. Locations of past flooding are outlined by the City's Stormwater Master Plan and/or provided through citizen and Staff input.</p>	
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Estimated Schedule	
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Design and Right of Way Acquisition	2007-2015
Construction	2014-2018

Funding Sources	
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Remaining Stormwater Bonds 2007	\$3,005,000
Total Lifetime Budget	\$15,800,000

Estimated Annual Operating and Maintenance	
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No impact on maintenance costs.	
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Project Title: Stormwater Infrastructure Improvements	
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Type: Stormwater, Public Works	Activity #57632272
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Project Description	
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This program will upgrade and/or improve the existing City stormwater system to relieve structural flooding throughout the City of Lee's Summit. Funding for this program is through the 2017 CIP Sales Tax Fund.	
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Project Purpose	
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To reduce or eliminate structural flooding throughout the City. Locations of past flooding are outlined by the City's Stormwater Master Plan and/or provided through citizen and Staff input.	
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Estimated Schedule	
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Design and Right of Way Acquisition	2018-2023
Construction	2018-2023

Funding Sources	
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2017 CIP Sales Tax	\$12,500,000
Total Lifetime Budget	\$12,500,000

Estimated Annual Operating and Maintenance	
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No impact on maintenance costs.	
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Project Title: Streambank Stabilization

Type: Stormwater, Public Works	Activity #54832272
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Project Description

This project will stabilize streambanks at five locations, NE Bristol Drive, NE Douglas Street, SE 2nd Street, and two locations on SW 3rd Street. The Bristol Drive stream will be redirected in such a manner to assure the longterm integrity of Bristol Drive. The stormwater flows originating on the Airport will be controlled so as not to threaten Douglas Street and utilities in the vicinity. The meandering of a stream toward 2nd Street and the adjacent sidewalk will be stabilized to protect the public infrastructure. A global slope failure on the south side of SW 3rd Street will to be stabilized over the box culvert underneath. A separate area of scour at a second box culvert will also be addressed on SW 3rd Street.

Project Purpose

To protect the existing roadway infrastructure at four locations throughout the City. Streambank erosion is threatening damage to the roadways and utilities.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018-2019

Funding Sources

2017 CIP Sales Tax	\$1,500,000
Total Lifetime Budget	\$1,500,000

Estimated Annual Operating and Maintenance


No impact on maintenance costs.

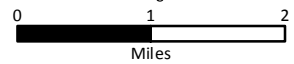
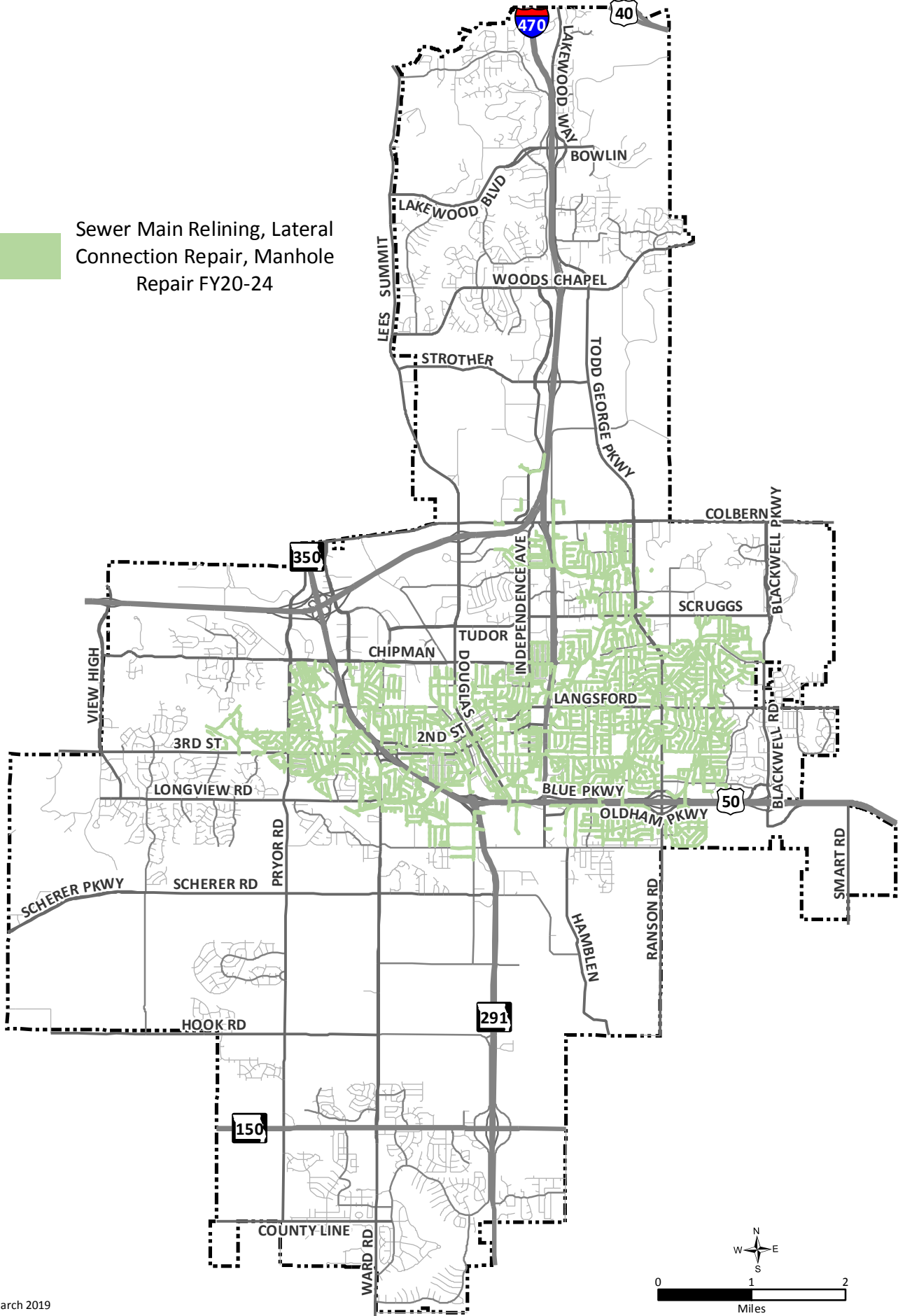
CAPITAL IMPROVEMENT PLAN 2020-2024

WATER UTILITIES
SEWER CONSTRUCTION



Sewer Rehab Projects Capital Improvement Plan FY20-FY24

 Sewer Main Relining, Lateral Connection Repair, Manhole Repair FY20-24



SANITARY SEWER
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Big Creek EFHB (East & West Forks)	50	600	-	-	-	-	650
Bogg's Hollow Meter Structure	300	100	-	-	-	-	400
Cedar Creek Improvements - MH29-220 to MH37-001	850	2,550	-	-	-	-	3,400
Cedar Creek Interceptor - Phase III & IV	1,715	-	-	-	-	-	1,715
Cedar Creek Interceptor - Winterset Woods & Sterling Hills	1,600	-	-	-	-	-	1,600
Large Diameter Sewer and Force Main Condition Assessments	1,060	200	200	200	200	-	1,860
Large Diameter Sewer and Force Main Repair Program	-	-	-	-	-	700	700
Sanitary Sewer Rehab - Relining, Manhole Rehab, Tap Repairs	1,150	900	900	900	750	750	5,350
Sewer Asset Management Plan	100	-	-	-	-	-	100
Sewer Main Cathodic Protection	-	-	-	-	-	300	300
Small Main Replacement Program	1,000	1,000	-	-	-	-	2,000
Tudor Force Main - Odor Control	1,200	-	-	-	-	-	1,200
Tudor Pump Station EFHB Rehabilitation	131	-	-	-	-	-	131
Wastewater Master Plan	-	500	-	-	-	-	500
West Prairie Lee Sewer Capacity Study	-	-	-	-	-	100	100
TOTAL	9,156	5,850	1,100	1,100	950	1,850	20,006

Project Title: Big Creek EFHB (East & West Forks)

Type: Sanitary Sewer

Activity #42431583

Project Description

This project will provide storage for peak wet weather flows in the Big Creek watershed. Phase I of this project will determine the location to meet the storage requirements of the basin. Phase II will be the construction of the basin.

Project Purpose

This basin will serve existing and future customers by reducing peak wet weather flows to downstream sewers and reduce potential overflows.

Estimated Schedule

Land Acquisition

2019

Design & Construction

2020-2022

Funding Sources

Sewer Tap Fund

\$650,000

Total Lifetime Budget \$650,000

Estimated Annual Operating and Maintenance

\$2,000

Project Title: Boggs Hollow Meter Structure	
Type: Sanitary Sewer	Activity #28531583

Project Description	
Secure the property for the construction of the Boggs Hollow Meter Structure, and construct meter structure on Boggs Hollow Interceptor.	

Project Purpose	
This project is in conjunction with KCMO for access to Boggs Hollow Interceptor.	

Estimated Schedule	
Design and Right of Way Acquisition	2017
Construction	2017-2020

Funding Sources	
Sewer Tap Fund	\$400,000
Total Lifetime Budget	\$400,000

Estimated Annual Operating and Maintenance	
\$1,500	

Project Title: Cedar Creek Improvements – MH 29-220 to MH 37-001

Type: Sanitary Sewer	Activity #42531783
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Project Description

This sanitary sewer improvement project consists of upgrades to the Interceptor within the Cedar Creek watershed that serves the internal core of the city. The project will improve approximately 5,000 LF of sewer main and will require a bore of US 50 Highway.

Project Purpose

The improvements will increase the conveyance of sewer to meet current and future needs within the Cedar Creek watershed as redevelopment occurs.

Estimated Schedule

Design and Right of Way Acquisition	2017
Construction	2020-2022

Funding Sources

Sewer Construction Fund	\$2,550,000
Sewer Tap Fund	\$850,000
Total Lifetime Budget	\$3,400,000

Estimated Annual Operating and Maintenance

\$1,000

Project Title: Cedar Creek Interceptor Improvements – Phase III & IV

Type: Sanitary Sewer	Activity #42631783
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Project Description

This sanitary sewer improvement project consists of the construction of approximately 1,500 LF of sanitary sewer lines along the upper segments of the Cedar Creek interceptor.

Project Purpose

The existing sanitary sewer lines do not have capacity to convey the predicted wet-weather flows nor meet the future needs of development in the watershed.

Estimated Schedule

Design and Right of Way Acquisition	2016-2017
Construction	2018-2020

Funding Sources

Sewer Construction Fund	\$1,285,000
Sewer Tap Fund	\$430,000
Total Lifetime Budget	\$1,715,000

Estimated Annual Operating and Maintenance

\$1,000

Project Title: Cedar Creek Interceptor - Winterset Woods & Sterling Hills

Type: Sanitary Sewer	Activity #19631783
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Project Description

This sanitary sewer improvement project consists of the construction of 2,600 LF of sanitary sewer relief lines ranging in pipe size from 12-inches to 15-inches in diameter on the lower segments of the Cedar Creek Interceptor Subbasins CC-03 and CC-04.

Project Purpose

The existing lines do not have capacity to convey the predicted peak wet weather sanitary sewer flows nor meet the future needs of development. The condition of the existing pipe system is also a concern. There has been at least one documented overflow in these subbasins.

Estimated Schedule

Design and Right of Way Acquisition	2017-2018
Construction	2018-2020

Funding Sources

Sewer Tap Fund	\$565,000
Sewer Construction Fund	\$1,035,000
Total Lifetime Budget	\$1,600,000

Estimated Annual Operating and Maintenance

\$2,000

Large Diameter Sewer and Force Main Condition Assessments

Type: Sanitary Sewer	Activity #48331783
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Project Description

Perform Condition assessments on our large diameter interceptor sewer and force mains.

Project Purpose

The sewer system that serves the City of Lee's Summit is made up of a network of small lines which drain to larger interceptors and pumpstations. The City has the equipment to inspect the small diameter mains effectively but does not have the equipment to inspect these larger interceptor mains or force mains as that requires specialized equipment. This program will inspect these mains.

Estimated Schedule

Inspection and assessment	2018-2023
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Funding Sources

Sewer Construction Fund	\$1,860,000
Total Lifetime Budget	\$1,890,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Large Diameter Sewer and Force Main Repair Program

Type: Sanitary Sewer	Activity #71931783
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Project Description

Based on condition assessments findings fund repair projects on our large diameter interceptor sewer and force mains.

Project Purpose

The sewer system that serves the City of Lee's Summit is made up of a network of small lines which drain to larger interceptors and pumpstations. The City has performed a condition assessment on these lines and this project funds the repairs identified in those assessments.

Estimated Schedule

Inspection and assessment	2024-2025

Funding Sources

Sewer Construction Fund	\$700,000
Total Lifetime Budget	\$700,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Sanitary Sewer Rehabilitation - CIPP Lining, Manhole Rehab, Tap Repairs

Type: Sanitary Sewer	Activity #19131783
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Project Description

Project is a multi-year rehabilitation of clay tile pipe, manholes and substandard sewer taps in service throughout the City that allow inflow and infiltration (I&I) to enter into the system.

Project Purpose

Lining of sanitary sewer pipes will reduce the I&I and the potential for blockages.
 Rehabilitation of manholes to reduce I&I and H2S corrosion.
 Repair of substandard sewer taps to reduce I&I and the potential for blockages.

Estimated Schedule

Design and Right of Way Acquisition	N/A
Construction	2019-2024

Funding Sources

Sewer Construction Fund	\$5,350,000
Total Lifetime Budget	\$5,350,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Sewer Asset Management Plan

Type: Sanitary Sewer

Activity #48431783

Project Description

Create a new asset management plan for the sewer lines managed Water Utilities.

Project Purpose

The sewer systems contains a system of pipes on which the Water Utilities Department collects data daily. The Sewer Asset Management plan will review our current practices and standard operating procedures and make recommendations to move us to the best practices in this area.

Estimated Schedule

Inspection and assessment

2018-2020

Funding Sources

Sewer Construction Fund

\$100,000

Total Lifetime Budget

\$100,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Sewer Main Cathodic Protection	
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Type: Water Utilities	Activity #57831683
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Project Description	
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Project Consists of installing cathodic protection in the form of sacrificial anodes on existing metallic pipes in the sewer system.	
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Project Purpose	
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The condition assesment program has identified that the corrosive soils found in and around Lee's Summit is having a detrimental corrosive effect on the sewer systems metallic pipes. These pipes require protection from this corrosion and the simpilest form of this protection on existing facilities is Cathodic Protection.	
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Estimated Schedule	
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Design	2024
Construction	2025-2025

Funding Sources	
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Sewer Construction	\$300,000
Total Lifetime Budget	\$300,000

Estimated Annual Operating and Maintenance	
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\$0	
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Project Title: Small Main Replacement Program	
Type: Sanitary Sewer	Activity #34031783

Project Description	
Replacement of undersized and dilapidated sewer mains around the City.	

Project Purpose	
Segments of line have been identified that are under the current standard for minimum size and in poor condition. These lines will be replaced to bring them up to standard and reduce I&I and potential for blockage.	

Estimated Schedule	
Design and Right of Way Acquisition	2016 – 2021
Construction	2016 - 2021

Funding Sources	
Sewer Construction Fund	\$2,000,000
Total Lifetime Budget	\$2,000,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Tudor Force Main – Odor Control

Type: Sanitary Sewer

Activity #42831583

Project Description

This project involves the design and installation of an Oxygen Injection System for odor control at the pump station.

Project Purpose

This project will reduce maintenance costs and improve odor control effectiveness. Costs associated with chemical delivery, storage and operation will be reduced.

Estimated Schedule

Design and Right of Way Acquisition

2017

Construction

2019-2020

Funding Sources

Sewer Construction Fund

\$1,200,000

Total Lifetime Budget

\$1,200,000

Estimated Annual Operating and Maintenance

\$5,000

Tudor Pump Station EFHB Rehabilitation

Type: Sanitary Sewer

Activity #48631783

Project Description

The floor in the Excess Flow Holding Basin at Tudor Road Pump Station is showing signs of distress and cracking and is in need of repair.

Project Purpose

The EFHB at Tudor Road Pumpstation was constructed in 1991 and is utilized to equalize flows into the pumpstation during rain events. The floor in the EFHB is beginning to deteriorate and show signs of cracking. This project will be to remediate this issue and keep this vital piece of our system in service.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018-2020

Funding Sources

Sewer Construction Fund	\$131,000
Total Lifetime Budget	\$131,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Wastewater Master Plan

Type: Sanitary Sewer

Activity #42931583

Project Description

This project consists of analysis, modeling, and evaluation of the Sanitary Sewer System.

Project Purpose

This project will ensure that the City's wastewater system is adequately prepared to meet future growth needs through an analysis the current infrastructure considering the number of improvements that have been made to the system.

Estimated Schedule

Design and Right of Way Acquisition

2020

Construction

2020-2021

Funding Sources

Sewer Construction Fund

\$500,000

Total Lifetime Budget

\$500,000

Estimated Annual Operating and Maintenance

Project Title: West Prairie Lee Sewer Capacity Study

Type: Sanitary Sewer

Activity #72031783

Project Description

This sanitary sewer project consists of modeling of the upper reaches of areas to the west of Highway 291 to identify capacity issues in the existing system that may affect redevelopment in the downtown core.

Project Purpose

Identify improvements that will increase the conveyance of sewer to meet current and future needs within the West Prairie Lee watershed as redevelopment occurs.

Estimated Schedule

Design and Right of Way Acquisition	2024
Construction	2024-2025

Funding Sources

Sewer Construction Fund	\$100,000
Total Lifetime Budget	\$100,000

Estimated Annual Operating and Maintenance

NA

CAPITAL IMPROVEMENT PLAN 2020-2024

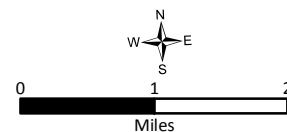
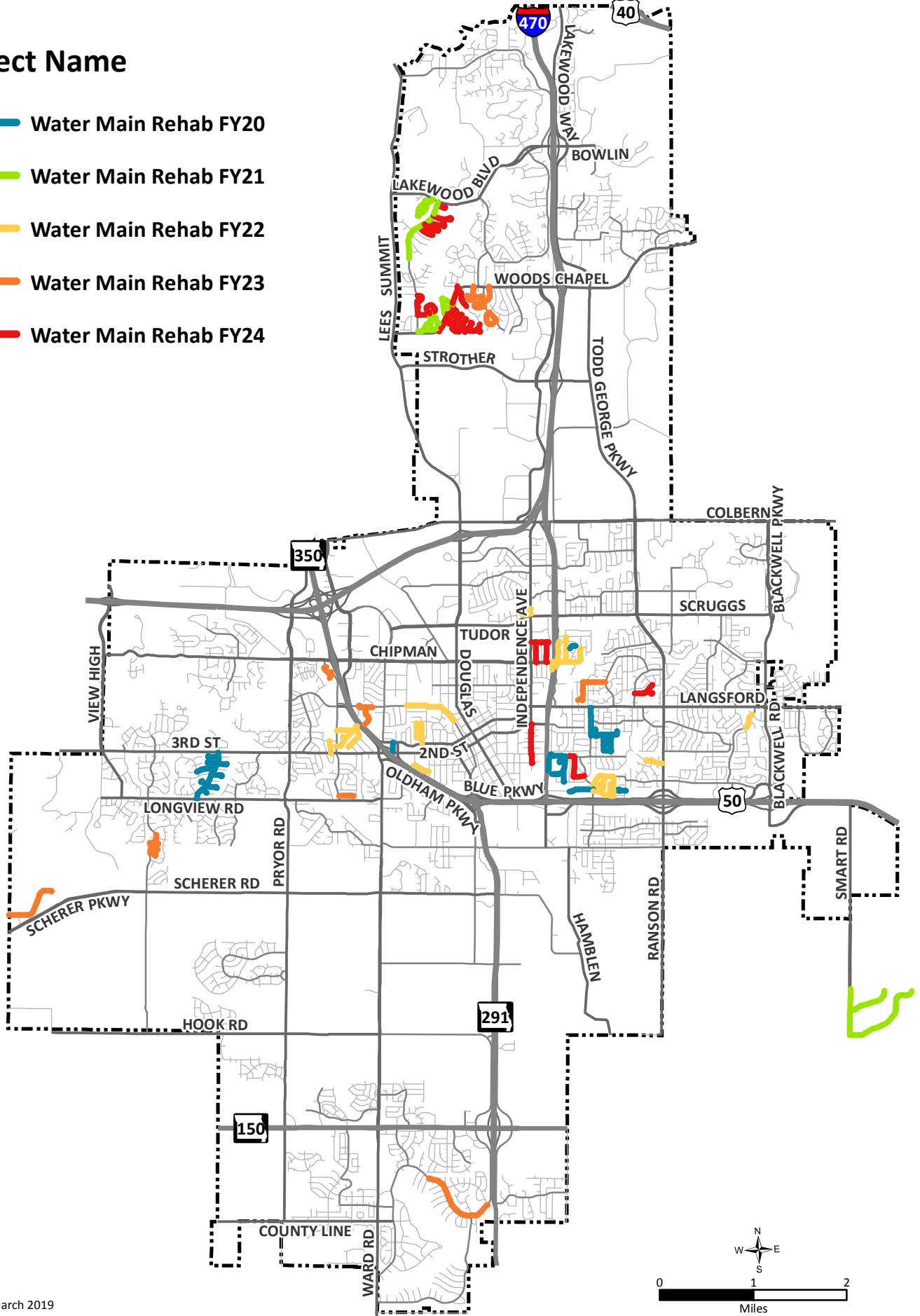
WATER UTILITIES WATER IMPROVEMENTS



Water Main Rehab Projects Capital Improvement Plan FY20-FY24

Project Name

- █ Water Main Rehab FY20
- █ Water Main Rehab FY21
- █ Water Main Rehab FY22
- █ Water Main Rehab FY23
- █ Water Main Rehab FY24



WATER
(Costs in \$1,000s)

Project	Prior Yrs.	2020	2021	2022	2023	2024	Total
Harris Park Standpipe - Recoating	-	287	-	-	-	-	287
Hook Tower - Recoating	409	-	-	-	-	-	409
Interconnection Projects – Tri County Water Authority	-	200	-	-	-	-	200
Ranson Tower - Recoating	841	-	-	-	-	-	841
Scherer Tower - Recoating	417	-	-	-	-	-	417
South Terminal Discharge Main	231	1,581	-	-	-	-	1,812
Transmission Main Condition Assessment	675	-	-	850	2,000	-	3,525
Water Asset Management Plan	-	100	-	-	-	-	100
Water Main - Harris Rd - Herring to Haines	504	50	-	-	-	-	554
Water Main – Lakewood Way – Ridgewood to Bowlin Rd	-	-	-	400	-	-	400
Water Main – Samson Road Existing 12” to Hook	682	-	-	-	-	-	682
Water Main – View High Longview Golf to Chipman Upsize	340	-	-	-	-	-	340
Water Main Rehab FY19	2,500	-	-	-	-	-	2,500
Water Main Rehab FY20	-	3,386	-	-	-	-	3,386
Water Main Rehab FY21	-	50	4,481	-	-	-	4,531
Water Main Rehab FY22	-	-	-	4,952	-	-	4,952
Water Main Rehab FY23	-	-	-	-	4,265	-	4,265
Water Main Rehab FY24	-	-	-	-	-	5,465	5,465
Water Master Plan Update	-	-	250	-	-	-	250
Water Meter Replacement	2,000	-	-	-	-	-	2,000
Water Operations Site Remediation and Genset Reconditioning	400	-	-	-	-	-	400
Woods Chapel Tower - Recoating	333	-	-	-	-	-	333
Level II Water Audit	50	-	-	-	-	-	50
Cathodic Protection Pilot Program	250	500	500	500	500	500	2,750
TOTAL	9,632	6,154	5,231	6,702	6,765	5,965	40,449

*Includes funding from Sewer Construction Fund since system serves both water and sewer facilities.

Project Title: Harris Park Standpipe - Recoating	
Type: Water Utilities	Activity #43031883

Project Description	
Project consists of recoating interior and exterior of standpipe located in Harris Park.	

Project Purpose	
The Harris Park Standpipe provides storage to meet peak demands during the summer.	

Estimated Schedule	
Design	2021
Construction	2021-2022

Funding Sources	
Water ERP	\$287,000
Total Lifetime Budget	\$287,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Hook Tower - Recoating

Type: Water Utilities

Activity #43131883

Project Description

Project consists of recoating interior and exterior of water tower located at Hook Road & Ward Road.

Project Purpose

Recent inspections have indicated that the exterior coating is separating from the undercoat. The tower was put into service in 2004 and is an integral part of the distribution system. The tower provides water storage for peak demands and emergencies.

Estimated Schedule

Design

2017

Construction

2017-2021

Funding Sources

Water ERP

\$409,000

Total Lifetime Budget

\$409,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Interconnection Projects – Tri County Water Authority

Type: Water Utilities	Activity #48731483
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Project Description

Provide Redundancy with interconnection points to Tri County Water Authority
Connect to the transmission main at Ranson and Scherer Road Towers

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2020-2021

Funding Sources

Water Tap	\$200,000
Total Lifetime Budget	\$200,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Ranson Tower - Recoating

Type: Water Utilities

Activity #43231883

Project Description

Project consists of recoating interior and exterior of water tower located on Ranson Road south of US 50 Hwy.

Project Purpose

The tower was recoated in 2004 and had an expected life of 12 years. The Ranson tower is an intergral part of the distribution system and provides water storage for peak summer demands and emergencies.

Estimated Schedule

Design

2017

Construction

2019-2021

Funding Sources

Water ERP

\$841,000

Total Lifetime Budget

\$841,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Scherer Tower - Recoating

Type: Water Utilities

Activity #43331883

Project Description

Project consists of recoating interior and exterior of water tower on Scherer Road, west of Pryor Road.

Project Purpose

Recent inspections have indicated that the exterior coating fading and should be recoated in 2018. The tower was placed into service in 2002 and is an intergral part of the distribution system. The tower provides water storage for peak summer demands and emergencies.

Estimated Schedule

Design

2018

Construction

2019-2021

Funding Sources

Water ERP

\$417,000

Total Lifetime Budget

\$417,000

Estimated Annual Operating and Maintenance

\$0

Project Title: South Terminal Discharge Main	
Type: Water Utilities	Activity #34431483

Project Description	
Create a redundant water discharge connection to the Kansas City transmission main at South Terminal.	

Project Purpose	
Reduce pressure and velocity on the water supply system at South Terminal.	

Estimated Schedule	
Design and Right of Way Acquisition	2019
Construction	2020-2022

Funding Sources	
Water Tap	\$1,812,000
Total Lifetime Budget	\$1,812,000

Estimated Annual Operating and Maintenance	
No additional operating/maintenance costs	

Project Title: Transmission Main Condition Assessment

Type: Water Utilities	Activity #48831683
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Project Description

Condition Assessment of select Large Diameter (greater than 16") transmission mains.

Project Purpose

The water system contains a system of pipes on which the Water Utilities Department collects data daily. The large transmission main system in Lee's Summit is the backbone of our water supply

Estimated Schedule

On Going Condition Assessment	2018-2023

Funding Sources

Water Construction	\$3,525,000
Total Lifetime Budget	\$3,525,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Asset Management Plan	
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Type: Water Utilities	Activity #48931683
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Project Description	
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Create a new asset management plan for the water lines managed Water Utilities.	
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Project Purpose	
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The water system contains a system of pipes on which the Water Utilities Department collects data daily. The Water Asset Management plan will review our current practices and standard operating procedures and make recommendations to move us to the best practices in this area.	
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Estimated Schedule	
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Design and Right of Way Acquisition	2020
Construction	2020-2021

Funding Sources	
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Water Construction	\$100,000
Total Lifetime Budget	\$100,000

Estimated Annual Operating and Maintenance	
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No additional operating/maintenance costs	
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Project Title: Water Main – Harris Road (Herring to Haines)

Type: Water Utilities	Activity #43431683
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Project Description

Rehabilitation and upsizing of water mains at: - - Harris Rd – Herring to Haines

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018-2020

Funding Sources

Water Construction	\$330,000
Water Tap	\$69,000
District 14	\$155,000
Total Lifetime Budget	\$554,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main – Lakewood Way – Ridgewood to Bowlin Rd	
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Type: Water Utilities	Activity #49031483
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Project Description

Connect existing Waterlines and Ridgewood and Bowlin Road to create a looped system.
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Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2022-2023

Funding Sources

Water Tap	\$400,000
Total Lifetime Budget	\$400,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main – Samson Road Existing 12” to Hook

Type: Water Utilities	Activity #49131483
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Project Description

Rehabilitation and upsizing of water mains at:
Along Sampson Road in support of development

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018-2020

Funding Sources

Water Tap	\$613,800
Water Construction	\$68,200
Total Lifetime Budget	\$682,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main – View High Longview Golf to Chipman Upsize

Type: Water Utilities	Activity #49231483
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Project Description

Rehabilitation and upsizing of water mains at:
Along Viewhigh Drive to Chipman in support of development

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018-2020

Funding Sources

Water Tap	\$227,800
Water Construction	\$112,200
Total Lifetime Budget	\$340,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY19

Type: Water Utilities

Activity #28631683

Project Description

Rehabilitation of water mains on:

- Raintree Drive Clubhouse Option
- Woods Chapel West of Lakeview
- Bordner and 11th
- NW Prior Road and Under 470
- Raintree cul-de-sacs – Lido, Pendant, Starboard, Ensign, Breezy Point
- Agate Dr and Circle

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2019
Construction	2019-2020

Funding Sources

Water Construction	\$2,500,000
Total Lifetime Budget	\$2,500,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY20

Type: Water Utilities

Activity #34331683

Project Description

Rehabilitation of water mains on:

- Quik Trip and Squeaky Clean Carwash
- 5th Ter Melody to Bayberry
- 7th Pl
- Brentwood South of Langsford
- 7th Terrace – Vista west to the 8inch line
- Briarcroft
- Bayberry and Woodway Pines

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2020
Construction	2020-2021

Funding Sources

Water Construction	\$3,386,000
Total Lifetime Budget	\$3,386,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY21

Type: Water Utilities

Activity #43831683

Project Description

Rehabilitation of water mains on:

- Lake Lee's Summit lots 293-630 Phase 1
- Basswood
- Bramble Trail
- Timberlake Estates
- Lake Lee's Summit Phase 3

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2021
Construction	2021-2022

Funding Sources

Water Construction	\$4,531,000
Total Lifetime Budget	\$4,531,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY22

Type: Water Utilities

Activity #49631683

Project Description

Rehabilitation of water mains on:

- Highway Ln, Peggy, 1st and McClendon
- SW 1st Noel and Alderson
- Yost
- Obrien Donovan to Monroe and Main Monroe to Maple
- Vista Del Verde – Phase 1
- Banner, Ridgeview, Rice Chipman and M291
- SE 5th Terrace
- Windsboro Dr, Nottingham to Williamsburg
- Pheasant Run Apartments
- Backyards between 4th Ter and Blue Parkway off Walnut

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2022
Construction	2022-2023

Funding Sources

Water Construction	\$4,952,000
Total Lifetime Budget	\$4,952,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Main Rehabilitation FY23	
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Type: Water Utilities	Activity #72131683
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Project Description	
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- Rehabilitation of water mains of various sizes throughout the City.	
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Project Purpose	
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Continued efforts to maintain and strengthen our water distribution system.	
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Estimated Schedule	
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Design and Right of Way Acquisition	2023
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Construction	2023-2024
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Funding Sources	
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Water Construction	\$4,265,000
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Total Lifetime Budget	\$4,265,000
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Estimated Annual Operating and Maintenance	
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No additional operating/maintenance costs	
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Project Title: Water Main Rehabilitation FY24	
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Type: Water Utilities	Activity #72231683
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Project Description	
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- Rehabilitation of water mains of various sizes throughout the City.	
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Project Purpose	
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Continued efforts to maintain and strengthen our water distribution system.	
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Estimated Schedule	
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Design and Right of Way Acquisition	2024
Construction	2024-2025

Funding Sources	
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Water Construction	\$5,465,000
Total Lifetime Budget	\$5,465,000

Estimated Annual Operating and Maintenance	
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No additional operating/maintenance costs	
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Project Title: Water Master Plan Update

Type: Water Utilities

Activity #49331683

Project Description

Our most recent Water Master Plan was completed in 2006 and is becoming out of date with the growth of our City and the changing technologies and water use levels. Water Utilities proposes to update the current plan to reflect the system as it is now and provide direction for the future.

Project Purpose

Provide future planning and direction for the utility.

Estimated Schedule

Design and Right of Way Acquisition	2021
Construction	2021-2022

Funding Sources

Water Tap	\$250,000
Total Lifetime Budget	\$250,000

Estimated Annual Operating and Maintenance

No additional operating/maintenance costs

Project Title: Water Meter Replacement

Type: Water Utilities

Activity #20531683

Project Description

Replacement of water meters throughout the City.

Project Purpose

Water meters degrade over the life of the meter and readings begin to slow. To ensure accurate readings and sustain revenues, water meters need to be replaced.

Estimated Schedule

Design and Right of Way Acquisition

N/A

Construction

Ongoing

Funding Sources

Water Construction

\$2,000,000

Total Lifetime Budget \$2,000,000

Estimated Annual Operating and Maintenance

\$70,000

Project Title: Water Operations Site Remediation and Genset Reconditioning

Type: Water Utilities	Activity #49431883
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Project Description

Demo of some of the existing buildings at the Douglas and Chipman Operations Facility after the new facility is complete.

Project Purpose

Continued efforts to maintain and strengthen our water distribution system.

Estimated Schedule

Design and Right of Way Acquisition	2018
Construction	2018-2020

Funding Sources

Water ERP Fund 318	\$400,000
Total Lifetime Budget	\$400,000

Estimated Annual Operating and Maintenance

N/A

Project Title: Woods Chapel Tower - Recoating	
Type: Water Utilities	Activity #43931883

Project Description	
Project consists of recoating interior and exterior of water tower north of Woods Chapel on Lakewood Way.	

Project Purpose	
Recent inspections have indicated that the exterior coating fading and should be recoated in 2018. The tower was placed into service in 2000 and is an intergral part of the distribution system. The tower provides water storage for peak summer demands and emergencies.	

Estimated Schedule	
Design	2018
Construction	2018-2021

Funding Sources	
Water ERP	\$333,000
Total Lifetime Budget	\$333,000

Estimated Annual Operating and Maintenance	
\$0	

Project Title: Level II Water System Audit

Type: Water Utilities

Activity #57731683

Project Description

Project Consists doing a Level II Water Audit to produce a clearer more reliable review of the systems water, purchases sales, non revenue water and water losses.

Project Purpose

The utility does water balance and audit program internally to measure the integrity of our system and its appurtenances. A Level II Audit will further enhance this tool to ensure the long term integrity of the system.

Estimated Schedule

Design

2019

Construction

2019-2020

Funding Sources

Water Construction

\$50,000

Total Lifetime Budget \$50,000

Estimated Annual Operating and Maintenance

\$0

Project Title: Cathodic Protection Program	
Type: Water Utilities	Activity #57831683

Project Description	
Project Consists of installing cathodic protection in the form of sacrificial anodes on a portion of the system which is showing signs of corrosion to slow the loss of the wall on the metallic water lines.	

Project Purpose	
Watermain break data indicates that we are seeing wall degradation on lines installed as recently as 20 years ago. This is due to the type of materials and construction methods used at that time. This corrosive degradation is creating a potential for an increased main break rate in the near future and the need for a rapid expansion in main replacement. The use of cathodic protection is hoed to slow this corrosion and allow us to replace these mains at a more reasonable rate.	

Estimated Schedule	
Design	2019
Construction	2019-2024

Funding Sources	
Water Construction	\$2,750,000
Total Lifetime Budget	\$2,750,000

Estimated Annual Operating and Maintenance	
\$0	