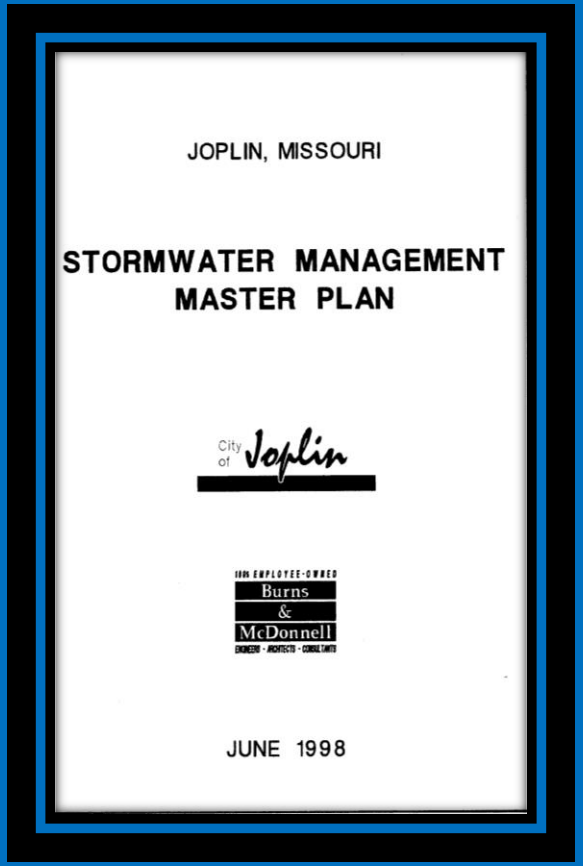


Sunnyvale Improvements

For the City of Joplin

COJ Team | December 18, 2023

History of Sunnyvale Improvements


JOPLIN, MISSOURI

STORMWATER MANAGEMENT MASTER PLAN

City of Joplin

100% EMPLOYEE-OWNED
Burns & McDonnell
ENGINEERS · ARCHITECTS · CONSULTANTS

JUNE 1998

- 1998: Stormwater Masterplan
- 2002-2012: Two Channel improvement Projects complete
- 2012-2022: Regional Detention Basin Project complete
- 2022-2032: Sunnyvale Drainage Improvements & I-44 Phase I Next Steps



RECOMMENDED STORMWATER PROJECTS

Sunnyvale Improvements
$3,003,500
& I-44 Phase I
$175,000

Total $3,178,500

Legend

- Proposed Storm Inlets
- Proposed Storm Sewer
- Floodplain (eff. 11/01/2020)
- 10ft Contours
- Streams
- Parcels
- Existing Storm Structures
- Existing Storm Lines
- Sanitary Sewer Manholes
- Sanitary Sewer



0 100 200 400 Feet

1 inch = 200 feet

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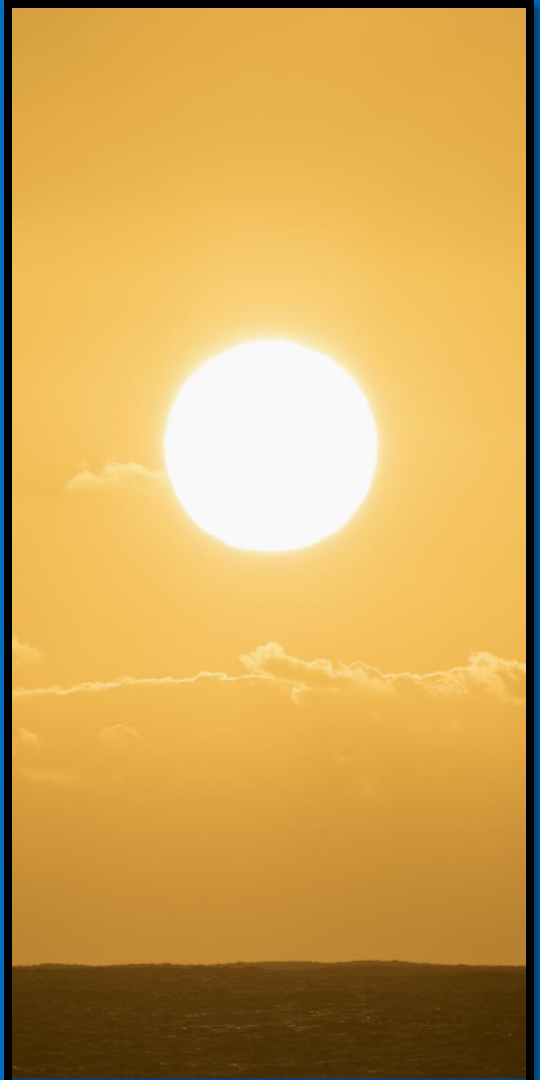
Preliminary Engineering

- Survey
- Hydrology
- Hydraulics for pipe/ inlet sizing
- Preliminary layout

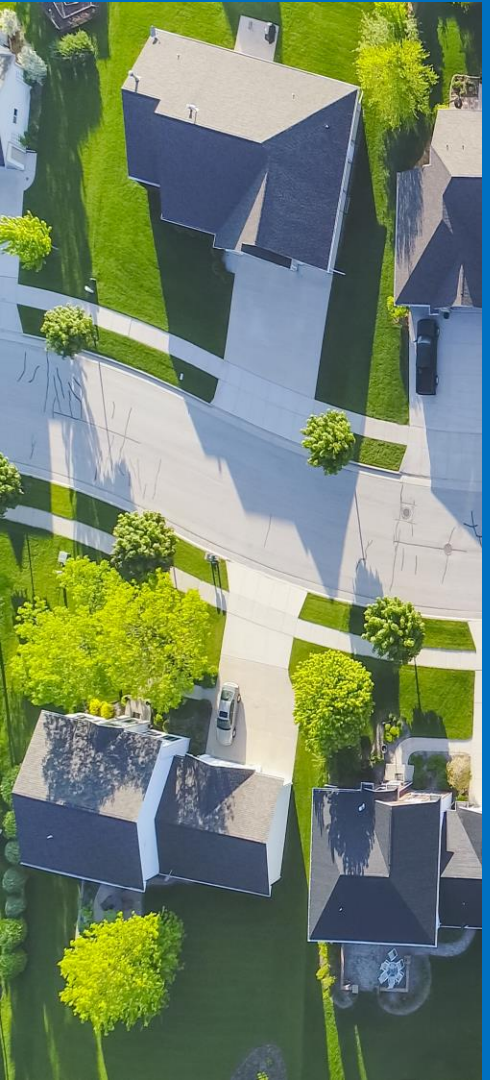


Sunnyvale Improvements



Design

- Final Pipe Sizing
- Inlet Locations
- Storage
- Hydraulic Model
- “NO RISE” Construction Plans



Scope of Improvements

- Capture stormwater runoff from the surface into a pipe system that will release into the stream
- Reduce street surface and nuisance flooding in the neighborhood
- No impact on 100-year flood plain
- This project does not address flooding at 36th & Brownell



Funding and Process

- This project is funded by Phase III Parks Stormwater Sales Tax (Collections for this sales tax started in June of 2022)
- With budget amendment, the Sunnyvale portion of the project can begin

PROJECT PROCESS:

- Request for qualifications and quality-based consultant selection
- Engineering consulting agreement approved by council
- Design will start after public meetings with the neighborhood
- Construction bidding
- Construction


I-44
Culvert
Phase I



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Scope of Project (Included in CIP)

I-44 Phase I

(Preliminary Engineering Only)

Includes:

- Conceptual size of a box culvert needed to pass the 100-year flood to address 36th & Brownell flooding
- Conceptual size of detention that is needed downstream to mitigate the flooding due to the passage of more stormwater under I-44
- Gantt chart showing timeline for the project which includes the required permits, approvals, and processes
- Current CIP Project Budget = $175,000

Future Phases & Grant Opportunities

- BRIC (FEMA) Grant: Project will include all engineering and permitting to ensure the I-44 Culvert project is ready for construction.
- City has already applied to SEMA
- SEMA has advanced the application to the next step in the process indicating the project is eligible as a possible state set-aside project rather than FEMA national competitive process.
- Application is due January 5, 2024; Approval process is approximately one year
- Estimated budget = $3,000,000; Grant is a 75% award

Future Phases & Grant Opportunities

- FMA (FEMA) Grant: Phase II includes construction
- The City plans to apply for this grant as a follow up to the BRIC Grant
- Estimated Budget $16 Million; Grant is a 75% Award

THANK YOU!

