

- L. Sheehan, Chair
- H. LeGris, Vice-Chair
- D. Wu
- T. Fogle
- S. Lynch
- B. Monarrez
- D. Gray
- P. Worley
- F. Brown
- D. Sevigny



AGENDA
Environmental Quality & Public Works Committee
September 12, 2023
1:00 P.M.

- | | | |
|------|--|---------|
| I. | Approval of the July 11, 2023 Committee Summary | (1-2) |
| II. | Annual Stormwater Priority List Update [Sheehan/Sanders] | (3-33) |
| III. | Process for Road Closures [Sevigny/Albright] | (34-49) |
| IV. | Items Referred to Committee | (50) |

"Environmental Quality and Public Works committee to which shall be referred matters relating to the department of Environmental Quality and Public Works and its divisions, including capital improvement projects and any related partner agencies."- Council Rules & Procedures, Section 2.102 (3). Effective January 1, 2023. Adopted by Urban County Council September 22, 2022.

2023 Meeting Schedule

February 7	September 12
April 18	October 24
May 23	December 5
July 11	



Environmental Quality & Public Works Committee

July 11, 2023

Summary and Motions

Chair Sheehan called the meeting to order at 1:01 p.m. Committee Members LeGris, Wu, Fogle, Lynch, Gray, F. Brown, and Sevigny were present. Committee Members Monarrez and Worley were absent.

I. Approval of May 23, 2023 Committee Summary

Motion by Gray to approve the May 23, 2023 Environmental Quality & Public Works Committee Summary. Seconded by Wu. Motion passed without dissent.

II. Annual Energy Improvement Fund Update

James Bush, Energy Initiatives Section Supervisor, provided a status update on energy initiatives. He reviewed FY22 utility expenses for a total of \$20.5M. He spoke about lighting projects with an Energy Improvement Fund (EIF) investment of \$23,216, cost avoidance of \$4,491/year, and estimated energy avoidance of 36,297 kWh/year. He reviewed solar projects which include Fire Station #9, Police West Gym, and Versailles Rd. Building #2 which have an EIF investment of \$124,403, year 1 cost avoidance of \$6,259/year, and estimated energy avoidance of 53,077 kWh/year. He provided a project comparison for lighting and solar PV. He reviewed the EIF balance as of 6/26/23 and he noted that EIF projects compete with normal workload of other divisions who manage the facilities. He closed with an overview of conclusions and comments.

Speaking about payback on solar and life of the equipment and if we have thought about bonding to move along quicker, Bush said they have not considered this and the scale has not been that high - it is smaller than the bonding scale. When asked about the rate increase, Bush confirmed it reflects that increase. Speaking about mitigating costs for FY22 utility expenses and street lights, Bush said they primarily lease street lights and it is not an asset the city owns so those cannot be modified. An exception to this is the Granville street lights which have been converted to LED to save energy. Most lights are owned by Kentucky Utilities or Blue Grass Energy. When asked if we prioritize solar, Bush explained they have found that a bolt-on system after installation is less costly, but it is higher cost if they design up front. No action was taken on this item.

III. Annual Urban Forestry / Street Trees Update

Jennifer Carey, Director of Environmental Services provided the annual update on Urban Forestry / Street Trees. She reviewed the ordinance chart pointing out changes previously made but noted there have been no changes since last update. She provided the definition of a street tree which is the responsibility of property owners. She spoke about Hazardous Street Tree Cost Share Program and provisions in place for that and she displayed a chart to explain hazardous street tree removals/replacements by district. She reviewed charts to explain the expenses incurred for removal of hazardous street trees and the species removed with pear being highest. For replacement trees, the tree used most was black gum. She explained sometimes you remove 4 of same species but replant with 4 different species. She spoke about success stories and opportunities for improvement. She spoke about the street tree pruning clearance program. She mentioned success stories from the street tree pruning and she highlighted opportunities for

improvement for the street tree pruning. She noted the proposed 8 year pruning schedule to work their way around Fayette County. She closed by speaking about the path forward and future initiatives.

Speaking about the Hazardous Street Tree Cost Share program and how to increase the number of participants qualifying for the 100% grant, Carey said those guidelines just changed in February because they were too rigorous. Since then, we have seen more people qualify. They are looking at locations and will see if they can do more outreach. If 25% isn't used, does it rollover? Carey confirmed the guidelines allow for grant funding to be used until February. When asked how many applicants there were versus how many were granted, Carey said it wasn't a large number. Speaking about the FY23 cost per tree appearing higher, Carey explained the cost for everything has increased and the replanted tree cost has increased as well. Addressing the fluctuating numbers and who decides where pruning takes place, Carey said it is the neighborhoods with full service trash collection. It is focused in areas with city services and where it hasn't taken place in a while. Speaking about removing and replanting, Carey said it is the responsibility of the property owner to maintain. When asked if it is solely for vendors to do the work, Carey said the property owner gets 2 quotes and they are reimbursed 50% of the lowest quote. When asked if we have a marketing plan to improve Hazardous Street Tree Cost Share numbers rather than relying on Council Members, Carey spoke about promotions and marketing. Speaking about pruning, Carey said the property owner is obligated but the city provides the service in areas that need it most. When asked about diversity of the team, Carey said the focus of diversity was on the Tree Board but it is based on people who apply and are appointed. She said this is something they are concerned about and they are looking for opportunities to diversify. Speaking about the new application, Carey confirmed the new application was sent to district offices. When asked how someone gets on the vendor list, Carey said it is a 1-page acknowledgment form and the package has been revamped. She added that they would love to add more people to the list. When asked how long applications are kept on file when funding is exhausted, Carey said they have never thought to rescreen applicants when they don't qualify. It is rare that they don't move forward when one qualifies. Addressing street trees that are removed but not replaced and how that is monitored, Carey said to call 311 and ask for Urban Forestry and they can provide this information so DES can look into it. They have 1 year to replace. No action was taken on this item.

IV. Environmental Commission – Ordinance Updates

This item was postponed to the September 12 Environmental Quality & Public Works Committee meeting.

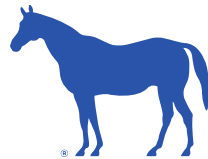
V. Items Referred to Committee

The Capacity Assurance Plan Audit was moved to a periodic item, taking place every 5 years

Motion by Sevigny to adjourn at 2:15 p.m. Seconded by Fogle. Motion passed without dissent.

STORMWATER SECTION DRAINAGE & FLOODING PROGRAM UPDATE

*Mark Sanders, Engineering Section Manager
Environmental Quality & Public Works Committee
September 12, 2023*



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Agenda

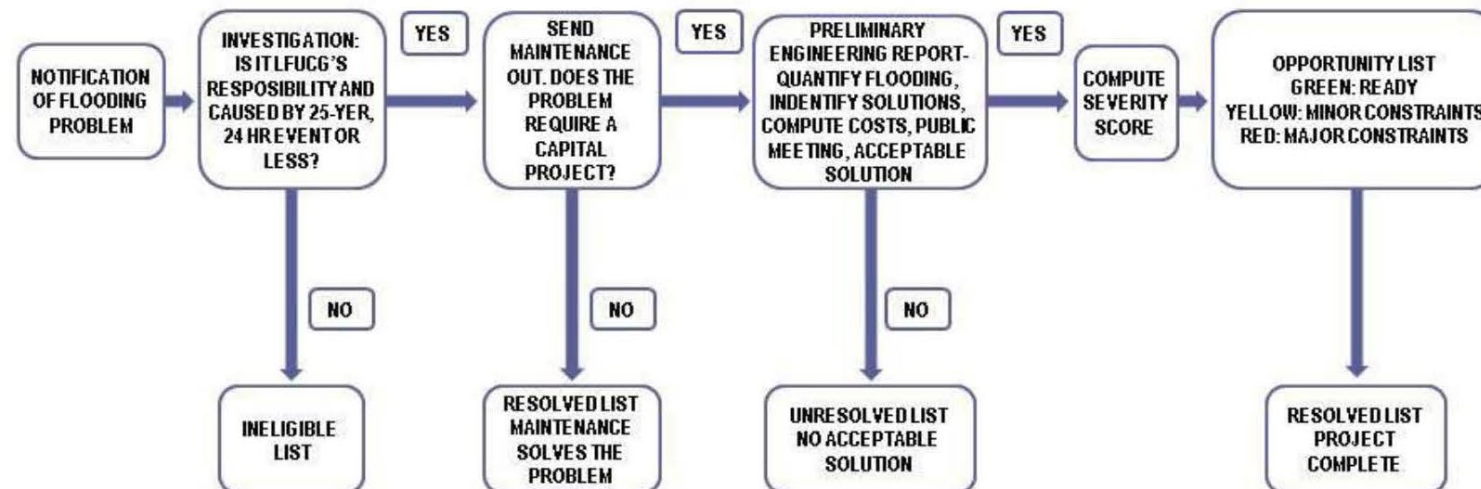
- Stormwater (SW) Priority Project List Overview
- Positive Efforts/Outcomes
- Challenges
- Upcoming Studies
- Questions





Stormwater (SW) Priority List

Severity Score Process





Stormwater (SW) Priority List

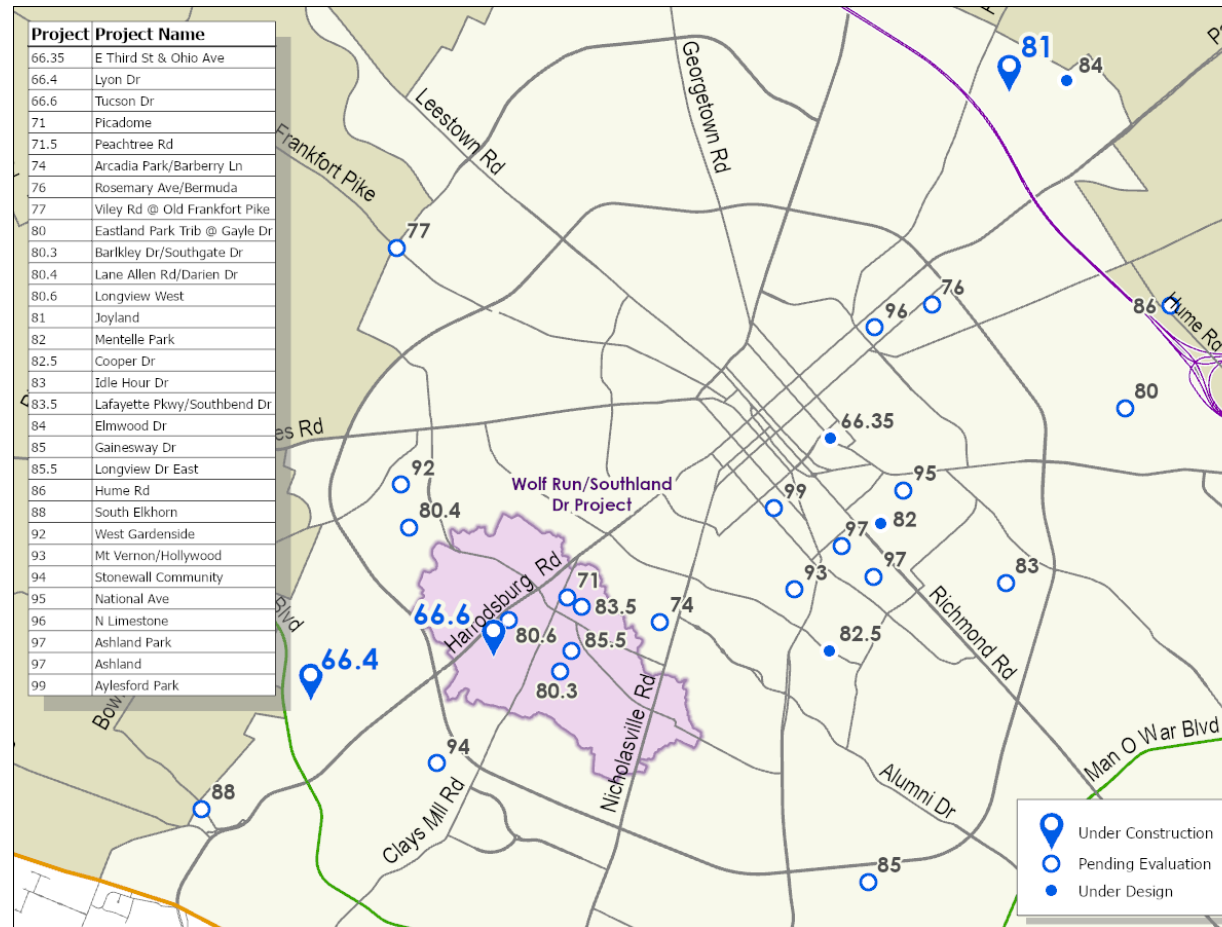
HOW DOES A PROPERTY GET CONSIDERED FOR INCLUSION ON THE STORMWATER PRIORITY LIST?

For storm events less than the 25-year, 24-hour event (5.23 inches) – at least one of the following conditions must be met:

- Structure flooding (surface water entering a structure through an opening such as a door, window, or vent); or
- Street/road flooding with either greater than 1 foot of water in the driving lane or the crown of the road is not visible.



REMAINING PRIORITY PROJECTS (current)

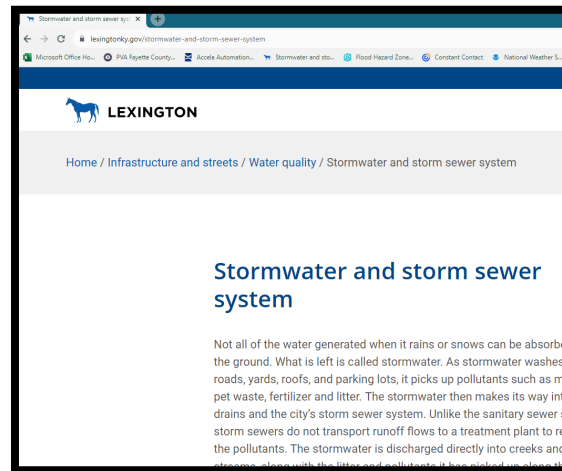


TOTAL PRIORITY LIST EXPENDITURES SINCE 2011- \$26,288,534

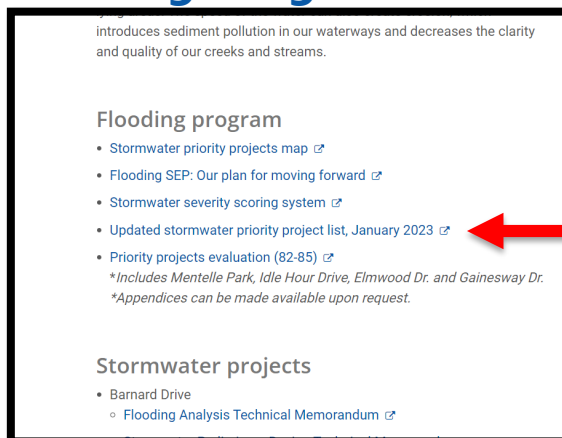


Stormwater (SW) Priority List

LFUCG Stormwater Website



Flooding Program Section



Stormwater Priority Projects Master List- January 2023

Home Flooding or Serious Street Flooding Known or Suspected

(Projects are Prioritized by Efficiency Value)

(Projects Active on the Date of Publication Appear as **Bold Text**)

(Shading Denotes Projects That are Complete, Bid, or Recommended for Removal)

Project Priority and Name		Water-shed	Council District	Severity Score	CPI Adjusted Estimate	Efficiency Value	Comments
N/A	WPGL	WR	3	1,506			PROJECT COMPLETED to prevent home flooding. Six homes demolished. Total Cost: \$ 450,000
N/A	FEMA Grant #1 (Kilrush)	WR	9	N/A			PROJECT COMPLETED by demolishing 3 homes. FEMA grant used. Total Cost: \$ 293,000
1	Yellowstone	EH	7	195			PROJECT COMPLETED to stop street flooding and dangerous ice formation. Total Cost: \$ 9,000
2	Plainview Drive	WH	7	193			PROJECT COMPLETED to prevent home flooding. 405 Plainview acquired and demolished in 2011. Total Cost: \$ 227,185
3	CR-3, Sandpiper/Kingston/Swigert	CR	6	706			Project recommended for removal from stormwater priority list. Disruption to neighborhood and cost/benefit ratio unreasonable.
4	Smoky Mountain	EH	7	194			PROJECT COMPLETED to prevent street & home flooding. Total Cost: \$ 9,000
4.3	Greyhound Dr.	CR	12	480			Project recommended for removal from stormwater priority list. Property owner resolved flooding by using LFUCG Cooperative Floodproofing Program.
4.5	Perry Street / 200 Block	TB	2	1,234			PROJECT COMPLETED to prevent home flooding and serious street flooding. Total Cost: \$ 40,000
4.7	Sherwood Drive / Robin Road	WH	4	880			PROJECT COMPLETED to prevent home flooding. Total Cost: \$77,000
5	CR-6, Old Paris @ I-75	CR	6	486			PROJECT COMPLETED to prevent home flooding. Two houses razed. Total Cost: \$ 129,000
6	NE-2, Silver Leaf Court	NE	6	1,220			PROJECT COMPLETED- acquisition and demolition of one structure complete Dec 2020
7	WH-43, Coldstream Ct	WH	8	928			PROJECT COMPLETED to protect homes from dangerous erosion. Total Cost: \$ 20,000

Website – [LINK](https://www.lexingtonky.gov/stormwater-and-storm-sewer-system)

<https://www.lexingtonky.gov/stormwater-and-storm-sewer-system>

Positive Efforts/Outcomes 2022-2023



*Kearney Ridge Basin
Kearney Ridge & Beaumont Woods
Detention Basin Improvements Project*

STORMWATER SECTION STAFFING

The section is at full strength.

Municipal Senior Engineer

- Doug Baldwin, PE
- Erik Merlino, PE
- Craig Morgan, PE

Municipal Associate Engineer

- Amad Al-Humadi

Infrastructure Rehabilitation Program

- Jason Martin, Program Manager
- Kevin Wagner, Project Manager
- Fidele Tibouo, Tech Senior

2022-2023 Capital Projects

- **SOUTHLAND/WOLF RUN PROJECTS (Council District 10 & Council District 11)**
 - Southland Park/Tucson/Yuma
 - Phase 1 – Detention Basins within Park – COMPLETED - *\$1,043,440.58*
 - Received American Public Works Association Kentucky Chapter Stormwater Project of the Year for 2022
 - Phase 2 – Storm Pipe Infrastructure – IN CONSTRUCTION - *\$1,666,349.21*
 - New stormsewer system to relieve street flooding in the Tucson Dr. and Burbank Dr. area and structure flooding on Yuma Ct.
 - Additional Note – Acquisition for the property at Allendale is underway, upcoming/future Water Quality Design.



Southland Area Park SW Project – Phase 1



Southland Area Park SW Project – Phase 2



2022-2023 Capital Projects

JOYLAND AREA STORMWATER PROJECT (Council District 1 & 6)

- The Preliminary Engineering report - undersized infrastructure in the project area.
- The solutions identified
 - Reduce property/yard flooding along stream by creating additional detention within the project area at Lisa Drive, Cabot Drive, and Shandon Drive.
 - Reduce street flooding along Freeman Drive with a new storm line and curb inlets.
- Two Phase Approach
 - Phase 1 - Basins (2023) - *\$1,289,489.00*
 - Phase 2 - Line Work (2024) - *Future*



Joyland Area SW Project – Phase 1





2022-2023 Capital Projects

- **LYON DRIVE SW PROJECT (Council District 10)**

- Project is to mitigate street flooding on Lyon Dr. between Ft. Harrod Dr. and Snaffle Rd.
- Undersized infrastructure.
- Project is to construct upsized stormsewer and expand an existing detention basin on Ft. Harrods Dr.
- Received Bids – Low Bid \$1,393,232 (EOP - \$1,487,200.00)
- Construction anticipated Late 2023/Early 2024



Lyon Drive SW Project





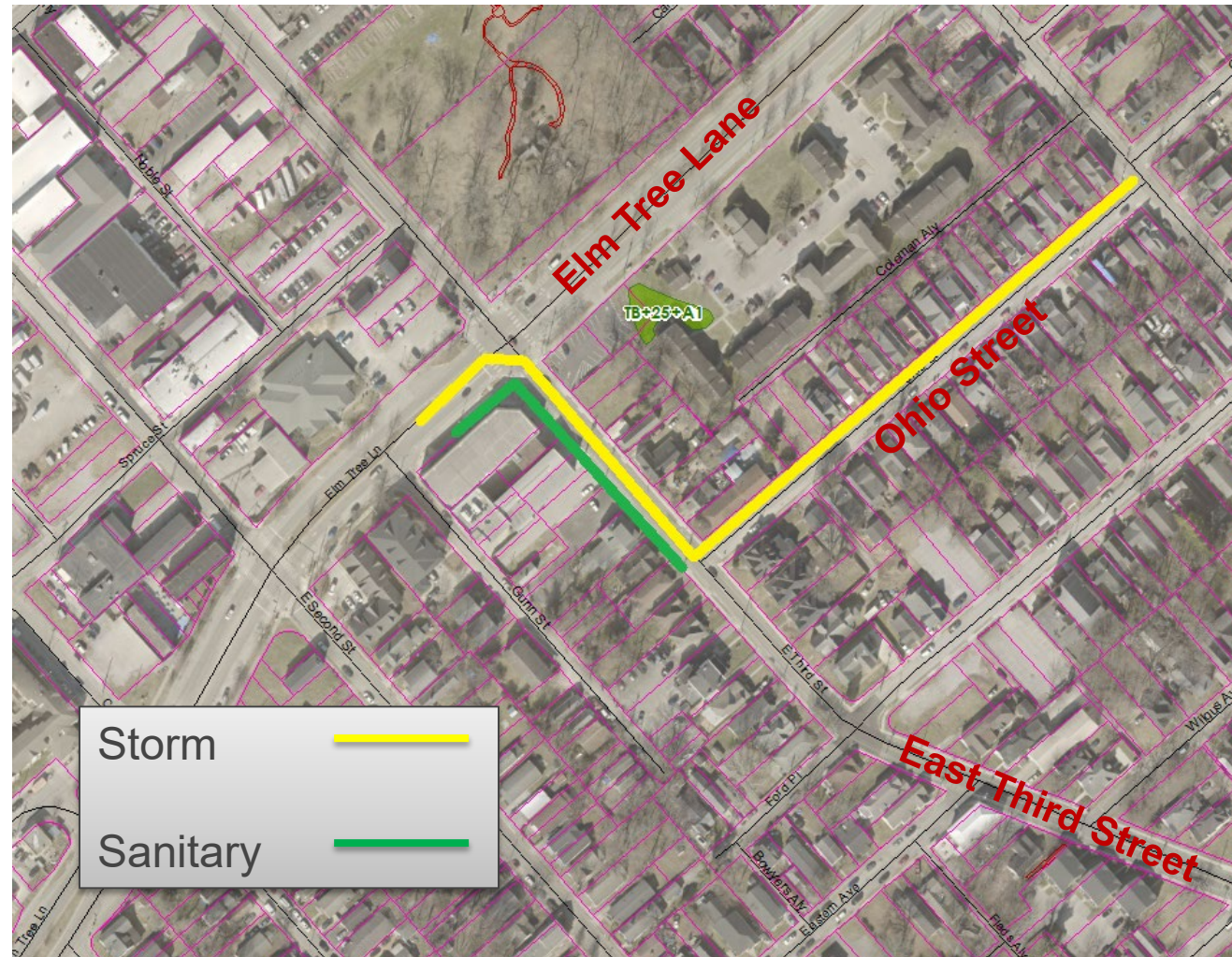
2022-2023 Capital Projects

- **EAST THIRD & OHIO SW PROJECT (Council District 1)**

- Project is to mitigate street flooding at intersection of East Third and Ohio Street.
- Undersized infrastructure.
- Project is to construct upsized stormsewer as well as replace some aging sanitary sewer along Ohio Street.
- Project Plans – 95%
- Goals
 - Advertise – September 2023
 - Construction – Spring 2024



East Third & Ohio SW Project





2022-2023 Capital Projects

- Cooper Drive SW Project (Council District 5)**

- Project Plans – 30%
- Cost Estimate - \$2,400,000
- Construction - 2024





“MINOR” STORMWATER PROJECTS

- Smaller projects to mitigate nuisance flooding or;
- Larger “Repair” projects, which require engineering design and are openly bid for construction. These would not likely meet the criteria for Priority Capital projects.



“MINOR” STORMWATER PROJECTS

- Construction Projects Completed – 2022-2023
 - Bob O Link Dr. (CD 11)
 - Campbell Ln. (CD6)
- Project to be Advertised for Construction (2023)
 - Meadowthorpe (CD 11, after redistricting) - August
 - Barnard Dr. (CD 6) – October
- Current Design Projects:
 - Viley Rd (CD 11)
 - Savannah/ Guilford (CD 10)
 - Dogwood Park (CD 9)
 - Burkewood Basin (CD 6)
 - Haggard Court (CD 1)

“MINOR” STORMWATER PROJECTS



Before

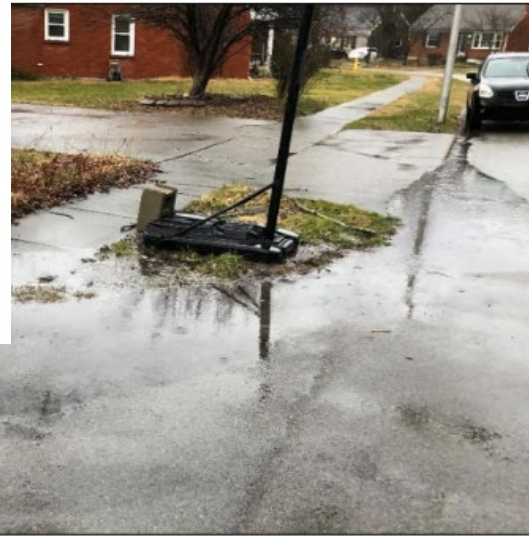


After

Campbell Lane (Council District 6)



“MINOR” STORMWATER PROJECTS



Before

Bob O Link (Council District 10)

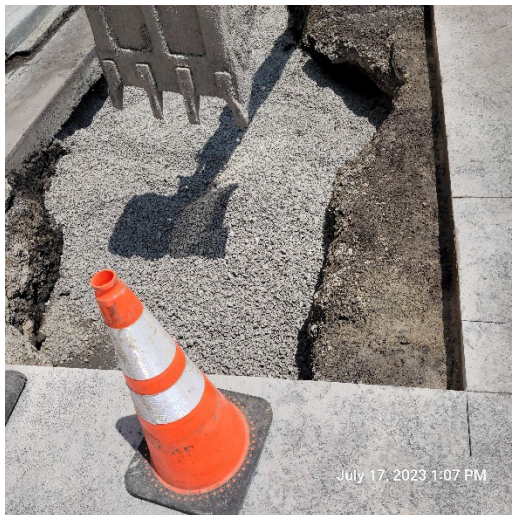


After



STORMWATER INFRASTRUCTURE MANAGEMENT

3 FTEs manage a contractor to clean and repair Stormwater infrastructure with an annual budget of \$1,000,000.



(Phoenix Building Storm Collapse)



STORMWATER INFRASTRUCTURE MANAGEMENT



Curb Inlets full of Trash



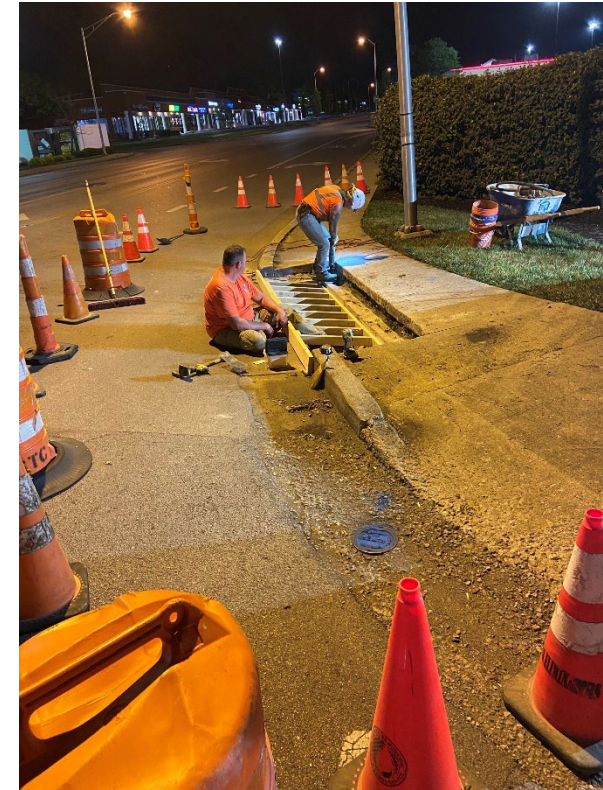
Cleaning Concrete Flumes



Completely Broken Inlets



Coolers blocking Storm Pipes



Working at Night



STORMWATER INFRASTRUCTURE MANAGEMENT

Completed Work Orders

Year	CCTV	Point Repair	Clean/Repair Basin	Totals
2018	16	25	46	87
2019	17	56	69	142
2020	15	21	25	61
2021	30	108	50	218
2022	49	122	61	232

Frustrating Outcomes



Unintended Consequences



Barkley Drive & Southgate



Lisle Industrial Road





Future Preliminary Engineering Reports

- Current Studies
 - Mentelle Park (#82), CD3
 - Masterson Station, CD 2
- Future Studies 2023-2024
 - Idle Hour Dr. (#83), CD5
 - Gainesway Dr. (#85), CD8
 - Walnut Grove, CD12
 - Taborlake Circle, CD5



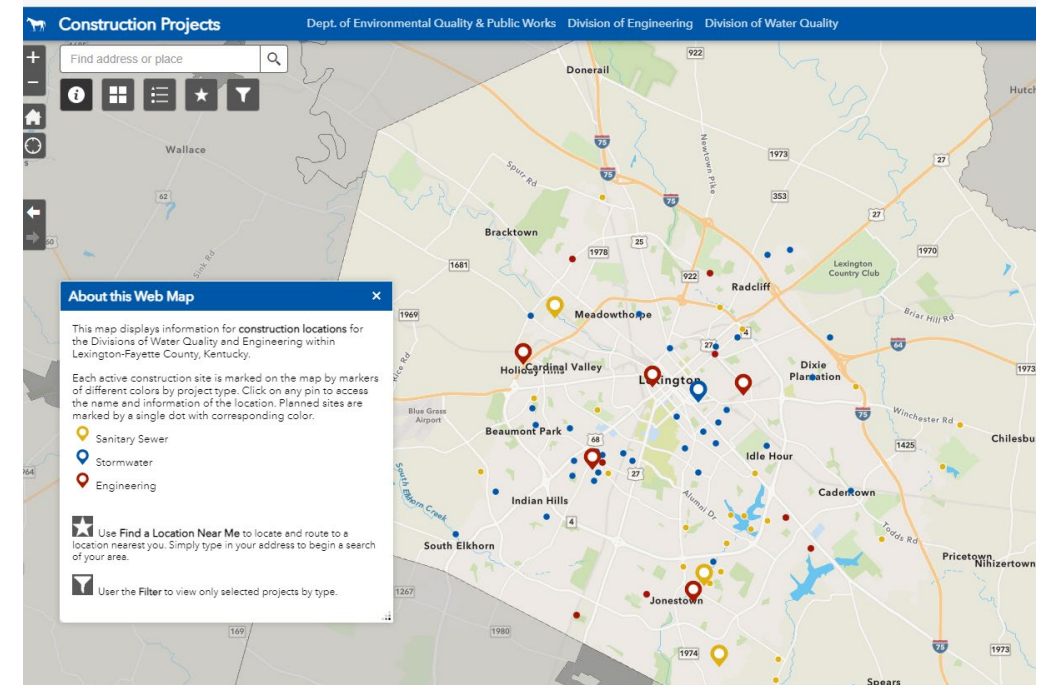
CHALLENGES/TASKS FOR 2023-2024

- Completing projects currently under design to clear up a project backlog.
- Maintaining the Stormwater Infrastructure Management Group's level of effort.
- Assist with the updating of a project web-based map.

Website

<https://www.lexingtonky.gov/construction-project-information>

LINK



Questions?



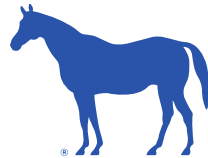
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MAJOR ROAD IMPACT COMMUNICATION PLAN

EQPW Committee

Nancy Albright, Commissioner

September 12, 2023



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Overview

- What is a major road impact?
- What are the parameters for use of this communication plan?
- What is the communication plan?
- Alternative scenarios



Defining a MAJOR Road Impact

- Rank of road (as identified in the snow plan)
 - Accounts for proximity to schools, emergency services, medical facilities, places of worship, bus routes, business hubs, etc.
 - Road work on Rank 1-3 roads may or may not be major
 - Work on residential roads (rank 4) is not considered major
- Extent of impact
 - Full road (high)
 - Lane closure, reducing traffic from 2-way to 1-way (medium)
 - Lane, traffic pattern maintained (low)



Defining a MAJOR Road Impact

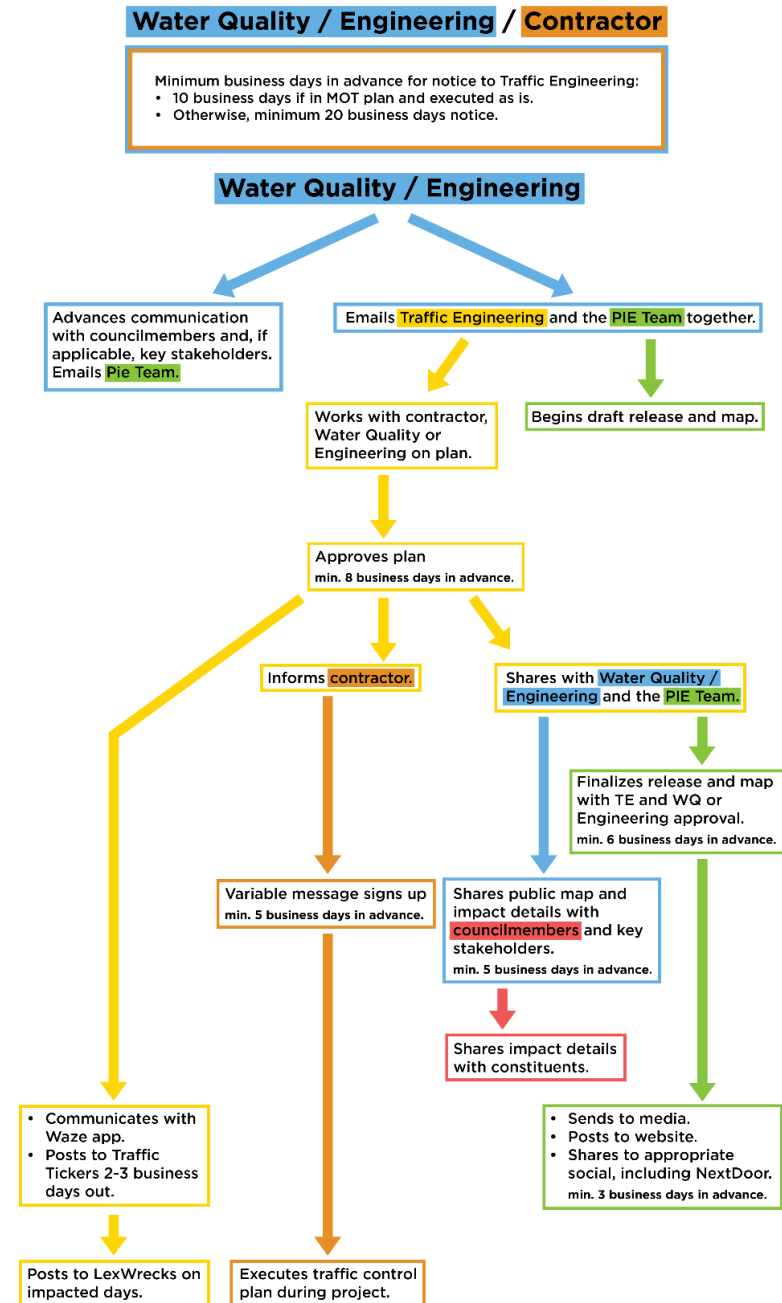
- Time of day
 - During rush hour → higher likelihood of major impact designation
- Duration of closure
 - Longer duration → higher likelihood of major impact designation
- Proximity to intersections
 - Closer to intersection → higher likelihood of major impact designation
- Proximity to other work zones, detours
 - Closer → higher likelihood of major impact designation



Communication Plan Parameters

- Project meets the threshold for a major road impact
- LFUCG projects only
 - Private projects, including utilities do their own communication
 - LFUCG will share notices of privately funded major impacts in a limited manner
- True emergencies change all of this

Communication Plan Overview





First Steps once Construction is Ready to Start

- Contract awarded
- Contract includes a Maintenance of Traffic (MOT) Plan
- Relationship of MOT to road impact review determines timeframe

Water Quality / Engineering / Contractor

Minimum business days in advance for notice to Traffic Engineering:

- 10 business days if in MOT plan and executed as is.
- Otherwise, minimum 20 business days notice.



Contract/MOT in place

Water Quality / Engineering



Advances communication with councilmembers and, if applicable, key stakeholders. Emails **Pie Team.**



Contractor Gives Notice to Traffic Engineering

Water Quality / Engineering

Emails Traffic Engineering and the PIE Team together.

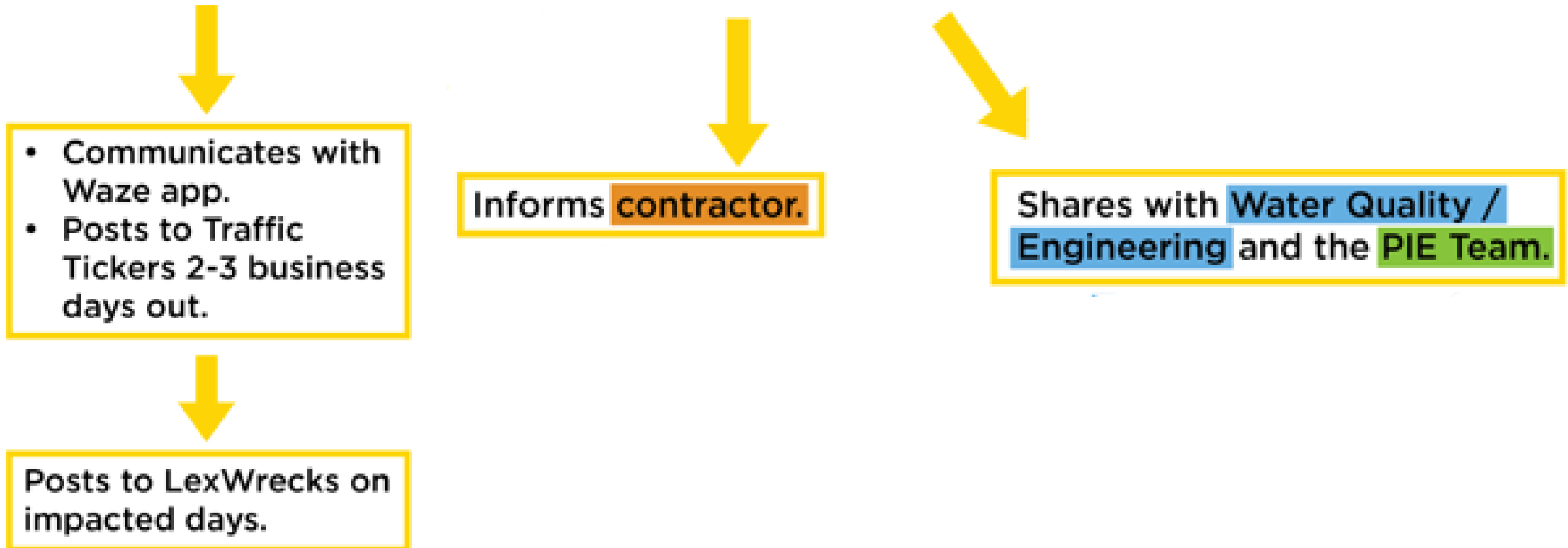
Works with contractor,
Water Quality or
Engineering on plan.

Begins draft release and map.



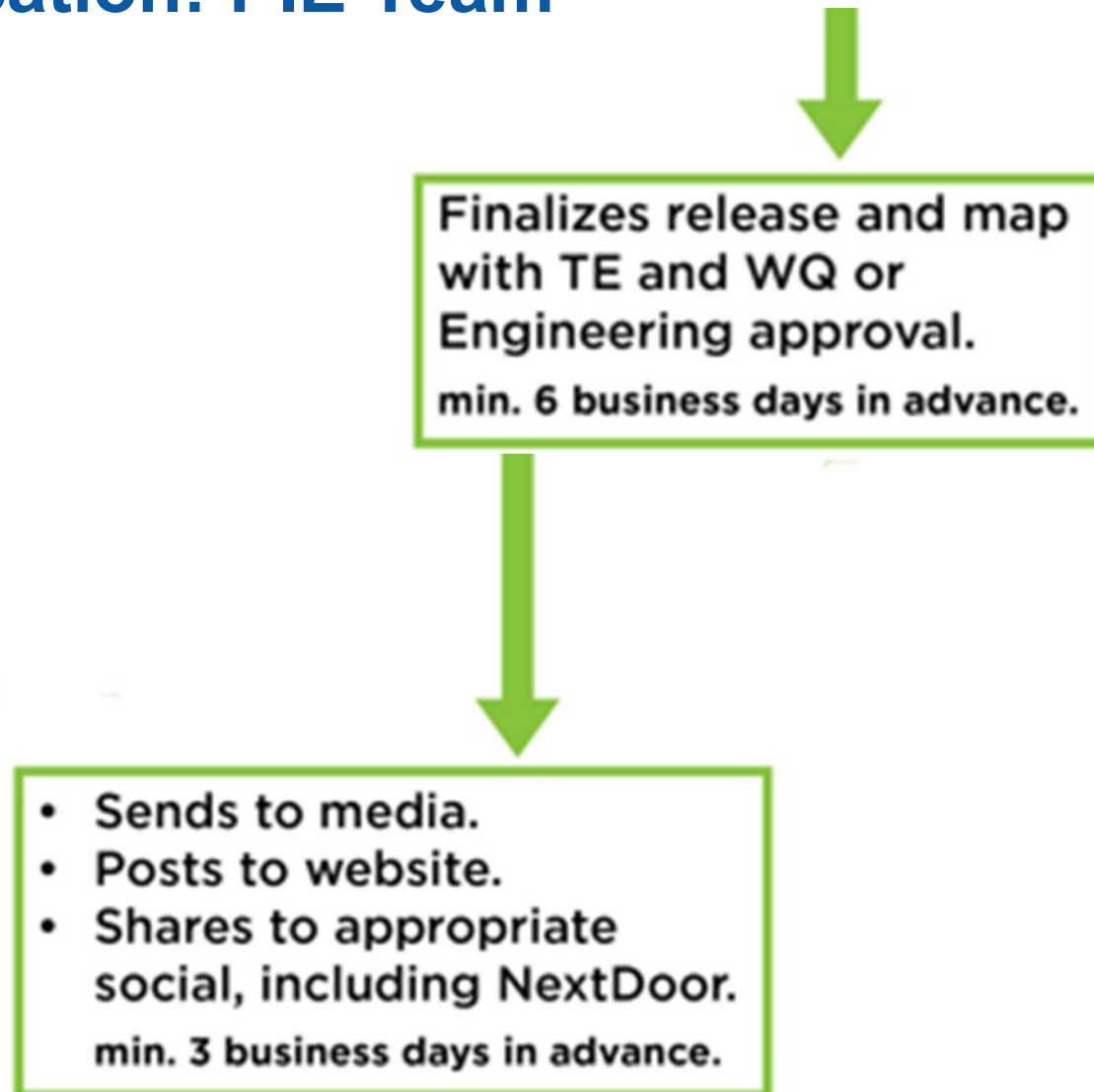
Traffic Engineering

- Approves plan a minimum of 8 business days before impact





Mass Communication: PIE Team





Direct Communication



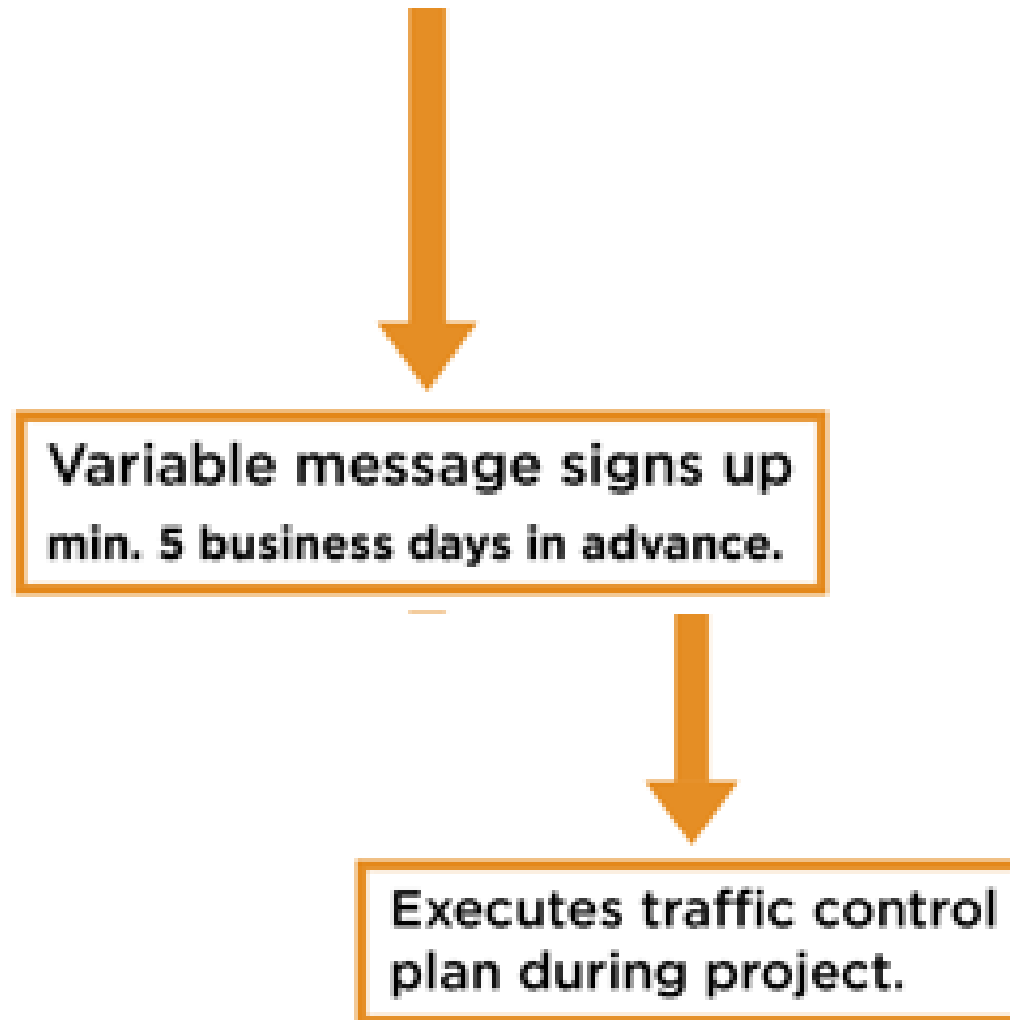
Shares public map and
impact details with
councilmembers and key
stakeholders.
min. 5 business days in advance.



Shares impact details
with constituents.



Contractor



Alternative Scenarios

- External contractor, planned
 - Traffic engineering still:
 - Communicates with Waze
 - Posts to Traffic Ticker
 - Posts to LexWrecks
 - Includes info on blockage report
 - Information posted to LexingtonKY.gov/construction, utility map
- Emergency
 - Depends on when emergency occurs and timeframe to resolve
 - Will use communication tools that can be executed in a timely manner

Summary

- Initial notification to councilmembers when contract finalized (MOT)
- Notice to Traffic Engineering a minimum of 10 days before road impact occurs
- Once Traffic Plan is approved, WQ/Eng, PIE team, councilmembers and contractor all have communication responsibilities

Questions?



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Environmental Quality & Public Works

Referral Item	Current Sponsor	Date Referred	Last Presentation	Status	Legistar File ID
1 Process for Road Closures	D. Seigny	August 16, 2022		September 12, 2023	0920-23
2 Sevierville Waste Digesters	L. Sheehan/D. Seigny	March 29, 2022	May 3, 2022	October 24, 2023	0445-22
3 Explore Lexington's Sustainability Options	L. Sheehan	February 20, 2018	May 23, 2023		0499-21
4 Environmental Best Practices In Our Paving Process	P. Worley	April 18, 2023		December 5, 2023	
5 Streets and Roads Fleet Depreciation and Replacement	H. LeGris	May 30, 2023			
6 Short-Term Rentals (STR) Enforcement	H. LeGris	May 30, 2023			
7 Environmental Commission - Ordinance Updates	L. Sheehan	June 13, 2023		December 5, 2023	0743-23
8 Update to Chapter 8 in Code of Ordinances related to blasting	D. Gray	July 11, 2023			
9 Review of revenue and expenditure of Refuse, Street Lights, and Street Sweeping (before the FY25 budget is finalized)	D. Seigny	August 22, 2023			
Annual / Periodic Updates					
10 Recycling General Practices * Note several recycling items were combined into this one item on March 9, 2021	P. Worley	March 9, 2021	January 19, 2021		0292-19
11 Backyard Composting - Home Compost Pilot Program	H. LeGris	February 2, 2021	May 23, 2023		0500-21
12 Urban Forestry / Street Trees Update	H. LeGris	September 17, 2019	July 11, 2023		0501-21
13 Capacity Assurance Program (CAP) Audit Update	L. Sheehan	August 30, 2018	April 18, 2023	Spring 2028	0964-20
14 Annual Energy Improvement Fund Update	L. Sheehan	January 10, 2017	July 11, 2023		0572-22
15 Annual Snow/Ice Removal Plan	L. Sheehan	February 15, 2014	October 11, 2022	October 24, 2023	1034-22
16 Annual Pavement Management Plan / Curbs Assessment	L. Sheehan	May 26, 2020	April 18, 2023		0440-22
17 Annual Stormwater Priority List Update	L. Sheehan	February 20, 2018	September 13, 2022	September 12, 2023	0922-22
18 Annual Municipal Separate Storm Sewer System (MS4) Program Update	L. Sheehan	February 20, 2018	November 1, 2022	October 24, 2023	1122-22
19 Annual Consent Decree and Remedial Measures Plan Update	L. Sheehan	January 22, 2019	March 1, 2022	December 5, 2023	0222-22
20 Annual Division and Program Review (Pilot Program)	L. Sheehan	November 30, 2021	November 1, 2022		0127-22

Updated 08.22.23, KJT