Witness: Krista Citron

1. Refer to Case No. 2018-00358,² the Direct Testimony of Brent O'Neill (O'Neil Direct Testimony), Exhibit 2, Replacement Program Report 2018 at 4, Table 2, Distribution System Material Types. Provide an update of the information contained in Table 2 in the format provided below.

Original Table		QIP 1 Proposed		QIP 1 Actual		QIP 2 Actual		Non-QIP		Total	
Mies of	Percentage	Mies of	Percentage	Mies of	Percentage	Miles of	Percentage	Miesof	Percentage	Mies of	Percentage
Naterial	of System	Naterial	of System	Naterial	of System	Naterial	of System	Vateria	of System	Naterial	of System

By Naterial

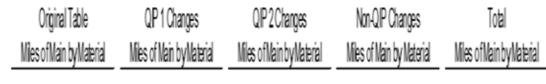
Response:

Refer to KAW_R_PSCDR1_NUM001_120123_Attachment A, Tab 001. Following an informal conference with PSC staff during Case No. 2022-00328, the above format was revised to better reflect QIP changes for each QIP year. The tables in the attachment follow that same format.

² Case No. 2018-00358, Electronic Application of Kentucky-American Water Company for an Adjustment of Rates (Ky. PSC June 27, 2019).

Witness: Krista Citron

2. Refer to Case No. 2018-00358, O'Neil Direct Testimony, Exhibit 2, Replacement Program Report 2018 at 4, Table 3, Miles of Existing Material Types Installed by Decade. Provide an update of the information contained in Table 3 in the format provided below.



By Decade

Response:

Refer to KAW_R_PSCDR1_NUM001_120123_Attachment A, Tab 002. Following an informal conference with PSC staff during Case No. 2022-00328, the above format was revised to better reflect QIP changes for each QIP year. The tables in the attachment follow that same format.

Witness: Krista Citron

- 3. Regarding Castlewood Phase I Project:
 - a. Explain why paving and restoration expenses were greater than planned.
 - b. Provide an estimate of the impact the paving cost-sharing with Lexington-Fayette Urban County Government (LFUCG) and Columbia Gas had on the completed project cost.

Response:

a. Paving and restoration limits are determined on a case-by-case basis. KAWC works to align our estimated restoration costs as closely as possible to actual final restoration costs; however, this can be difficult and often results in "variances" of the actual final project cost to the original estimated project cost. For this or any project, KAWC makes an initial estimate of the total square footage of pavement that will need to be restored at the completion of the job.

The guiding document for pavement restoration is LFUCG's Code of Ordinances, Chapter 17C – Public Rights-of-Way.¹ "17C", as it is commonly called, outlines that "restoration in the rights-of-way shall be performed according to the applicable standards and with the materials specified by the division, and at a minimum shall comply with the applicable standard engineering drawing".² LFUCG also maintains a set of standard drawings which are used in conjunction with 17C to illustrate how construction should be performed when working within LFUCG rights-of-way. In particular, Standard Drawings 201-1, 201-2, and 201-4 apply to the estimated extents of pavement and restoration. In these drawings, the "typical" pavement restoration width is the width of the trench plus one (1) foot on either side as shown in Figure 1 below. This is how KAWC has historically estimated how much pavement will need to be replaced at the completion of a project.

¹ <u>https://codelibrary.amlegal.com/codes/lexingtonfayettecoky/latest/lexingtonfayettecoky_code/0-0-0-11719</u>

² See LFUCG Chapter 17C-24, "Patching and restoration standards," at the link provided above.

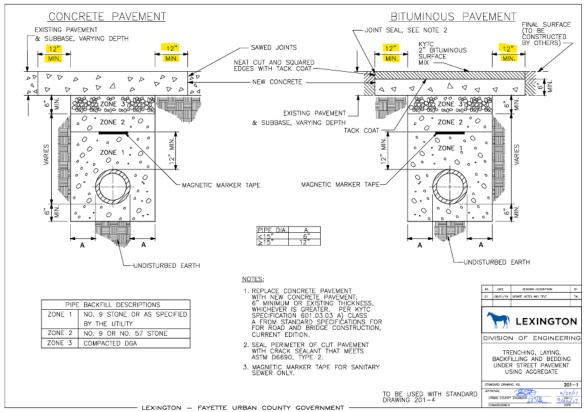


Figure 1: LFUCG Standard Drawing 201-1 (emphasis K. Citron)

LFUCG also maintains a "Pavement Restoration Requirement Policy" which is a set of exceptions or additions to 17C. For example, if the trench-plus-one-foot extent will leave a strip of existing pavement between it and the curb, the utility is then responsible for paving all the way to the curb. Thus, a five (5) foot estimated trench restoration width could become a six (6) or seven (7) foot actual restoration width. This "Pavement Restoration Requirement Policy" can be viewed on pages 8-9 of the attached KAW_R_PSCDR1_NUM003_120123_Attachment A.

KAWC works to accurately estimate the pavement restoration width based on preliminary design. However, each construction project must be visually inspected by an LFUCG inspector, and <u>only after</u> that step is complete are the full extents of the restoration limits known. The typical process for pavement restoration on QIP projects is as follows:

- 1) Extents of pavement restoration are estimated, based on disturbance to the roadway and the guidelines set forth in LFUCG Ordinance 17C, as part of the initial project cost and submitted with KAWC's annual QIP application.
- 2) KAWC bids the projects to construction contractors and files street cut permit applications with LFUCG. KAWC's construction contractors perform the water main installation and service line reconnection work.
- 3) After all roadway work is complete and water mains are in-service, KAWC's construction contractors notify KAWC that the job is ready for inspection. There is an

on-site inspection performed by LFUCG's inspector with the KAWC inspector present. LFUCG's inspector marks the extent of the actual required pavement restoration.

- 4) KAWC's paving contractor is notified that the area should be added to the schedule for final restoration. Occasionally, a representative from KAWC's paving contractor is present at the inspection too.
- 5) KAWC's construction contractors perform temporary restoration work, which is meant to allow the roadway to remain usable during the time between completion of the water main installation and the final restoration.
- 6) After the on-site inspection, KAWC's paving contractor estimates the concrete and asphalt quantities needed to complete the work.
- 7) A final invoice is submitted by KAWC's paving contractor with actual quantities once the restoration work has been completed.

Note that this process only applies to projects that are not cost-shares with LFUCG or another utility. When a cost-share opportunity has been identified, the final restoration schedule is dependent upon work completion by all utilities within the right-of-way, and final restoration is performed by LFUCG's paving contractor.

b. The total paving cost for this project area was \$163,560.12. KAWC's cost for our portion was \$66,558.07, a savings of \$97,002.05.

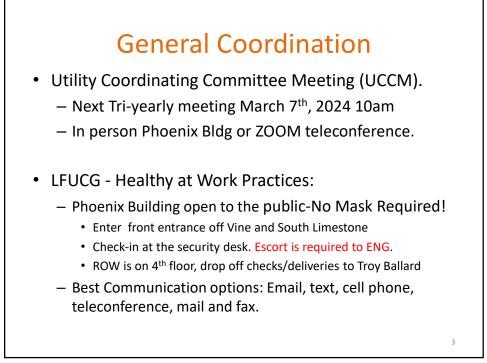


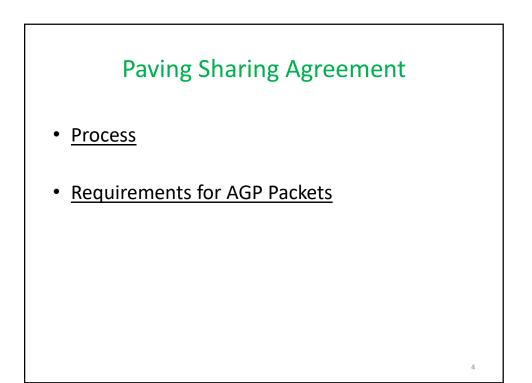
UTILITY COORDINATING COMMITTEE MEETING

November 9th, 2023 – 10:00 am

In-person 3rd Floor conference room of the Phoenix Building (101 East Vine) or by Zoom Teleconference

Doug Burton, PE, PMP - Director of Engineering/Urban County Engineer
John Cassel, PE - Division of Engineering, Right-of-Way (ROW) Manager
DOE/ ROW Management/ Engineering Technicians
Vince May – Cgas Capital Projects
Vic Annas - KAWC,LFUCG-SS, Elements Guru
Cam Sayre - Above Ground, Contractors
Scott Ford - CGas
Sara Burd – AGP, Admin etc.
Assignments subject to change

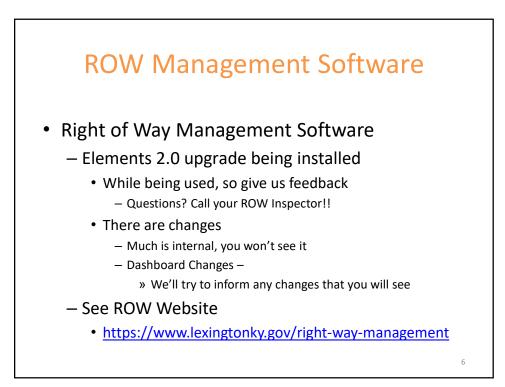


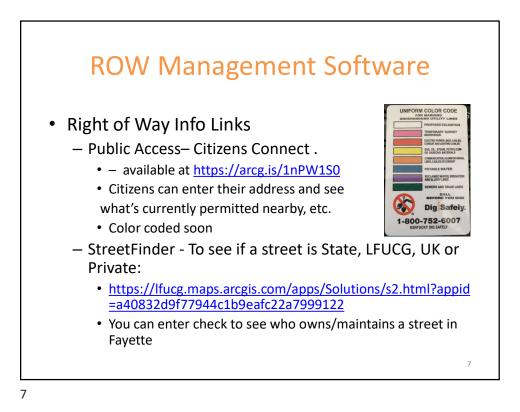


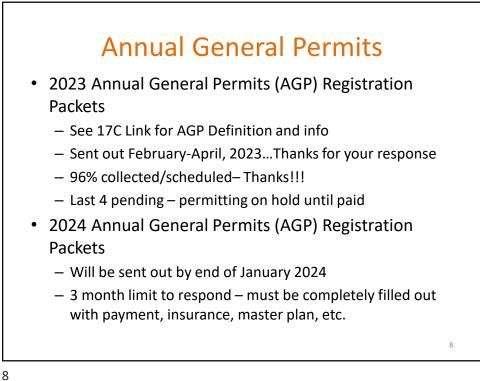


- Paving Sharing Opportunities
- KAWC/LFUCG long term planning
- Small area opportunities
 - Like 3rd and Ohio
- Next Paving Sharing Meeting ? TBD

5

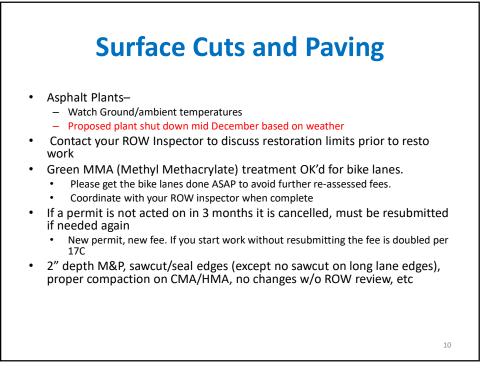


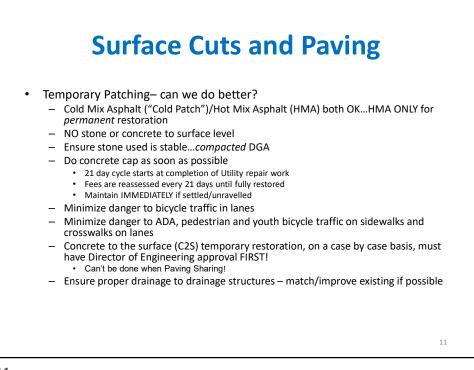




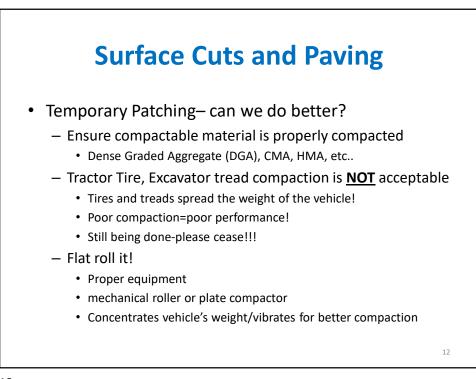


- See new O&M manual
- Special materials requirements





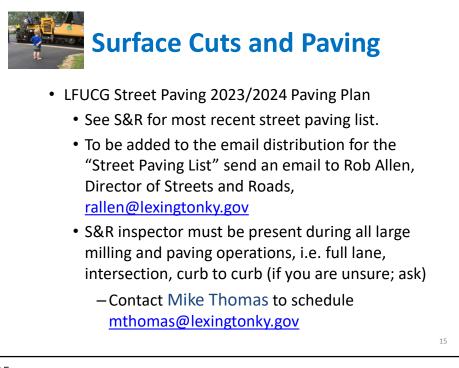


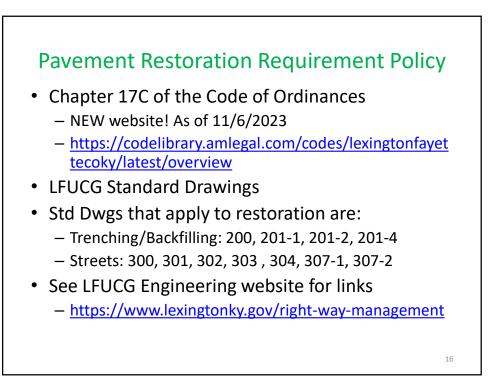


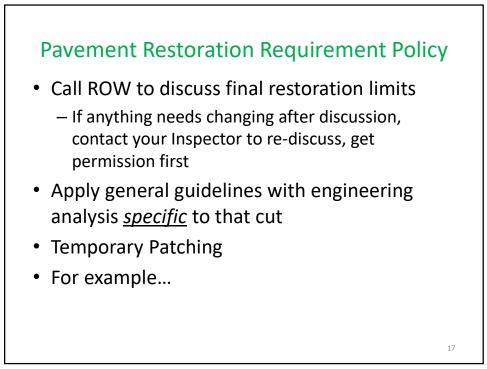














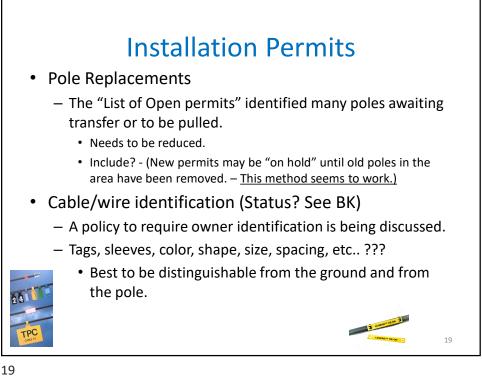
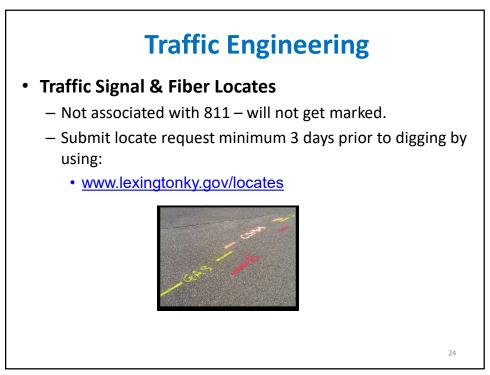






PLATE	Steel plates form Use this form to submit information regarding steel plate usage	ontact eets & Roads 1555 Old Frankfort Pike exington, KY rs: Monday – Friday: 7:30 a.m. – 4 p.m. 859) 258-3451		
	Location address* Location address* Location specifics Location specific	Utility or project owner name* Ex. Kentucky American Water A hour contact name* Printhame A hour contact email address ex. contact@example.com Expected removal date *	Lattime Address	
	Nev C 13 C 2019 C Submit Form	Nov \$ 13 \$ 2019 \$		22

		_
STEEL PLATE	Steel Plate Information	
AHEAD	Address or intersection:	
	Plate placement date:	
	You can also fill out the following information at: <u>https://www.iss/nstonky.gov/steel-platesform</u>	
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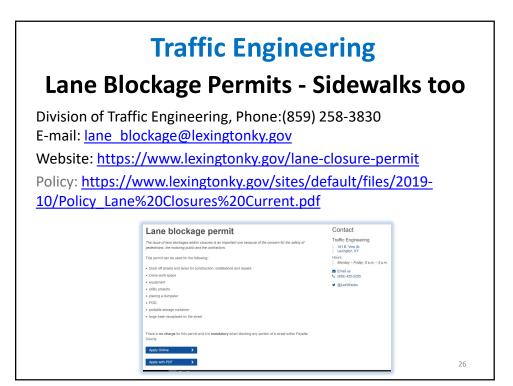
Traffic Engineering

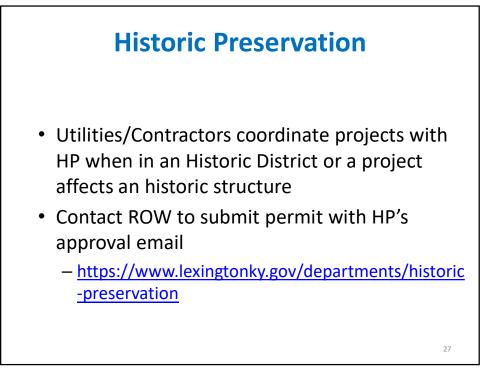
Lane Blockage Permits - Sidewalks too

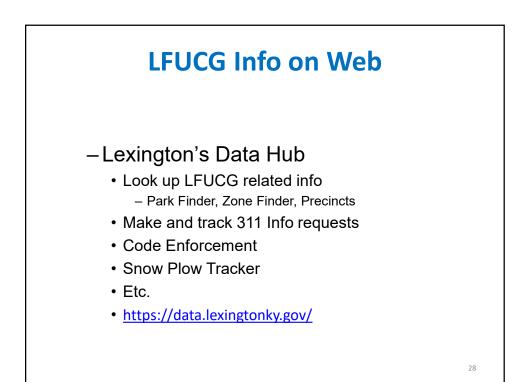
Required every time a lane is scheduled to be blocked. Please remind your contractors! – Several repeat offenders.

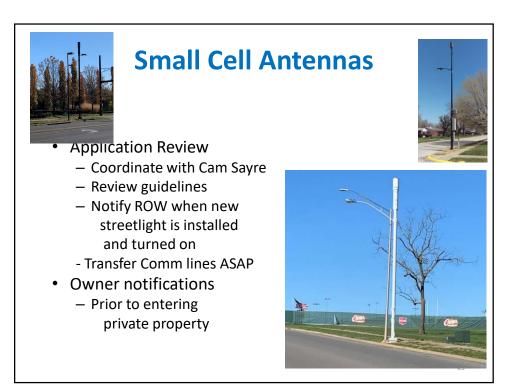


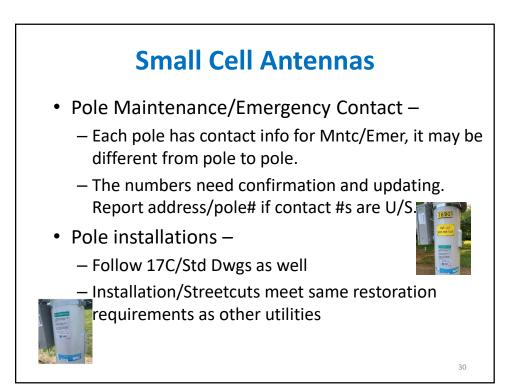
25











Open Discussion, Questions



What will YOU add to this meeting?

31

Witness: Krista Citron

4. Regarding Bluegrass/Highlawn Project, provide an updated estimate of the impact the paving cost-sharing with LFUCG had on the completed project cost.

Response:

Due to LFUCG infrastructure projects in this area, no final restoration work was required of KAWC. The project's final cost was \$268,339 less than estimated due to these cost savings.

Witness: Krista Citron

5. Regarding National Avenue Project, explain why this project required additional cold patch - temporary asphalt.

Response:

Some paving restoration began in fall of 2022; however, not all the final paving restoration was able to be completed before the asphalt plant closed for the winter. The areas that were still unpaved received cold patch—a temporary restoration method—to last through the winter until the asphalt plant reopened in spring 2023. At that time, the remainder of the final paving restoration was completed.

Witness: Krista Citron

6. Regarding Whitney/Ash Project, explain why nearly all service lines required replacement compared to estimated.

Response:

At the time this project was initiated, the condition of the service lines in the project area was unknown. KAWC originally intended to only reconnect the existing service lines. However, once our construction contractor was in the area working, we determined that most of the service lines needed a full replacement instead due to the poor condition of the existing lines.

Witness: Krista Citron

- 7. Regarding Montclair Drive Project:
 - a. Explain why this project required full curb-to-curb width paving.
 - b. Provide an estimate of the impact the paving cost-sharing with LFUCG had on the completed project cost.

Response:

- a. The extents of the final paving restoration were determined at the conclusion of the project based on the disturbance areas to the existing roadway. Please refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.
- b. KAWC was able to cost-share a portion of final restoration along Montclair Drive with LFUCG, an area of 12,582 square feet. KAWC's portion of the restoration was 6,291 square feet at a cost of approximately \$13,151.93. If KAWC had been responsible for the entire section of restoration, that cost would have been approximately \$50,328.00. This is a cost savings of \$37,176.07.

Witness: Krista Citron

- 8. Regarding Summit Drive Project:
 - a. Explain why this project required full curb-to-curb width paving.
 - b. Provide an estimate of the impact the paving cost-sharing with LFUCG had on the completed project cost.

Response:

- a. The extents of the final paving restoration were determined at the conclusion of the project based on the disturbance areas to the existing roadway. Please refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.
- b. KAWC was able to cost-share a portion of final restoration along Scoville Road with LFUCG. KAWC's portion of the restoration was 14,904 square feet at a cost of approximately \$32,043.60. Additionally, Summit and Eldemere roadways were paved by LFUCG's contractor under their agreement and pricing. KAWC's responsibility for this work was \$44,892.00.

If KAWC had been responsible for the entirety of the final restoration on this project, that cost would have been approximately \$171,360.00. This is a cost savings of \$94,424.40.

Witness: Krista Citron

9. Regarding Westgate/Hamilton Park Project, explain why this project required curb-to-curb width paving in most areas rather than the 5' paving as originally budgeted. Provide a comparison of the original forecasted paving to the actual paving cost incurred.

Response:

The extents of the final paving restoration were determined by LFUCG at the conclusion of the project based on the disturbance areas to the existing roadway. Refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.

The original forecasted paving extent was approximately 18,000 square feet; the actual paving extent was 86,003 square feet. The final actual cost for paving and restoration on this project was \$943,548.51 while the estimated cost based on 18,000 square feet would have been \$197,480.00.

Witness: Krista Citron

10. Regarding Lancelot Project, explain why this project required curb-to-curb width paving in most areas rather than the 5' paving as originally budgeted. Provide a comparison of the original forecasted paving to the actual paving cost incurred.

Response:

The extents of the final paving restoration were determined by LFUCG at the conclusion of the project based on the disturbance areas to the existing roadway. Refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.

The original forecasted paving extent was approximately 12,500 square feet; the actual paving extent was 61,973.5 square feet. The final actual cost for paving and restoration on this project was \$524,015.48 while the estimated cost based on 12,500 square feet would have been \$105,693.46.

Witness: Krista Citron

11. Regarding Kilrush/Caywood Project, explain why this project required "parking lane widths" of ~6' plus all intersections and full cul-de-sac bulbs rather than the 5' paving as originally budgeted. Provide a comparison of the original forecasted paving to the actual paving cost incurred.

Response:

The extents of the final paving restoration were determined by LFUCG at the conclusion of the project based on the disturbance areas to the existing roadway. Refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.

The original forecasted paving extent was approximately 26,195 square feet; the actual paving extent was 77,019.35 square feet. The final actual cost for paving and restoration on this project was \$920,258.10 while the estimated cost based on 26,195 square feet would have been \$312,988.37.

Witness: Krista Citron

12. Regarding Merrimac/Fogo/Crewe Project, explain why this project required "parking lane widths" of ~6' plus all intersections and full cul-de-sac bulbs rather than the 5' paving as originally budgeted. Provide a comparison of the original forecasted paving to the actual paving cost incurred.

Response:

The extents of the final paving restoration were determined by LFUCG at the conclusion of the project based on the disturbance areas to the existing roadway. Refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.

The original forecasted paving extent was approximately 15,205 square feet; the actual paving extent was 64,669.02 square feet. The final actual cost for paving and restoration on this project was \$739,641.44 while the estimated cost based on 15,205 square feet would have been \$173,904.72.

Witness: Krista Citron

13. Regarding Tisdale/Fraserdale Project, explain why this project required "parking lane widths" of ~6' plus all intersections and full cul-de-sac bulbs rather than the 5' paving as originally budgeted. Provide a comparison of the original forecasted paving to the actual paving cost incurred.

Response:

The extents of the final paving restoration were determined by LFUCG at the conclusion of the project based on the disturbance areas to the existing roadway. Refer to KAW_R_PSCDR1_NUM003_120123 question 3(a) for more details regarding how paving restoration limits are determined by LFUCG.

The original forecasted paving extent was approximately 25,280 square feet; the actual paving extent was 57,051.54 square feet. The final actual cost for paving and restoration on this project was \$602,448.97 while the estimated cost based on 25,280 square feet would have been \$266,950.02.

Witness: Krista Citron

14. Regarding Montavesta Road Project, provide an estimate of the impact the paving costsharing with LFUCG had on the completed project cost.

Response:

The final costs for this project have yet to be determined. However, in the areas where KAWC is cost-sharing with LFUCG, the estimated total cost is \$77,376.68 and KAWC's estimated portion is \$25,085.30, an approximate cost savings of \$52,291.38.

Witness: Jeffrey Newcomb

15. Refer to Direct Testimony of Jeffery Newcomb (Newcomb Direct Testimony), page 3 lines 4 through 8. Provide the presentation of the QIP 3 Actual "End of Period Rate Base for QIP 4" and the presentation of the "QIP 4 Rider Charge with QIP 3 Balancing Adjustment" absent the QIP balance in base rates in pending case 2022-00191.

Response:

Please see KAW_R_PSCDR1_NUM015_120123_Attachment. A presentation of the "QIP 3 Actual "End of Period" Rate Base for QIP 4" can be found on the "QIP-4 Revenues" tab and the presentation of the "QIP 4 Rider Charge with QIP 3 Balancing Adjustment" absent the QIP balance in base rates in pending Case No. 2023-00191 can be found on the "Summary Adjustment" tab.

Witness: Jeffrey Newcomb

16. Refer to Newcomb Direct Testimony, page 5 lines 14 through 17. Explain how the portion of billed QIP revenues were inadvertently omitted in Case No. 2022-00328 and what procedures has Kentucky-American put in place to ensure this does not occur in the future.

Response:

The inadvertent omission of a portion of total QIP billed revenues in Case No. 2022-00328 was due to a formula error within the Kentucky-American revenue support file. The formula error resulted in the QIP billed revenues for Fire Service being omitted from total QIP billed revenues in the Balancing Adjustment for the QIP Year 2 period of twelve-months ended June 30, 2022. As a result, Kentucky-American confirmed that all QIP billed revenues were included in the Balancing Adjustment for the QIP Year 1 period of twelve-months ended June 30, 2021, has adjusted it procedures to include additional review by senior leaders, and has modified the revenue support file to reconcile back to a system generated report to ensure all relevant QIP revenue accounts are included in total QIP billed revenues.

Witness: Krista Citron

- 17. Refer to Newcomb Direct Testimony, Exhibit 1 pages 7 through 10, Reason for Variance column.
 - a. For each project listed as "still underway." Explain if the project timeline was on its original completion schedule at the end of June 2023.
 - b. For each project that was not on schedule, provide an explanation as to why the project was not on schedule.
 - c. For each project that notes "contractor bids were higher than originally estimated," explain the specific factors that lead to the original estimate projecting lower contract costs.

Response:

a. Aylesford – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Linden Walk/Rose – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Colonial Dr – This project was substantially complete at the end of June 2023 and only waiting on final pavement, however, an opportunity for utility coordination and pavement cost-sharing arose during the project and delayed the final pavement.

Standish Way – This project was substantially complete at the end of June 2023 and only waiting on final pavement, however, an opportunity for utility coordination and pavement cost-sharing arose during the project and delayed the final pavement.

Bryanwood Pkwy – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Gaines Village Dr – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Ox Hill Dr – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Stephen Foster Dr/Versie Ct/Jannelle Ct – This project was substantially complete at the end of June 2023 and only waiting on final pavement, however, an opportunity for utility coordination and pavement cost-sharing on the Stephen Foster Dr portion arose during the project and delayed the final pavement.

American Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Southern Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Camden Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Stanley Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Lone Oak Dr/Southbend Dr - Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This project was a coordination project with a sanitary sewer replacement so the final restoration schedule was impacted.

Douglas Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Chiles Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Breathitt Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Florence Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Woodstock Cir – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Woodside Way/Ct – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Malabu Cir – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Tanforan Dr/Ct - Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final restoration.

Waterford Park – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Narrangansett Park – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Oaklawn/Maywood Park – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Moundview Ct – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Wood Valley Ct – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Derby Dr – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Headley Ave – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Jane St – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This area is an opportunity for pavement cost-sharing which impacts the final restoration schedule.

Ferguson St/Martin St – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This area is an opportunity for pavement cost-sharing which impacts the final restoration schedule.

Coolidge St – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This area is an opportunity for pavement cost-sharing which impacts the final restoration schedule.

Anderson St – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This area is an opportunity for pavement cost-sharing which impacts the final restoration schedule.

Kenton St – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Campbell St – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement.

Briarwood Dr - Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This area is an opportunity for pavement cost-sharing which impacts the final restoration schedule.

Redwood Dr/Cir – Yes, on schedule. This project was substantially complete at the end of June 2023 and only waiting on final pavement. This area is an opportunity for pavement cost-sharing which impacts the final restoration schedule.

Edinburgh Ct – This project was substantially complete at the end of June 2023 and only waiting on final pavement. It was slightly delayed due to a miscommunication regarding paving on Edinburgh Dr. KAWC had previously reported that this project could not be completed because of recent LFUCG paving, however, the new pavement did not extend to the section of Edinburgh Dr intersecting with Edinburgh Ct and KAWC was able to complete this project in QIP Year 3 after all.

b. Greenwood Ave – This project was unable to be completed in this QIP period as planned. Before the project start date, the roadway was paved by LFUCG, and per LFUCG Ordinance 17C-19(e)(5),¹ KAW was unable to cut new pavement within 12 months except in case of emergency.

Bradley Ct – This project was unable to be completed in this QIP period as planned. Before the project start date, the roadway was paved by LFUCG, and per LFUCG Ordinance 17C-19(e)(5), KAW was unable to cut new pavement within 12 months except in case of emergency.

c. KAWC competitively bids all QIP projects to our list of contractors, and the standardized bid package that each contractor receives includes a bid form with estimated quantities, technical specifications, and project-specific construction plan drawings. KAWC is unable to state what specific factors or decisions a contractor may make during their bid process, although some common factors in bids returning higher or lower could include: the contractor's existing workload, project complexity, equipment needs, or workforce availability.

¹ <u>https://codelibrary.amlegal.com/codes/lexingtonfayettecoky/latest/lexingtonfayettecoky_code/0-0-0-11719</u>

Witness: Krista Citron

18. Explain what steps Kentucky-American has taken to reduce cost variances by ensuring its original project estimates are more in line with total project costs.

Response:

As explained in detail in my Direct Testimony in the March 1, 2023 filing for Case No. 2023-00030, as well as the response to PSC DR2 NUM001 072723 in that same case, actions taken to control costs include:

- Bundling projects in geographic proximity;
- Competitively bidding construction contracts;
- Installing mains under sidewalks or utility strips as opposed to pavement, where feasible;
- Bulk ordering materials to anticipate long lead times;
- Coordinating with LFUCG and other utilities for shared work areas;
- Implementing a formal pavement sharing agreement with LFUCG; and
- Increasing the initial estimated extent of pavement restoration to better reflect the actual final extents.