# Witness: John Magner

1. Confirm that KAW will not provide service to City of Paris's customers without the Paris's express consent. If KAW is unwilling to confirm this statement, please provide a detailed explanation of why it is unwilling to confirm this statement.

# **Response:**

KAW will not provide service to Paris's customers without Paris's express consent.

## Witness: John Magner

2. Please refer to Response to PSC 1-1, Attachment 2, page 2 of 9. Confirm that KAW acknowledges that Paris has an existing water main along the US-68 Bypass.

# **Response:**

KAW acknowledges that Paris has an existing water main along the US-68 bypass.

## Witness: John Magner

- 3. Please refer to KAW's Responses to Paris 1-2, 1-3, and 1-4. In addition, please refer to the Project Profile and preliminary design plan attached hereto as Exhibit A.
  - a. State whether KAW had knowledge of Paris's plan to construct an interceptor sewer around Houston Creek, which would require installation of a force main within the right of way of a portion of the right of way of the US-68 Bypass.
  - b. State whether KAW and its consultant is designing drawings for the installation of its proposed route for the transmission line and considering the anticipated construction of an interceptor sewer around Houston Creek in a portion of the right of way of the US-68 Bypass.
  - c. Confirm that KAW's construction specifications require the following: "Lay water mains at least 10 feet horizontally from any existing or proposed sanitary sewer. Measure the distance from edge to edge. In cases where it is not practical to maintain a 10-foot separation, the applicable State Agency may allow deviation on a case-by-case basis, if supported by data from the Engineer. Such deviation may allow installation of the water main closer to a sanitary sewer, provided that the water main is laid in a separate trench or on an undisturbed earth shelf located on one side of the sanitary sewer at such an elevation that the bottom of the water main is at least 18 inches above the top of the sanitary sewer."
  - d. State whether KAW and its consultant believes that its proposed transmission line and the anticipated interceptor sewer line can both be installed within the right of way of the US-68 Bypass by adhering to the guideline that water mains be installed 10 feet horizontally from any proposed sanitary sewer.
  - e. If the response to (d) above is "no," state whether KAW and its consultant believes that the applicable State Agency will allow a deviation for its proposed transmission line and the anticipated interceptor sewer line can both be installed within the right of way of the US-68 Bypass in separate trenches less than 10 feet horizontally from each other.

## **Response:**

a. KAW's engineering department did not have knowledge of the potential interceptor sewer project.

- b. KAW notes the following about the potential interceptor sewer project and related information provided in Exhibit A to Paris's data request.
  - The project's "Date Approved" is listed as October 18, 2013, which was almost ten years ago.
  - The project status is listed as "not funded."
  - Construction of the project was estimated to have been completed over five years ago in September 2018.
  - The information is Exhibit A appears to have been printed over five years ago in February 2018.

KAW and its design consultant are considering existing utilities in the design of the proposed main.

- c. The project will be constructed in accordance with the listed requirements.
- d. In general, it appears there is sufficient right-of-way to accommodate the installation of the proposed water main and a potential future sewer interceptor. However, KAW cannot confirm the feasibility of the design for a potential future City of Paris sewer project.
- e. This determination would be at the sole discretion of the applicable State Agency based on the detailed design of the potential sewer project and cannot be evaluated by KAW.

## Witness: John Magner

4. Please refer to KAW's Responses to Paris 1-5. Provide the calculation referred to in this request. Separately itemize each cost (power, chemicals, labor, etc.)

## **Response:**

The variable incremental production cost was calculated by dividing the 2022 total production cost of \$9,439,565.44 by the total system production of 15,713,364,000 gallons. The total production cost included \$5,324,133.17 for fuel and power; \$3,252,662.88 for chemicals; \$378,618. 65 for purchased water; and \$484,150.74 for waste disposal.

## Witness: John Magner

5. Please refer to KAW's Responses to Paris 1-6. State whether KAW will commit to have a standard interconnection to KAW's proposed transmission line.

# **Response:**

KAW is willing to provide permanent, metered interconnections to other utilities if an agreement can be reached that is acceptable to both KAW and the other utility.

#### Witness: John Magner

6. Please refer to KAW's Response to Paris 1-7. Explain whether the 117 MG anticipated annual future demand is the amount of wholesale water that KAW anticipates that it would sell Paris. If yes, explain why it is appropriate to use this amount reflecting 15% of Paris's current demand.

#### **Response:**

The value of 117 million gallons is an estimate of future wholesale water sales from KAW to Paris. Paris has expressed interest in an interconnection to KAW's proposed main. Paris has not provided an estimate of the amount of water they would purchase from KAW via a potential interconnection, therefore KAW's design consultant assumed a volume equal to 15% of Paris's current annual production for the purpose of performing hydraulic analyses for the proposed main.

## Witness: John Magner

- 7. Please refer to Table 1 on pages 4-5 of 8 of Exhibit 2 to the Application (Stantec Memo regarding Millersburg Water Supply Project– Preliminary Planning Study).
  - a. Explain how KAW determined its proposed future annual volumes sold to Harrison County Water Association (+14 MG) and Nicholas County Water District (+62 MG).
  - b. Explain how KAW determined its proposed future annual volumes sold to Judy Water Association (+30 MG) and Sharpsburg (+25 MG).
  - c. Explain why KAW only anticipates future demand of Judy Water Association to be supplied from KAW's Millersburg's system and no future demand of Judy Water Association to be supplied from KAW's North Middletown system.
  - d. Identify the year on which KAW's future demands are based.

#### **Response:**

- a. Please see KAW's response to PSC DR 1-12.
- b. Please see KAW's response to PSC DR 1-12. Definitive values have not been provided by these utilities and were assumed by KAW's design consultant.
- c. KAW anticipates supplying additional water to Judy Water Association via the proposed main to avoid reducing the available supply to KAW's customers in North Middletown.
- d. The estimated useful life of the project is 80 years, therefore this planning horizon is considered in future demand estimates.

# Witness: John Magner

8. Please refer to KAW's Response to Paris 1-12(c). Identify the estimated cost for upsizing approximately six miles of existing 8" KAW main between US-68 and Bethlehem Road. Provide all assumptions on which this estimate is based.

# **Response:**

Please see the attached.

Planning Cost Estimate								
Proj. Main South of Paris - Upsize Existing Main								
Date:	Date: 9/22/2023							
No.	Item	Unit	Quantity	ι	Jnit Price*		Total Cost	Notes/Assumptions
Engineering/Design						\$	200,000	
1	Consultant Design Fee	LS	1	\$	200,000	\$	200,000	Approx. 50% of design fee for currently proposed main
Materials						\$	1,922,500	
2	12" Ductile Iron Pipe	LF	0	\$	40	\$	-	
3	16" Ductile Iron Pipe	LF	32,000	\$	55	\$	1,760,000	Assumes upsizing to 16" main
4	Gate Valve	EA	22	\$	7,000	\$	154,000	Replacement of existing valves
5	22.5° Bend	EA	0	\$	350	\$	-	
6	45° Bend	EA	0	\$	350	\$	-	
7	90° Bend	EA	1	\$	500	\$	500	
8	Air Release Valve	EA	5	\$	400	\$	2,000	Install ARV's at signficant high points
9	Hydrant	EA	4	\$	1,500	\$	6,000	Replacement of existing hydrants
Construction Labor							2,586,450	
10	Mobilization/Demobalization	LS	1	\$	120,000	\$	120,000	Approx. 5% of construction labor cost
11	Traffic Control	LS	1	\$	75,000	\$	75,000	Assumed
12	Pipe Installation - Rural/ROW	LF	31,550	\$	65	\$	2,050,750	
13	Pipe Installation - Roadway	LF	0	\$	170	\$	-	
14	Pipe Installation - Road Crossing	LF	350	\$	700	\$	245,000	
15	Pipe Installation - Creek Crossing	LF	100	\$	600	\$	60,000	
16	Pipe Installation - Railroad Crossing	LF	0	\$	1,500	\$	-	
17	Valve Installation	EA	27	\$	600	\$	16,200	
18	Hydrant Installation	EA	4	\$	3,000	\$	12,000	
19	Tie-in	EA	3	\$	2,500	\$	7,500	Reconnect three existing mains to upsized main
Overhead/Legal/Easements							830,000	
20	AFUDC	LS	1	\$	130,000	\$	130,000	Approx. 3% of material and construction labor costs
21	Overhead	LS	1	\$	450,000	\$	450,000	Approx. 10% of material and construction labor costs
22	Legal/Easements	LS	1	\$	250,000	\$	250,000	Approx. 50% of estimated fees for currently proposed main
Project Total							5,538,950	

\*Unit prices, except for lump sum items, are identical to those used in the development of the cost estimate for the proposed project which was provided as Exhibit 4 to the direct testimony of John Magner.

# Main South of Paris – Existing Main Upsizing



# Witness: John Magner

- 9. Please refer to KAW's Responses to Paris 1-15 and 1-17.
  - a. Provide a detailed description of the "significant leak" that was repaired in Millersburg in January 2023. Include within your answer the location of the leak, how it was discovered, a description of the water main where there was a leak, the estimated rate of flow for the leak, the estimated duration of the leak, and the cause for the leak if known.
  - b. State whether KAW believes the repair of the leak has resulted in the significantly lower volume of water purchased from Paris from February to July 2023, in comparison to the two prior years, as shown in Response to Paris 1-15.

## **Response:**

- a. KAW's operations personnel utilized leak detection equipment to identify a leak at a 90-degree bend fitting on a 6" polyvinyl chloride main along Old Millersburg Road near Blacks Cross Road. The exact rate and duration of the leak are unknown, but operations personnel estimated them at 90 gallons per minute and 30 days, respectively. The exact cause of the leak is unknown, but KAW operational personnel believe it could have resulted from inadequate restraint of the fitting during the installation of the main, which occurred prior to KAW acquiring the Millersburg system.
- b. KAW believes that the repair of the leak could have contributed to a decrease in purchased water for the Millersburg system.

#### Witness: John Magner

10. Please refer to Response to PSC 1-1, Attachment 2, page 4 of 9. Confirm that KAW acknowledges that there would reduced disturbance within Paris if the alternate for a main south of Paris.

#### **Response:**

A main south of Paris would result in less disturbance within Paris. However, as discussed in the Direct Testimony of John Magner and the response to PSC DR 1-1, the alternative involving the construction of a main south of Paris: (1) provides significantly less hydraulic capacity when compared to the proposed alternative; (2) negatively affects pressures in other areas of KAW's system; (3) is not able to provide adequate flushing velocities without additional improvements, and; (4) unlike the proposed alternative, a main south of Paris would require significant private easement acquisition which has the potential to cause significant disturbance and makes project execution more risky.

## Witness: John Magner

11. Please refer to Response to PSC 1-16. State whether KAW anticipates that one or more chlorine boosters will be required for its proposed project, given the amount of time it will take to turn over the amount of water.

#### **Response:**

KAW already has a system to feed chlorine into water supplied to Millersburg. Due to routinely elevated levels of disinfection byproducts in the water supplied by Paris that violate regulatory maximum contaminant levels, KAW filters the supplied water using granular activated carbon. KAW must then rechlorinate the filtered water prior to distributing it to customers in Millersburg.