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west virginia department of environmental protection

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Division of Water and Waste Management  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Phone: 304-926-0495 / Fax: 304-926-0463

Harold D. Ward, Cabinet Secretary  
dep.wv.gov

**MEMORANDUM**

**To:** Marie Prezioso, Chair  
Meredith J. Vance, Director, Environmental Engineering Division, BPH

**From:** Katheryn Emery, P.E. Engineer Chief  
Sewer Technical Review Committee

**Date:** February 20, 2025

**Subject:** City of Pennsboro  
IJDC Application - 2024W-2580  
WV74 Waterline Extension - Phase II Critical Needs Project

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1. This committee has reviewed the preliminary application and engineering report submitted for the above referenced project in accordance with Chapter 31, Article 15A. It has been determined that the proposed project is:
  - a.  Consistent with the intent of the Infrastructure and Jobs Development Act and is the most cost-effective, environmentally sound alternative for solving the water needs in this area.
  - b.  Not consistent with the Act and may not be the most cost effective, environmentally sound alternative for solving the water needs in this area.
  - c.  Same as (a) above except that certain issues need to be addressed prior to design and construction as the attached comments indicate.
2. Our recommendation is that:
  - a.  The Funding Committee needs to review the proposed sources of funding to determine the best mix of grant and/or loan funds in accordance with applicable guidelines.
  - b.  The Funding Committee should recommend that the Council approve the proposed project and its funding plan.

- c. \_\_\_ The Funding Committee does not need to review the funding assumptions on this project because of deficiencies in the engineering report. The proposed project should be tabled for the consultant to address technical comments.
- d. \_\_\_ This project should be referred to the Consolidation Committee.

3. Other remarks:

This project will extend water service to 14 customers from the end of Phase I (WV 74 extension) near Haddox Run Road to Marsh Run Road as well as short extensions along Burton Run Road and Marsh Run Road. Recent tests conducted on the well water show arsenic and lead contamination. This project will provide a reliable source of potable water and all 14 future customers have signed up for water service agreements.

The proposed total cost for this project is \$1,317,000.00 and the City intends to pursue a \$1,317,000 IJDC Critical Needs Grant.

Using the Combined Application, the Design, and Total Engineering Fees appear to be within the ASCE Curves.

Preliminary Project Ratings:

Public Health Benefits:	15
Compliance with Standards:	5



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Harold D. Ward, Cabinet Secretary  
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## MEMORANDUM

**TO:** Katheryn Emery, P.E., Engineer Chief, DWWM

**FROM:** Jesse Rupe, P.E., DWWM

**DATE:** January 16, 2025

**SUBJECT:** City of Pennsboro  
IJDC Application - 2024W-2580  
WV74 Waterline Extension - Phase II Critical Needs Project

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### RECOMMENDATION

The IJDC Application and Preliminary Engineering Report prepared by Civil & Environmental Consultants, Inc. for the above referenced project has been reviewed and is technically feasible.

### PROJECT DESCRIPTION

The City of Pennsboro operates a water distribution system under (PWSID # 3304306) in Ritchie County, West Virginia. Pennsboro provides drinking water to approximately 616 total customers, including one resale customer. The distribution system includes 3 water storage tanks and has a total storage capacity of 960,000 gallons. The Hughes River Water Board water treatment plant (WTP) has a 2.5 million gallon per day (MGD) capacity.

This project proposes to extend water service to 14 customers from the end of Phase I (WV 74 extension) near Haddox Run Road to Marsh Run Road as well as short extensions along Burton Run Road and Marsh Run Road. This extension will include 6" PVC and DI pipe along with multiple fire hydrant assemblies.

The proposed total cost for this project is \$1,317,000.00 and the City intends to pursue a \$1,317,000 IJDC Critical Needs Grant.

## **NEED FOR PROJECT**

The project will address the water quality of the well water currently serving the residents that this project will be extending water service to. Recent tests conducted on the well water show arsenic and lead contamination. This project will provide treated water to these customers.

## **DEFICIENCIES/COMMENTS**

- All 14 future customers have signed up for water service agreements
- It is recommended that further sampling be conducted via BPH sampling guidelines to confirm that the contamination is located in the private wells and there isn't further contamination being introduced through the plumbing of each house.
- Using the Combined Application, the Design, and Total Engineering Fees appear to be within the ASCE Curves.

### **Preliminary Project Ratings:**

Public Health Benefits: 15

Compliance with Standards: 5

# Public Service Commission of West Virginia

201 Brooks Street, P.O. Box 812  
Charleston, West Virginia 25323

Phone: (304) 340-0300  
Fax: (304) 340-0325



August 14, 2024

Meredith J. Vance  
Office of Environmental Health Services  
350 Capitol Street, Room 313  
Charleston, West Virginia 25301-3713

Re: Public Service Commission Staff Review Comments  
Application No. 2024W-2580  
City of Pennsboro - Water Extension  
Infrastructure Preliminary Application

Dear Ms. Vance:

As requested, the Technical Staff of the Public Service Commission of West Virginia has completed its review of the above-referenced Infrastructure application. In light of Technical Staff's comments enclosed herewith, we are recommending the application be:

forwarded to the Funding Committee

forwarded to the Consolidation Committee

returned to the Applicant

Please advise if you have any questions.

Sincerely,

*Jonathan M Fowler*  
Jonathan M. Fowler, P.E.  
Engineering Division

Enclosures  
JMF:vb

**PUBLIC SERVICE COMMISSION STAFF  
TECHNICAL REVIEW**

**DATE:** August 14, 2024

**PROJECT SPONSOR:** CITY OF PENNSBORO - WATER

**PROJECT SUMMARY:** West Virginia 74 Waterline Extension (Phase II) along WV 74 from the end of the WV 74 Waterline Extension (Phase I) near Haddox Run Road to Marsh Run Road and a section of Burton Run Road as a Critical Needs Project. The total project cost will be \$1,317,000 serving 14 new customers.

**PROPOSED FUNDING:** IJDC Critical Needs Grant \$1,317,000

**CURRENT/PROPOSED  
RATES:**

<b>Schedule I</b>	\$60.48	3,400 gallons
	\$70.72	4,000 gallons
<b>Schedule II</b>	\$72.89	3,400 gallons
	\$85.25	4,000 gallons

Application No. 2024W-2580

**RECOMMENDATION:**  forward to the Funding Committee.  
 forward to the Consolidation Committee.  
 return to the Applicant.

**FINANCIAL: Bob Cadle**

1. Current average rates (\$66.69 for 3,400 gallons) are above the rates attributable to 1.25% (\$43.41), 1.5% (\$52.09), and 1.75% (\$60.77), of the Median Household Income (MHI), but below the rates attributable to 2% (\$69.46) of the MHI. Increasing current rates to 2.0% of the MHI would provide additional revenues of \$21,689.
2. Using Scenario 1, the preferred funding package consisting of an IJDC Critical Needs Grant of \$1,317,000, proposed average rates (\$66.69 for 3,400 gallons) will provide a cash flow surplus of \$13,340 and debt service coverage of 160.64%.
3. Using the Scenario 2 alternate loan package of \$1,317,000 (in

uncommitted funds) at 5% for 40 years (paid back over 38 years), proposed average rates (\$76.36 for 3,400 gallons) will provide a cash flow surplus of \$15,204 and debt service coverage of 143.67%.

#### 4. NOTES TO COMMENTS

- A. Staff's detailed adjustments are listed on Attachment A for Scenario 1 (Preferred Funding Package) and Attachment B for Scenario 2 (Loan Package).
- B. Staff prepared the attached Cash Flow Analysis utilizing information from the Annual Report for the Fiscal Year Ended June 30, 2023, and the applicant's Cash Flow Statement submitted with the application.
- C. Staff notes the Applicant is requesting a waiver of Rule 42 Exhibit requirement.
- D. The Accountant's Preliminary Application Form reflects a project cost of \$1,370,000, which is a typo and the actual amount is \$1,317,000, as reflected in the Preliminary Engineering Report as well as the Administrator's Preliminary Application Form. Also, the proposed rate reflected in the Accountant's Preliminary Application Form and applicable to the 14 new customers was the City's Schedule 1 rates. However, the project sponsor's attached Cash Flow Analysis reflects revenues based on the City's Schedule 2 rates. Staff utilized these rates in its analysis.
- E. Senate Bill 234, effective June 12, 2015, required water and sewer utilities that are political subdivisions of the state to maintain a cash working capital reserve in an amount of no less than one-eighth (1/8) of actual annual operation and maintenance expenses. It should be noted that the cash flows provided by the project sponsor include funding for the 1/8 cash working capital reserve. Staff accepted that amount in its analyses. However, this amount may be reviewed by the Commission in future filings in accordance with Public Service Commission General Order 183.11.
- F. Senate Bill 234 (2015) required, pursuant to WV Code 24-2-4b (b), that municipally operated utilities shall consider a reasonable plant-in-service depreciation expense for rates and charges. The project sponsor should take this into consideration when preparing its Rule 42. Municipals that do not provide for a reasonable depreciation expense risk delays in Certificate of Convenience and Necessity filings if rates are determined to not be sufficient.

- G. The City should carefully evaluate its revenue requirements before passing a rate ordinance in order to ensure that rates are sufficient to provide a reasonable surplus and meet coverage requirements. Calculations to support the revenue projections should also be provided.

**ENGINEERING:** Mansour Mashayekhi

1. This project may not require a Certificate of Convenience and Necessity from the PSC. The utility should consult with Commission Staff pursuant to General Order 246 for such determination. If a Certificate is required, the utility should reference this application number on the PSC's Form No. 4 when its application is filed at the Commission given the requirement of West Virginia Code §24-2-11 (c) and (e) et seq.
2. **Scope:** Phase II of the WV 74 Waterline Extension Project includes the following: an 11,000 foot, six-inch (6") waterline extension from the end of the WV 74 Waterline Extension (Phase I) near Haddox Run Road to Marsh Run Road, a short six-inch (6") waterline extension along Burton Run Road and Marsh Run Road (MAP), fire hydrants along the six-inch (6") waterline extension, and all Service connections. The City of Pennsboro (Pennsboro) purchases its potable water from Hughes River Water Board (Hughes River). Hughes River has sufficient capacity to provide the anticipated additional water required for this project. The City's water distribution system has sufficient capacity to convey the anticipated additional water required for this project. The estimated budget of the project is \$1,317,000. Project is expected to be funded an IJDC critical needs grant in the amount of \$1,317,000.
3. **Need for Project:** several families requested potable water service from the City. Some wells in the area are contaminated with poisonous minerals.
4. **Customer Density:** this project is an extension of potable water to approximately 14 new customers with about 11,000 feet of new lines, this equals about 6.7 customers per mile.
5. **Cost per Customer:** Based upon the estimated project budget of \$1,317,000 and proposing to have approximately 14 new customers, the cost- per-new-customer is approximately \$94,071. This project is entirely grant funded, therefore customers bear no project capital expenses.



6. **Project Feasibility:** This project appears to be technically feasible and poses little technical risk.
7. **Project Alternatives:** Only one Alternative was considered consists of the following: a six-inch (6") waterline extension from the end of the WV 74 Waterline Extension (Phase I) near Haddox Run Road to Marsh Run Road, a short six-inch (6") waterline extension along Burton Run Road and Marsh Run Road, fire hydrants along the six-inch (6") waterline extension, and service connections. No other reasonable alternatives are available for this project.
8. **Permits Required:** The following permits and/or certificates may be required for this project. WV Division of Natural Resources Clearance, US Fish and Wildlife "No Effect" Self Determination, WV Division of Culture and History Clearance, WV Bureau of Public Health (Construction Permit), Binding Commitment of Funding from Funding Agencies, WV DEP (Construction Stormwater Permit), WV Department of Transportation (Division of Highways), United States Army Corps of Engineers, WV Public Service Commission (Certificate of Convenience and Necessity), and authorization to advertise for bids from funding agencies.
9. **Consolidation:** There is no consolidation issue regarding this project.
10. **Inconsistencies:** None was noticed for this project.
11. **Operation and Maintenance (O&M) Expenses:** the project's O&M expenses are expected to increase by approximately (\$500) to an annual expense of \$341,965. All 14 potential customers have Signed water services agreements.
12. **Engineering Agreement:** The applicant has provided documentation relative to compliance with West Virginia Code §5G-1-1, et seq. Based on filing, the total design fees for engineering services are \$82,000 at construction cost of \$992,000. This is approximately 8.27% of the construction costs as shown on the application.

CITY OF PENNSBORO - WATER  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2023  
 APPLICATION NO: 2024W-2580  
 August 14, 2024

**PREFERRED FUNDING PACKAGE  
 SCENARIO 1**

	Cash Flow Going Level Per Application Before Project	Cash Flow Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<b>AVAILABLE CASH</b>				
Operating Revenues	526,967	539,213	(42,764) (1)	496,449
Other Operating Revenue	22,316	22,316	(1,280) (2)	21,036
SB 234 Annual Working Cash Collections	-	-	42,764 (3)	42,764
Interest Income & Other Misc.	378	378	-	378
<b>Total Cash Available</b>	<b>549,661</b>	<b>561,907</b>	<b>(1,280)</b>	<b>560,627</b>
<b>OPERATING DEDUCTIONS</b>				
Operating Expenses	341,465	341,965	-	341,965
Taxes	8,812	8,812	-	8,812
<b>Total Cash Requirements Before Debt Service</b>	<b>350,277</b>	<b>350,777</b>	<b>-</b>	<b>350,777</b>
Cash Available for Debt Service (A)	199,384	211,130	(1,280)	209,850
<b>DEBT SERVICE REQUIREMENTS</b>				
Principal & Interest (B)	130,634	130,634	-	130,634
Other Debt			-	-
Reserve Account @ 10%	10,175	10,175	-	10,175
Renewal & Replacement Fund (2.5%)	13,732	14,038	(1,101) (4)	12,937
<b>Total Debt Service Requirement</b>	<b>154,541</b>	<b>154,847</b>	<b>(1,101)</b>	<b>153,746</b>
SB 234 Cash Working Capital	42,683	42,764	-	42,764
<b>Remaining Cash</b>	<b>2,160</b>	<b>13,519</b>	<b>(179)</b>	<b>13,340</b>
Percent Coverage (A) / (B)	152.63%	161.62%		160.64%
Average rate for 3,400 gallons	\$ 66.69	\$ 66.69	\$ -	\$ 66.69
Average rate for 4,000 gallons	\$ 77.99	\$ 77.99	\$ -	\$ 77.99
<b>Schedule 1</b>				
Rate for 3,400 gallons	\$ 60.48	\$ 60.48	\$ -	\$ 60.48
Rate for 4,000 gallons	\$ 70.72	\$ 70.72	\$ -	\$ 70.72
<b>Schedule 2</b>				
Rate for 3,400 gallons	\$ 72.89	\$ 72.89	\$ -	\$ 72.89
Rate for 4,000 gallons	\$ 85.25	\$ 85.25	\$ -	\$ 85.25

Staff Adjustments

<u>Adjustment Description</u>			\$	Increase <Decrease>
(1)	<b>Operating Revenues</b>	Per Staff Analysis	496,449	(42,764)
		Per Application with Project	539,213	
Adjust revenues in accordance with PSC General Order 183.11.				
(2)	<b>Other Operating Revenue</b>	Per Staff Analysis	21,036	(1,280)
		Per Application with Project	22,316	
Remove tap fees that were recorded as other water revenues.				
(3)	<b>SB 234 Annual Working Cash Collections</b>	Per Staff Analysis	42,764	42,764
		Per Application with Project	-	
Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.				
(4)	<b>Renewal &amp; Replacement Fund (2.5%)</b>	Per Staff Analysis	12,937	(1,101)
		Per Application with Project	14,038	
Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.				

CITY OF PENNSBORO - WATER  
 CASH FLOW ANALYSIS  
 YEAR ENDED: June 30, 2023  
 APPLICATION NO: 2024W-2580  
 August 14, 2024

**LOAN PACKAGE  
 SCENARIO 2**

	Max Rate Going Level Per Application Before Project	Max Rate Proforma Per Application with Project	Staff Adjustments	Per Staff Analysis
	1	2	3	4
	\$	\$	\$	\$
<b>AVAILABLE CASH</b>				
Operating Revenues	526,967	629,213	(42,764) (1)	586,449
Other Operating Revenue	22,316	22,316	(1,280) (2)	21,036
SB 234 Annual Working Cash Collections	-	-	42,764 (3)	42,764
Interest Income & Other Misc.	378	378		378
<b>Total Cash Available</b>	<b>549,661</b>	<b>651,907</b>	<b>(1,280)</b>	<b>650,627</b>
<b>OPERATING DEDUCTIONS</b>				
Operating Expenses	341,465	341,965	-	341,965
Taxes	8,812	8,812	-	8,812
<b>Total Cash Requirements Before Debt Service</b>	<b>350,277</b>	<b>350,777</b>	<b>-</b>	<b>350,777</b>
Cash Available for Debt Servi (A)	199,384	301,130	(1,280)	299,850
<b>DEBT SERVICE REQUIREMENTS</b>				
Principal & Interest (B)	130,634	208,119	592 (4)	208,711
Other Debt			-	-
Reserve Account @ 10%	10,175	17,924	59 (5)	17,983
Renewal & Replacement Fund (2.5%)	13,732	16,288	(1,101) (6)	15,187
<b>Total Debt Service Requirement</b>	<b>154,541</b>	<b>242,331</b>	<b>(450)</b>	<b>241,881</b>
SB 234 Cash Working Capital	42,683	42,764	-	42,764
<b>Remaining Cash</b>	<b>2,160</b>	<b>16,035</b>	<b>(830)</b>	<b>15,204</b>
Percent Coverage (A) / (B)	152.63%	144.69%		143.67%
Average rate for 3,400 gallons	\$ 66.69	\$ 76.36	\$ -	\$ 76.36
Average rate for 4,000 gallons	\$ 77.99	\$ 89.30	\$ -	\$ 89.30
<b>Schedule 1</b>				
Rate for 3,400 gallons	\$ 60.48	\$ 69.25	\$ -	\$ 69.25
Rate for 4,000 gallons	\$ 70.72	\$ 80.98	\$ -	\$ 80.98
<b>Schedule 2</b>				
Rate for 3,400 gallons	\$ 72.89	\$ 83.46	\$ -	\$ 83.46
Rate for 4,000 gallons	\$ 85.25	\$ 97.61	\$ -	\$ 97.61

Staff Adjustments

<u>Adjustment Description</u>		\$	Increase <Decrease>
(1)	<b>Operating Revenues</b>	<b>Per Staff Analysis</b>	<b>586,449</b>
		<b>Per Application with Project</b>	<b>629,213</b>
	Adjust revenues in accordance with PSC General Order 183.11.		<b>(42,764)</b>
(2)	<b>Other Operating Revenue</b>	<b>Per Staff Analysis</b>	<b>21,036</b>
		<b>Per Application with Project</b>	<b>22,316</b>
	Remove tap fees that were recorded as other water revenues.		<b>(1,280)</b>
(3)	<b>SB 234 Annual Working Cash Collections</b>	<b>Per Staff Analysis</b>	<b>42,764</b>
		<b>Per Application with Project</b>	<b>-</b>
	Account for SB 234 (2015) funding pursuant to PSC General Order 183.11.		<b>42,764</b>
(4)	<b>Principal &amp; Interest</b>	<b>Per Staff Analysis</b>	<b>208,711</b>
		<b>Per Application with Project</b>	<b>208,119</b>
	The difference in P&I is related to Staff's calculation of a loan of \$1,317,000 for 40 years (paid over 38 years) at 5%.		<b>592</b>
(5)	<b>Reserve Account @ 10%</b>	<b>Per Staff Analysis</b>	<b>17,983</b>
		<b>Per Application with Project</b>	<b>17,924</b>
	Staff assumed a 10% reserve on the new debt.		<b>59</b>
(6)	<b>Renewal &amp; Replacement Fund (2.5%)</b>	<b>Per Staff Analysis</b>	<b>15,187</b>
		<b>Per Application with Project</b>	<b>16,288</b>
	Staff used 2.5% of the projection of "Operating & Other Revenues" as the basis of the renewal & replacement fund.		<b>(1,101)</b>