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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  
Funding Committee  
Infrastructure and Jobs Development Council

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

**Date:** November 10, 2022

**Subject:** City of Ranson  
Preliminary Application: IJDC No. 2022S-2261  
Mildred-Beltline Bioswale and Detention Pond 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 wastewater needs in this area.
  - b.  Not consistent with the Act and may not be the most cost effective, environmentally sound alternative for solving the wastewater 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 until technical comments have been resolved.
- d.  This project should be referred to the Consolidation Committee.

3. Other remarks:

The proposed project includes the installation of a 5 acre-feet composite-lined detention pond near the intersection of W Beltline Ave. and N George St. This area has experienced localized flooding from storms exceeding 0.5 inches in rainfall from improperly installed drainage piping.

This application should be tabled until the next Funding committee meeting to give the consultant time to answer the technical comments.

Attachments: Technical Comments

**Engineering Fees:**

Estimated construction cost =	\$ 2,297,166.30
Consultant's design fee =	\$ 267,521.50
Consultant's total fee =	\$ 465,000.00
Design fee percentage =	11.6 %
Design fee per ASCE curve =	9.9 %
Total fee percentage =	20.2 %
Total fee per ASCE curve =	20.5 %

**Preliminary Project Ratings:**

1. Public Health Benefits	5
3. Compliance with Standards	5
5. O & M Capabilities	0
6. Readiness to Proceed	0
8. Cost Effectiveness	0
10. Compliance with PSC Orders	0



STATE OF WEST VIRGINIA  
**DEPARTMENT OF HEALTH AND HUMAN RESOURCES**  
Bureau for Public Health  
Office of Environmental Health Service

Bill J. Crouch  
Cabinet Secretary

Ayne Amjad, MD, MPH  
Commissioner & State Health Officer

**MEMORANDUM**

**TO:** Jason Billups, P.E.  
DEP/Infrastructure Sewer Technical Review Committee

**FROM:** William S. Herold, Jr., P.E., Assistant Manager  
I/CD/Environmental Engineering Division

**DATE:** November 14, 2022

**SUBJECT:** City of Ranson  
Preliminary Application **Project No.: 2022SS-2261**  
Mildred-Beltline Stormwater Management Project  
Jefferson County

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**RECOMMENDATION:**

We have reviewed this preliminary application and recommend it be forwarded to the Funding Committee for review.

**PROJECT SCOPE:**

This preliminary application is to construct stormwater management facilities in the North Old Town area and along & adjacent to N Mildred Street between CSX Transportation corridor and 7<sup>th</sup> Avenue in the Town of Ranson. The project will consist of the installation of a stormwater management pond near the intersection of W. Beltline Ave. and S. George St., 900 LF of grass bioswales along the eastern edge of CSX right-of-way, and approximately 800 LF of drainage pipe along North Mildred St. and Cranes Ln.

Total estimated project cost is **\$2,777,166.30** (Local/County/Council): **\$965,000**; WDA Economic Enhancement Grant Fund: **\$1,498.30**; CWSRF Grant: **\$136,897.50**; and Local contribution: **\$176,607.50**).

**NEED FOR PROJECT:**

The Preliminary Engineering Report indicates the City of Ranson experiences isolated areas of flooding throughout the North Old Town area, along and adjacent to N. Mildred Street between the CSX Transportation corridor and 7<sup>th</sup> Avenue.

**CONCERNS:**

None.

**PERMITS:**

A permit **will not be** required from the WV Bureau for Public Health.



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## MEMORANDUM

**TO:** Kathy Emery, P.E., Director, DWWM

**FROM:** Thomas Cazad, P.E., Engineer, DWWM

**DATE:** November 9, 2022

**SUBJECT:** City of Ranson  
Preliminary Application: IJDC No. 2022S-2261  
Mildred-Beltline Bioswale and Detention Pond Project

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## RECOMMENDATION

The IJDC Application and Preliminary Engineering Report (PER), prepared by Toole Design, for the above referenced project has been reviewed and it is recommended to be tabled.

## PROJECT DESCRIPTION

The City of Ranson (City) does not own or operate a sanitary or stormwater utility. The Charles Town Utility Board (CTUB) owns and operates the collection and treatment systems that serve residents of Charles Town, Ranson, and former customers of the Jefferson County PSD.

The proposed project includes the installation of a 5 acre-feet composite-lined detention pond near the intersection of W Beltline Ave. and N George St., 900 LF of grass bioswales along the eastern edge of the CSX right-of-way from W Beltline Ave. to Cranes Ln., and 800 LF of storm sewers between 12 and 48 inches in diameter along N Mildred St. and Cranes Ln.

The proposed total project cost is \$2,777,166.30, and the proposed funding scenario includes a WDA Economic Enhancement Grant of \$1,498,661.30, a WVDEP Diversity, Equity, Inclusion, and Justice (DEIJ) Grant of \$136,897.50 with a local match of \$176,607.50 from the City, and \$965,000 in additional funds from the City.

## **NEED FOR PROJECT**

The PER indicates that areas along Mildred St. from Cranes Ln. to E. 12th Ave. have experienced localized flooding from storms exceeding 0.5 inches in rainfall from improperly installed drainage piping. The proposed project will install a new storm sewer to convey runoff from this area to a new grass bioswale running from Cranes Ln., which will convey storm flows to the proposed detention pond located near W Beltline Ave. The drainage area served by this project is approximately 152 acres. Flows from the detention pond will be tied-in to an existing bioswale that was constructed in the 1990s to prevent annual flooding in the area. The existing bioswale appears to run between McDonald St. and Mineral St. from W 6th Ave. to Evitts Run near the end of W 2nd Ave.

## **DEFICIENCIES/COMMENTS**

- The PER is not sealed by a WV P.E.
- Cost estimates are not attached for the alternatives.
- The proposed detention pond's sizing calculations, detention time, and design storm are not discussed.
- It is unclear how the proposed detention pond will connect to the existing swale between McDonald and Mineral Streets. The PER indicates it will tie-in to the existing storm system on W 7th Ave, while the project map uploaded to IJDC's Dashboard shows a picture of the existing swale at W 6th Ave. The map does not show a proposed tie-in from the detention pond to the existing swale at either location.
- The PER indicates that the downstream CSX trestle restricts flow leaving the existing swale, causing localized flooding. The PER does not discuss how the proposed project will affect this existing condition.
- Documentation of past flooding incidents should be attached.
- There are discrepancies between the IJDC Application, the information uploaded to the Dashboard, and the PER regarding the proposed O&M costs, engineering costs, and the amount of the City's funding commitment.
- It was noted during the review that the IJDC Application did not include common project costs for line items such as an Accountant, Local Attorney, Lands & ROWs, Permits, Preliminary Design, Study & Report Phase, and Resident Project Representative. This should be reviewed by the project team and updated where necessary.
- An engineering variance for the design fee will be necessary.
- It is unclear whether the project is eligible for the proposed WVDEP DEIJ Grant.
- The PER includes construction contingency equal to 30% of the estimated construction costs.
- It is unclear how the City will pay the proposed O&M without an associated rate. It should be noted that CTUB confirmed that their acquisition of the City's sanitary sewers did not include any existing storm sewers or systems.
- The IJDC Application listed the MHI for Jefferson County (\$82,551) instead of the City of Ranson (\$69,544).
- The PER will need to be developed into a facilities plan that meets CWSRF requirements if funds from the CWSRF are sought in the future.

Engineering Fees:

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Preliminary Project Ratings:

Public Health Benefits	5
Compliance with Standards	5