AGENDA

Red Run Intercounty Drain Drainage Board

Macomb and Oakland Counties

July 9, 2025 – 10:30 a.m.

Office of the Macomb County Public Works Commissioner 21777 Dunham Road, Clinton Township, Michigan, and Microsoft Teams

1. Call meeting to order

Board Members:

Joe Brezvai, Chair, Michigan Department of Agriculture and Rural Development Candice Miller, Macomb County Public Works Commissioner Jim Nash, Oakland County Water Resources Commissioner

- 2. Approval of the meeting agenda for July 9, 2025
- 3. Approval of Drainage District Board Meeting Minutes from June 18, 2025
- 4. Public Comment
- 5. Present HRC Proposal for Professional Services
- 6. Present trial balance
- 7. Present approval for payment of invoices in the amount of \$447.45
- 8. Other business
- 9. Adjourn

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 3

Board Meeting Minutes from June 18, 2025

Minutes of the Meeting of the Intercounty Drainage Board for the Red Run Drain

June 18, 2025

Minutes of the regular meeting of the Drainage Board of the Red Run Drain Drainage District held at the office of the Oakland County Water Resources Commissioner, One Public Works Drive, Building 95 West, Waterford, Michigan on the 18th day of June 2025 at 10:30 a.m. Eastern Standard Time and via Microsoft Teams.

Present: Joe Brezvai, Chairperson and Deputy for Dr. Tim Boring, Director of the Michigan

Department of Agriculture and Rural Development; Candice Miller, Member and Macomb County Public Works Commissioner; and Jim Nash, Secretary and Oakland

County Water Resources Commissioner.

Also Present: Representing the office of the Macomb County Public Works Commissioner; Brian

Baker, Don Brown, Steven Downing, Bruce Manning, Norb Franz, Jeff Bednar. Representing the office of the Oakland County Water Resources Commissioner: Steve Korth, Anne Vaara, Sara Rubino, Gary Nigro, George Nichols, Stephanie Lajdziak and Mel Todd. Others in attendance: Jamie Burton and Nancy Kolinski (Hubbell, Roth & Clark), Brandon Williams (Michigan Department of Agriculture and Rural Development), Stephen Saph and John Johnson (Steven Saph of Nickle & Saph, Inc. Insurance Agency), Kristina Lovidisi and Tina Gapshes (City of Warren).

1. <u>Call meeting to order</u>.

Chairperson Brezvai called the meeting to order at 10:30 a.m.

2. Agenda.

Motion by Miller, supported by Nash, to approve the June 18, 2025, agenda as presented.

Adopted: YEAS - 3

NAYS - 0

3. Minutes.

Motion by Nash, supported by Miller, to approve the minutes of the December 18, 2024, meeting.

Adopted: YEAS - 3

NAYS - 0

4. <u>Public Comment.</u>

None.

5. Macomb County Public Works Liability Insurance Renewal

Steven Saph of Nickle & Saph, Inc. Insurance Agency presented to the Board an overview of the Red Run Liability Insurance renewal coverages and premium notice of \$66,435.00. Brian

Baker noted that there will be no change in apportionment or deductibles, but the renewal increase from last year is 5.22%.

Motion by Nash, supported by Miller, to authorize the Board to effectuate the insurance coverage and approve payment of premium as presented.

Adopted: YEAS - 3

NAYS - 0

6. Freedom Hill.

Nancy Kolinski provided the Board an update of completed construction for the Red Run Drain Freedom Hill Restoration project. Nancy also reviewed the Red Run Drain Supplemental Services project task summary, GWK Outfall project, Resilience Study, Water Management Plan Update, Drain Proper Assessment, and Spill Response within her Account of Project Standing presentation.

Jeff Bednar reviewed various solutions regarding the ongoing concern of soil erosion on the southside bank. Discussion ensued as to the possible funding and studies of environmental factors contributing to needed enhancements. It was further noted that immediate efforts and planning on primary areas of concern along the drain should be taken into consideration.

Motion by Nash, supported by Miller, to receive and file the Red Run Freedom Hill update as presented.

Adopted: YEAS - 3

NAYS - 0

7. Macomb Daily Article.

Candice Miller presented to the Board the Macomb Daily Article regarding the City of Warren's wastewater treatment plant's new storage basin. Tina Gapshes and Kristina Lovidisi reviewed the positive impact the \$100 million investment has had on the City of Warren and the Drainage District. The detention facility holds 22 million gallons and has helped reduce basement backups in their community.

Motion by Nash, supported by Miller, to receive and file the Macomb Daily article as presented.

Adopted: YEAS - 3

NAYS - 0

8. Trial Balance

George Nichols presented the Trial Balance report dated June 9, 2025, indicating a cash available balance of \$795,971.20.

Motion by Nash, supported by Miller, to receive and file the Trial Balance as provided.

Adopted: YEAS - 3

NAYS - 0

9. <u>Invoices and/or Reimbursement of the Drain Revolving Fund</u>

A request for approval of payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$44,738.71 was presented.

Motion by Miller, supported by Nash, to approve the payment of invoices and/or reimbursement of the Drain Revolving Fund in the amount of \$44,738.71 as presented.

Adopted: YEAS - 3

NAYS - 0

10. Red Run Drain Bank Erosion

Gary Nigro presented to the Board the Red Run Intercounty Drain UAS Flight, Process and Bank Conditions prepared by Hubbell, Roth and Clark, Inc. Gary reviewed drone and Google Earth mapping processed using DJI software that converts aerial images into 2D and 3D models used to produce images of various areas of erosion and shoaling along the Red Run Drain.

Discussion ensued regarding previous US Army involvement and funding as well as the need to understand the drain flow before devising a plan for improvement actions. Jamie Burton will provide a proposed scope of work for an engineering analysis to determine priority areas for bank stabilization at the next meeting on July 9, 2025.

Motion by Miller, supported by Nash, to request a proposal from HRC to perform an engineering analysis to review property and easement concerns, develop details and recommendations for bank stabilization, and provide an opinion of probable cost for improvement recommendations.

Adopted: YEAS - 3

NAYS - 0

11. Other Business.

Jim Nash provided the following statement to be entered into the record.

We are aware of the June 11 letter Macomb County sent to EGLE Director Phillip Roos. This letter contains many falsehoods, unsubstantiated claims, and misleading statements about the condition of the Red Run Drain, among other things.

While WRC staff, engineers, and subject-matter experts quickly provided Director Roos with the correct information – it should be stated for the record that this Board did not authorize, endorse, or even discuss the letter sent by Commissioner Miller.

Motion by Nash, supported by Miller, to receive and file Commissioner Nash's statement.

Adopted: YEAS - 3

NAYS - 0

12. Adjourn.

Motion by Nash, supported by Miller, to adjourn the June 18, 2025, meeting at 11:44 a.m.

Adopted: YEAS - 3

NAYS - 0

Next Regular Meeting: Office of the Macomb County Public Works Commissioner, 21777 Dunham Road, Clinton Township, Michigan and electronically at 10:30 a.m., Eastern Standard Time on July 9, 2025.

Jim Nash, Secretary

Red Run Intercounty Drain Drainage Board

STATE OF MICHIGAN)
)SS
COUNTY OF OAKLAND)

I hereby certify that the foregoing is a true and complete copy of the minutes of the Red Run Intercounty Drain Drainage Board, at a meeting held on the 18th day of June 2025, and that the meeting was conducted and public notice was given in compliance with the Open Meetings Act being Act 267, Public Acts of Michigan, 1976, as may be amended from time to time and that the minutes were kept and will be or have been made available to the public as required by the Act.

IN WITNESS WHEREOF, I have hereunto affixed my official signature on this 18^{th} day of June 2025.

Jim Nash, Secretary

Red Run Intercounty Drain Drainage Board

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 4

Public Comment

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 5

HRC Proposal for Professional Services

555 Hulet Drive Bloomfield Hills, MI 48302-0360

HRC Job Number: 20250308.01

248-454-6300

www.hrcengr.com



July 2, 2025

Oakland County Water Resources Commissioner 1 Public Works Drive Waterford, Michigan 48328

Attn: Mr. Gary Nigro, P.E., Field Operations Manager

Re: Proposal for Professional Services

Red Run Intercounty Drain Drainage Board 2025 Update and Comprehensive Action Plan

Dear Mr. Nigro,

At the request of the Red Run Intercounty Drain Drainage Board (Board) at their June 18, 2025 meeting, HRC is pleased to submit this proposal for professional services to update our Study for the Repair, Maintenance, and Management of the Red Run Intercounty Drain (issued on September 16, 2020). The scope identified herein was collaboratively established with the staff from Macomb and Oakland Counties at a work group meeting held on June 27, 2025.

Background

To ensure the long-term viability of the Drain, the Board obtained the professional engineering services of Hubbell, Roth, and Clark, Inc., and Spicer Group (Project Team) to develop a comprehensive study for the repair, maintenance, and management of the Red Run Drain in 2018. To determine the maintenance needs and capital improvement projects, the Project Team conducted a baseline assessment by inspecting 8.2 miles of the Drain, starting from the George W. Kuhn Retention Treatment Basin (GWK) outlet at Dequindre, between 13 Mile and 14 Mile Roads, to where the Red Run meets the Clinton River. In addition, the Project Team reviewed existing data, reports, models, and drone footage. All the information obtained was used to evaluate the following:

- Bank/slope conditions
- Encroachments
- Invasive vegetation
- Obstructions
- Peak flows and floodplain

- > Regional detention opportunities
- Sedimentation
- Utilities
- Water quality

Our findings identified a number of capital projects, with current status noted:

- > Bank Stabilization west of Ryan Road No action to date
- ➤ Bank Stabilization east of Ryan Road No action to date
- Freedom Hill north bank Completed by the Intercounty Drain Drainage Board
- Freedom Hill south bank Design completed by USACE, awaiting funding
- GWK Outlet Transferred to the GWK Drain Drainage Board, design completed by USACE, awaiting funding

In addition to the above capital projects, a number of on-going maintenance projects were recommended including invasive species management, outfall replacement or repair, an emergency spill response plan, etc. Progress continues on these matters, as necessary.

Based on the recent changes to USACE funding opportunities, it is likely that undertaking projects through their various Federal authorizations will be challenging and out at least 3 to 4 years. Further, additional bank failure areas have identified since the walk through performed in 2018-2019 by the Project Team. Staff from both Counties approached HRC to conceptualize a plan to undertake a significantly larger project in a quicker manner.

Bloomfield Hills | Delhi Township | Detroit | Grand Rapids | Howell | Jackson | Kalamazoo | Traverse City | Troy



Due to the timing of this conversation and the imminent start of the growing season, HRC took it upon ourselves, without a cost to the District, to fly the entire Drain with our drone and gather 3D imagery of the current bank and drain conditions. We also have unprocessed LIDAR survey data for the 0.5 Miles downstream of GWK. No comparison to past conditions has been made at this time. The preliminary findings of this effort were presented to the Drainage Board on June 18, 2025. Based on the condition of the Drain and the desire to take significant action, the Board requested this proposal.

On June 27, 2025, the work group discussed the status of three potential supplemental studies being conducted on the Red Run sub-watershed. Through the Department of Defense's Dar2V2 program, the hydrology over the entire watershed is being updated with a project deliverable of identifying flood risks. A significant benefit from this study for the Board is updated flow data that could be used to make the current hydraulic model for Red Run more accurate and robust. This study is slated for completion this winter. At the same time, the USACE is working on an updated model from Red Run to Garfield on the Clinton River and recently completed modeling for the lower Clinton near the Spillway.

It is the belief of this working group that we have enough data to update the report and generate an immediate action plan for projects that could be under construction in 2026, but hold off any large-scale modeling, survey, or geotechnical efforts until the above-mentioned studies are complete and can be integrated. Further, while the LIDAR capabilities of our drone make it possible to obtain elevation data during the growing season, it is more accurate after the vegetation goes dormant which lines up better with the aforementioned studies by others. We have accounted for those services needed to support the highest priority projects at this time at a smaller scale.

Overview of Project Goal

This is not another study. We propose to supplement and update the 2020 report only in the areas that support the development of the next actionable projects to reduce maintenance and long term risks. The secondary goal of this effort is to generate a comprehensive scope to restore and improve the Red Run Drain that can be easily updated as more data becomes available or as progress is made and will support the request for grant funding and inform the communities of the long term funding needs of the Drain.

Scope of Services

Phase 1 Conditions and Priorities

- 1) Merge all available data sets into a comprehensive and centralized GIS platform, including:
 - a) Old study findings such as bank conditions, capacity, etc.
 - b) Condition pictures from original study and periodic walk throughs
 - c) Outfall locations and data
 - d) Right of way information
 - e) Known utilities
 - f) Existing geotechnical data
 - g) New aerial imagery
- 2) Scan and catalog all Red Run files in one central location
- 3) Develop a consistent rating system for banks
 - a) Reset old data to new rating
 - b) Reevaluate new aerial imagery to same reference
 - c) Consensus from staff on condition ratings



- Evaluate changes in Drain conditions from 2018 to 2025
 - a) Severity
 - b) Progression or rate of change supplemented with Near Map images
- 5) Overlay and comment on ROW/easement availability or encroachments
- 6) Identify any areas that should be addressed immediately with recommended stabilization measures
 - a) Areas that do not require permitting or USACE 408 Review
 - b) Can be handled by local maintenance forces
 - c) Includes any areas that should be temporarily fenced off or otherwise protected
 - d) Including some additional field data collection and planning level cost estimates
 - e) Comment on short term apportionment needs to process repairs before the final report is completed
- 7) Review existing modeling and flow data to estimate sheer stress concerns over a variety of flows
 - a) Will be based on current flows and model and scaled accordingly
- 8) Establish a repeatable prioritization metric
 - a) Identify the factors influence sequence and priorities such as but not limited to:
 - i) Severity
 - ii) ROW impacts
 - iii) Infrastructure threatened
 - iv) Rate of change
 - b) Develop weighting for these factors based on criticality, probability of failure, and consequences
 - c) Establish a metric tool to screen current and future projects
- 9) Prepare a comprehensive but dynamic map of the conditions and priorities for repair and improvement
- 10) Preliminary report memo and presentation to the Board
 - a) Story map (GIS dashboard)
- 11) Normal administrative tasks including biweekly team calls and monthly reports to the Board

Phase 2 - Restoration and Improvement Recommendations

- 12) Review previous project designs and current field conditions to see what worked well and why including:
 - a) USACE projects
 - b) Maintenance work
 - c) North bank project
 - d) Outfall repairs
- 13) Field Data Collection
 - a) Rip Rap review for sizing that has stayed in place
 - b) Survey as needed for highest priority area(s), assuming 3 bank sections for 2026
 - c) Geotechnical data as needed for highest priority area(s), assuming 3 bank sections for 2026
- 14) Generate design cross sections and stabilization means per field conditions
 - a) Based on current data and modeling
 - i) Informed by historic designs and inventory
 - b) Stress test solutions across a variety of flows with existing model
 - c) Apply solutions throughout the Drain by current conditions



- 15) Provide planning level estimates of probable project costs and run said costs through the current apportionment rolls, including:
 - a) Comprehensive (end to end) scenario
 - b) Priority areas
 - c) Annual capital projects vs bonding scenarios
 - d) Comment on permitting challenges and timing
- 16) Comment on other recommendations
 - a) Maintenance needs
 - b) Third party issues
- 17) Normal administrative tasks including biweekly team calls and monthly reports to the Board
- 18) Preliminary report memo and presentation to the Board
 - a) Provide clear direction and steps to implement priority projects including ROW, permitting, access, or other challenges
 - b) Story map update
- 19) Final report memo and presentation to the Board
 - a) Story map final

<u>Future Phase 3 – Dynamic Map Improvements with Updated Model Information (Costs not included)</u>

- 20) Update model input flows from DOD project outcomes
- 21) Collect survey grade Lidar data and create a complete terrain model of the Red Run
- 22) Input terrain model and current sections into model
- 23) Rerun model
 - a) Refine shear stress analysis
 - b) Review model predicted flooding or capacity issues
- 24) Update findings and recommendations
- 25) Final report memo and presentation to the Board
 - a) Refreshed and updated findings and recommendations
 - b) Story map final

Additional Assumptions

- A. Near Map data provided to HRC from MCPWO at no cost
- B. Property ownership and easement files provided by OCWRC, no new research needed at this time
- C. There will be a paper set of the GIS Story Map but base construction drawings are not currently included

Costs

Based on the above scope of services and attached table of hours, HRC recommends a project budget of 1,152 hours and \$173,310 which includes a \$30,000 place holder for additional survey and geotechnical investigations of the first 3 priority areas.



Schedule

We are prepared to begin immediately and have the Phase 1 preliminary report submitted to the ICDB by December 1, 2025, and have Phase 2 preliminary report by March 1, 2026. The attached table includes a basic monthly milestone schedule. This will get refined as we get started.

As early as December 2025, we will have the field investigation done and projects identified. Under an amendment or separate proposal, the Board could authorize design and bidding documents for the first construction projects to be bid in summer/fall 2026 with construction in fall/winter. This does assume that the work proposed is exempt under State law and we can avoid USACE 408 approval or seek a waiver to proceed. EGLE permitting and 408 review will add six (6) months after plans and specifications plus the updated hydraulic modeling is complete.

If you have any questions or require any additional information, please contact the undersigned.

Sincerely,

HUBBELL, ROTH & CLARK, INC.

James F. Burton Vice President

Cc: MCPWO; Mr. Jeff Bednar

OCWRC; Mr. Evans Bantios, Mr. George Nichols

MDARD; Mr. Joe Brezvai

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HRC; Files

	Partn	er	Project	M	1anager	C	Frad	 GIS	GIS	S	Adn	nin	Budget	Task Hours	Timing
			Manage				gineer	 anager	Specia						
	\$	180	\$ 18	0 \$	155	\$	115	\$ 140	\$	95	\$	100			
Phase 1 – Conditions and Priorities								 							
1) Merge all available data sets into a comprehensive and centralized GIS platform, including:			4		8		24	 4	40					80	July
2) Scan and catalog all Red Run files in one central location								 			3:	<u></u>		32	On Going
3) Develop a consistent rating system for banks	4		4		4		40	 	8					60	July
4) Evaluate changes in Drain conditions from 2018 to 2025			4				40	 	24	ļ 				68	August
5) Overlay and comment on ROW/easement availability or encroachments	4		4				24	 	8					40	August
6) Identify any areas that should be addressed immediately with recommended stabilization measures			10		10		40	 	4					64	September
7) Review existing modeling and flow data to estimate sheer stress concerns over a variety of flows	4				24		40	 	8					76	September
8) Establish a repeatable prioritization metric	4		8				16	 4	16	i				48	September
9) Prepare a comprehensive but dynamic map of the conditions and priorities for repair and improvement			8				16	 16	32	<u> </u>				72	October
10) Preliminary report memo and presentation to the Board	4		8		4		40	 	24	ļ	8			88	November
11) Normal administrative tasks including biweekly team calls and monthly reports to the Board	40							 			40)		80	On Going
SUBTOTAL HOURS - PHASE 1	60		50		50		280	24	164	4	8)		708	
SUBTOTAL COSTS - PHASE 1	\$ 10,8	800	\$ 9,00	0 \$	7,750	\$:	32,200	\$ 3,360	\$ 15,	,580	\$ 8	,000	\$ -	\$ 86,690	
Phase 2 – Restoration and Improvement Recommendations								 					•••••		
12) Review previous project designs and current field conditions to see what worked well and why including:					40		40	 	8					88	October
13) Field Data Collection					16		16	 					\$ 30,000	40	November
14) Generate design cross sections and stabilization means per field conditions			8		16		40	 	16	;	• • • • • • • • • • • • • • • • • • • •			80	December
15) Provide planning level estimates of probable project costs and run said costs through the current apportionment								 							January
rolls, including:	4		4				32		8		4			52	-
16) Comment on other recommendations			4		4		16	 	4		• • • • • • • • • • • • • • • • • • • •			28	January
17) Normal administrative tasks including biweekly team calls and monthly reports to the Board	24							 			24	4		48	On Going
18) Preliminary report memo and presentation to the Board	8		4		4		40	 	16	 }	8			80	February
19) Final report memo and presentation to the Board	4		4				16	 	8		4	· · · · · · · · · · · · · · · · · · ·		36	March
SUBTOTAL HOURS - PHASE 2	40		24		80		200	0	60)	40)		444	
SUBTOTAL COSTS - PHASE 2	\$ 7,2	200	\$ 4,32	0 \$	12,400	\$:	23,000	\$ -	\$ 5,	700	\$ 4	,000	\$ 30,000	\$ 86,620	
TOTAL HOURS	100)	74		130		480	24	224	4	12	0		1152	
TOTAL COSTS	\$ 18,0	000	\$ 13,32	0 \$	20,150	\$	55,200	\$ 3,360	\$ 21,	,280	\$ 12	,000	\$ 30,000	\$ 173,310	\$ 173,310

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 6

Trial Balance

Trial Balance



Organization Oakland County
Periods FY2025 : Jul

Ledger Actuals

Accounting Worktag FND82902 Red Run Federal Drain Ch21

Book Operating

Company Currency USD Translation Currency USD

Run 07/02/2025 03:35 PM

Consolidation Data

Ledger Account	Beginning Balance	Debit Amount	Credit Amount	Ending Balance
100100:Cash - Operating	753,229.49	2,877.44	25.43	756,081.50
101500:Undeposited Cash	0.00	0.00	0.00	0.00
104100:Accrued Interest on Investment	0.00	0.00	0.00	0.00
126100:Due from Municipalities	0.00	0.00	0.00	0.00
201210:Vouchers Payable AP Cont	0.00	0.00	0.00	0.00
201220:Employee Expenses Payable	0.00	0.00	0.00	0.00
211100:Due to Primary Government	0.00	0.00	0.00	0.00
228100:Deposits Liability	(28,244.40)	0.00	0.00	(28,244.40)
230852:Accounts Payable	0.00	0.00	0.00	0.00
381350:FB Restricted Programs	(945,122.43)	0.00	0.00	(945,122.43)
450100:Cash Sweep	0.00	0.00	0.00	0.00
655000:Investment Income	(23,605.93)	25.43	2,877.44	(26,457.94)
730000:Contractual Services	219,839.11	0.00	0.00	219,839.11
770000:Internal Support Expenditures	23,904.16	0.00	0.00	23,904.16
Total	0.00	2,902.87	2,902.87	0.00

Cash	\$ 756,081.50
Permit Held	(28,244.40)
Total Cash Available	\$ 727,837.10

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 7

Invoices

MEMO TO:

Mr. Jim Nash, Chairman

of the Intercounty Drainage Board for the RED RUN FEDERAL DRAIN

FROM:

Shawn Phelps, Chief of Fiscal Services

OCWRC Accounting

H for Shown Phelps

DATE: July 9, 2025

SUBJECT:

Request for Approval of Invoices

Request for Board approval of payment of the following invoices:

Ref

Date 6/20/2025

No. SINV00348114 Paid To

Hubbell, Roth, & Clark Inc

Inv # 0227982 - Contracted Services - 05/24/25 - Proj# 1-7494

447.45

Project # 1-7494 Total

447.45

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 8

Other Business

Regular Meeting – Wednesday, July 9, 2025

Agenda Item No. 9

Adjourn