

## AGENDA

### **Randolph Street Intercounty Drain Drainage Board** Wayne and Oakland Counties

**March 3, 2023 – 10:00 a.m.**

Northville Public Library

212 W. Cady St.

Northville, MI, and Microsoft Teams

1. Call meeting to order

Board Members:

Michael Gregg, Chair, Michigan Department of Agriculture and Rural Development

Elmeka Steele, Wayne County Drain Commissioner

Jim Nash, Oakland County Water Resources Commissioner

2. Approval of the meeting agenda for March 3, 2023
3. Approval of Drainage District Board Meeting Minutes from April 8, 2019
4. Public Comment
5. Present Memorandum from Geoff Wilson, P.E. – Assistant Chief Engineer, dated March 3, 2023, requesting the Board to receive and file documents regarding the Drainage District's Serenity Point and Riverbank Stabilization Project
6. Present Memorandum from Geoff Wilson, P.E. – Assistant Chief Engineer, dated March 3, 2023, requesting the Board receive and file documents regarding the Drainage District's Easement Acquisitions of Center Street to Lower Terminus
7. Present Memorandum from Geoff Wilson, P.E. – Assistant Chief Engineer, dated March 3, 2023, requesting the Board pause effort to build weir and replace Mill Pond Court culvert until further progress is made between the City of Novi and Lexington Green Homeowners Association
8. Present Memorandum from Geoff Wilson, P.E. – Assistant Chief Engineer, dated March 3, 2023, regarding the Maintenance Update and Prior Inspections
9. Present Maintenance Assessment Recommendation and Special Assessment Roll in the amount of \$86,992.00
10. Present trial balance
11. Other business
12. Adjourn

**Agenda Item No. 3**

Board Meeting Minutes from  
April 8, 2019

**MINUTES OF THE MEETING OF THE  
RANDOLPH STREET INTERCOUNTY DRAIN DRAINAGE BOARD**

April 8, 2019

A meeting of the Intercounty Drain Drainage Board for the Randolph Street Drain was held at the City of Northville Municipal Offices, 215 West Main Street, Northville, Michigan at 10:00 a.m. on the 8<sup>th</sup> of April, 2019.

Present: Mike Gregg, Chairperson  
Michigan Department of Agriculture and Rural Development (MDARD)

Jim Nash, Member  
Oakland County Water Resources Commissioner (OCWRC)

Elmeka Steele, Member  
Wayne County Drain Commissioner

Also Present: Representing Residents: Laura Lorenzo, Walt Kowalkowski and Mike Fee; Representing the Oakland County Water Resources Commissioner: Geoff Wilson, Mike McMahon, Jacklyn Thomas and Megan Koss; Representing the City of Northville: Loyd Cureton and Mike Domine; Representing the City of Novi: Megan Mikus and George D. Melistas.

Chairperson Gregg called the meeting to order at 10:00 a.m.

Chairperson Gregg asked the attendees to introduce themselves.

Motion by Mr. Nash, supported by Ms. Steele, that Oakland County serve as Secretary.

Adopted:	Yeas	-	3
	Nays	-	0

Motion by Mr. Nash, supported by Ms. Steele, to approve the July 13, 2018 minutes as presented.

Adopted:	Yeas	-	3
	Nays	-	0

Chairperson Gregg asked if there were any public comments. Ms. Lorenzo provided a detailed timeline of the flooding event that occurred on her property in May of 2011. She indicated that she promptly notified the Oakland County Water Resource Commissioner's Office of the May 2011 event. In 2012, the Board asked ASI to provide an engineering report and as a result of said report, the Board approved a project to clean out debris and sediment in 2013. She noted that she and her husband strongly object to

the weir proposal and are afraid that the potential project would compromise the benefits derived from the 2013 cleanout referenced above.

Mr. Fee stated that the pond in question was converted from a dry basin to a wet pond in the late 1980s but was significantly undersized in comparison to the need. Mr. Fee further expressed concern over who (Oakland County WRC or City of Novi) is responsible for the pipe which discharges into the Lorenzo's backyard.

Mr. McMahon provided the trial balance report as of April 3, 2019 reflecting a deficit of \$9,823.47 (as attached). Motion by Ms. Steele, supported by Mr. Nash, to receive and file the trial balance.

Adopted:	Yeas	-	3
	Nays	-	0

A Memorandum from Geoff Wilson, P.E., Drain Maintenance Engineer from OCWRC, dated April 8, 2019 (as attached) was presented recommending the Board authorize Applied Science (ASI) to proceed with design engineering. Mr. Wilson gave an overview of the affected geographic area. He indicated that the project option he recommended would seek to add a culvert under Millpond Court and would add a weir to restore the wetland to its previous elevation. He noted that the new culvert would be located next to the existing one and would almost double the flow rate capacity. The weir would span both the existing and new culverts.

There was general concern expressed over the need to clear the pond of sediment. Mr. Fee noted that one of the five corrective options presented by ASI included fixing the pond in Lexington Green, and he hoped the Board would consider that option. Chairperson Gregg noted that the Randolph Street Board has no jurisdiction over the pond. Ms. Lorenzo further objected to proposal five in as much as she believed it would regrade her property as a drainage easement.

Ms. Lorenzo circulated a map of the affected area and pictures of her property. She believes that Millpond Court roadway is also a contributing factor to the flooding issues and is acting as a dam. She believes that the proposed weir would be akin to a dam and would further contribute to the flooding problems. Mr. Wilson noted that the project would make sure the sizing of the culvert underneath Millpond Court is correct and will look at how the pond elevation is varying over rain events.

Lastly, concern was raised over potential problems up and downstream of the affected area. Mr. Wilson noted that the OCWRC does not maintain the wetland area, but they will check upstream to see if any backups have occurred and downstream to assess whether there is adequate capacity.

After the discussion, the Board members agreed to hold any decision as to the Memorandum in abeyance pending ASI presenting options to the Board at a future meeting. It was expressed that the meeting should be held in May or as soon as



practicable for ASI. Accordingly, a motion was made by Mr. Nash, supported by Ms. Steele, to receive and file the Memorandum as presented.

Adopted:      Yeas   -      3  
                     Nays   -      0

A Memorandum from Geoff Wilson dated April 8, 2019 (as attached) was presented recommending the Board receive and file the update as to the Randolph Street Drain Easement Acquisitions (Center Street to Lower Terminus). Mr. Wilson detailed that easements are being sought along portions of the Randolph Street open channel in order to properly maintain the drain. He noted that one property owner is reluctant to sell and that, without that easement, they would need to install a new pipe or consider condemning the property. Mr. Cureton indicated he would like to work with Mr. Wilson on securing said easement with the property owner in question as he has had several contacts with that property owner in the past. A motion was made by Mr. Nash, supported by Ms. Steele, to receive and file the Memorandum as presented.

Adopted:      Yeas   -      3  
                     Nays   -      0

A future meeting date was discussed. As noted above, the meeting date will be determined by ASI's availability to further present design options to the board.

Chairperson Gregg asked if there was any other business and there was none.

Motion by Mr. Nash, supported by Ms. Steele, to adjourn the meeting at 11:45 a.m.

Adopted:      Yeas   -      3  
                     Nays   -      0



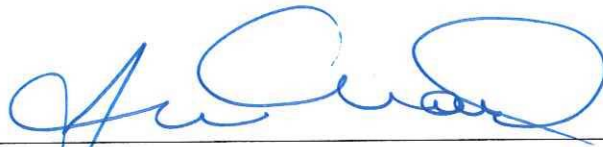
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Jim Nash, Secretary  
Randolph Street Intercounty Drain Drainage Board

STATE OF MICHIGAN            )  
  )SS.  
COUNTY OF OAKLAND        )

I hereby certify that the foregoing is a true and complete copy of the minutes of the Randolph Street Intercounty Drain Drainage Board held on the 8<sup>th</sup> day of April, 2019, and that the minutes are on file in the Office of the Oakland County Water Resources Commissioner's Office and are available to the public.

I further certify that notice of the meeting was posted at least 18 hours before the meeting at the office of the Oakland County Water Resources Commissioner, which is the principal office of the Randolph Street Intercounty Drain.



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Jim Nash, Secretary  
Randolph Street Intercounty Drain Drainage Board

**Agenda Item No. 4**

Public Comment

**Agenda Item No. 5**

**Serenity Point Improvement Project**

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Randolph Street Intercounty Drain Drainage Board

**FROM:** Geoff S. Wilson, P.E. – Assistant Chief Engineer, OCWRC

**SUBJECT:** Randolph Street Drain & Serenity Point Improvement Project

**DATE:** March 3, 2023

A 2022 application for a community grant was obligated to the City of Northville for FY 2023. The grant is for a maximum of \$700,000 project involving the Randolph Street Drain and the adjacent Northville park at the lower terminus of the drain. Program details are yet not available for review, but staff is prepared to review the guidance with Northville staff once available. Staff will work in the coming months to scope this potential project and help Northville with guidance through the grant process. If a project is pursued, the local match is 20%. For items involving the Randolph Street Drain, an interagency agreement should be pursued to facilitate Randolph Street Drain maintenance funds being used to reimburse Northville for the local match. Staff will bring an interagency agreement before the board at a later date.

**Recommendation – Receive and File.**



Randolph Street Drain



Downstream terminus, looking upstream toward Hutton Street.



Randolph Street Drain



Enclosed portion outlet downstream of Hutton Street.



Randolph Street Drain



Hutton Street culvert over low flow channel.



Randolph Street Drain



Hutton Street culvert over low flow channel.



Randolph Street Drain



Outlet of enclosed portion. Looking downstream with Ford Field in the background.

**Agenda Item No. 6**

Easement Acquisitions – Center Street to Lower  
Terminus

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO:** Randolph Street Intercounty Drain Drainage Board

**FROM:** Geoff S. Wilson, P.E. – Assistant Chief Engineer, OCWRC

**SUBJECT:** Randolph Street Drain Easement Acquisitions – Center Street to Lower Terminus

**DATE:** March 3, 2023

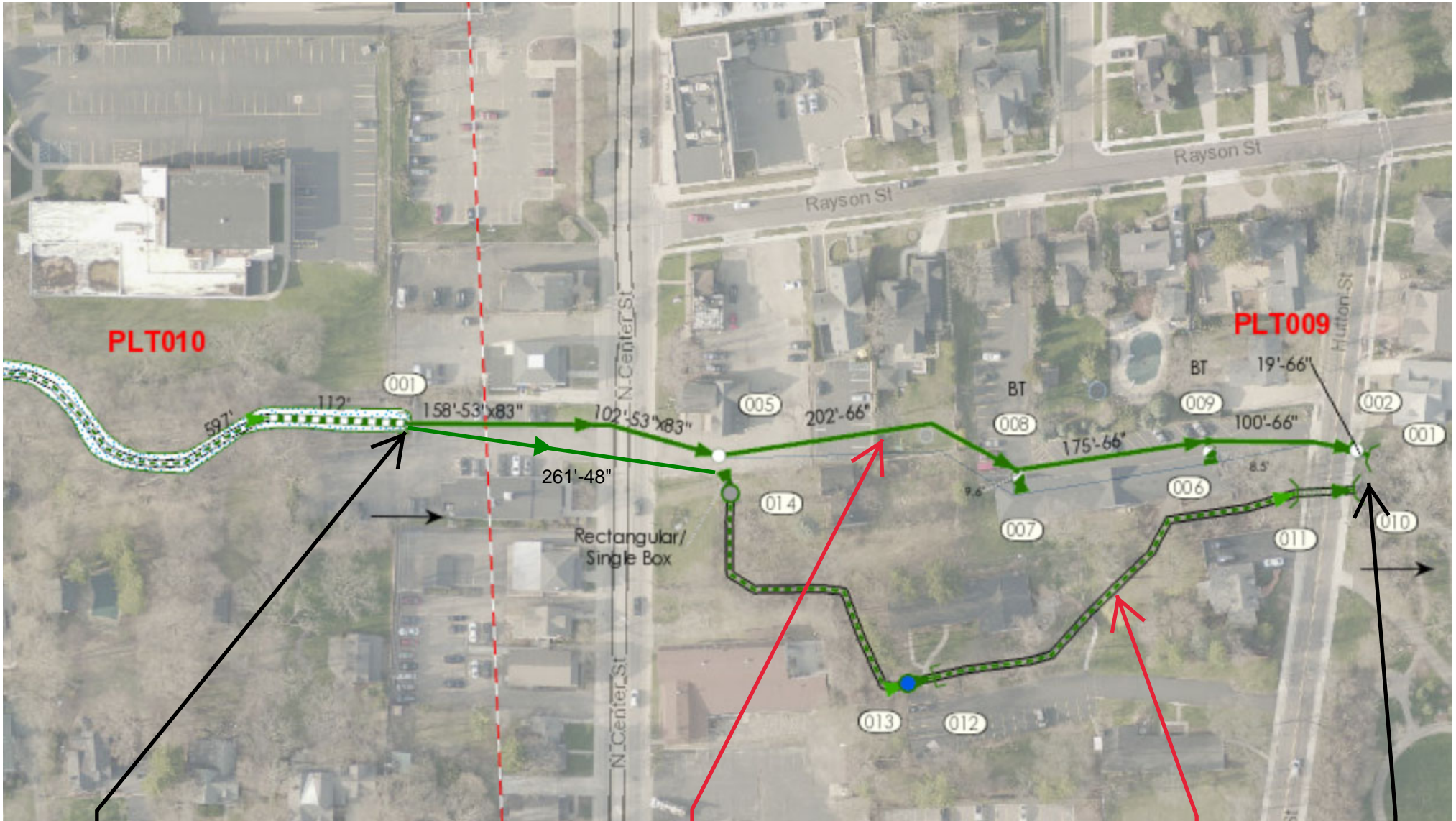
Acquisition of easements has been ongoing for the low-flow channel downstream of Center Street in the City of Northville. There are three property owners along this channel of the drain, which was described in the route and course of the drain but is without easements or improvements. In several meetings, one owner is unwilling to grant an easement for the drain, expressing a desire for reduced flow through the open channel. Additional talks facilitated by Northville have been unsuccessful. The enclosed portion north of the low-flow channel is at capacity and the drain requires the current flow rate through the low-flow channel. To handle the full flow of the drain without the low-flow channel, an additional enclosure would need to be constructed parallel to the existing enclosure. Staff will continue to work with the final landowner to secure the easement.

Expenditures to date: \$20,934.  
Original Budget: \$35,000.

**Recommendation – Receive and File.**



# Randolph Street Drain - Center Street to Lower Terminus



Flow  
Diversion

Enclosed  
Portion

Low-Flow  
Channel  
(no easements)

Lower  
Terminus

**Agenda Item No. 7**

Design Engineering Progress Update – Mill Pont Court  
and Weir

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER****MEMORANDUM**

**TO: Randolph Street Intercounty Drain Drainage Board**

**FROM: Geoff S. Wilson, P.E. – Assistant Chief Engineer, OCWRC**

**SUBJECT: Mill Pond Court Culvert and Weir – Design Engineering Progress Update**

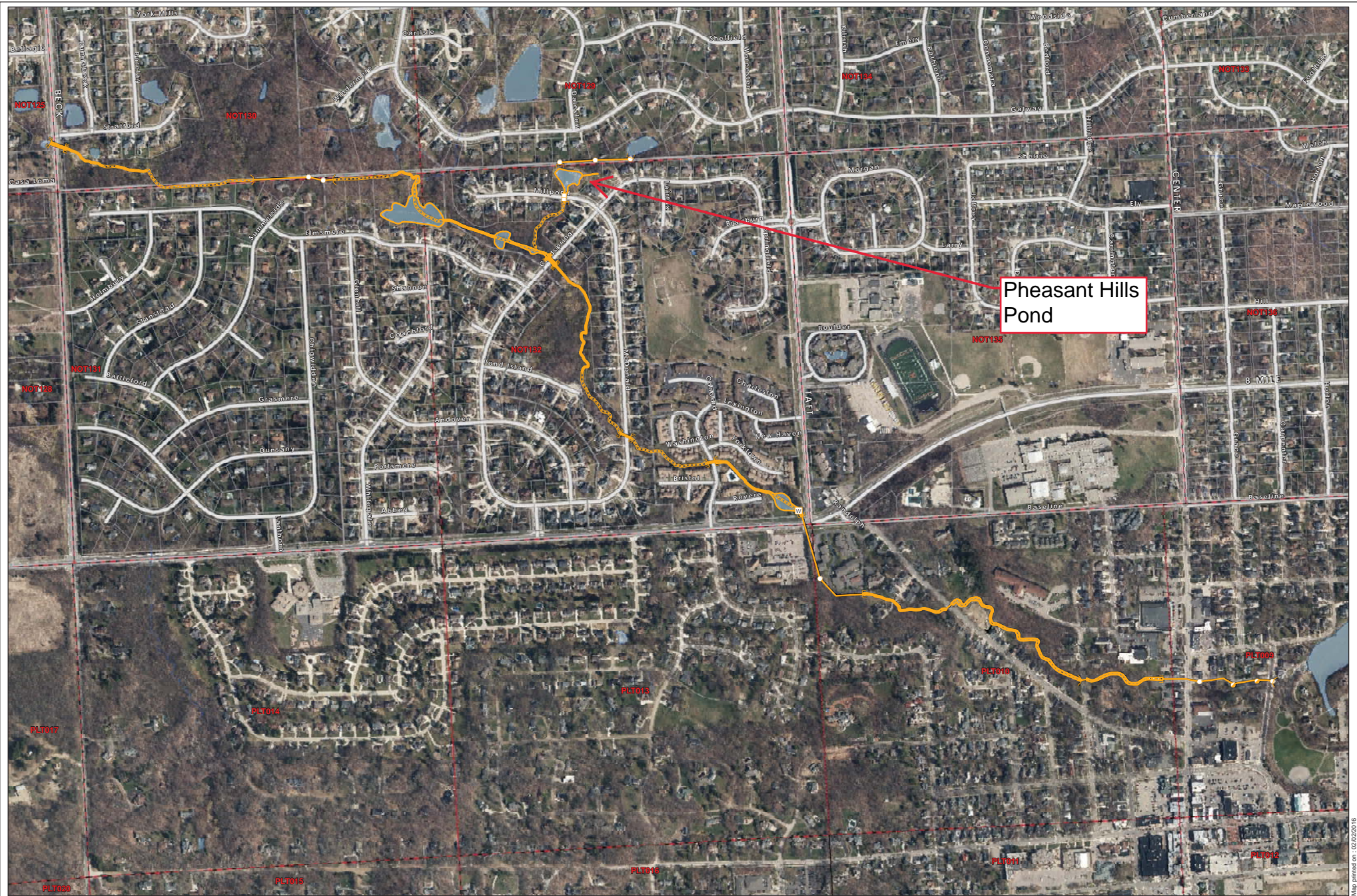
**DATE: March 3, 2023**

To alleviate flooding in both the Lexington Green and Pheasant Hills subdivision, and to restore a disturbed wetland, the Board previously authorized Applied Science, Inc. (ASI) to perform engineering for an additional culvert and a weir at Mill Pond Court in the City of Northville. The weir would be constructed to restore a wetland affected when a drain cleanout occurred in 2013. This plan was identified as one of five alternatives developed by ASI in 2012. Conceptual plans were created and a model was developed based on new flow rates from the culvert beneath Mill Pond Court. A resident information meeting took place on March 27, 2019, with invitations being sent to all residents living adjacent to the areas affected by flooding. Follow up conversations took place with the residents who attended. Two residents requested additional figures and data to demonstrate the anticipated changes that would result from the installation of the culvert and weir. A request was also made by R.C. Edwards at the July 2018 board meeting to determine the effects of this project on residents along Elmsmere Drive. Lengthy discussions took place at the April 2019 drain board meeting, including talks of fixing the Lexington Green basin. The City of Novi has subsequently offered the Lexington Green HOA to share in the cost of fixing the Lexington Green basin. Fixing the basin would substantially alter the peak flow rates for the ten year, 24 hour event reaching Mill Pond Court, and may allow additional solutions to the flooding. ASI has stopped work on this project until receiving further direction from WRC staff.

Project expenditures to date: \$15,747  
Total design services budget: \$38,375

**Recommendation – Pause effort to build weir and replace Mill Pond Court culvert until further progress is made between City of Novi and Lexington Green HOA.**





2014 Orthophotography  
**DRAIN QUARTER GRIDS**  
 7 QUARTER SHEET(S)  
 NOT125, NOT129, NOT130, NOT131, NOT132, PLT009, PLT010

# RANDOLPH STREET DRAIN

Map printed on: 02/02/2016



**Agenda Item No. 8**

Maintenance Update

**OAKLAND COUNTY  
WATER RESOURCES COMMISSIONER**

**MEMORANDUM**

**TO:** Randolph Street Intercounty Drain Drainage Board

**FROM:** Geoff S. Wilson, P.E. – Assistant Chief Engineer, OCWRC

**SUBJECT:** Randolph Street Drain Maintenance Update

**DATE:** March 3, 2023

The Randolph Street Intercounty Drain was inspected in 2017 and 2020. A few manhole plaster repair work orders and woody debris removal work orders resulted from the 2017 inspection, and a few woody debris removal work orders resulted from the 2020 inspection. The drain is due for formal inspection in 2024.

The drain has several bar screens in need of regular inspection and minor cleaning. The bar screen west of center street requires significant maintenance. A skid steer and mini excavator are used to remove debris from the bar screen. This occurred four times in the last six years, the largest effort being in August 2021 with a total cost of \$7,382.

A collection of culverts was recently inspected on behalf of the City of Northville and the report is enclosed with this information packet.





2020 Orthophotography  
*DRAIN QUARTER GRIDS*  
 7 QUARTER SHEETS:  
 NOT125, NOT129, NOT130, NOT131, NOT132,  
 PLT009, PLT010

# RANDOLPH STREET DRAIN



June 28, 2022

Mr. Mike Domine  
DPW Director  
City of Northville  
215 West Main Street  
Northville, MI 48167

RE: 2022 Northville Bridge and Culvert Inspections

Dear Mr. Domine:

We have completed our inspections of the Beal Street, Old Novi Road and Rural Hill Drive bridges. All of the inspections have been submitted to MDOT. We have enclosed a copy of the reports along with stream cross sections, scour evaluations, and pictures we took during the inspection for your records.

We have also completed the inspection of the City owned culverts and pedestrian bridges. Descriptions and condition assessments are described in the second part of this letter.

## **BRIDGES**

The Beal Street structure is in good condition. There is one crack in the HMA pavement that runs over the structure at the centerline of the roadway. We suggest you have this crack sealed in order to keep water out of the joint and away from the culvert segments below. There is some scaling on the sanitary casing pipe running through the river.

The Old Novi Road structure is in good condition however the pavement on the approaches and over the structure has deteriorated. In the next 2 years it is suggested that the HMA either be capped or the road get an HMA mill and fill. Repairing the pavement will keep water from filtering through the road section down to the structure, which will eventually cause deterioration of the concrete segments. There are some minor hairline cracks in a few of the culvert segments and one minor area of exposed rebar on the western headwall.

The Rural Hill Drive structure is in fair condition with a few areas in poor condition. Over the past 2 years the joints between the beams have continued to deteriorate. There is spalling and a small hole along the centerline joint on the southern end of the bridge. This hole should be repaired in the next 6 months. It would be best if this was done as a concrete patch although a road plate over top of the hole would serve a similar purpose. The west railing is also continuing to deteriorate. The beam fascia around the north three posts on the west side has spalled off. The north two post have been replaced with wood posts. The approach pavement at both ends of the structure is deteriorating and it is suggested that the City put some HMA patching in place or mill and fill replacement. A few areas of exposed rebar exist on the northern abutment. This appears to be an issue caused by a lack of cover from the original forming of the abutment. The bottom half of the northern backwall is also beginning to crack between the two eastern-most beams.

The Rural Hill structure has deteriorated and will continue to do so as it ages. This structure is currently under application for funding through the Local Bridge Program. Past discussion has expressed concern with the low ADT and low economic importance that put other more heavily travelled structures ahead in priority. As the deterioration continues the City will need to monitor the deck and railings to ensure that traffic can continue to



safely cross the structure. Once the railing is no longer safe, a temporary concrete barrier could be installed if the superstructure load rating can support the additional load. A long-term solution could be purchasing a timber superstructure and placing it on the existing abutments. While this is not an inexpensive option it is more cost effective than a traditional bridge superstructure and would carry the loads that are required.

## CULVERTS

The Coldsprings Drive culvert is a series of 5 adjacent culverts with approximately 2' of separation. The north 3 pipes are 42" span by 30" rise elliptical CMP. The south 2 pipes are 60" span by 38" arch CMP. All pipes are approximately 65' long with 2' of cover. These pipes are in overall fair condition with light scaling throughout each pipe and general light rust along the waterline. However, a full invert inspection was not feasible due to standing water and small pipe size. These culverts serve as wetland equalization pipes and appear to always have standing water. No work is recommended at this time.



Pictures 1 & 2: Coldsprings culvert condition

The McDonald Drive culverts are two adjacent 68" span by 45" rise arch CMP with approximately 6' of separation. They are approximately 85' long with 4' of cover and a 60 degree angle of crossing. These pipes are in overall fair condition with light scaling throughout each pipe and general light rust along the waterline. No work is recommended at this time.

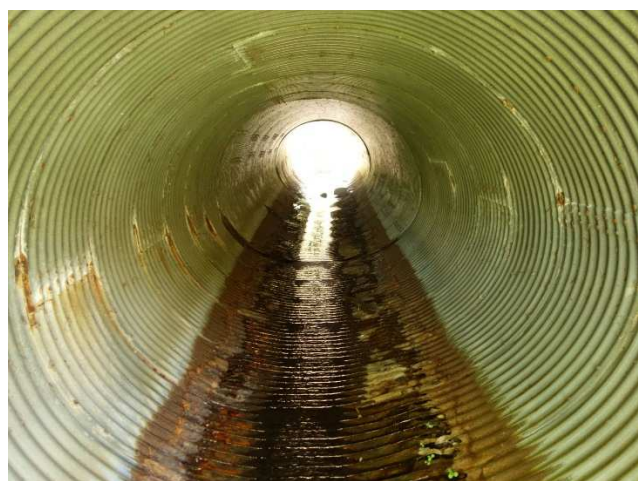


Pictures 3 & 4: McDonald culvert condition

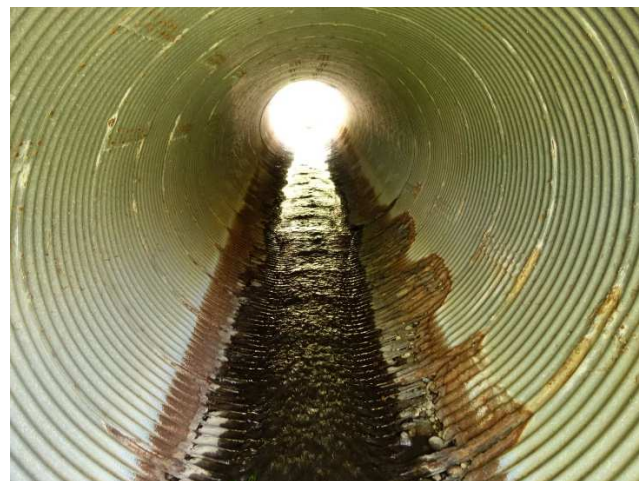
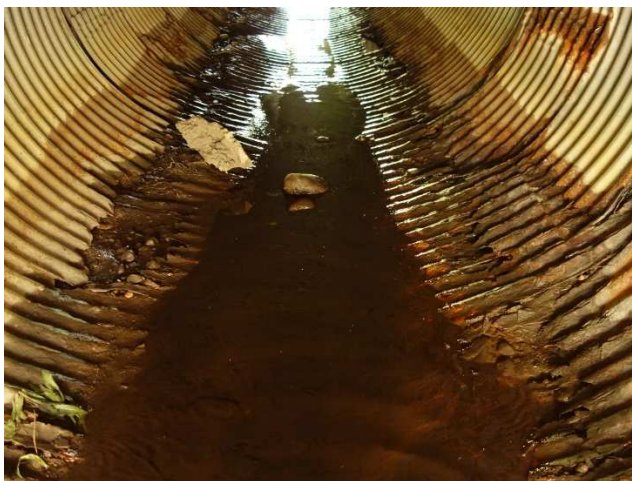




The Lexington Boulevard culverts are two adjacent 75" span by 66" rise arch CMP with approximately 2.5' of separation. They are approximately 63' long with 5' of cover at a 80-degree angle of crossing. The condition of these pipes are poor/serious with isolated heavy scaling in the walls, heavy corrosion throughout the bottom with numerous holes. There is some evidence of loss of bedding material through the holes and little remains of the pipe inverts. The culvert is perched (culvert invert located above the natural stream bed elevation) approximately 1'-1.5' on the downstream end. It is recommended that this crossing be budgeted and scheduled for replacement as soon as possible. Immediate action is recommended to plug the larger holes with grout and place a concrete canvas liner along the bottom and partially up the sidewalls. This work should be completed as soon as possible but no later than the next couple months. The concrete canvas is not a long-term fix but is usually very effective in preventing additional loss of bedding material and protecting the bottom of pipe from peeling during high flow events.



Pictures 5 & 6: Lexington outfall and north pipe condition



Pictures 7 & 8: Lexington typical invert condition and south pipe condition





The Randolph Street crossing is a 16' span by 7' rise bridge which is not long enough to be on the MDOT system. The bridge has a clear roadway width of 32' and an overall width of 47'. The crossing is 90 degrees to the road. The superstructure is comprised of twenty-four (24) 12" deep adjacent concrete box beams. This crossing is at a poor alignment to the Randolph drain. The beams are in overall poor condition. The following beams have noteworthy deterioration. Beams 7 through 10 and 12 through 14 have heavy spalling and exposed strands. Beam 8 has 2 broken strands at midspan. The abutments are in overall fair condition with some delamination and scaling throughout. The north abutment has a storm tap through the wall. Both the storm pipe and the abutment wall has scaled in this area. There is a 3' thick concrete encasement of a utility running through the middle of the bridge at the footing level. This encasement has caused the water to flume under it and created a scour hole that has exposed and undermined the bridge footing for the eastern half of the south abutment. It is recommended that a load rating be performed if existing plans are available. It is recommended that this bridge be monitored every 12-24 months and be budgeted for eventual replacement and utilities relocated in approximately 10 years.



Pictures 9 & 10: Randolph west elevation and north abutment



Pictures 11 & 12: Randolph scour hole south abutment and spalling on beams with exposed reinforcement

The High Street culvert has been previously inspected under separate report in fall 2021. It is in need of rehabilitation as soon as possible.



The Center Street culverts consist of two separate flow paths. (see map on sheet 6A). The main flow path consist of the following from the inlet on the west end.

- Section 1: 104' of 42" round class III concrete pipe in good condition.
- Section 2: 53' of 54" round concrete pipe in poor condition with several wide longitudinal cracks up to 1" wide. The pipe appears not to be reinforced.
- Section 3: 27' of 54" concrete pipe in good condition with some minor joint separation.
- Section 4: 8' of 60" concrete pipe in good condition.
- Section 5: 20' of 3-sided brick on stone masonry culvert in poor condition with loss of grout, voids in the masonry and a partially collapsed are with a utility duct running through.
- Section 6: 69' of 4.5' span by 4.5' rise cast-in-place 3-sided concrete box culvert in poor condition with spalling along 50% along the waterline and spalling throughout the top slab.

The recommended work for this part of the culvert is a full replacement of at least sections 2-6.



Pictures 13 & 14: Center sections 1 and 2



Pictures 15 & 16: Center section (3 and 4) and partial collapse of section 5





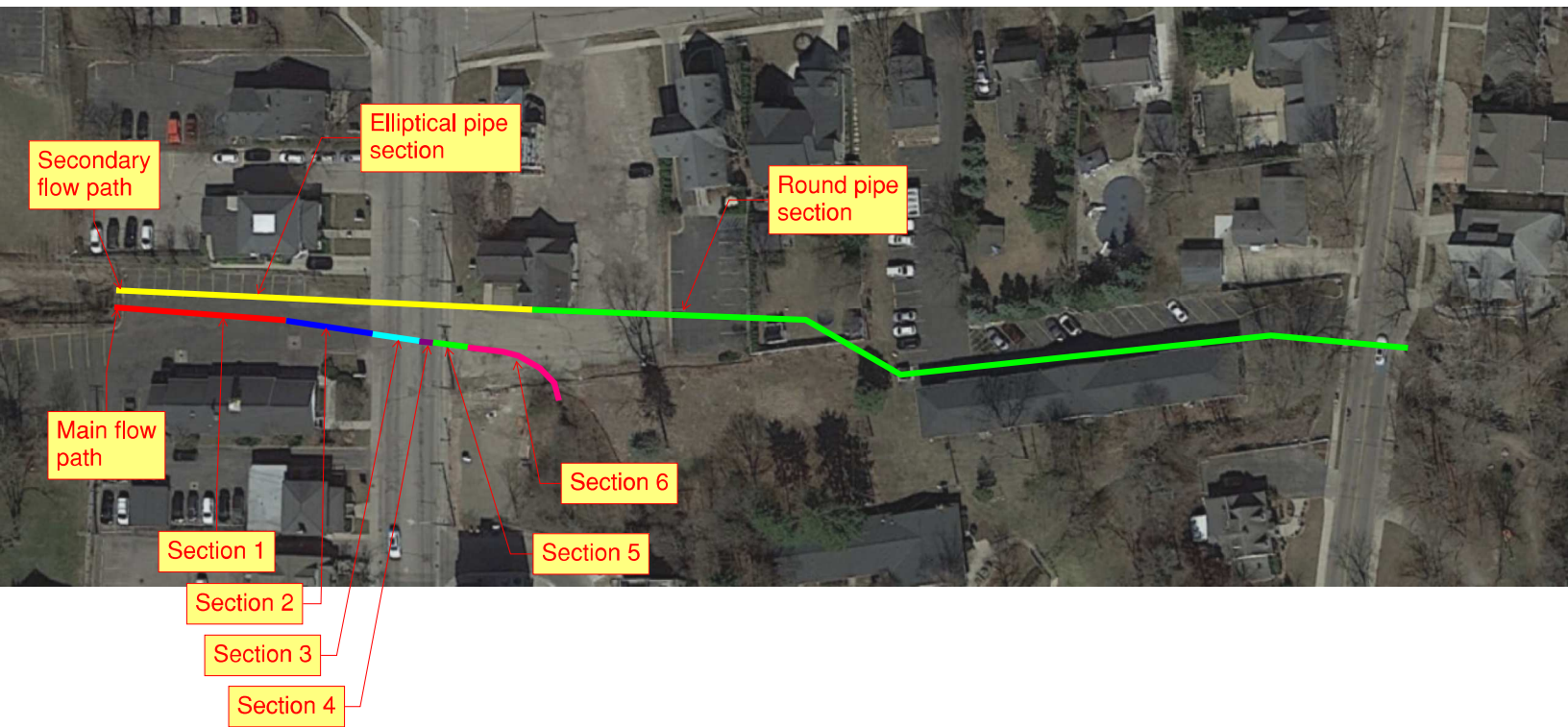
Pictures 17 & 18: Center sections 5 and 6

The secondary flow path independent of the main flow path by approximately 2' elevation consists of 6.9' span by 4.4' rise concrete elliptical pipe and 66" round concrete pipe. The path of the pipe meanders throughout 5 separate tangent sections with the ultimate outfall west of Hutton Street at the Rouge River. Both ends are protected by a rebar grate. The pipe is in overall good condition with minor spalling in isolated locations. There are several blind taps into this run of pipe. No work is recommended at this time.



Pictures 19 & 20: Center overflow general pipe condition.

# Approximate Center Street Culvert Layout







The Hutton Street culvert consists of a 6' span by 7' rise concrete arch with full concrete invert. The culvert is approximately 50' long. The culvert is in overall fair condition with some scaling throughout. There are two 12" utilities running through the middle of culvert. The east and west headwalls and wingwalls are in poor condition with large areas of spalling and deterioration. There is instability at the downstream end outfall. It is recommended that both end treatments be replaced, and the outfall end be stabilized.



Pictures 21 & 22: Hutton general culvert condition and southwest wingwall condition



Pictures 23 & 24: Hutton general culvert east end and Center Street overflow pipe outlet at Hutton





The pedestrian bridge over the Rouge River connecting Ford Field to Mill Race Park is 33.5' span by 9' wide timber structure in fair condition. The wood decking is in overall fair condition with minor dry rot. The abutments are in good condition. The south footing is exposed. It is recommended that the south footing be protected with riprap and the settlement accumulation in the approaches be removed.



Pictures 25 & 26: Rouge Pedestrian Bridge general condition and south abutment erosion

The pedestrian bridge over the mill pond is a multi-span timber structure in overall fair condition. There is some dry rot and general decay of visible the wood elements. The portions of timber piles below water were not inspected due to the water turbidity. The member sizes for this structure are substantial and no work is recommended at this time.



Pictures 27 & 28: Rouge Pedestrian Bridge south elevation and general condition



If you have any questions, please feel free to contact me at (734) 466-4542.

Sincerely,  
OHM Advisors

A handwritten signature in black ink, appearing to read "Adam Rychwalski".

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Adam Rychwalski, PE, Project Engineer  
Encl: MDOT Form Bridge Inspection Reports

MICHIGAN DEPARTMENT OF TRANSPORTATION

**STR 8245 CULVERT SAFETY INSPECTION REPORT**

<b>Facility</b> OLD NOVI ROAD	<b>Latitude / Longitude</b> 42.4381 / -83.4734	<b>MDOT Structure ID</b> 63548700023B01	<b>Structure Condition</b> Good Condition(7)	
<b>Feature</b> MIDDLE RIVER ROUGE	<b>Length / Width / Spans</b> 34.8 / 47.9 / 1	<b>Owner</b> City: NORTHVILLE(4870)		
<b>Location</b> 0.15 MI E OF OAKLAND AVE	<b>Built / Recon. / Paint / Ovly.</b> 1994 / / /	<b>TSC</b> Oakland(23)	<b>Operational Status</b> A Open, no restriction(A)	
<b>Region / County</b> Metro(7) / Oakland(63)	<b>Material / Design</b> 1 Concrete / 19 Culvert	<b>Last NBI Inspection</b> 04/28/2022 / E2DN	<b>Scour Evaluation</b> 8 Stable Above Footing	

**CULVERT INSPECTION E2DN**

<b>Inspector Name</b> Adam Rychwalski	<b>Agency / Company Name</b> Orchard, Hiltz & McCliment Inc	<b>Insp. Freq.</b> 24	<b>Insp. Date</b> 04/28/2022
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**GENERAL NOTES**

**NBI INSPECTION**

	04/18	04/20	04/22	
<b>1. Culvert Rating (SIA-62)</b>	7	7	7	(04/22) (04/20) (04/18)
<b>2. Channel (SIA-61)</b>	6	6	6	Poor alignment and uneven channel bottom. North side has a stone bottom. Bank is eroding in SW quadrant. Two pockets of erosion in SW quad. One at bridge and one ~30' upstream. Articulating block across entire bottom (04/22) Poor alignment and uneven channel bottom. North side has a stone bottom. Bank is eroding in SW quadrant. Two pockets of erosion in SW quad. One at bridge and one ~30' upstream. Articulating block across entire bottom (04/20) Poor alignment and uneven channel bottom. North side has a stone bottom. Bank is eroding in SW quadrant. Two pockets of erosion in SW quad. One at bridge and one ~30' upstream. Articulating block across entire bottom (04/18)
<b>3. Scour</b>	5	5	5	Articulating block mat across entire bottom under structure including upstream and downstream. material has scoured out between cofferdam and vertical leg of segment. (04/22) Articulating block mat across entire bottom under structure including upstream and downstream. material has scoured out between cofferdam and vertical leg of segment. (04/20) Articulating block mat across entire bottom under structure including upstream and downstream. material has scoured out between cofferdam and vertical leg of segment. (04/18)

**AASHTO ELEMENTS (English Units)**

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
<b>Culvert</b>							
241	Re Conc Culvert	48	ft	47 98%	0 0%	1 2%	0 0%
Hairline cracks in middle quarter of several segments. no evidence of leaking. Exposed rebar on western fascia (3", isolated). Hairline crack on middle 1/3 of eastern fascia.							
861	Culvert Wingwall	4	(EA)	4 100%	0 0%	0 0%	0 0%
Minor spalls at isolated locations on western headwall.							
863	Culvert Headwall	2	(EA)	2 100%	0 0%	0 0%	0 0%
Minor spalls at isolated locations.							
<b>Scour Countermeasure</b>							
833	Articulating Conc Block	2000	sq.ft	2000 100%	0 0%	0 0%	0 0%

MICHIGAN DEPARTMENT OF TRANSPORTATION

**STR 8245 CULVERT SAFETY INSPECTION REPORT**

<b>Facility</b> OLD NOVI ROAD	<b>Latitude / Longitude</b> 42.4381 / -83.4734	<b>MDOT Structure ID</b> 635487000023B01	<b>Structure Condition</b> Good Condition(7)	
<b>Feature</b> MIDDLE RIVER ROUGE	<b>Length / Width / Spans</b> 34.8 / 47.9 / 1	<b>Owner</b> City: NORTHVILLE(4870)		
<b>Location</b> 0.15 MI E OF OAKLAND AVE	<b>Built / Recon. / Paint / Ovly.</b> 1994 / / /	<b>TSC</b> Oakland(23)	<b>Operational Status</b> A Open, no restriction(A)	
<b>Region / County</b> Metro(7) / Oakland(63)	<b>Material / Design</b> 1 Concrete / 19 Culvert	<b>Last NBI Inspection</b> 04/28/2022 / E2DN	<b>Scour Evaluation</b> 8 Stable Above Footing	

Articulating block appears to be functioning as intended. no irregularities noted. approximately half of the area is covered with natural stream bottom.

**MISCELLANEOUS**

**Guard Rail**

<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	1
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	0

**Other Items**

<u>Item</u>	<u>Rating</u>
71. Water Adequacy	8
72. Approach Alignment	8
Special Insp. Equipment	
Underwater Insp. Method	1

**RECOMMENDATIONS & ACTION ITEMS**

<b>Recommendation Type</b>	<b>Priority</b>	<b>Description</b>
HMA Overlay	H	Pavement is deteriorating. HMA mill and fill or HMA cap recommended. Approximate area for overlay is 30' wide x 300' long.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12510		CULVERT SAFETY INSPECTION REPORT		
<b>Facility</b> BEAL STREET	<b>Latitude / Longitude</b> 42.4289 / -83.4782	<b>MDOT Structure ID</b> 824487000002B01	<b>Structure Condition</b> Good Condition(8)	
<b>Feature</b> MIDDLE RIVER ROUGE	<b>Length / Width / Spans</b> 30.3 / 47 / 1	<b>Owner</b> City: NORTHVILLE(4870)		
<b>Location</b> 0.01 MI W OF RIVER STREET	<b>Built / Recon. / Paint / Ovly.</b> 2008 / / /	<b>TSC</b> Taylor(25)	<b>Operational Status</b> A Open, no restriction(A)	
<b>Region / County</b> Metro(7) / Wayne(82)	<b>Material / Design</b> 1 Concrete / 19 Culvert	<b>Last NBI Inspection</b> 04/28/2022 / 86LY	<b>Scour Evaluation</b> 5 Stable w/in footing	

**CULVERT INSPECTION** 86LY

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Adam Rychwalski	Orchard, Hiltz & McCliment Inc	24	04/28/2022

**GENERAL NOTES**

Some scaling of sanitary casing pipe exposed in the stream.

**NBI INSPECTION**

	04/18	04/20	04/22	
<b>1. Culvert Rating (SIA-62)</b>	8	8	8	(04/22) (04/20) (04/18)
<b>2. Channel (SIA-61)</b>	8	8	8	Channel is approximately 2 ft deeper on downstream side of encased sanitary sewer. (04/22) Channel is approximately 2 ft deeper on downstream side of encased sanitary sewer. (04/20) Channel is approximately 2 ft deeper on downstream side of encased sanitary sewer. (04/18)
<b>3. Scour</b>	8	8	8	None noted. Bridge is on piles with cofferdam left in place. (04/22) None noted. Bridge is on piles with cofferdam left in place. (04/20) (04/18)

**AASHTO ELEMENTS** (English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
<u>Culvert</u>							
241	Re Conc Culvert	47	ft	47 100%	0 0%	0 0%	0 0%
No deficiencies noted on Conspan arch segments. minor leaking from fascia segment lifting pockets.							
863	Culvert Headwall	1	(EA)	1 100%	0 0%	0 0%	0 0%
Surface cracking throughout precast headwall portion. downstream ties into private culvert.							

**Scour Countermeasure**

831	Heavy Riprap	1000	sq.ft	1000 100%	0 0%	0 0%	0 0%
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Heavy riprap in place in front of cofferdam and upstream. stable.

**MISCELLANEOUS**

Guard Rail		Other Items	
Item	Rating	Item	Rating
36A. Bridge Railings	1	71. Water Adequacy	6
36B. Transitions	N	72. Approach Alignment	7
36C. Approach Guardrail	N	Special Insp. Equipment	
36D. Approach Guardrail Ends	N	Underwater Insp. Method	1

**RECOMMENDATIONS & ACTION ITEMS**


Recommendation Type	Priority	Description
Approach Repair	M	Seal pavement cracks.




MICHIGAN DEPARTMENT OF TRANSPORTATION

**STR 12510**

**CULVERT SAFETY INSPECTION REPORT**

<b>Facility</b>	<b>Latitude / Longitude</b>	<b>MDOT Structure ID</b>	<b>Structure Condition</b>	
BEAL STREET	42.4289 / -83.4782	824487000002B01	Good Condition(8)	
<b>Feature</b>	<b>Length / Width / Spans</b>	<b>Owner</b>		
MIDDLE RIVER ROUGE	30.3 / 47 / 1	City: NORTHVILLE(4870)		
<b>Location</b>	<b>Built / Recon. / Paint / Ovly.</b>	<b>TSC</b>	<b>Operational Status</b>	
0.01 MI W OF RIVER STREET	2008 / / /	Taylor(25)	A Open, no restriction(A)	
<b>Region / County</b>	<b>Material / Design</b>	<b>Last NBI Inspection</b>	<b>Scour Evaluation</b>	
Metro(7) / Wayne(82)	1 Concrete / 19 Culvert	04/28/2022 / 86LY	5 Stable w/in footing	

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12511		BRIDGE SAFETY INSPECTION REPORT		
<b>Facility</b> RURAL HILL DRIVE	<b>Latitude / Longitude</b> 42.4253 / -83.4889	<b>MDOT Structure ID</b> 825487000057B02	<b>Structure Condition</b> Fair Condition(5)	
<b>Feature</b> JOHNSON DRAIN	<b>Length / Width / Spans</b> 33.8 / 25.9 / 1	<b>Owner</b> City: NORTHVILLE(4870)		
<b>Location</b> 0.1 MI S OF FAIRBROOK ST	<b>Built / Recon. / Paint / Ovly.</b> 1973 / / /	<b>TSC</b> Taylor(25)	<b>Operational Status</b> A Open, no restriction(A)	
<b>Region / County</b> Metro(7) / Wayne(82)	<b>Material / Design</b> 1 Concrete / 04 Tee Beam	<b>Last NBI Inspection</b> 04/28/2022 / 81HA	<b>Scour Evaluation</b> 4 Stable, needs action	

**NBI INSPECTION** **81HA**


Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Adam Rychwalski	Orchard, Hiltz & McCliment Inc	24	04/28/2022

**GENERAL NOTES**

**DECK**

	04/18	04/20	04/22	
<b>1. Surface (SIA-58A)</b>	5	5	5	<p>Surface is top flange of T-beam. Few popouts and general wear. Joint at centerline has spalled at north 1/3 point 6"x6'. Weld plate pockets deteriorating and there is loss of grout. Spall at centerline joint south half from connection 2S to connection 1S. Hole through deck at southern weld plate on centerline. (04/22)</p> <p>Surface is top flange of T-beam. Few popouts and general wear. Joint at centerline has spalled at north 1/3 point 6"x6'. Weld plate pockets deteriorating and there is loss of grout. Spall at centerline joint south half from connection 2S to connection 1S (04/20)</p> <p>Surface is top flange of T-beam. Few popouts and general wear. Joint at centerline has spalled at north 1/3 point 6"x6'. Weld plate pockets deteriorating and there is loss of grout. Spall at centerline joint south half from connection 2S to connection 1S (04/18)</p>
<b>2. Expansion Joints</b>	4	4	4	<p>Asphalt approach and concrete header breaking up at north and south reference lines (~10'). Bit previous patched and settled at south reference line. spalling along north header is progressing with lots of cold patch buildup at south end. (04/22)</p> <p>Asphalt approach and concrete header breaking up at north and south reference lines (~10'). Bit previous patched and settled at south reference line. spalling along north header is progressing with lots of cold patch buildup at south end. (04/20)</p> <p>Asphalt approach and concrete header breaking up at north and south reference lines (~10'). Bit previous patched and settled at south reference line. spalling along north header is progressing with lots of cold patch buildup at south end. (04/18)</p>
<b>3. Other Joints</b>	4	4	4	<p>Joints between beams are in poor condition. Most of grout is missing. Signs of leakage below along much of the joint. Wetness and active leaking throughout all joints underneath. (04/22)</p> <p>Joints between beams are in poor condition. Most of grout is missing. Signs of leakage below along much of the joint. Wetness and active leaking throughout all joints underneath. (04/20)</p> <p>Joints between beams are in poor condition. Most of grout is missing. Signs of leakage below along much of the joint. (04/18)</p>
<b>4. Railings</b>	4	4	4	<p>Rebar visible in a few location on concrete posts. Guardrail beams in place and in good condition. Two posts in NW quadrant have been replaced with woods posts. Spalling around post 1, 2, &amp; 3 north at anchor bolts on west fascia with some bolts exposed. (04/22)</p> <p>Rebar visible in a few location on concrete posts. Guardrail beams in place and in good condition. Two posts in NW quadrant have been replaced with woods posts. Spalling around post 1, 2, &amp; 3 north at anchor bolts on west fascia with some bolts exposed. (04/20)</p> <p>Rebar visible in a few location on concrete posts. Guardrail beams in place and in good condition. Two posts in NW quadrant have been replaced with woods posts. Spalling around post 1, 2, &amp; 3 north at anchor bolts on west fascia with some bolts exposed. (04/18)</p>
<b>5. Sidewalks or Curbs</b>	N	N	N	<p>(04/22)</p> <p>(04/20)</p> <p>(04/18)</p>

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12511		BRIDGE SAFETY INSPECTION REPORT		
<b>Facility</b>	<b>Latitude / Longitude</b>	<b>MDOT Structure ID</b>	<b>Structure Condition</b>	
RURAL HILL DRIVE	42.4253 / -83.4889	825487000057B02	Fair Condition(5)	
<b>Feature</b>	<b>Length / Width / Spans</b>	<b>Owner</b>		
JOHNSON DRAIN	33.8 / 25.9 / 1	City: NORTHVILLE(4870)		
<b>Location</b>	<b>Built / Recon. / Paint / Ovly.</b>	<b>TSC</b>	<b>Operational Status</b>	
0.1 MI S OF FAIRBROOK ST	1973 / / /	Taylor(25)	A Open, no restriction(A)	
<b>Region / County</b>	<b>Material / Design</b>	<b>Last NBI Inspection</b>	<b>Scour Evaluation</b>	
Metro(7) / Wayne(82)	1 Concrete / 04 Tee Beam	04/28/2022 / 81HA	4 Stable, needs action	

<b>6. Deck Bottom Surface (SIA-58B)</b>	5	5	5	Spall on deck underside (3x3) on north end and south end of beam 2W with rebar completely corroded. Leaking and map cracking at Bm 2W. East overhang has rust along entire length. Several small spalls along longitudinal joints. Beam 2E has an incipient spall along east edge of top flange entire length. Spall on beam 2E at west overhang for south 10' of deck. sporadic spalling throughout. (04/22) Spall on deck underside (3x3) on north end and south end of beam 2W with rebar completely corroded. Leaking and map cracking at Bm 2W. East overhang has rust along entire length. Several small spalls along longitudinal joints. Beam 2E has an incipient spall along east edge of top flange entire length. Spall on beam 2E at west overhang for south 10' of deck. sporadic spalling throughout. (04/20) Spall on deck underside (3x3) on north end and south end of beam 2W with rebar completely corroded. Leaking and map cracking at Bm 2W. East overhang has rust along entire length. Several small spalls along longitudinal joints. Beam 2E has an incipient spall along east edge of top flange entire length. Spall on beam 2E at west overhang for south 10' of deck. (04/18)
<b>7. Deck (SIA-58)</b>	5	5	5	Double T-Beam. See superstructure comments. (04/22) Double T-Beam. See superstructure comments. (04/20) Double T-Beam. See superstructure comments. (04/18)
<b>8. Drainage</b>				Evidence that water is ponding at the south reference line. Positive drainage on deck. (04/22) Evidence that water is ponding at the south reference line. Positive drainage on deck. (04/20) Evidence that water is ponding at the south reference line. Positive drainage on deck. (04/18)

**SUPERSTRUCTURE**

04/18 04/20 04/22

<b>9. Stringer (SIA-59)</b>	5	5	5	There is rust along the beams with one section where the reinforcement is exposed and one piece is hanging on beam 2w south end. The deterioration is most notable at the south. Signs of leakage between joints. Two deck drains in second bay from west have exposed rebar. Middle joint has large spall (~8' long). West joint cracked and leaching, east joint cracked. Minor spalls on flange bottoms (insufficient cover throughout entire beam). North 1/4 point of 1E has cracking along eastern stem and bottom (~5' long). (04/22) There is rust along the beams with one section where the reinforcement is exposed and one piece is hanging on beam 2w south end. The deterioration is most notable at the south. Signs of leakage between joints. Two deck drains in second bay from west have exposed rebar. Middle joint has large spall (~8' long). West joint cracked and leaching, east joint cracked. Minor spalls on flange bottoms (insufficient cover throughout entire beam). (04/20) There is rust along the beams with one section where the reinforcement is exposed and one piece is hanging on beam 2w south end. The deterioration is most notable at the south. Signs of leakage between joints. Two deck drains in second bay from west have exposed rebar. Middle joint has large spall (~8' long). West joint cracked and leaching, east joint cracked. Minor spalls on flange bottoms (insufficient cover throughout entire beam). (04/18)
<b>10. Paint (SIA-59A)</b>	N	N	N	(04/22) (04/20) (04/18)
<b>11. Section Loss</b>	N	N	N	(04/22) (04/20) (04/18)
<b>12. Bearings</b>	5	5	5	Wet and rusted, but functioning as intended. Pack rust at all bearings. (04/22) Wet and rusted, but functioning as intended. Pack rust at all bearings. (04/20) Wet and rusted, but functioning as intended. Pack rust at all bearings. (04/18)

**SUBSTRUCTURE**

04/18 04/20 04/22

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 12511		BRIDGE SAFETY INSPECTION REPORT		
<b>Facility</b>	<b>Latitude / Longitude</b>	<b>MDOT Structure ID</b>	<b>Structure Condition</b>	
RURAL HILL DRIVE	42.4253 / -83.4889	825487000057B02	Fair Condition(5)	
<b>Feature</b>	<b>Length / Width / Spans</b>	<b>Owner</b>		
JOHNSON DRAIN	33.8 / 25.9 / 1	City: NORTHVILLE(4870)		
<b>Location</b>	<b>Built / Recon. / Paint / Ovly.</b>	<b>TSC</b>	<b>Operational Status</b>	
0.1 MI S OF FAIRBROOK ST	1973 / / /	Taylor(25)	A Open, no restriction(A)	
<b>Region / County</b>	<b>Material / Design</b>	<b>Last NBI Inspection</b>	<b>Scour Evaluation</b>	
Metro(7) / Wayne(82)	1 Concrete / 04 Tee Beam	04/28/2022 / 81HA	4 Stable, needs action	

<b>13. Abutments (SIA-60)</b>	6	6	6	Cracks between wingwall and abutment in NW and SW quads. Cracks remain narrow. Corner spalling on NE abutment wall. 1x1 spall on north abutment under west fascia beam. No signs of scour. Small scattered spall with exposed rebar on northern abutment, appears to be due to lack of cover. Minor cracking in bottom half of backwall between 2E stems and 2E & 1E stems. (04/22) Cracks between wingwall and abutment in NW and SW quads. Cracks remain narrow. Corner spalling on NE abutment wall. 1x1 spall on north abutment under west fascia beam. No signs of scour. (04/20) Cracks between wingwall and abutment in NW and SW quads. Cracks remain narrow. Corner spalling on NE abutment wall. 1x1 spall on north abutment under west fascia beam. No signs of scour. (04/18)
<b>14. Piers (SIA-60)</b>	N	N	N	(04/22) (04/20) (04/18)
<b>15. Slope Protection</b>	5	5	5	Riprap in place and seems to have slowed erosion in SE quad. NE quad has active erosion 10-25' downstream. Riprap in channel is restricting flow in the southeast quad. (04/22) Riprap in place and seems to have slowed erosion in SE quad. NE quad has active erosion 10-25' downstream. Riprap in channel is restricting flow in the southeast quad. (04/20) Riprap in place and seems to have slowed erosion in SE quad. NE quad has active erosion 10-25' downstream. Riprap in channel is restricting flow in the southeast quad. (04/18)
<b>16. Channel (SIA-61)</b>	5	5	5	Riprap is partial blocking the channel. Channel enters at 45 from northwest. Some erosion at northwest wingwall. (04/22) Riprap is partial blocking the channel. Channel enters at 45 from northwest. Some erosion at northwest wingwall. (04/20) Riprap is partial blocking the channel. Channel enters at 45 from northwest. Some erosion at northwest wingwall. (04/18)
<b>17. Scour Inspection</b>	6	6	6	No evidence of scour. Stream is stable. Cobble and riprap bottom. (04/22) No evidence of scour. Stream is stable. Cobble and riprap bottom. (04/20) No evidence of scour. Stream is stable. (04/18)

**APPROACH**

	04/18	04/20	04/22	
<b>18. Approach Pavement</b>	5	5	5	Cold patch in both lanes of south approach. Cracking and settling. North approach has some cracking and settling with cold patch at the reference line. (04/22) Cold patch in both lanes of south approach. Cracking and settling. North approach has some cracking and settling with cold patch at the reference line. (04/20) Cold patch in both lanes of south approach. Cracking and settling. North approach has some cracking and settling with cold patch at the reference line. (04/18)
<b>19. Approach Shoulders Sidewalks</b>	7	7	7	Shoulders are vegetated. some minor washouts in SW and NE quadrants. (04/22) Shoulders are vegetated. some minor washouts in SW and NE quadrants. (04/20) Shoulders are vegetated. some minor washouts in SW and NE quadrants. (04/18)
<b>20. Approach Slopes</b>				Very steep with signs of erosion on the east side. Slopes are vegetated and there is some riprap. Some erosion in NW quadrant near end of wingwall. (04/22) Very steep with signs of erosion on the east side. Slopes are vegetated and there is some riprap. Some erosion in NW quadrant near end of wingwall. (04/20) Very steep with signs of erosion on the east side. Slopes are vegetated and there is some riprap. Some erosion in NW quadrant near end of wingwall. (04/18)
<b>21. Utilities</b>				Catch basins in SE & SW quads. Watermain passes between stems on Bm2W, but is not attached to them. Water valve in north approach. Watermain has significant pack rust near holes in the deck. (04/22) Catch basins in SE & SW quads. Watermain passes between stems on Bm2W, but is not attached to them. Water valve in north approach. Watermain has significant pack rust near holes in the deck. (04/20) Catch basins in SE & SW quads. Watermain passes between stems on Bm2W, but is not attached to them. Water valve in north approach. Watermain has significant pack rust near holes in the deck. (04/18)

MICHIGAN DEPARTMENT OF TRANSPORTATION

**STR 12511 BRIDGE SAFETY INSPECTION REPORT**

<b>Facility</b> RURAL HILL DRIVE	<b>Latitude / Longitude</b> 42.4253 / -83.4889	<b>MDOT Structure ID</b> 825487000057B02	<b>Structure Condition</b> Fair Condition(5)	
<b>Feature</b> JOHNSON DRAIN	<b>Length / Width / Spans</b> 33.8 / 25.9 / 1	<b>Owner</b> City: NORTHVILLE(4870)		
<b>Location</b> 0.1 MI S OF FAIRBROOK ST	<b>Built / Recon. / Paint / Ovly.</b> 1973 / / /	<b>TSC</b> Taylor(25)	<b>Operational Status</b> A Open, no restriction(A)	
<b>Region / County</b> Metro(7) / Wayne(82)	<b>Material / Design</b> 1 Concrete / 04 Tee Beam	<b>Last NBI Inspection</b> 04/28/2022 / 81HA	<b>Scour Evaluation</b> 4 Stable, needs action	

**22. Drainage Culverts** outlet in NE quadrant. (04/22)  
outlet in NE quadrant. (04/20)  
outlet in NE quadrant. (04/18)

**MISCELLANEOUS**

**Guard Rail**

<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	0
36B. Transitions	0
36C. Approach Guardrail	0
36D. Approach Guardrail Ends	0

**Other Items**

<u>Item</u>	<u>Rating</u>
71. Water Adequacy	8
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking

**Critical Feature Inspections (SIA-92)**

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		



**Agenda Item No. 9**

Maintenance Assessment Recommendation and Special  
Assessment Roll

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER**  
**MAINTENANCE ASSESSMENT RECOMMENDATION FOR THE**  
**Randolph Street Drain**

Assessment for current fund deficit and estimated maintenance expenses for fiscal years: 2023 through 2025

Date last assessment approved:	12/22/16	
Last Assessment:		\$367,545
Current Available Cash:		(\$65,092)

Expenditure History:	Fiscal Year	Amount
	2016	\$43,703
	2017	\$27,663
	2018	\$14,639
	2019	\$5,233
	2020	\$3,239
	2021	\$14,873
	2022	\$3,205

Estimated Expenditures:	Year	Amount
	2023	\$7,300
	2024	\$7,300
	2025	\$7,300
	<b>Total</b>	<b>\$21,900</b>

**Recommended Assessment:**

Current Cash Deficit	\$65,092
Total Anticipated Expenses 2023 - 2025	\$21,900

**TOTAL RECOMMENDED ASSESSMENT \$86,992**

Prepared by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Geoff Wilson, P.E. - Assistant Chief Engineer

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Gary Nigro, P.E. - Manager

Note: Current Available Cash as of December 31, 2022, Fiscal Services Division Report.

**SPECIAL ASSESSMENT ROLL FOR THE MAINTENANCE  
OF THE RANDOLPH STREET DRAIN**

<b>Public Corporation</b>	<b>*Percentage of Apportionment</b>	<b>Total Amount of Assessment</b>	<b>Payment #1</b>	<b>Payment #2</b>	<b>Payment #3</b>
City of Northville	62.19039%	\$ 54,100.66	\$ 54,100.66	-	-
City of Novi	35.40427%	\$ 30,798.88	\$ 30,798.88	-	-
County of Oakland	2.07760%	\$ 1,807.35	\$ 1,807.35	-	-
County of Wayne	0.32774%	\$ 285.11	\$ 285.11	-	-
<b>Total</b>	<b>100.00000%</b>	<b>\$ 86,992.00</b>	<b>\$ 86,992.00</b>	<b>\$ -</b>	<b>\$ -</b>

\*Apportionment based on Final Order of Apportionment dated 6/10/1975.

Assessment Payment Due Date(s): Payment #1 04/30/2023

I hereby certify that I have prepared the Special Assessment Roll for the Maintenance of the Randolph Street Drain for the fiscal years 2023- 2025 in accordance with the direction of the Drainage Board and the statutory provisions applicable thereto.

\_\_\_\_\_  
Jim Nash  
Secretary of the Drainage Board for the Randolph Street Drain

The foregoing Special Assessment Roll for the maintenance of the Randolph Street Drain was approved by the Drainage Board on \_\_\_\_\_ .

\_\_\_\_\_  
Jim Nash  
Secretary of the Drainage Board for the Randolph Street Drain



**Agenda Item No. 10**

Trial Balance

**Trial Balance**

**Organization** Oakland County  
**Periods** FY2023 : Oct - Dec  
**Ledger** Actuals  
**Accounting Worktag** FND82906 Randolph St  
Drain Ch21  
**Book** Operating  
**Company Currency** USD  
**Translation Currency** USD  
**Run** 2/15/2023 13:43

**Consolidation Data**

<b>Ledger Account</b>	<b>Beginning Balance</b>	<b>Debit Amount</b>
100100:Cash - Operating	(44,569.89)	355.10
104100:Accrued Interest on Investment	229.25	80.47
207100:Due to Municipalities	(5,905.32)	0.00
211100:Due to Primary Government	(10,611.75)	0.00
228100:Deposits Liability	(111.11)	0.00
381350:FB Restricted Programs	60,968.82	0.00
655000:Investment Income	0.00	262.24
770000:Internal Support Expenditures	0.00	4,046.11
<b>Total</b>	<b>0.00</b>	<b>4,743.92</b>



<b>Credit Amount</b>	<b>Ending Balance</b>
4,248.87	(48,463.66)
59.48	250.24
0.00	(5,905.32)
0.00	(10,611.75)
0.00	(111.11)
0.00	60,968.82
130.01	132.23
305.56	3,740.55
4,743.92	0.00



**Agenda Item No. 11**

Other Business

**Randolph Street Intercounty Drain**  
Regular Meeting – Friday, March 3, 2023

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**Agenda Item No. 12**

Adjourn

**From:** [ndarga@fortunateland.com](mailto:ndarga@fortunateland.com)  
**To:** [Nash, James Holbrook](#); ["Auger, Peter E."](#); [Markham, Gwen](#)  
**Cc:** ["Mike Domine"](#); [Wilson, Geoff](#); ["Brian Turnbull"](#); [mwollenweber@ci.northville.mi.us](mailto:mwollenweber@ci.northville.mi.us)  
**Subject:** RE: Randolph Drain Serenity Point and Riverbank Stabilization Project Community Project Funding Program  
**Date:** Monday, January 9, 2023 3:46:46 PM

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**CAUTION:** This message is from a sender outside of the Oakland County organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Jim Nash , Peter Auger and Commissioner Gwen Markam,,

Mayor Turnbull and the Citizens of Northville extend our gratitude for all of your support in submitting a grant to address the headwall failures and severe erosion around the Randolph Consolidated Drain as it outlets into Ford Field. Please be advised that Congresswoman Haley Stevens posted a press release announcing the award of our grant as follows:

**Project Name:** Northville Randolph Drain Serenity Point and Riverbank Stabilization Project

**Project Sponsor:** City of Northville

**Requested Amount:** \$560,000

**Funded Amount:** \$560,000

**Local Match:** \$140,000

**Description:** This project would be a valuable use of taxpayer funds because the Randolph Drain, Serenity Point and Riverbank Stabilization Project seeks to repair a pair of deteriorated drainage structures that serve the cities of Northville and Novi. The Randolph Drain emerges from beneath Hutton Street, forming a confluence with the Walled Lake Branch of the Rouge River flowing through historic Ford Field in Northville. The drains are severely undermined and have contributed to eroding the banks of the river and endangering the stability of Hutton Street. In addition to stabilizing the drainage structures and river embankments, the Ford Field Master Plan calls for the development of a scenic viewing area in this location, overlooking the spillway of the Upper Mill Pond built by Henry Ford for the Ford Valve Plant, one of his first Village Industry Plants in the 1920's. The stabilization of the drains and river embankments will address a safety hazard and an eyesore and will create a serene viewing point, benefiting the many visitors who are attracted to this popular, regional destination. The project will be done in partnership with the Oakland County Water Resource Commission who repairs and maintains the drain.

I do not know when the grant papers or funds will be available. Hopefully, this information will be forwarded to us shortly. It is my understanding that the processing of the grant documents and execution of the project will be worked out by the Oakland County Water Resource Commission, the City of Novi and Northville. The River Restoration Task Force looks forward to this most important improvement along the river.

Respectfully

Nancy Darga  
Chair Northville River Restoration Task Force  
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**From:** ndarga@fortunateland.com <ndarga@fortunateland.com>

**Sent:** Tuesday, April 26, 2022 5:02 PM

**To:** 'Brian Turnbull' <BTurnbull@ci.northville.mi.us>; 'Patrick Sullivan' <psullivan@ci.northville.mi.us>; 'nashj@oakgov.com' <nashj@oakgov.com>; 'Auger, Peter E.' <pauger@cityofnovi.org>

**Cc:** 'Mike Domine' <mdomine@ci.northville.mi.us>; 'Wilson, Geoffrey Stefan' <wilsong@oakgov.com>; 'Dave Gutman' <dgutman@xperience-det.com>; 'Kathy Spillane One' <kspillane1@comcast.net>; John Arrowsmith <john.w.arrowsmith@outlook.com>; 'Jennifer Chehab' <jchehab@fveng.com>

**Subject:** Randolph Drain Serenity Point and Riverbank Stabilization Project Community Project Funding Program

Dear Pat Sullivan, Mayor Brian Turnbull, Jim Nash, Peter Auger, Mayor Bob Gatt,

Today the Northville River Restoration Task Force submitted the Randolph Drain Serenity Point and Riverbank Stabilization project to the congressional "Community Project Funding," special appropriations FY23. As described in the attached application the intent of the project is to.

1. Repair the outfall of the Randolph Drain as it discharges into Ford Field,
2. Replace the 2 headwalls of the drain as it goes under Hutton Street ,
3. Excavate a defined channel for the outfall to the river,
4. Stabilize the portions of the river next to the outfall with rip rap and vegetation.
5. Create a small viewing area with a park bench and some flag stone to be called serenity point

The total price of the project is estimated at \$ 700,000 which requires a 20 % match. (Federal allocation \$ 650,000 match \$ 140,000) this project is being sponsored by Congresswoman Haley Stevens. Letters of support were given by Wayne County Executive Office, City of Novi, City of Northville, Oakland County Water Resource Commission, Representative Matt Koleszar, Oakland County Commissioner Gwen Markum, SEMCOG. (see attachment) Thank you for all of your assistance in submitting this application. Thank you, Geoff Wilson, Mike Domine, Fleis Vandenbrink , John Arrowsmith for meeting on site to review the engineering needs of the project. Congresswoman Stevens office has confirmed they have received the application and support letters.



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