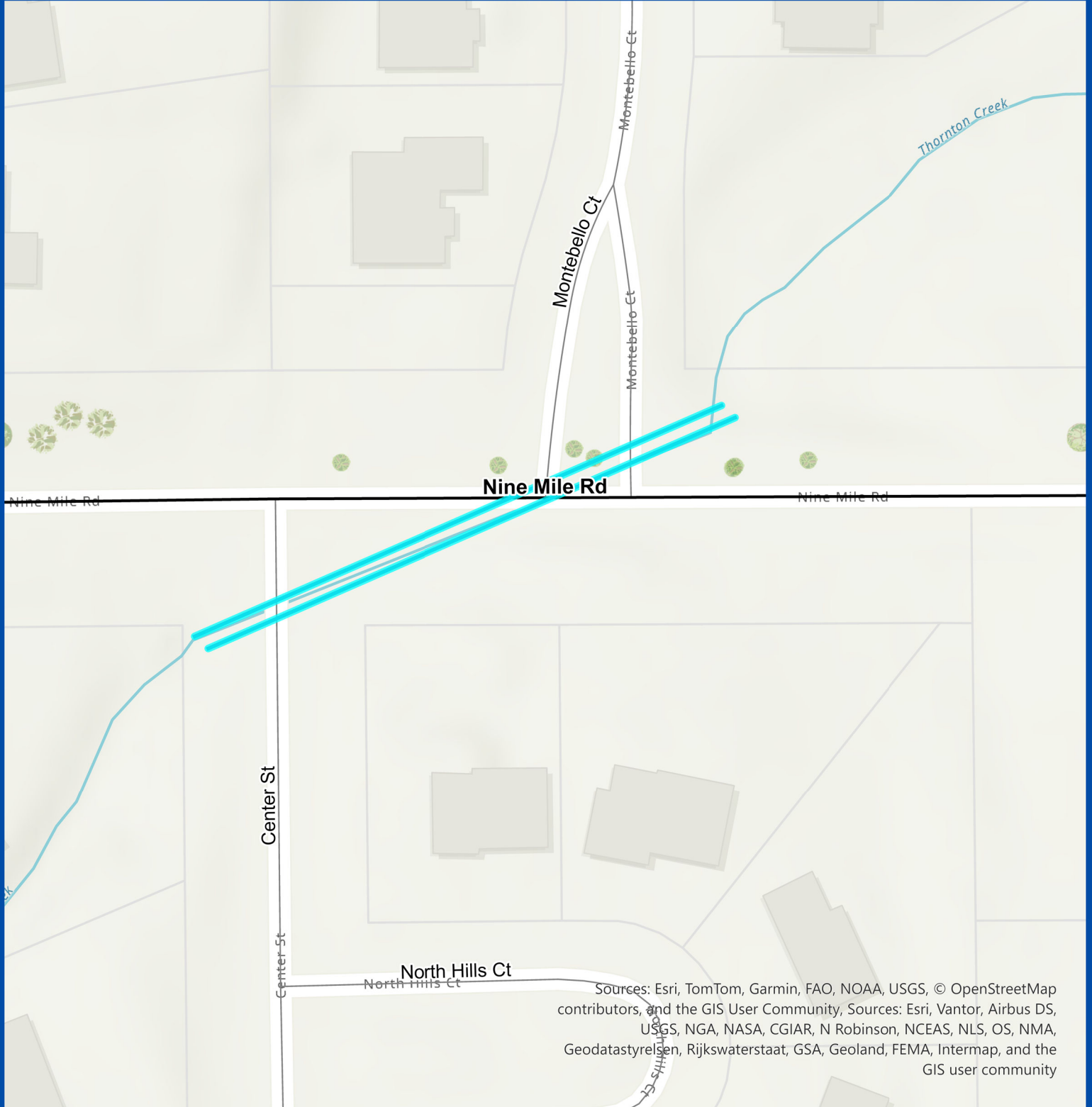
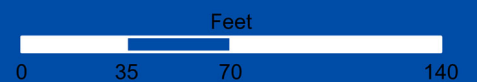


Nine Mile/Center Bridge

Location Map



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Vantor, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community



Map Author: Croy
Map Print Date: Mar 2026

ELIZABETH KUDLA SAARELA
esaarela@rsjalaw.com

27555 Executive Drive, Suite 250
Farmington Hills, Michigan 48331
P 248.489.4100 | F 248.489.1726
rsjalaw.com



ROSATI | SCHULTZ
JOPPICH | AMTSBUECHLER

March 11, 2026

Ben Croy, City Engineer
City of Novi
Department of Public Works
Field Services Complex
26300 Lee BeGole Drive
Novi, MI 48375

Re: MDOT Local Bridge Program –The Bridge on Nine Mile Road Over Thornton Creek (Str# 14274)

Dear Mr. Croy:

You have indicated that the City will be submitting its application for participation in MDOT's Local Bridge Program using the same Resolution as approved for the 2020 submittal. We previously reviewed and approve use of the proposed Resolution Requesting that the Michigan Department of Transportation Include the Bridge on Nine Mile Road Over Thornton Creek (Str# 14274) in the State Local Bridge Program List. The Resolution is provided for the limited purpose of acknowledging that the City agrees pay 5% of the total bridge replacement cost and 100% of the design and construction engineering cost in the event that a grant is awarded by MDOT.

Based on the limited purpose of the Resolution, we see no legal impediment to City Council approving the enclosed version of the Resolution.

If you have any questions regarding the above, please do not hesitate to contact me.

Very truly yours,

ROSATI SCHULTZ JOPPICH
& AMTSBUECHLER PC

Elizabeth Kudla Saarela

Enclosure

C: Cortney Hanson, Clerk (w/Enclosure)
Jeffrey Herczeg, Director of Public Works (w/Enclosure)
Rebecca Runkel, Project Engineer (w/Enclosure)
Thomas R. Schultz, Esquire (w/Enclosure)

CITY OF NOVI

COUNTY OF OAKLAND, MICHIGAN

RESOLUTION REQUESTING THAT THE MICHIGAN DEPARTMENT OF TRANSPORTATION INCLUDE THE BRIDGE ON NINE MILE ROAD OVER THORNTON CREEK (Str# 14274) IN THE STATE LOCAL BRIDGE PROGRAM LIST FOR REPLACEMENT

Minutes of a Meeting of the City Council of the City of Novi, County of Oakland, Michigan, held in the City Hall of said City on March 23, 2026, at 7 o'clock P.M. Prevailing Eastern Time.

PRESENT: Councilmembers_____

ABSENT: Councilmembers_____

The following preamble and Resolution were offered by Councilmember _____ and supported by Councilmember _____.

WHEREAS; OHM Advisors, Consulting Engineers for the City of Novi, completed the 2024 annual inspection of twelve bridges in the City; and

WHEREAS; based on the 2024 inspection, OHM Advisors prepared a 2024 Bridge Inspection Report for the bridge on Nine Mile Road over Thornton Creek; and

WHEREAS; the 2024 Bridge Inspection Report concludes that the bridge on Nine Mile Road over Thornton Creek is in need of replacement; and

WHEREAS; based on the findings and recommendations of OHM Advisors, the DPW Director recommends that City Council authorize OHM Advisors to submit the LAP Bridge Applications to the Michigan Department of Transportation for the bridge on Nine Mile Road over Thornton Creek on the Local Bridge Program for Replacement funding; and

WHEREAS; the City of Novi's cost participation amount would be 5% of the total cost and 100% of the design and construction engineering cost; and

WHEREAS; the Mayor and City Clerk are authorized to execute said resolution.

NOW THEREFORE, IT IS THEREFORE RESOLVED that the City of Novi is actively seeking financial participation to replace the bridge on Nine Mile Road over Thornton Creek and authorizes OHM Advisors to submit the LAP Bridge application to the Michigan Department of Transportation to include this bridge on the State Local Bridge Program

List for Replacement, to make application for financial assistance from the State of Michigan and Federal Government and to do those things reasonably necessary or required in order to accomplish the replacement of this bridge.

AYES:

NAYS:

RESOLUTION DECLARED ADOPTED.

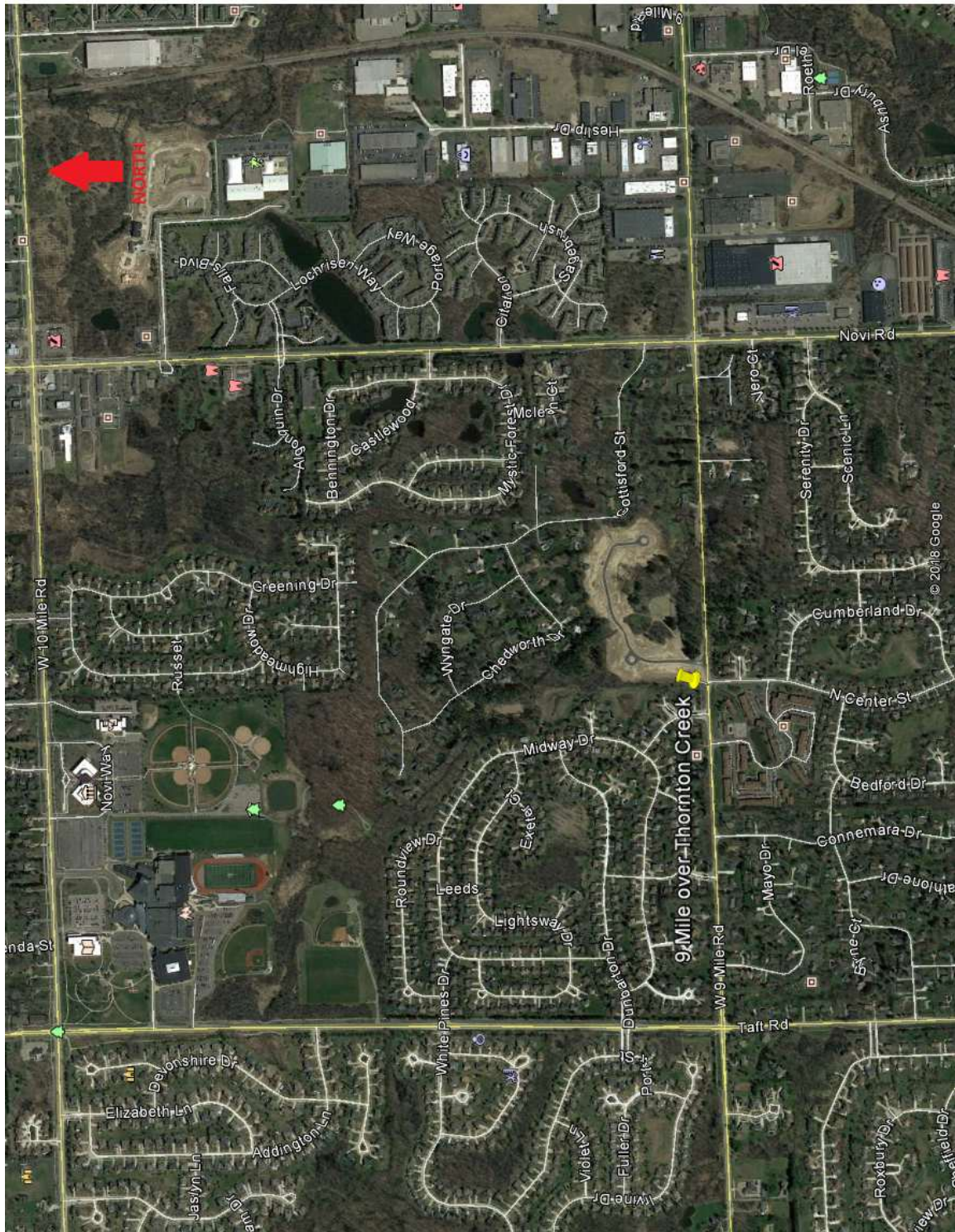
Cortney Hanson, City Clerk

CERTIFICATION

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the City Council of the City of Novi, County of Oakland, and State of Michigan, at a regular meeting held this _____ day of _____, 2026, and that public notice of said meeting was given pursuant to and in full compliance with Act No. 267, Public Acts of Michigan, 1976, and that the minutes of said meeting have been kept and made available to the public as required by said Act.

Cortney Hanson, City Clerk
City of Novi

2a. Situation Map



2b. Detour Map



9 Mile Rd to Novi Rd
To 10 Mile Rd
To Taft Rd
To 9 Mile Rd

Detour Length: 3.97 Miles

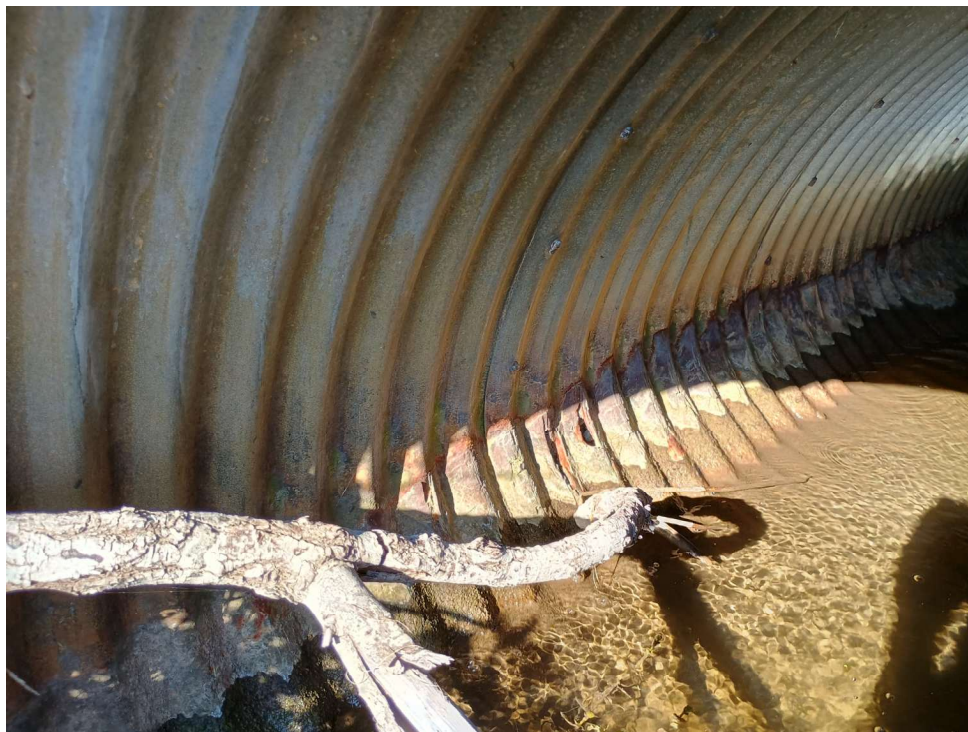
3. Photographs



South end



North pipe damage



Typical pipe condition at water line



North pipe damage



South pipe out of round



Patch and surface condition at kink in neighborhood entrance

4. Application Requirements for 9 Mile Road over Thornton Creek

A. Local Agency Contact Person

Ben Croy, PE
City Engineer
City of Novi
26300 Lee BeGole Drive
Novi, MI 48375

B. The purpose of this application is for the replacement of the bridge for 9 Mile Road over Thornton Creek. The City of Novi will commit to providing 5% of the construction cost for local match on this project.

C. Economic Importance of the Structure

This structure is located approximately 2.8 miles west and 1 mile north of the interchange of I-275 and 8 Mile Road. 9 Mile Road is an east west road in Novi, servicing various neighborhoods, commercial and light industrial businesses, and schools in the area. The structure sees approximately 10,100 vehicles a day according to SEMCOG traffic counts.

9 Mile Road is used by the Novi School District for busing to its elementary, middle, and high schools. Novi High School is approximately 1 mile north of the structure and Thornton Creek Elementary is approximately 1 mile west of the structure on 9 mile road. Novi Fire Department Station 3 is located approximately 0.25 miles west of the structure and uses this roadway as one of its main routes to access areas to the east in times of emergency.

Many light industrial businesses are located adjacent to the CSX railroad 1 mile east of the structure on 9 Mile Road. A commercial area is also located 0.5 miles east of the structure at the intersection of 9 Mile and Novi Roads.

The current structure is a twin barrel 64 inch wide by 42 inch tall corrugated metal pipe arch culvert. The two barrels are separated by 1 foot. The structure is at a severe skew of 64 degrees underneath 9 Mile Road. It also has a kink on the north side due to an extension being placed to re-route the culvert for a new subdivision entrance. The condition of the structure is poor and has approximately one foot of cover over the culvert. The two barrels have considerable damage resulting in the pipes being pushed inwards with large areas of rust due to minimal amount of cover. Additional areas are out of round and have been bent. There is significant rust at the waterline in areas. The bankfull width of the Thornton Creek is also wider than the existing structure which can result in erosion around the structure and overtopping.

Due to the poor condition, existing damage and bankfull width, it is recommended that it be removed and replaced. To increase the cover over the

culverts to extend their life additional roadwork should be completed to raise the road.

D. If there is a current detour, what does it affect?

Currently the bridge is open to traffic and there is no detour.

E. If the structure were to be closed, what would the detour affect?

If the structure were to be closed, the commercial and light industrial areas on 9 Mile Road would be impacted due to traffic having to be detoured. The commercial area could be impacted due to rerouting of traffic. The light industrial companies would have costs associated with longer delivery routes. These impacts could result in economic strain. Local residents would also have to change their commuting routes. This culvert crosses in front of the only entrance to the Montebello subdivision and thus structure closure may result in geometric changes needed to the entrance to allow for 2-way traffic and deliveries. Emergency services, specifically the fire department, would take longer to reach the neighborhoods as they would have to detour around the bridge which serves as a primary connection between the east-west. As every second matters in an emergency, this could lead to public safety concerns. School buses would have to change their routes to be less efficient, costing the school district money. As schools are already struggling with funding, this would further stress the school's budgets.

F. The structure is not currently closed.

G. Maintenance of the Structure

No known work has been done to the structure. This structure is difficult to perform maintenance on due to the size and material.

5. Estimated Rehabilitation Costs

Structure Replacement	
A. Road Construction	\$ 306,022.00
B. Structure Construction	\$ 2,871,500.00
Total (A & B)	\$ 3,177,522.00

For a breakdown of Construction costs, see Appendix A.

6. Priority List

1. 9 Mile Road

7. Resolution

The resolution is attached in Appendix B.

8. Previous Applications

It is understood that all previous applications have been discarded and that this application will be used to select funding.

APPENDIX A

Exhibit A

BRIDGE COST ESTIMATE WORKSHEET

- CPM, REHAB, REPLACE -

REV. 02/5/2025

Anticipated year of construction:

Min. annual Inflation Limit:

Max. annual Inflation Limit:

OWNER:

REGION:

TSC:

2025
2029
3.00%
9.00%

Novi
Metro
Oakland

LOCATION:

PRIMARY WORK ACTIVITY

OTHER WORK:

PR: 633603

MP:

THORNTON CREEK

LENGTH
26.6

CHECK AREA:

ROADWAY:

24

638

0

Curb to Curb
0

SFT

FT

DATE:

ENGINEER:

BRIDGE ID:

STR. TYPE: 3 Steel 19 Culvert

WORK ACTIVITY			MDOT Bridge Design Guides	QUANTITY	UNIT	UNIT COST		TOTAL
NEW BRIDGE		(increase deck area based on design standards and hydraulic requirements)				Model Predicted	Used	(Price projection to 2029)
	Single or Multiple Spans, Grade Separation	(add demo, approach, MOT)		SFT		533	533	/SFT
	Single Span, Over Water	(add demo, approach, MOT)		SFT		626	626	/SFT
	Multiple Spans, Over Water	(add demo, approach, MOT)		SFT		564	564	/SFT
	Precast Culvert	(add demo, approach, MOT)	3,080.0	SFT		677	677	/SFT
	Railroad	(add demo, approach, MOT)		SFT		491	491	/SFT
NEW SUPERSTRUCTURE								
	New Superstructure, Grade Separation	(incl. remove exist deck/super; add MOT & approach)		SFT		420	420	/SFT
	New Superstructure, Over Water	(incl. remove exist deck/super; add MOT & approach)		SFT		278	278	/SFT
	New Superstructure, Combined	(incl. remove exist deck/super; add MOT & approach)		SFT		291	291	/SFT
WIDENING								
	Structure Widening, _____ ft	(incl. deck/super/sub widening, add approach transition)		SFT		1056	1056	/SFT
NEW DECK								
	New Bridge Deck & Barrier	(incl. remove exist deck/railing, add approach, MOT)		SFT		168	168	/SFT
DEMOLITION								
	Entire Structure, Grade Separation		1.0	SFT		48	48	/SFT
	Other (culvert removal)			LSUM			50000	LSUM
	Entire Structure, Over Water			SFT		119	119	/SFT
DECK REPAIR / TREATMENTS								
	Bridge Railing Replacement	(incl. removal and replacement)		FT		2066	2066	/FT
	Concrete Brush Block / Curb Patch	(incl. hand chipping and formwork)		FT		67	67	/FT
	Concrete Barrier Patch	(incl. hand chipping and formwork)		SFT		160	160	/SFT
	Concrete Deck Patch	(incl. hand chipping)		SFT		87	87	/SFT
	Deep Overlay	(incl. joint repl & hydro)		SFT		57	57	/SFT
	Epoxy Overlay	(incl. warranty)		SYD		73	73	/SYD
	Expansion Joint Gland Replacement	(remove and replace elastomeric gland)		FT		202	202	/FT
	Expansion Joint Replacement	(incl. removal)		FT		1217	1217	/FT
	Full Depth Patch			SFT		163	163	/SFT
	Healer / Sealer	(penetrates cracks in bridge deck)		SYD		26	26	/SYD
	HMA Overlay with WP membrane			SYD		140	140	/SYD
	Overlay Removal			SYD		34	34	/SYD
	(Latex Concrete Surface Removal)			SYD		34	34	/SYD
	(Epoxy Overlay Removal)			SYD		28	28	/SYD
	(HMA Surface Removal)			SYD		21	21	/SYD
	Reseal Bridge Joints			FT		44	44	/FT
	Shallow Overlay	(incl. joint repl & hydro)		SFT		50	50	/SFT
SUPERSTRUCTURE REPAIR								
	Bearing Realignment / Replacement	(incl. temporary supports)		EA		7020	7020	EA
	Heat Straightening	(incl. clean and coat)		EA		115028	115028	EA
	Pack Rust Repair	(greater than 3/8" separation)		FT		764	764	/FT
	Paint - Complete	(incl. clean & coat)		SFT		41	41	/SFT
	Paint - Partial / Spot / Zone	(incl. clean & coat - \$20k minimum)		SFT		54	54	/SFT
	PCI Beam End Blockout	(incl. temporary supports)		EA		13262	13262	EA
	Pin & Hanger Replacement	(incl. temporary supports)		EA		17834	17834	EA
	Structural Steel Repair	(based on 6ft repair length)		EA		9983	9983	EA
	Structural Steel Repair - Stiffener	(includes each side of beam)		EA		3335	3335	EA
SUBSTRUCTURE REPAIR								
	Substructure Patching	(measured x 2) replace if repair area > 30%		CFT		476	476	/CFT
	Substructure Replacement	(incl. temporary supports, excavation)		CFT		565	565	/CFT
	Substructure Horizontal Surface Sealer			SYD		117	117	/SYD
	Temporary Supports	(add Structural Steel Repair - Stiffener for ea steel beam)		EA		7864	7864	EA
MISCELLANEOUS								
	Articulating Concrete Block System (ACB)			SYD		422	422	/SYD
	Concrete Surface Coating			SYD		62	62	/SYD
	Culvert Cleanout			FT		61	61	/FT
	Epoxy Crack Injection	(structural crack repair)		FT		93	93	/FT
	Metal Mesh Panels	(48" width, max 6'-6" length)		SFT		44	44	/SFT
	Pressure Relief Joint	(use when approach concrete roadway exceeds 1,000ft)		FT		199	199	/FT
	Riprap	(assume 10ft distance around perimeter of substructure)	44.4	SYD		487	487	/SYD
	Silane Treatment	(penetrating sealer for concrete surfaces)		SFT		6	6	/SFT
	Slope Protection Repairs			SYD		316	316	/SYD
	Other					0	0	
STRUCTURE CONSTRUCTION BUDGET								\$2,158,162
ROAD WORK								
	Approach Pavement, 12" RC	(incl. removal; add curb, gutter, guardrail) 40' ea. end		SYD		1067	1067	/SYD
	Approach Curb & Gutter	(incl. removal) 40' ea. quadrant		FT		36	36	/FT
	Guardrail Anchorage to Bridge	(each quadrant)		EA		4780	4780	/EA
	Guardrail	(incl. removal) < 200ft beyond reference line		FT		41	41	/FT
	Guardrail Terminal	(each quadrant)		EA			3900	/EA
	Roadway Approach Work	(beyond approach pavement)	1.0	LSUM			\$150,000.00	LSUM
	Utilities		1.0	LSUM			\$50,000.00	LSUM
TRAFFIC CONTROL								
	Part Width Construction	Unit Cost to be determined by Region or TSC Traffic & Safety		LSUM				LSUM
	Crossovers			EA				/EA
	Temporary Traffic Signals			set				/set
	RR Flagging			LSUM				LSUM
	Detour		1.0	LSUM			\$30,000.00	LSUM
RELATED ROAD/TRAFFIC CONSTRUCTION BUDGET								\$230,000
CONTINGENCY MOBILIZATION			(10% - 20%) (use higher contingency for small projects) (estimate at 10%)	15 10	%		\$2,388,161.89 \$2,746,386.17	\$358,224 \$274,639

(Does not include PE or CE, includes inflation)
e Cost Estimating Worksheet for CE, PE & PE-S

5.18 % Equivalent Inflation
15 % CE
12 % PE

TOTAL CONSTRUCTION BUDGET

Inflation Budget:
CE BUDGET
PE BUDGET

\$3,177,522
included above
\$476,628
\$381,303

APPENDIX B



February 26, 2025

Mr. Ben Croy, City Engineer
City of Novi
26300 Lee BeGole Drive
Novi, MI 48375

**RE: 2024 Novi Bridge Inspection
Completed Inspections and Recommendations**

Dear Mr. Croy:

OHM has completed the 2024 Bridge Inspections for the twelve City-owned bridges. Below is a summary of each structure with recommendations. To maximize the life of each structure, the maintenance repairs should be completed in the next 6-24 months.

The City has applied funding through the MDOT Local Bridge Program for the 9-Mile Rd structure over Thornton Creek at N. Center Street and Ashbury Drive over Middle Rouge River in the past few years. Those bridges have not been successful in receiving funding. Last year the City applied for Ashbury but did not apply for 9-Mile. If the City would like to re-apply for Ashbury in the 2025 call for projects, the application on file can be updated and resubmitted with relatively little effort. It is possible sheet pile will need intermediate maintenance work in the next few years as well.

Meadowbrook Rd over Courter Ditch STR# 8246

- ▶ No work recommended at this time.

Willowbrook Drive over Courter Ditch STR# 8247

- ▶ Seal tops of joint filler fiber at back of curb/sidewalk interface on the bridge.
- ▶ Grind top of sidewalk to smooth transition into approach walk or replace approach walk flags.

Cranbrooke Drive over Courter Ditch STR# 8248

- ▶ Seal gap in end joint and seal cracks in deck.

West Park Drive over CSX Railroad STR# 12769

- ▶ Fill washout in the southwest corner at the end of the newly poured wall.

Ashbury Drive over Middle Rouge River STR# 13828

- ▶ Replace sheet pile abutment facing with concrete facing
- ▶ HMA overlay the deck, apply waterproofing underneath the overlay.
- ▶ This structure is on a 12 month inspection cycle due to sheep pile abutment facing condition.

Ashbury Drive North over Thornton Creek STR# 13860

- ▶ Remove debris from upstream channel.

9-Mile Rd over Walled Lake Branch of Middle Rouge River STR# 13858

- ▶ No work recommended at this time.

Island Lake Drive over Novi Lyons Drain STR# 13861

- ▶ No work Recommended at this time.

Shoreline Drive over Unnamed Tributary STR# 13862

- ▶ No work recommended at this time.



Wixom Rd over Unnamed Tributary STR# 13859

- ▼ No work recommended at this time.

9-Mile Rd over Thornton Creek at Novi Road STR# 14275

- ▼ There is a small tear in the east pipe that should be plugged with grout the next time a project is scheduled for the area.

9-Mile Rd over Thornton Creek at N. Center Street STR# 14274

- ▼ This structure is a dual CMP arch culvert in overall poor condition. The culverts have pack rust along the water line and several areas of pack rust and deterioration at riveted seams. There are a few areas of deformed pipe under the pavement. A partial video survey was completed 2017 however due to large debris in the pipe a complete survey was not obtained.
- ▼ This structure is currently on a 12 month inspection cycle due to its condition of the portions that are visible.
- ▼ It is recommended that this culvert be scheduled for replacement in the next 3-5 years and monitored annually until replaced.

Copies of the inspection reports as well as inspection pictures are available digitally upon request. We have submitted the necessary documentation to MDOT and no further action is required on your part.

Please contact me if you have any questions or require additional information.

Sincerely,
OHM Advisors


Adam Rychwalski, PE

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14274

CULVERT SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
9 MILE ROAD	42.4519 / -83.4841	634489000010C02	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
THORNTON CREEK	26.6 / 0 / 2	City: NOVI(4890)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI W OF NOVI RD	1970 / / /	Oakland(23)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Metro(7) / Oakland(63)	3 Steel / 19 Culvert	09/30/2024 / 261X	8 Stable Above Footing	

CULVERT INSPECTION

261X

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Adam Rychwalski	Orchard, Hiltz & McCliment Inc	12	09/30/2024

GENERAL NOTES

Adjacent CMP arch pipe approximately 280' long each at heavy skew to 9 Mile road. Heavy corrosion and deterioration in first 40-70 feet of each pipe from inlet. Pipe shape change from CMP arch to CMP ellipse leaving exposed joint. Several blind taps with heavy corrosion at taps. Rust and scaling along the waterline for full length with the exception of the last 30 feet or so which appears to be new pipe. Large area of deflected pipe in east pipe at approximately 166' in from inlet. detailed inspection is difficult without robotics due to low rise of pipe. Deflection in north pipe approximately 25 feet from inlet and in south pipe approximately 24 feet from inlet. Assisted by Nick Aukerman (2022).

NBI INSPECTION

	09/22	09/23	09/24	
1. Culvert Rating (SIA-62)	4	4	4	(09/24) (09/23) (09/22)
2. Channel (SIA-61)	6	6	6	Upstream and downstream ends are aligned with channel. there is a 45 degree kink in the pipe approximately 30' from outlet. upstream end has rock ladder controlling stream profile. (09/24) Upstream and downstream ends are aligned with channel. there is a 45 degree kink in the pipe approximately 30' from outlet. upstream end has rock ladder controlling stream profile. (09/23) Upstream and downstream ends are aligned with channel. there is a 45 degree kink in the pipe approximately 30' from outlet. upstream end has rock ladder controlling stream profile. (09/22)
3. Scour	7	7	7	armoring at both ends. no scour noted. full invert on pipe throughout. (09/24) armoring at both ends. no scour noted. full invert on pipe throughout. (09/23) armoring at both ends. no scour noted. full invert on pipe throughout. (09/22)

AASHTO ELEMENTS

(English Units)

Element Number	Element Name	Total Quantity	Unit	Good CS1	Fair CS2	Poor CS3	Severe CS4
Culvert							
240	Steel Culvert	560	ft	60 11%	350 62%	140 25%	10 2%

Adjacent CMP arch pipe approximately 280' long each at heavy skew to 9 Mile road. Heavy corrosion and deterioration in first 40-70 feet of each pipe from inlet. Pipe shape change from CMP arch to CMP ellipse leaving exposed joint subject to attacking water from normal flow. Several blind taps with heavy corrosion at taps. Rust and scaling along the waterline for full length with the exception of the last 30 feet or so which appears to be new pipe. Large area of deflected pipe in east pipe at approximately 166' in from inlet. detailed inspection is difficult without robotics due to low rise of pipe. Robotic inspection is still difficult due to small riprap that has washed into pipe. Deflection in north pipe approximately 25 feet from inlet and in south pipe approximately 24 feet from inlet.

Scour Countermeasure

830	Plain Riprap	400	sq.ft	400 100%	0 0%	0 0%	0 0%
new riprap at outlet in good condition. New riprap and slope paving at inlet in good condition.							
837	Other Scour Protect	20	ft	20 100%	0 0%	0 0%	0 0%

Slope paving at upstream end has been replaced.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14274

CULVERT SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
9 MILE ROAD	42.4519 / -83.4841	634489000010C02	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
THORNTON CREEK	26.6 / 0 / 2	City: NOVI(4890)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI W OF NOVI RD	1970 / / /	Oakland(23)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Metro(7) / Oakland(63)	3 Steel / 19 Culvert	09/30/2024 / 261X	8 Stable Above Footing	

MISCELLANEOUS

Guard Rail

Item	Rating
36A. Bridge Railings	N
36B. Transitions	N
36C. Approach Guardrail	N
36D. Approach Guardrail Ends	N

Other Items

Item	Rating
71. Water Adequacy	6
72. Approach Alignment	4
Special Insp. Equipment	9
Underwater Insp. Method	1

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Detailed Insp.	L	Clean and televise both pipes.
Culvert Repl.	L	Replace culvert due to poor condition, pipe damage, pipe alignment.

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14274

STRUCTURE INVENTORY AND APPRAISAL

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
9 MILE ROAD	42.4519 / -83.4841	634489000010C02	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
THORNTON CREEK	26.6 / 0 / 2	City: NOVI(4890)		
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Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Metro(7) / Oakland(63)	3 Steel / 19 Culvert	09/30/2024 / 261X	8 Stable Above Footing	

Bridge History, Type, Materials		Route Carried By Structure(ON Record)		Route Under Structure (UNDER Record)	
27 - Year Built	1970	5A - Record Type	1	5A - Record Type	
106 - Year Reconstructed		5B - Route Signing	5	5B - Route Signing	
202 - Year Painted		5C - Level of Service	1	5C - Level of Service	
203 - Year Overlay		5D - Route Number	00000	5D - Route Number	
43 - Main Span Bridge Type	3 19	5E - Direction Suffix	0	5E - Direction Suffix	
44 - Appr Span Bridge Type		10L - Best 3m Unclr-Lt	0 0	10L - Best 3m Unclr-Lt	
77 - Steel Type		10R - Best 3m Unclr-Rt	0 0	10R - Best 3m Unclr-Rt	
78 - Paint Type		PR Number		PR Number	
79 - Rail Type	0	Control Section		Control Section	
80 - Post Type		11 - Mile Point	0	11 - Mile Point	
107 - Deck Type	N	12 - Base Highway Network	0	12 - Base Highway Network	
108A - Wearing Surface	6	13 - LRS Route-Subroute	0000006336 03	13 - LRS Route-Subroute	
108B - Membrane	N	19 - Detour Length	4	19 - Detour Length	
108C - Deck Protection	0	20 - Toll Facility	3	20 - Toll Facility	
Structure Dimensions		26 - Functional Class	16	26 - Functional Class	
34 - Skew	64	28A - Lanes On	2	28B - Lanes Under	
35 - Struct Flared	N	29 - ADT	8260	29 - ADT	
45 - Num Main Spans	2	30 - Year of ADT	2014	30 - Year of ADT	
46 - Num Apprs Spans	0	32 - Appr Roadway Width	24	42B - Service Type Under	5
48 - Max Span Length	12.2	32A/B - Ap Pvt Type/Width	4 24	47L - Left Horizontal Clear	
49 - Structure Length	26.6	42A - Service Type On	1	47R - Right Horizontal Clear	
50A - Width Left Curb/SW	0	47L - Left Horizontal Clear	0.0	54A - Left Feature	
50B - Width Right Curb/SW	0	47R - Right Horizontal Clear	24.0	54B - Left Underclearance	99 99
33 - Median	0	53 - Min Vert Clr Ov Deck	99 99	54C - Right Feature	
51 - Width Curb to Curb	0	100 - STRAHNET	0	54D - Right Clearance	99 99
52 - Width Out to Out	0	102 - Traffic Direct	2	Under Clearance Year	0
112 - NBIS Length	Y	109 - Truck %	0	55A - Reference Feature	N
Inspection Data		110 - Truck Network	0	55B - Right Horiz Clearance	0
90 - Inspection Date	09/30/2024	114 - Future ADT	9500	56 - Left Horiz Clearance	0
91 - Inspection Freq	12	115 - Year Future ADT	2034	100 - STRAHNET	
92A - Frac Crit Req/Freq	N	Freeway	0	102 - Traffic Direct	
93A - Frac Crit Insp Date		Structure Appraisal		109 - Truck %	
92B - Und Water Req/Freq	N	36A - Bridge Railing	N	110 - Truck Network	
93B - Und Water Insp Date		36B - Rail Transition	N	114 - Future ADT	
92C - Oth Spec Insp Req/Freq	N	36C - Approach Rail	N	115 - Year Future ADT	
93C - Oth Spec Insp Date		36D - Rail Termination	N	Freeway	
92D - Fatigue Req/Freq	N	67 - Structure Evaluation	4	Proposed Improvements	
93D - Fatigue Insp Date		68 - Deck Geometry	N	75 - Type of Work	
176A - Und Water Insp Method	1	69 - Underclearance	N	76 - Length of Improvement	
58 - Deck Rating	N	71 - Waterway Adequacy	6	94 - Bridge Cost	
58A/B - Deck Surface/Bottom		72 - Approach Alignment	4	95 - Roadway Cost	
59 - Superstructure Rating	N	103 - Temporary Structure		96 - Total Cost	
59A - Paint Rating		113 - Scour Criticality	8	97 - Year of Cost Estimate	
60 - Substructure Rating	N	Miscellaneous		Load Rating and Posting	
61 - Channel Rating	6	37 - Historical Significance	5	31 - Design Load	0
62 - Culvert Rating	4	98A - Border Bridge State		41 - Open, Posted, Closed	A
Navigation Data		98B - Border Bridge %	0	63 - Fed Oper Rtg Method	6
38 - Navigation Control		101 - Parallel Structure	N	64F - Fed Oper Rtg Load	2.03
39 - Vertical Clearance	0	EPA ID		64MA - Mich Oper Rtg Method	6
40 - Horizontal Clearance	0	Stay in Place Forms		64MB - Mich Oper Rtg	3.61
111 - Pier Protection		143 - Pin & Hanger Code	0	64MC - Mich Oper Truck	19
116 - Lift Brdg Vert Clear	0	148 - No. of Pin & Hangers	0	65 - Inv Rtg Method	6
				66 - Inventory Load	1.22
				70 - Posting	5
				141 - Posted Loading	
				193 - Overload Class	A N

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14274		WORK RECOMMENDATIONS		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
9 MILE ROAD	42.4519 / -83.4841	634489000010C02	Poor Condition(4)	
Feature	Length / Width / Spans	Owner		
THORNTON CREEK	26.6 / 0 / 2	City: NOVI(4890)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.5 MI W OF NOVI RD	1970 / / /	Oakland(23)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Metro(7) / Oakland(63)	3 Steel / 19 Culvert	09/30/2024 / 261X	8 Stable Above Footing	

WORK RECOMMENDATIONS	261X
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MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 14275		WORK RECOMMENDATIONS		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	
9 MILE ROAD	42.4522 / -83.4729	634489000010C03	Good Condition(7)	
Feature	Length / Width / Spans	Owner		
THORNTON CREEK	21.5 / 104 / 2	City: NOVI(4890)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.06 MI E OF NOVI RD	1990 / / /	Oakland(23)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Metro(7) / Oakland(63)	3 Steel / 19 Culvert	09/30/2024 / 2RDO	8 Stable Above Footing	

WORK RECOMMENDATIONS	2RDO
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