



CITY OF NOVI CITY COUNCIL
SEPTEMBER 14, 2026

SUBJECT: Consideration of approval of assessment payment to Oakland County for the Caddell Drain Rehabilitation project at the intersection of 9 Mile and Drake Roads, in the amount of \$220,134.

SUBMITTING DEPARTMENT: Department of Public Works, Engineering Division

KEY HIGHLIGHTS:

- Project includes rehabilitation of the Caddell Drain's four-barrel crossing at the intersection of 9 Mile and Drake Roads in Farmington Hills.
- The Caddell Drain is an Intracounty Drainage District (Chapter 20).
- The City of Novi is responsible for \$220,134 of the \$6M project's total costs.
- The Oakland County Water Resources Commissioner's Office (OCWRC) is managing the project.

FINANCIAL IMPACT

	FY 2026/27
EXPENDITURE REQUIRED	\$ 220,134.00
BUDGET Drain Fund 211-445.00-936.151	\$ 220,134.00
APPROPRIATION REQUIRED	\$ 0
FUND BALANCE IMPACT	\$ 0

BACKGROUND INFORMATION:

The Caddell Drain is an Intracounty Drainage District (Chapter 20) located in the cities of Farmington and Farmington Hills. It was first constructed in several phases in the 1980s to provide controlled drainage of several hundred acres of land in Farmington, Farmington Hills, and Novi (see attached map depicting the Caddell Drain's drainage district, including the 105 acres in the Village Oaks/Stonehenge area of Section 25 in the City of Novi).

Maintenance and construction projects related to stormwater management in this drainage district are funded through assessments that are apportioned based on tributary area and runoff amongst the following public entities:

CITY OF FARMINGTON, Oakland County, Michigan For benefits to public health	11.90 %
CITY OF FARMINGTON HILLS, Oakland County, Michigan For benefits to public health	60.50 %
CITY OF NOVI, Oakland County, Michigan For benefits to public health	3.8 %
OAKLAND COUNTY, Michigan For benefits to county roads	5.60 %
MICHIGAN DEPARTMENT OF TRANSPORTATION For benefits to state highways	18.20 %

The Caddell Drain crosses the intersection of 9 Mile and Drake Roads in Farmington Hills through four large culvert barrels. A 2022 inspection rated the barrels in poor to severe condition, documenting corrosion, section loss, perforations, and localized deformation.

The project will rehabilitate each barrel using a custom-shaped slip liner designed to fit the existing pipe-arch geometry. New concrete headwalls will also be installed at the upstream and downstream ends. This approach extends the structure's useful life while limiting excavation and disruption associated with full replacement.

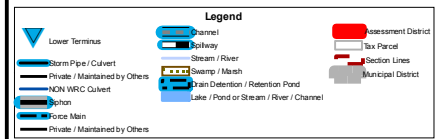
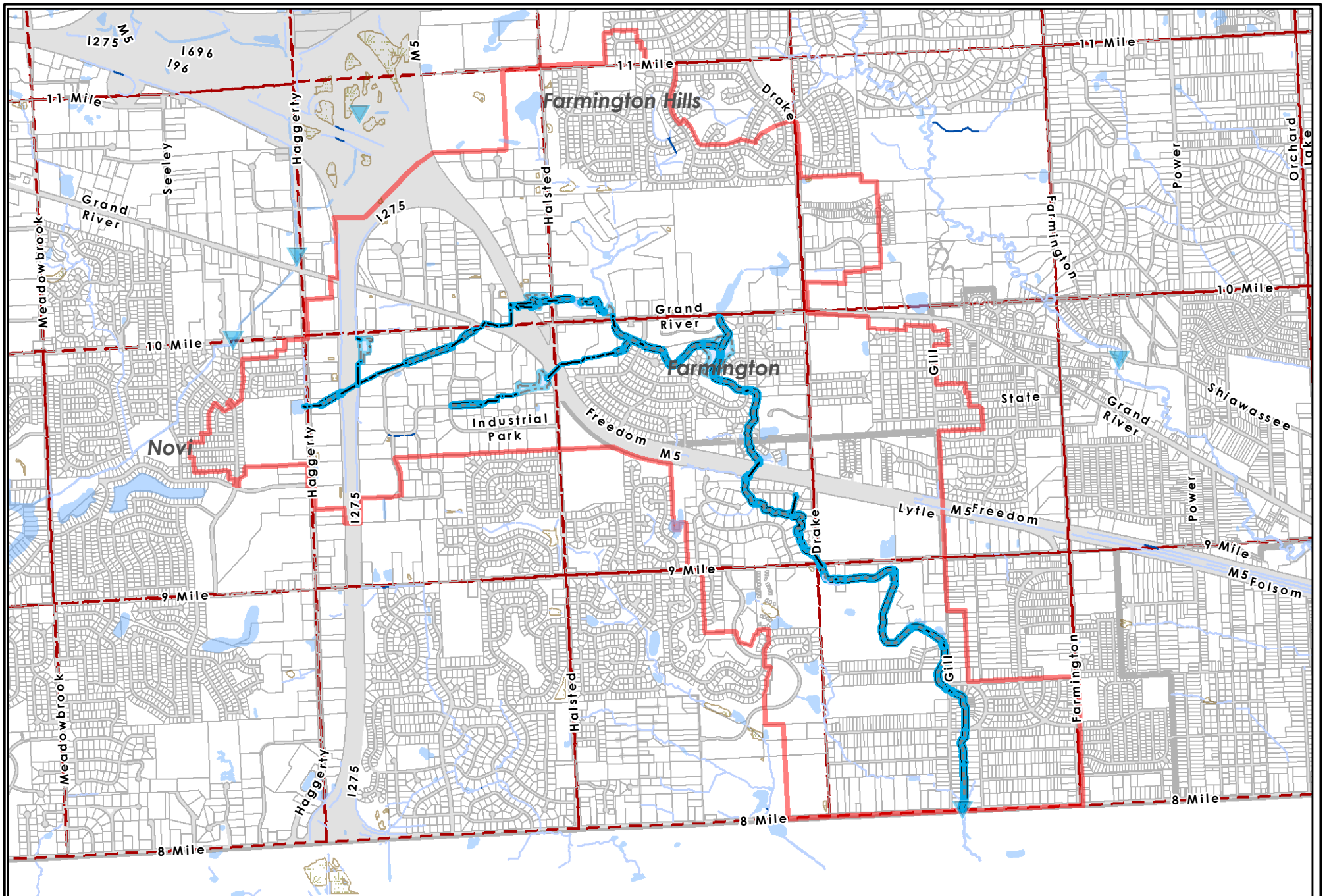
In 2024 and 2025, the Cities of Farmington and Farmington Hills petitioned the Chapter 20 Drainage Board for these improvements. The project was bid out this summer and awarded to D.V.M. Utilities, Inc in July. The City of Novi is responsible for \$220,134 of the \$6M project's total costs. The Oakland County Water Resources Commissioner's Office (OCWRC) is coordinating and managing the project.

Project benefits include:

- Addresses documented deterioration in all four culvert barrels.
- Extends service life through a structurally fitted rehabilitation system.
- Provides durable new upstream and downstream concrete headwalls.
- Protects drainage performance beneath a major local intersection.

Construction is anticipated from fall 2026 through spring 2027.

RECOMMENDED ACTION: Approval of assessment payment to Oakland County for the Caddell Drain Rehabilitation project at the intersection of 9 Mile and Drake Roads, in the amount of \$220,134.



**CADDELL DRAIN
DRAIN ASSESSMENT DISTRICT
CITY OF FARMINGTON HILLS
CITY OF FARMINGTON
CITY OF NOVI**



Disclaimer: The information provided in this system has been compiled from computerized data, plans, maps, surveys, and other data records and data. It is not a legally recorded map or survey and is not intended to be used as one. Users of this data are hereby notified that the information is provided for informational purposes only and should be verified for verification of the information.

Map Printed: June 6, 2011
J:\Drawings\GIS\CDRA\CDRA.dwg Caddell Drain for Assessment E:\GIS\CDRA.dwg

FARMINGTON HILLS, MICHIGAN

Caddell Drain 9 Mile and Drake Rehabilitation

Four-barrel crossing at 9 Mile Road and Drake Road

PROJECT COST
\$6,092,000

CONSTRUCTION SCHEDULE
Fall 2026 - Spring 2027

REHABILITATION TECHNIQUE
Custom Slip Lining



EXISTING FOUR-BARREL CROSSING
Inspection photograph, June 2022



INTERIOR PIPE CONDITION
Inspection photograph, June 2022

PROJECT OVERVIEW

The Caddell Drain crossing consists of four corrugated-metal pipe arches, each approximately 300 feet long, beneath the 9 Mile Road and Drake Road intersection. A 2022 inspection rated the barrels in poor to severe condition, documenting corrosion, section loss, perforations and localized deformation.

REHABILITATION APPROACH

The project will rehabilitate each barrel using a custom-shaped slip liner designed to fit the existing pipe-arch geometry. New concrete headwalls will also be installed at the upstream and downstream ends. This approach extends the structure's useful life while limiting excavation and disruption associated with full replacement.

PROJECT BENEFITS

- Addresses documented deterioration in all four culvert barrels.
- Extends service life through a structurally fitted rehabilitation system.
- Provides durable new upstream and downstream concrete headwalls.
- Protects drainage performance beneath a major local intersection.

CURRENT PROJECT STATUS

The project has been bid, with construction anticipated from fall 2026 through spring 2027.

QUESTIONS?

Contact our office at 248-858-0958.



Caddell Drain - 9 Mile & Drake
7/28/2026

	Project Costs
1) Facility Acquisition	
a Construction Cost	\$ 4,538,080
Subtotal Facility Acquisition	\$ 4,538,080
2) Engineering Consultants	
a Prelim. Engineering (Study) and Design Phase Services	\$ 179,000
b Construction Phase Services Incl. Materials Testing	\$ 332,535
c Scheduling Consultant	\$ -
d Additional Special Services - Observation	\$ 291,016
Subtotal Engineering Consultants	\$ 803,000
3) Project Financing & Legal	
a Project Insurance	\$ -
b Bond Issuance (Legal)	\$ -
c Bond Issuance (Financial Consultant)	\$ -
d Wetland Mitigation	\$ -
Subtotal Project Financing & Legal	\$ -
3) Right of Way	
a Easement Fees	\$ 20,000
b Legal Fees	\$ 8,000
c Permits	\$ -
d County Services	\$ 18,030
Subtotal Right of Way	\$ 46,000
4) Exclusive County Services	
a Administration	\$ 27,586
b Engineering	\$ 113,195
c Inspection	\$ -
d Survey	\$ 7,801
e O&M Startup	\$ 2,258
Subtotal Exclusive County Services	\$ 151,000
8) Project Subtotal	\$ 5,538,000
9) Project Contingency (10%)	\$ 554,000
10) Total Project Cost	\$ 6,092,000

I hereby certify the period of usefulness of these facilities to be 50 years and upwards.

By: 
 David Wirth, P.E.
 Project Engineer

By: _____
 Joel Brown, P.E.
 Chief Engineer

**OAKLAND COUNTY WATER RESOURCES COMMISSIONER
PROJECT ASSESSMENT RECOMMENDATION FOR THE
CADELL DRAIN**

PROJECT: Caddell Drain-Nine Mile and Drake (PRJ-17877)
TOTAL PROJECT COST: \$6,092,000.00
PREVIOUS ASSESSMENTS: \$299,000.00
Construction fund FND84600
AMOUNT TO BE ASSESSED: \$5,793,000.00

Public Corporation	*Percentage of Apportionment	Total Amount of Assessment
City of Farmington Hills	60.500%	\$ 3,504,765.00
City of Farmington	11.900%	\$ 689,367.00
City of Novi	3.800%	\$ 220,134.00
State of Michigan	18.200%	\$ 1,054,326.00
Oakland County on account of drainage to county highways	5.600%	\$ 324,408.00
Total	100.000%	\$ 5,793,000.00

*Apportionment based on Final Order of Apportionment dated 01/26/1983.

Assessment Payment Due Date: 08/31/2026

I hereby certify that the forgoing Special Assessment Roll was prepared in accordance with the directions of the Drainage Board for the Caddell Drain and the statutory provisions applicable thereto.

Jim Nash
Chairman of the Drainage Board for the Caddell Drain

The foregoing Special Assessment Roll was approved for the Caddell Drain on _____

Jim Nash
Chairman of the Drainage Board for the Caddell Drain

07812

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Oakland County
WRC Special Assessments
1200 N Telegraph
Pontiac, MI 48341

INVOICE

Customer ID: CU000477
Invoice Number: C1082670
Invoice Date: 08/26/2026
Due Date: 09/25/2026
Amount Due: USD 220,134.00

Bill To:

CITY OF NOVI
ACCOUNTS PAYABLE
45175 W 10 MILE RD
NOVI, MI 48375-3024

For billing questions, please call: Kimberly E Smith at 248-858-1541
Email: smithke@oakgov.com
Payments made easy. Visit <https://mi.oakgov.com/form/general-billing> to pay your
Oakland County invoice

Description - Goods and Services	Quantity	UOM	Unit Price	Amount
CADDELL DRAIN - NINE MILE and DRAKE PROJECT (PRJ-17877) ASSESSMENT DRAIN BOARD APPROVAL ON 07/28/26	1	Each	220,134.00	220,134.00
Sub Total				220,134.00
Tax				0.00
Invoice Total				220,134.00

PLEASE INCLUDE YOUR INVOICE NUMBER WHEN SUBMITTING PAYMENT.

SCANNED

AUG 31 2026

CITY OF NOVI
FINANCE**Please Remit Payments to:**

Oakland County
Treasurers-Cash Acctg Bldg 12 E
1200 N Telegraph
Pontiac, MI 48341
United States of America