

CITY of NOVI CITY COUNCIL

**Agenda Item 4
November 13, 2018**

SUBJECT: Approval to award the construction contract for the Nine Mile Road Sewer project (Evergreen Court to Kensington) to D.V.M. Utilities, Inc., the low-bidder, in the amount of \$5,553,167.65, and amend the budget.

SUBMITTING DEPARTMENT: Department of Public Works, Water & Sewer Division

CITY MANAGER APPROVAL: 

EXPENDITURE REQUIRED	\$ 5,553,167.65
AMOUNT BUDGETED	\$ 4,151,582
APPROPRIATION REQUIRED	\$ 2,349,275
LINE ITEM NUMBER	592-592.00-976.029

BACKGROUND INFORMATION:

A recent analysis of the Park Place pump station and the downstream force main serving Nine Mile between Napier Road and Beck Road indicated there are capacity concerns in this area of the sanitary sewer system. In addition to the capacity, there is also a major concern regarding redundancy for the 1.6-mile long force main. For further information, refer to the attached memo from Ben Croy dated April 18, 2016. After reviewing the options available to resolve capacity and redundancy concerns, it was determined replacing the majority of the existing force main with a gravity sewer would be the best option. Mitigating factors for replacement include system operation, maintenance, and future residential service connections.

OHM Advisors, the City's Engineering consultant, assisted the Water and Sewer Division with developing the plans for this project. The plans were advertised for public bids on September 28, 2018. Following the solicitation period, staff received and opened six (6) bids on October 31, 2018. D.V.M.'s bid is recommended as being in the best interest of the City as it is responsive, is the low bidder, and complies with all of the requirements of the bidding instructions. OHM's award recommendation letter including the bid tabulation dated November 2, 2018 is attached. A summary of the bid tabulation is as follows:

Contractor	Base Bid (including Crew Days)*	Alternate Bid (including Crew Days)*
D.V.M. Utilities	\$ 6,276,842.65	\$ 5,798,167.65
Verdeterre Contracting	No Bid	\$ 6,572,287.20
Lawrence M. Clarke	No Bid	\$ 6,582,250.00
L. D'Agostini & Sons	No Bid	\$ 6,753,546.00
Pamar Enterprises	\$ 6,913,404.00	\$ 7,936,904.00
Stante Excavating	\$ 8,678,045.50	No Bid

*Crew Days are included to compare bids, but are not included in the award.

Following recent trends in construction, the project cost is significantly higher than estimated. City staff and OHM have not identified any particular bid anomaly causing the increased price; however, this type of construction can be difficult to estimate. This project involves non-standard construction practices primarily due to: 1) the depth of construction reaches 30-foot and presents a high level of difficulty during excavation, and 2) the trenchless technology method chosen for this project to preserve natural features is seldom used at this scale, and is therefore difficult to estimate compared to traditional open-cut methods of construction.

Following review of the bids, staff would not be expect to see lower prices if re-bid in the future. Since the City received six competitive bids by reputable and specialized contractors, staff believes the bid prices represent the actual cost of construction.

The construction engineering services award associated with this project is proposed elsewhere on this agenda. Anticipated project substantial completion is late 2019 or early 2020.

RECOMMENDED ACTION: Approval to award the construction contract for the Nine Mile Road Sewer project (Evergreen Court to Kensington) to D.V.M. Utilities, Inc., the low-bidder, in the amount of \$5,553,167.65, and amend the budget.

RESOLUTION

NOW, THEREFORE BE IT RESOLVED that the following
Budget Amendment for the contract award with
D.V.M. Utilities, Inc., for the construction associated with
the Nine Mile Road Sewer project is authorized:

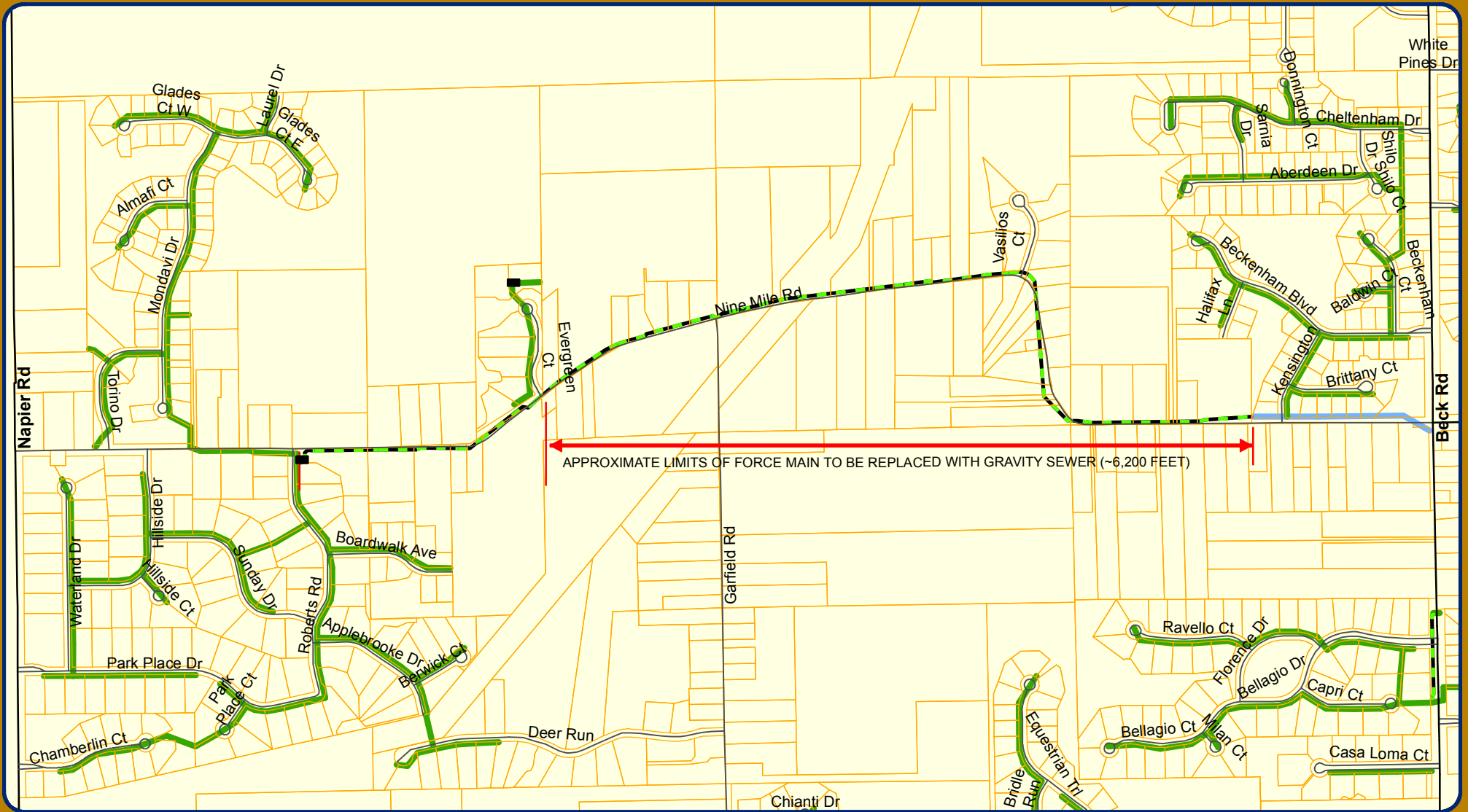
	INCREASE (DECREASE)
WATER & SEWER FUND	
APPROPRIATIONS	
Capital Outlay	2,349,275
TOTAL APPROPRIATIONS	<u>\$ 2,349,275</u>
Net Increase (Decrease) to Fund Balance	<u><u>\$ (2,349,275)</u></u>

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
at a regular meeting held on November 13, 2018

Cortney Hanson
City Clerk

NINE MILE GRAVITY SEWER PROJECT

Location Map






APPROXIMATE LIMITS OF FORCE MAIN TO BE REPLACED WITH GRAVITY SEWER (~6,200 FEET)

Map Author: Croy
 Date: 4/28/17
 Project: Nine Mile Gravity Sewer
 Version #: v1.0

MAP INTERPRETATION NOTICE

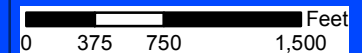
Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Map Legend

-  6" Sanitary Force Main
-  8" Gravity Sanitary Sewer
-  12" Gravity Sanitary Sewer



City of Novi
 Engineering Division
 Department of Public Services
 26300 Lee BeGole Drive
 Novi, MI 48375
cityofnovi.org





November 2, 2018

Mr. Ben Croy, PE
 Water & Sewer Senior Manager
 City of Novi
 Department of Public Services
 26300 Lee Begole Drive
 Novi, MI 48375

RE: Nine Mile Road Sanitary Sewer

Dear Mr. Croy:

On Wednesday, October 31, 2018 at 10:00 am, the City received sealed bids for the construction of a proposed 12-inch gravity sanitary sewer along the Nine Mile Road corridor. Included in the bid was the option of two different trenchless sewer installation methods, to compare pricing for both acceptable methods. The City received proposals from six (6) bidders. The summary of bidders, and their total bid amounts for both the base bid and alternate bid are listed below. We have summarized the bid amounts of all work items from the bidders in the attached bid tabulation. Please note that the total bid amounts listed below in the table include the anticipated cost of inspection crew days for the project.

Contractor Name	Base Bid Amount	Alternate Bid Amount
DVM Utilities	\$6,276,842.65	\$5,798,167.65
Verdeterre Contracting	No Bid	\$6,572,287.20
Lawrence M. Clarke	No Bid	\$6,582,250.00
L. D'Agostini & Sons	No Bid	\$6,753,546.00
Pamar Enterprises	\$6,913,404.00	\$7,936,904.00
Stante Excavating	\$8,678,045.50	No Bid

The project scope consists of gravity sanitary sewer main line and service lead installation, and associated work items such as detouring through traffic, dewatering, water main relocation, and sanitary force main bypass along the Nine Mile Road corridor, generally located between Evergreen Court and Kensington Road. The project also includes other miscellaneous work related to the impact of the sanitary sewer installation such as driveway approach replacement, landscaping replacement, and site restoration. The work to be completed under this contract includes the furnishing of materials, equipment, and labor necessary to complete the proposed work, in accordance with the contract documents.

DVM Utilities, Inc. (DVM), located in Sterling Heights, Michigan, is the apparent low bidder for both the base bid and alternate bid. OHM Advisors has considerable past experience working with this Contractor on previous projects similar in scope to this project. We also understand that the City has successfully worked with DVM in the past on various capital improvements. We spoke with DVM directly regarding the scope of work and their unit prices for the project, and are comfortable that their bid submittal is complete and competitive for current market conditions. DVM



also indicated that they are comfortable with their pricing, and are ready to execute the work on this contract per the as-bid plans and specifications.

We therefore recommend award of the Nine Mile Road Sanitary Sewer project to DVM Utilities, Inc. for their alternate bid related to the pilot tube trenchless method, in an estimated contract award amount of **\$5,553,167.65**. Please note that we have calculated this contract award amount from the total bid amount of \$5,798,167.65, less the inspection crew day cost of \$245,000.

We look forward to continuing to provide professional services on this project through the construction phase of work. If you have any questions, please do not hesitate to contact me at (734) 466-4439.

Sincerely,
OHM Advisors

George Tsakoff, PE
Principal

Encl: Bid Tabs

cc: Tim Juidici, OHM Advisors

Tabulation for Bids Received on 10/31/2018
City of Novi - Nine Mile Road Sanitary Sewer
 City of Novi, Oakland County, State of Michigan
 OHM Job No.: 0163-16-0050

DVM Utilities, Inc.
 6045 Sims Rd, Suite #2
 Sterling Heights, MI 48313

Verdeterre Contracting
 7994 Belleville Road
 Belleville, MI 48111

Lawrence M. Clarke, Inc.
 50850 Bemis Road
 Belleville, MI 48111

L. D'Agostini & Sons
 15801 23 Mile Road
 Macomb Township, MI

Pamar Enterprises, Inc.
 58021 Gratiot Avenue
 New Haven, MI 48048

Phone: 586-979-0402

Phone: 734-697-4166

Phone: 734-481-1565

Phone: 586-781-5800

Phone: 586-749-8593

Item No.	Description	Estimated			Unit			Unit			Unit			Unit		
		Quantity		Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount	Price	Amount		
Alternate Bid w/Guided Pilot Tube Trenchless Method																
1)	Mobilization, Max. 5%	1	LSUM	\$275,000.00	\$275,000.00	\$200,000.00	\$200,000.00	\$313,440.00	\$313,440.00	\$337,000.00	\$337,000.00	\$390,000.00	\$390,000.00			
2)	Audio Video Recording	1	LSUM	\$5,000.00	\$5,000.00	\$4,000.00	\$4,000.00	\$25,000.00	\$25,000.00	\$10,000.00	\$10,000.00	\$3,500.00	\$3,500.00			
3)	Erosion Control, Inlet Protection, Fabric Drop	5	Ea	\$100.00	\$500.00	\$405.00	\$2,025.00	\$200.00	\$1,000.00	\$120.00	\$600.00	\$100.00	\$500.00			
4)	Erosion Control, Silt Fence	7500	Ft	\$3.15	\$23,625.00	\$3.05	\$22,875.00	\$7.00	\$52,500.00	\$1.00	\$7,500.00	\$1.10	\$8,250.00			
5)	Construction Fence	13000	Ft	\$0.50	\$6,500.00	\$4.00	\$52,000.00	\$10.00	\$130,000.00	\$1.40	\$18,200.00	\$2.25	\$29,250.00			
6)	Tree, Rem, 19 inch to 36 inch	15	Ea	\$1,250.00	\$18,750.00	\$891.25	\$13,368.75	\$2,000.00	\$30,000.00	\$2,500.00	\$37,500.00	\$775.00	\$11,625.00			
7)	Tree, Rem, 6 inch to 18 inch	150	Ea	\$500.00	\$75,000.00	\$241.50	\$36,225.00	\$600.00	\$90,000.00	\$1,000.00	\$150,000.00	\$210.00	\$31,500.00			
8)	Oak Wilt Prevention	40	Ea	\$200.00	\$8,000.00	\$205.00	\$8,200.00	\$1,000.00	\$40,000.00	\$200.00	\$8,000.00	\$176.25	\$7,050.00			
9)	Stump, Rem, 19 inch to 36 inch	5	Ea	\$500.00	\$2,500.00	\$603.75	\$3,018.75	\$1,000.00	\$5,000.00	\$200.00	\$1,000.00	\$80.00	\$400.00			
10)	Clearing	2800	Syd	\$10.00	\$28,000.00	\$2.50	\$7,000.00	\$2.00	\$5,600.00	\$3.00	\$8,400.00	\$1.50	\$4,200.00			
11)	Pavt, Rem	803	Syd	\$12.00	\$9,636.00	\$19.25	\$15,457.75	\$10.00	\$8,030.00	\$13.00	\$10,439.00	\$10.00	\$8,030.00			
12)	Sidewalk, Rem	82	Syd	\$7.00	\$574.00	\$23.75	\$1,947.50	\$10.00	\$820.00	\$14.00	\$1,148.00	\$9.50	\$779.00			
13)	Curb and Gutter, Rem	30	Ft	\$20.00	\$600.00	\$15.50	\$465.00	\$20.00	\$600.00	\$15.00	\$450.00	\$22.00	\$660.00			
14)	Sanitary Force Main, 6 inch, Rem	950	Ft	\$20.00	\$19,000.00	\$38.25	\$36,337.50	\$15.00	\$14,250.00	\$40.00	\$38,000.00	\$22.00	\$20,900.00			
15)	Sanitary Force Main Structure, Rem	7	Ea	\$1,150.00	\$8,050.00	\$575.00	\$4,025.00	\$1,500.00	\$10,500.00	\$2,500.00	\$17,500.00	\$150.00	\$1,050.00			
16)	Water Main, 16 inch, Rem	200	Ft	\$25.00	\$5,000.00	\$38.25	\$7,650.00	\$30.00	\$6,000.00	\$20.00	\$4,000.00	\$22.00	\$4,400.00			
17)	Barricade, Type III, High Intensity, Double Sided, Lighted	40	Ea	\$125.00	\$5,000.00	\$97.75	\$3,910.00	\$200.00	\$8,000.00	\$85.00	\$3,400.00	\$100.00	\$4,000.00			
18)	Lighted Arrow, Type C	2	Ea	\$1,500.00	\$3,000.00	\$920.00	\$1,840.00	\$3,000.00	\$6,000.00	\$800.00	\$1,600.00	\$1,000.00	\$2,000.00			
19)	Minor Traf Devices	1	LSUM	\$25,000.00	\$25,000.00	\$79,975.00	\$79,975.00	\$30,000.00	\$30,000.00	\$30,000.00	\$30,000.00	\$80,000.00	\$80,000.00			
20)	Plastic Drum, High Intensity	150	Ea	\$42.50	\$6,375.00	\$28.75	\$4,312.50	\$50.00	\$7,500.00	\$25.00	\$3,750.00	\$35.00	\$5,250.00			
21)	Sign, Portable, Changeable Message	2	Ea	\$5,500.00	\$11,000.00	\$6,325.00	\$12,650.00	\$1,000.00	\$2,000.00	\$5,500.00	\$11,000.00	\$5,500.00	\$11,000.00			
22)	Sign, Type B, Temp, Prismatic	600	Sft	\$8.50	\$5,100.00	\$5.75	\$3,450.00	\$6.00	\$3,600.00	\$5.00	\$3,000.00	\$7.00	\$4,200.00			
23)	Sign, Type B, Temp, Prismatic, Special	300	Sft	\$13.50	\$4,050.00	\$13.80	\$4,140.00	\$10.00	\$3,000.00	\$15.00	\$4,500.00	\$14.00	\$4,200.00			
24)	Traf Regulator Control	1	LSUM	\$25,000.00	\$25,000.00	\$4,105.00	\$4,105.00	\$25,000.00	\$25,000.00	\$25,000.00	\$25,000.00	\$45,000.00	\$45,000.00			
25)	Conc Barrier Ending, Temp, Detail 5, Adj	8	Ea	\$500.00	\$4,000.00	\$345.00	\$2,760.00	\$1,000.00	\$8,000.00	\$300.00	\$2,400.00	\$250.00	\$2,000.00			
26)	Conc Barrier Ending, Temp, Detail 5	2	Ea	\$1,500.00	\$3,000.00	\$1,380.00	\$2,760.00	\$1,000.00	\$2,000.00	\$1,200.00	\$2,400.00	\$1,500.00	\$3,000.00			
27)	Conc Barrier Ending, Temp, Detail 5, Relocated	8	Ea	\$700.00	\$5,600.00	\$690.00	\$5,520.00	\$2,000.00	\$16,000.00	\$600.00	\$4,800.00	\$250.00	\$2,000.00			
28)	Conc Barrier Reflector Replacement	10	Ea	\$100.00	\$1,000.00	\$23.00	\$230.00	\$1,000.00	\$10,000.00	\$90.00	\$900.00	\$10.00	\$100.00			
29)	Conc Barrier, Temp, Adj	500	Ft	\$5.00	\$2,500.00	\$20.35	\$10,175.00	\$60.00	\$30,000.00	\$10.00	\$5,000.00	\$2.00	\$1,000.00			
30)	Conc Barrier, Temp	500	Ft	\$27.50	\$13,750.00	\$39.10	\$19,550.00	\$60.00	\$30,000.00	\$40.00	\$20,000.00	\$18.00	\$9,000.00			
31)	Conc Barrier, Temp, Relocated	2000	Ft	\$3.50	\$7,000.00	\$15.25	\$30,500.00	\$5.00	\$10,000.00	\$10.00	\$20,000.00	\$3.00	\$6,000.00			
32)	High Intensity Light, Type B	2	Ea	\$150.00	\$300.00	\$109.25	\$218.50	\$500.00	\$1,000.00	\$95.00	\$190.00	\$110.00	\$220.00			
33)	Sign Cover	5	Ea	\$100.00	\$500.00	\$86.25	\$431.25	\$100.00	\$500.00	\$75.00	\$375.00	\$75.00	\$375.00			
34)	Pedestrian Type II Barricade, Temp	6	Ea	\$200.00	\$1,200.00	\$172.50	\$1,035.00	\$500.00	\$3,000.00	\$150.00	\$900.00	\$100.00	\$600.00			
35)	Pedestrian Ramp, Temp	2	Ea	\$250.00	\$500.00	\$1,725.00	\$3,450.00	\$1,000.00	\$2,000.00	\$2,500.00	\$5,000.00	\$100.00	\$200.00			
36)	Dewatering System	1	LSUM	\$215,000.00	\$215,000.00	\$680,000.00	\$680,000.00	\$660,000.00	\$660,000.00	\$705,134.00	\$705,134.00	\$520,000.00	\$520,000.00			
37)	Sanitary Force Main Bypass	1200	Ft	\$60.00	\$72,000.00	\$47.00	\$56,400.00	\$30.00	\$36,000.00	\$45.00	\$54,000.00	\$10.00	\$12,000.00			
38)	Temporary Chain Link Fence	238	Ft	\$28.50	\$6,783.00	\$40.25	\$9,579.50	\$50.00	\$11,900.00	\$20.00	\$4,760.00	\$16.00	\$3,808.00			
39)	Water Main, 16 inch, Cut and Cap	4	Ea	\$1,725.00	\$6,900.00	\$2,105.00	\$8,420.00	\$5,000.00	\$20,000.00	\$1,000.00	\$4,000.00	\$3,500.00	\$14,000.00			
40)	Water Main, DI, CL 54, 16 inch	200	Ft	\$217.50	\$43,500.00	\$250.00	\$50,000.00	\$300.00	\$60,000.00	\$95.00	\$19,000.00	\$185.00	\$37,000.00			
41)	Fire Hydrant, Relocate	4	Ea	\$4,250.00	\$17,000.00	\$3,500.00	\$14,000.00	\$5,000.00	\$20,000.00	\$6,500.00	\$26,000.00	\$8,500.00	\$34,000.00			
42)	Fire Hydrant, Lead Extension	1	Ea	\$3,500.00	\$3,500.00	\$4,115.00	\$4,115.00	\$4,000.00	\$4,000.00	\$3,500.00	\$3,500.00	\$2,250.00	\$2,250.00			
43)	Water Service, Curb Stop and Box, Relocate	15	Ea	\$800.00	\$12,000.00	\$3,070.00	\$46,050.00	\$1,500.00	\$22,500.00	\$1,000.00	\$15,000.00	\$350.00	\$5,250.00			
44)	Water Service, Relocate	530	Ft	\$26.75	\$14,177.50	\$58.00	\$30,740.00	\$25.00	\$13,250.00	\$55.00	\$29,150.00	\$20.00	\$10,600.00			
45)	Connect to Existing Water Main	4	Ea	\$5,365.00	\$21,460.00	\$3,500.00	\$14,000.00	\$4,000.00	\$16,000.00	\$3,000.00	\$12,000.00	\$4,500.00	\$18,000.00			
46)	Temporary Water Service	2651	Ft	\$13.00	\$34,463.00	\$28.00	\$74,228.00	\$30.00	\$79,530.00	\$55.00	\$145,805.00	\$3.00	\$7,953.00			
47)	Sanitary Force Main, 1.5 inch	65	Ft	\$43.50	\$2,827.50	\$45.85	\$2,980.25	\$60.00	\$3,900.00	\$70.00	\$4,550.00	\$90.00	\$5,850.00			
48)	Sanitary Force Main, 2 inch	21	Ft	\$57.65	\$1,210.65	\$45.85	\$962.85	\$80.00	\$1,680.00	\$80.00	\$1,680.00	\$110.00	\$2,310.00			
49)	Sanitary Force Main, 6 inch	38	Ft	\$115.00	\$4,370.00	\$92.80	\$3,526.40	\$120.00	\$4,560.00	\$180.00	\$6,840.00	\$155.00	\$5,890.00			
50)	Sanitary Sewer, PVC Truss, 12 inch	2860	Ft	\$230.00	\$657,800.00	\$200.00	\$572,000.00	\$250.00	\$715,000.00	\$265.00	\$757,900.00	\$550.00	\$1,573,000.00			
51)	Sanitary Sewer, VCP, 12 inch, Pilot Tube	3550	Ft	\$747.50	\$2,653,625.00	\$520.00	\$1,846,000.00	\$645.00	\$2,289,750.00	\$650.00	\$2,307,500.00	\$975.00	\$3,461,250.00			

52)	Sanitary Sewer, PVC Truss, 8 inch	650	Ft	\$172.30	\$111,995.00		\$165.00	\$107,250.00	\$180.00	\$117,000.00	\$255.00	\$165,750.00	\$280.00	\$182,000.00
53)	Sanitary Force Main, Drop Connection	3	Ea	\$2,305.00	\$6,915.00		\$2,275.00	\$6,825.00	\$7,000.00	\$21,000.00	\$1,700.00	\$5,100.00	\$650.00	\$1,950.00
54)	Sanitary Manhole, Tap, 12 inch	1	Ea	\$1,850.00	\$1,850.00		\$23,500.00	\$23,500.00	\$2,000.00	\$2,000.00	\$10,000.00	\$10,000.00	\$125,000.00	\$125,000.00
55)	Sanitary Sewer Manhole, 48 inch dia, less than 15 feet deep	12	Ea	\$7,500.00	\$90,000.00		\$7,285.00	\$87,420.00	\$6,000.00	\$72,000.00	\$6,500.00	\$78,000.00	\$6,500.00	\$78,000.00
56)	Sanitary Sewer Manhole, 60 inch dia, less than 15 feet deep	2	Ea	\$9,875.00	\$19,750.00		\$8,990.00	\$17,980.00	\$8,000.00	\$16,000.00	\$9,000.00	\$18,000.00	\$8,000.00	\$16,000.00
57)	Sanitary Sewer Manhole, 48 inch dia, greater than 15 feet deep	4	Ea	\$11,400.00	\$45,600.00		\$59,975.00	\$239,900.00	\$8,000.00	\$32,000.00	\$9,000.00	\$36,000.00	\$8,250.00	\$33,000.00
58)	Sanitary Sewer Manhole, 60 inch dia, greater than 15 feet deep	5	Ea	\$12,575.00	\$62,875.00		\$69,350.00	\$346,750.00	\$10,000.00	\$50,000.00	\$12,000.00	\$60,000.00	\$9,350.00	\$46,750.00
59)	Sanitary Sewer Manhole, 72 inch dia	8	Ea	\$13,200.00	\$105,600.00		\$74,350.00	\$594,800.00	\$20,000.00	\$160,000.00	\$15,000.00	\$120,000.00	\$9,500.00	\$76,000.00
60)	Sanitary Service Lead, 6 inch	2500	Ft	\$53.65	\$134,125.00		\$115.00	\$287,500.00	\$60.00	\$150,000.00	\$155.00	\$387,500.00	\$55.00	\$137,500.00
61)	Sanitary Service Lead, Connect to Exist LPS	4	Ea	\$1,400.00	\$5,600.00		\$1,325.00	\$5,300.00	\$3,000.00	\$12,000.00	\$1,500.00	\$6,000.00	\$1,900.00	\$7,600.00
62)	Sanitary Service Lead, Interior Drop Connection	29	Ea	\$1,500.00	\$43,500.00		\$1,275.00	\$36,975.00	\$1,500.00	\$43,500.00	\$1,200.00	\$34,800.00	\$350.00	\$10,150.00
63)	Grout in Place Existing Force Main, 6 inch	6500	Ft	\$5.25	\$34,125.00		\$5.75	\$37,375.00	\$3.00	\$19,500.00	\$8.00	\$52,000.00	\$1.00	\$6,500.00
64)	Culv End Sect, Conc, 12 inch	1	Ea	\$850.00	\$850.00		\$950.00	\$950.00	\$1,000.00	\$1,000.00	\$800.00	\$800.00	\$750.00	\$750.00
65)	Culv End Sect, Conc, 18 inch	4	Ea	\$1,075.00	\$4,300.00		\$1,040.00	\$4,160.00	\$1,200.00	\$4,800.00	\$900.00	\$3,600.00	\$800.00	\$3,200.00
66)	Culv, CI IV, RCP, 12 inch	12	Ft	\$67.25	\$807.00		\$65.50	\$786.00	\$80.00	\$960.00	\$90.00	\$1,080.00	\$180.00	\$2,160.00
67)	Culv, CI IV, RCP, 18 inch	86	Ft	\$100.00	\$8,600.00		\$72.75	\$6,256.50	\$100.00	\$8,600.00	\$95.00	\$8,170.00	\$185.00	\$15,910.00
68)	Trench Undercut and Backfill	250	Cyd	\$55.00	\$13,750.00		\$25.00	\$6,250.00	\$40.00	\$10,000.00	\$55.00	\$13,750.00	\$48.00	\$12,000.00
69)	Station Grading, Roadway	65	Sta	\$1,450.00	\$94,250.00		\$1,440.00	\$93,600.00	\$4,000.00	\$260,000.00	\$1,700.00	\$110,500.00	\$800.00	\$52,000.00
70)	Aggregate Base	2582	Ton	\$22.00	\$56,804.00		\$29.75	\$76,814.50	\$30.00	\$77,460.00	\$30.00	\$77,460.00	\$30.00	\$77,460.00
71)	Curb and Gutter, Conc, Det F4	30	Ft	\$72.50	\$2,175.00		\$40.25	\$1,207.50	\$80.00	\$2,400.00	\$35.00	\$1,050.00	\$65.00	\$1,950.00
72)	HMA, Driveway, 3.5 inch	575	Syd	\$35.00	\$20,125.00		\$46.00	\$26,450.00	\$40.00	\$23,000.00	\$50.00	\$28,750.00	\$50.00	\$28,750.00
73)	HMA, Roadway	15	Ton	\$300.00	\$4,500.00		\$287.50	\$4,312.50	\$500.00	\$7,500.00	\$300.00	\$4,500.00	\$650.00	\$9,750.00
74)	Driveway, Nonreinf Conc, 6 inch	187	Syd	\$65.00	\$12,155.00		\$67.50	\$12,622.50	\$60.00	\$11,220.00	\$55.00	\$10,285.00	\$55.00	\$10,285.00
75)	Gravel, Driveway, 6 inch	1358	Syd	\$10.00	\$13,580.00		\$9.90	\$13,444.20	\$20.00	\$27,160.00	\$15.00	\$20,370.00	\$8.00	\$10,864.00
76)	Gravel, Roadway, 8 inch	4440	Syd	\$12.00	\$53,280.00		\$11.50	\$51,060.00	\$20.00	\$88,800.00	\$17.00	\$75,480.00	\$19.00	\$84,360.00
77)	Maintenance Aggregate	300	Ton	\$40.00	\$12,000.00		\$29.75	\$8,925.00	\$30.00	\$9,000.00	\$32.00	\$9,600.00	\$30.00	\$9,000.00
78)	Sidewalk, Conc, 4 inch	720	Sft	\$6.75	\$4,860.00		\$8.95	\$6,444.00	\$7.00	\$5,040.00	\$5.00	\$3,600.00	\$8.00	\$5,760.00
79)	Mailbox, Remove and Reset	68	Ea	\$95.00	\$6,460.00		\$175.00	\$11,900.00	\$100.00	\$6,800.00	\$60.00	\$4,080.00	\$20.00	\$1,360.00
80)	Sign, Relocate	9	Ea	\$50.00	\$450.00		\$375.00	\$3,375.00	\$300.00	\$2,700.00	\$50.00	\$450.00	\$295.00	\$2,655.00
81)	Fence, Relocate	280	Ft	\$39.50	\$11,060.00		\$40.25	\$11,270.00	\$80.00	\$22,400.00	\$30.00	\$8,400.00	\$28.00	\$7,840.00
82)	Emergency Excavation	3	Ea	\$15,000.00	\$45,000.00		\$58,925.00	\$176,775.00	\$15,000.00	\$45,000.00	\$35,000.00	\$105,000.00	\$50,000.00	\$150,000.00
83)	Restoration	1	LSUM	\$75,000.00	\$75,000.00		\$30,500.00	\$30,500.00	\$100,000.00	\$100,000.00	\$138,000.00	\$138,000.00	\$65,000.00	\$65,000.00
84)	Landscape Allowance	1	Dir	\$75,000.00	\$75,000.00		\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00
85)	Crew Days	350	Day	\$700.00	\$245,000.00	200	\$700.00	\$140,000.00	300	\$700.00	\$210,000.00	271	\$700.00	\$189,700.00
				TOTAL BID AMOUNT:	\$5,798,167.65		\$6,572,287.20		\$6,582,250.00		\$6,753,546.00		\$7,936,904.00	

Tabulation for Bids Received on 10/31/2018
City of Novi - Nine Mile Road Sanitary Sewer
 City of Novi, Oakland County, State of Michigan
 OHM Job No.: 0163-16-0050

DVM Utilities, Inc.
 6045 Sims Rd, Suite #2
 Sterling Heights, MI 48313

Pamar Enterprises, Inc.
 58021 Gratiot Avenue
 New Haven, MI 48048

Stante Excavating Co, Inc.
 46912 Liberty Drive
 Wixom, MI 48393

Phone: 586-979-0402

Phone: 586-749-8593

Phone: 248-624-0030

Item No.	Description	Estimated			Unit		Unit		Unit	
		Quantity		Price	Amount	Price	Amount	Price	Amount	
Base Bid w/Bore & Jack Trenchless Method										
1)	Mobilization, Max. 5%	1	LSUM	\$295,000.00	\$295,000.00	\$340,000.00	\$340,000.00	\$433,000.00	\$433,000.00	
2)	Audio Video Recording	1	LSUM	\$5,000.00	\$5,000.00	\$3,500.00	\$3,500.00	\$43,389.00	\$43,389.00	
3)	Erosion Control, Inlet Protection, Fabric Drop	5	Ea	\$100.00	\$500.00	\$100.00	\$500.00	\$334.00	\$1,670.00	
4)	Erosion Control, Silt Fence	7500	Ft	\$3.15	\$23,625.00	\$1.10	\$8,250.00	\$4.50	\$33,750.00	
5)	Construction Fence	13000	Ft	\$0.50	\$6,500.00	\$2.25	\$29,250.00	\$7.80	\$101,400.00	
6)	Tree, Rem, 19 inch to 36 inch	15	Ea	\$1,250.00	\$18,750.00	\$775.00	\$11,625.00	\$862.00	\$12,930.00	
7)	Tree, Rem, 6 inch to 18 inch	150	Ea	\$500.00	\$75,000.00	\$210.00	\$31,500.00	\$234.00	\$35,100.00	
8)	Oak Wilt Prevention	40	Ea	\$200.00	\$8,000.00	\$176.25	\$7,050.00	\$89.00	\$3,560.00	
9)	Stump, Rem, 19 inch to 36 inch	5	Ea	\$500.00	\$2,500.00	\$80.00	\$400.00	\$217.00	\$1,085.00	
10)	Clearing	2800	Syd	\$10.00	\$28,000.00	\$1.50	\$4,200.00	\$6.70	\$18,760.00	
11)	Pavt, Rem	803	Syd	\$12.00	\$9,636.00	\$10.00	\$8,030.00	\$37.10	\$29,791.30	
12)	Sidewalk, Rem	82	Syd	\$7.00	\$574.00	\$9.50	\$779.00	\$21.20	\$1,738.40	
13)	Curb and Gutter, Rem	30	Ft	\$20.00	\$600.00	\$22.00	\$660.00	\$20.40	\$612.00	
14)	Sanitary Force Main, 6 inch, Rem	950	Ft	\$20.00	\$19,000.00	\$22.00	\$20,900.00	\$19.70	\$18,715.00	
15)	Sanitary Force Main Structure, Rem	7	Ea	\$1,150.00	\$8,050.00	\$150.00	\$1,050.00	\$1,577.00	\$11,039.00	
16)	Water Main, 16 inch, Rem	200	Ft	\$25.00	\$5,000.00	\$22.00	\$4,400.00	\$28.10	\$5,620.00	
17)	Barricade, Type III, High Intensity, Double Sided, Lighted	40	Ea	\$125.00	\$5,000.00	\$100.00	\$4,000.00	\$106.00	\$4,240.00	
18)	Lighted Arrow, Type C	2	Ea	\$1,500.00	\$3,000.00	\$1,000.00	\$2,000.00	\$945.00	\$1,890.00	
19)	Minor Traf Devices	1	LSUM	\$25,000.00	\$25,000.00	\$65,000.00	\$65,000.00	\$104,268.00	\$104,268.00	
20)	Plastic Drum, High Intensity	150	Ea	\$42.50	\$6,375.00	\$35.00	\$5,250.00	\$33.00	\$4,950.00	
21)	Sign, Portable, Changeable Message	2	Ea	\$5,500.00	\$11,000.00	\$5,500.00	\$11,000.00	\$5,555.00	\$11,110.00	
22)	Sign, Type B, Temp, Prismatic	600	Sft	\$8.50	\$5,100.00	\$7.00	\$4,200.00	\$6.70	\$4,020.00	
23)	Sign, Type B, Temp, Prismatic, Special	300	Sft	\$13.50	\$4,050.00	\$14.00	\$4,200.00	\$13.40	\$4,020.00	
24)	Traf Regulator Control	1	LSUM	\$25,000.00	\$25,000.00	\$35,000.00	\$35,000.00	\$272,195.00	\$272,195.00	
25)	Conc Barrier Ending, Temp, Detail 5, Adj	8	Ea	\$500.00	\$4,000.00	\$250.00	\$2,000.00	\$667.00	\$5,336.00	
26)	Conc Barrier Ending, Temp, Detail 5	2	Ea	\$1,500.00	\$3,000.00	\$1,500.00	\$3,000.00	\$1,667.00	\$3,334.00	
27)	Conc Barrier Ending, Temp, Detail 5, Relocated	8	Ea	\$700.00	\$5,600.00	\$250.00	\$2,000.00	\$223.00	\$1,784.00	
28)	Conc Barrier Reflector Replacement	10	Ea	\$100.00	\$1,000.00	\$10.00	\$100.00	\$56.00	\$560.00	
29)	Conc Barrier, Temp, Adj	500	Ft	\$5.00	\$2,500.00	\$2.00	\$1,000.00	\$16.70	\$8,350.00	
30)	Conc Barrier, Temp	500	Ft	\$27.50	\$13,750.00	\$18.00	\$9,000.00	\$33.40	\$16,700.00	
31)	Conc Barrier, Temp, Relocated	2000	Ft	\$3.50	\$7,000.00	\$3.00	\$6,000.00	\$25.60	\$51,200.00	
32)	High Intensity Light, Type B	2	Ea	\$150.00	\$300.00	\$110.00	\$220.00	\$112.00	\$224.00	
33)	Sign Cover	5	Ea	\$100.00	\$500.00	\$75.00	\$375.00	\$56.00	\$280.00	
34)	Pedestrian Type II Barricade, Temp	6	Ea	\$200.00	\$1,200.00	\$100.00	\$600.00	\$223.00	\$1,338.00	
35)	Pedestrian Ramp, Temp	2	Ea	\$250.00	\$500.00	\$100.00	\$200.00	\$1,334.00	\$2,668.00	
36)	Dewatering System	1	LSUM	\$215,000.00	\$215,000.00	\$480,000.00	\$480,000.00	\$745,820.00	\$745,820.00	
37)	Sanitary Force Main Bypass	1200	Ft	\$60.00	\$72,000.00	\$10.00	\$12,000.00	\$133.70	\$160,440.00	
38)	Temporary Chain Link Fence	238	Ft	\$28.50	\$6,783.00	\$16.00	\$3,808.00	\$36.70	\$8,734.60	
39)	Water Main, 16 inch, Cut and Cap	4	Ea	\$1,725.00	\$6,900.00	\$3,500.00	\$14,000.00	\$8,809.00	\$35,236.00	
40)	Water Main, DI, CL 54, 16 inch	200	Ft	\$217.50	\$43,500.00	\$185.00	\$37,000.00	\$122.60	\$24,520.00	
41)	Fire Hydrant, Relocate	4	Ea	\$4,250.00	\$17,000.00	\$8,500.00	\$34,000.00	\$10,034.00	\$40,136.00	
42)	Fire Hydrant, Lead Extension	1	Ea	\$3,500.00	\$3,500.00	\$2,250.00	\$2,250.00	\$9,146.00	\$9,146.00	

43)	Water Service, Curb Stop and Box, Relocate	15	Ea	\$800.00	\$12,000.00	\$350.00	\$5,250.00	\$491.00	\$7,365.00		
44)	Water Service, Relocate	530	Ft	\$26.75	\$14,177.50	\$20.00	\$10,600.00	\$19.60	\$10,388.00		
45)	Connect to Existing Water Main	4	Ea	\$5,365.00	\$21,460.00	\$4,500.00	\$18,000.00	\$9,856.00	\$39,424.00		
46)	Temporary Water Service	2651	Ft	\$13.00	\$34,463.00	\$3.00	\$7,953.00	\$29.60	\$78,469.60		
47)	Sanitary Force Main, 1.5 inch	65	Ft	\$43.50	\$2,827.50	\$90.00	\$5,850.00	\$159.00	\$10,335.00		
48)	Sanitary Force Main, 2 inch	21	Ft	\$57.65	\$1,210.65	\$110.00	\$2,310.00	\$439.90	\$9,237.90		
49)	Sanitary Force Main, 6 inch	38	Ft	\$115.00	\$4,370.00	\$155.00	\$5,890.00	\$319.20	\$12,129.60		
50)	Sanitary Sewer, PVC Truss, 12 inch	2860	Ft	\$270.00	\$772,200.00	\$550.00	\$1,573,000.00	\$273.90	\$783,354.00		
51)	Sanitary Sewer, PVC Truss, 12 inch, Bore and Jack w/ 30 inch Casing	3550	Ft	\$838.00	\$2,974,900.00	\$725.00	\$2,573,750.00	\$726.70	\$2,579,785.00		
52)	Sanitary Sewer, PVC Truss, 8 inch	650	Ft	\$187.30	\$121,745.00	\$280.00	\$182,000.00	\$231.20	\$150,280.00		
53)	Sanitary Force Main, Drop Connection	3	Ea	\$2,305.00	\$6,915.00	\$650.00	\$1,950.00	\$7,254.00	\$21,762.00		
54)	Sanitary Manhole, Tap, 12 inch	1	Ea	\$1,850.00	\$1,850.00	\$125,000.00	\$125,000.00	\$35,649.00	\$35,649.00		
55)	Sanitary Sewer Manhole, 48 inch dia, less than 15 feet deep	12	Ea	\$7,500.00	\$90,000.00	\$6,500.00	\$78,000.00	\$17,955.00	\$215,460.00		
56)	Sanitary Sewer Manhole, 60 inch dia, less than 15 feet deep	2	Ea	\$9,875.00	\$19,750.00	\$8,000.00	\$16,000.00	\$19,440.00	\$38,880.00		
57)	Sanitary Sewer Manhole, 48 inch dia, greater than 15 feet deep	4	Ea	\$11,400.00	\$45,600.00	\$8,250.00	\$33,000.00	\$21,801.00	\$87,204.00		
58)	Sanitary Sewer Manhole, 60 inch dia, greater than 15 feet deep	5	Ea	\$12,575.00	\$62,875.00	\$9,350.00	\$46,750.00	\$33,495.00	\$167,475.00		
59)	Sanitary Sewer Manhole, 72 inch dia	8	Ea	\$13,200.00	\$105,600.00	\$9,500.00	\$76,000.00	\$30,969.00	\$247,752.00		
60)	Sanitary Service Lead, 6 inch	2500	Ft	\$53.65	\$134,125.00	\$55.00	\$137,500.00	\$135.50	\$338,750.00		
61)	Sanitary Service Lead, Connect to Exist LPS	4	Ea	\$1,400.00	\$5,600.00	\$1,900.00	\$7,600.00	\$6,444.00	\$25,776.00		
62)	Sanitary Service Lead, Interior Drop Connection	29	Ea	\$1,500.00	\$43,500.00	\$350.00	\$10,150.00	\$5,077.00	\$147,233.00		
63)	Grout in Place Existing Force Main, 6 inch	6500	Ft	\$5.75	\$37,375.00	\$1.00	\$6,500.00	\$12.60	\$81,900.00		
64)	Culv End Sect, 12 inch	1	Ea	\$850.00	\$850.00	\$750.00	\$750.00	\$1,739.00	\$1,739.00		
65)	Culv End Sect, 18 inch	4	Ea	\$1,075.00	\$4,300.00	\$800.00	\$3,200.00	\$2,176.00	\$8,704.00		
66)	Culv, CI E, 12 inch	12	Ft	\$67.25	\$807.00	\$180.00	\$2,160.00	\$52.90	\$634.80		
67)	Culv, CI E, 18 inch	86	Ft	\$100.00	\$8,600.00	\$185.00	\$15,910.00	\$67.30	\$5,787.80		
68)	Trench Undercut and Backfill	250	Cyd	\$55.00	\$13,750.00	\$48.00	\$12,000.00	\$44.50	\$11,125.00		
69)	Station Grading, Roadway	65	Sta	\$1,450.00	\$94,250.00	\$800.00	\$52,000.00	\$3,019.00	\$196,235.00		
70)	Aggregate Base	2582	Ton	\$22.00	\$56,804.00	\$30.00	\$77,460.00	\$23.30	\$60,160.60		
71)	Curb and Gutter, Conc, Det F4	30	Ft	\$72.50	\$2,175.00	\$65.00	\$1,950.00	\$43.90	\$1,317.00		
72)	HMA, Driveway, 3.5 inch	575	Syd	\$35.00	\$20,125.00	\$50.00	\$28,750.00	\$63.70	\$36,627.50		
73)	HMA, Roadway	15	Ton	\$300.00	\$4,500.00	\$650.00	\$9,750.00	\$336.10	\$5,041.50		
74)	Driveway, Nonreinf Conc, 6 inch	187	Syd	\$65.00	\$12,155.00	\$55.00	\$10,285.00	\$72.30	\$13,520.10		
75)	Gravel, Driveway, 6 inch	1358	Syd	\$10.00	\$13,580.00	\$8.00	\$10,864.00	\$20.60	\$27,974.80		
76)	Gravel, Roadway, 8 inch	4440	Syd	\$12.00	\$53,280.00	\$19.00	\$84,360.00	\$19.90	\$88,356.00		
77)	Maintenance Aggregate	300	Ton	\$40.00	\$12,000.00	\$30.00	\$9,000.00	\$58.30	\$17,490.00		
78)	Sidewalk, Conc, 4 inch	720	Sft	\$6.75	\$4,860.00	\$8.00	\$5,760.00	\$6.70	\$4,824.00		
79)	Mailbox, Remove and Reset	68	Ea	\$95.00	\$6,460.00	\$20.00	\$1,360.00	\$285.00	\$19,380.00		
80)	Sign, Relocate	9	Ea	\$50.00	\$450.00	\$295.00	\$2,655.00	\$167.00	\$1,503.00		
81)	Fence, Relocate	280	Ft	\$39.50	\$11,060.00	\$28.00	\$7,840.00	\$77.80	\$21,784.00		
82)	Emergency Excavation	3	Ea	\$15,000.00	\$45,000.00	\$50,000.00	\$150,000.00	\$98,259.00	\$294,777.00		
83)	Restoration	1	LSUM	\$85,000.00	\$85,000.00	\$65,000.00	\$65,000.00	\$177,796.00	\$177,796.00		
84)	Landscape Allowance	1	Dir	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00		
85)	Crew Days	350	Day	\$700.00	\$245,000.00	220	\$700.00	\$154,000.00	350	\$700.00	\$245,000.00

TOTAL BID AMOUNT:

\$6,276,842.65

\$6,913,404.00

\$8,678,045.50

BID
for
Nine Mile Road Sanitary Sewer

Bid of D.V.M. UTILITIES, INC. hereinafter called Bidder, organized and existing under the laws of or a resident of the State of Michigan, doing business as " A CORPORATION "

Insert as applicable: "a corporation", "a partnership" or "an individual".

TO THE CITY OF NOVI, MICHIGAN, hereinafter called OWNER:

The undersigned as Bidder hereby declares: that this Bid is made in good faith without fraud or collusion with any person or persons bidding on the same Contract; that the Bidder has read and examined the Advertisement for Bids, Instructions to Bidders, Bid, General Conditions, Supplementary Conditions, Agreement, Forms of Bond, Specifications and Drawings, as prepared by the ENGINEER, and understands all of the same; that the Bidder of its representative has made personal investigation at the site and has become fully familiar with regard to the conditions to be met in the execution of this Contract, and the undersigned proposes to furnish all labor, materials, tools, power, transportation, and construction equipment necessary for the construction of the Project and performing related work in full accordance with the aforesaid Contract Documents, including any and all Addenda officially issued, their receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
<u>1</u>	<u>10/09/18</u>
<u>2</u>	<u>10/26/18</u>

The Contract will be awarded to the lowest responsive, responsible Bidder based on the unit prices for all Work specified. The Bidder may choose to complete either the Base Bid or Alternate Bid, or both Bids listed in the tables below. Either the Base Bid or Alternate Bid will be chosen by the Owner as the selected option, at their discretion. In submitting this Bid, it is understood that the right is reserved by the OWNER to accept either the Base Bid or Alternate Bid, to reject any or all Bids, and to waive irregularities in bidding in the interest of the OWNER.

The Bidder agrees to complete the Project for the following unit prices:

Item No.	Item Description	Qty	Unit	Unit Price	Total Price
Base Bid w/ Bore & Jack Trenchless Method					
1	Mobilization, Max. 5%	1	LSUM	\$ <u>295,000.00</u>	\$ <u>295,000.00</u> <i>P.D.</i>
2	Audio Video Recording	1	LSUM	\$ <u>5,000.00</u>	\$ <u>5,000.00</u>
3	Erosion Control, Inlet Protection, Fabric Drop	5	Ea	\$ <u>100.00</u>	\$ <u>500.00</u>



4	Erosion Control, Silt Fence	7,500	Ft	\$ 3.15	\$ 23,625.00
5	Construction Fence	13,000	Ft	\$ 0.50	\$ 6,500.00
6	Tree, Rem, 19 inch to 36 inch	15	Ea	\$ 1,250.00	\$ 18,750.00
7	Tree, Rem, 6 inch to 18 inch	150	Ea	\$ 500.00	\$ 75,000.00
8	Oak Wilt Prevention	40	Ea	\$ 200.00	\$ 8,000.00
9	Stump, Rem, 19 inch to 36 inch	5	Ea	\$ 500.00	\$ 2,500.00
10	Clearing	2,800	Syd	\$ 10.00	\$ 28,000.00
11	Pavt, Rem	803	Syd	\$ 12.00	\$ 9,636.00
12	Sidewalk, Rem	82	Syd	\$ 7.00	\$ 574.00
13	Curb and Gutter, Rem	30	Ft	\$ 20.00	\$ 600.00
14	Sanitary Force Main, 6 inch, Rem	950	Ft	\$ 20.00	\$ 19,000.00
15	Sanitary Force Main Structure, Rem	7	Ea	\$ 1,150.00	\$ 8,050.00
16	Water Main, 16 inch, Rem	200	Ft	\$ 25.00	\$ 5,000.00
17	Barricade, Type III, High Intensity, Double Sided, Lighted	40	Ea	\$ 125.00	\$ 5,000.00
18	Lighted Arrow, Type C	2	Ea	\$ 1,500.00	\$ 3,000.00
19	Minor Traf Devices	1	LSUM	\$ 25,000.00	\$ 25,000.00
20	Plastic Drum, High Intensity	150	Ea	\$ 42.50	\$ 6,375.00
21	Sign, Portable, Changeable Message	2	Ea	\$ 5,500.00	\$ 11,000.00
22	Sign, Type B, Temp, Prismatic	600	Sft	\$ 8.50	\$ 5,100.00
23	Sign, Type B, Temp, Prismatic, Special	300	Sft	\$ 13.50	\$ 4,050.00
24	Traf Regulator Control	1	LSUM	\$ 25,000.00	\$ 25,000.00
25	Conc Barrier Ending, Temp, Detail 5, Adj	8	Ea	\$ 500.00	\$ 4,000.00
26	Conc Barrier Ending, Temp, Detail 5	2	Ea	\$ 1,500.00	\$ 3,000.00
27	Conc Barrier Ending, Temp, Detail 5, Relocated	8	Ea	\$ 700.00	\$ 5,600.00
28	Conc Barrier Reflector Replacement	10	Ea	\$ 100.00	\$ 1,000.00
29	Conc Barrier, Temp, Adj	500	Ft	\$ 5.00	\$ 2,500.00
30	Conc Barrier, Temp	500	Ft	\$ 27.50	\$ 13,750.00



31	Conc Barrier, Temp, Relocated	2000	Ft	\$ <u>3.50</u>	\$ <u>7,000.00</u>
32	High Intensity Light, Type B	2	Ea	\$ <u>150.00</u>	\$ <u>300.00</u>
33	Sign Cover	5	Ea	\$ <u>100.00</u>	\$ <u>500.00</u>
34	Pedestrian Type II Barricade, Temp	6	Ea	\$ <u>200.00</u>	\$ <u>1,200.00</u>
35	Pedestrian Ramp, Temp	2	Ea	\$ <u>250.00</u>	\$ <u>500.00</u>
36	Dewatering System	1	LSUM	\$ <u>215,000.00</u>	\$ <u>215,000.00</u> D.D.
37	Sanitary Force Main Bypass	1,200	Ft	\$ <u>60.00</u>	\$ <u>72,000.00</u>
38	Temporary Chain Link Fence	238	Ft	\$ <u>28.50</u>	\$ <u>6,783.00</u>
49	Water Main, 16 inch, Cut and Cap	4	Ea	\$ <u>1,725.00</u>	\$ <u>6,900.00</u>
40	Water Main, DI, CL 54, 16 inch	200	Ft	\$ <u>217.50</u>	\$ <u>43,500.00</u>
41	Fire Hydrant, Relocate	4	Ea	\$ <u>4,250.00</u>	\$ <u>17,000.00</u>
42	Fire Hydrant, Lead Extension	1	Ea	\$ <u>3,500.00</u>	\$ <u>3,500.00</u>
43	Water Service, Curb Stop and Box, Relocate	15	Ea	\$ <u>800.00</u>	\$ <u>12,000.00</u>
44	Water Service, Relocate	530	Ft	\$ <u>26.75</u>	\$ <u>14,177.50</u>
45	Connect to Existing Water Main	4	Ea	\$ <u>5,365.00</u>	\$ <u>21,460.00</u>
46	Temporary Water Service	2,651	Ft	\$ <u>13.00</u>	\$ <u>34,463.00</u>
47	Sanitary Force Main, 1.5 inch	65	Ft	\$ <u>43.50</u>	\$ <u>2,827.50</u>
48	Sanitary Force Main, 2 inch	21	Ft	\$ <u>57.65</u>	\$ <u>1,210.65</u>
49	Sanitary Force Main, 6 inch	38	Ft	\$ <u>115.00</u>	\$ <u>4,370.00</u>
50	Sanitary Sewer, PVC Truss, 12 inch	2,860	Ft	\$ <u>270.00</u>	\$ <u>772,200.00</u>
51	Sanitary Sewer, PVC Truss, 12 inch, Bore & Jack w/ 30 inch Casing	3,550	Ft	\$ <u>838.00</u>	\$ <u>2,974,900.00</u>
52	Sanitary Sewer, PVC Truss, 8 inch	650	Ft	\$ <u>187.30</u>	\$ <u>121,745.00</u>
53	Sanitary Force Main, Drop Connection	3	Ea	\$ <u>2,305.00</u>	\$ <u>6,915.00</u>
54	Sanitary Manhole, Tap, 12 inch	1	Ea	\$ <u>1,850.00</u>	\$ <u>1,850.00</u>
55	Sanitary Sewer Manhole, 48 inch dia, less than 15 feet deep	12	Ea	\$ <u>7,500.00</u>	\$ <u>90,000.00</u>
56	Sanitary Sewer Manhole, 60 inch dia, less than 15 feet deep	2	Ea	\$ <u>9,875.00</u>	\$ <u>19,750.00</u>
57	Sanitary Sewer Manhole, 48 inch dia, greater than 15 feet deep	4	Ea	\$ <u>11,400.00</u>	\$ <u>45,600.00</u>



58	Sanitary Sewer Manhole, 60 inch dia, greater than 15 feet deep	5	Ea	\$	<u>12,575.00</u>	\$	<u>62,875.00</u>
59	Sanitary Sewer Manhole, 72 inch dia	8	Ea	\$	<u>13,200.00</u>	\$	<u>105,600.00</u>
60	Sanitary Sewer Service Lead, 6 inch	2,500	Ft	\$	<u>53.65</u>	\$	<u>134,125.00</u>
61	Sanitary Service Lead, Connect to Exist LPS	4	Ea	\$	<u>1,400.00</u>	\$	<u>5,600.00</u>
62	Sanitary Service Lead, Interior Drop Connection	29	Ea	\$	<u>1,500.00</u>	\$	<u>43,500.00</u>
63	Grout in Place Existing Force Main, 6 inch	6,500	Ft	\$	<u>5.75</u>	\$	<u>37,375.00</u>
64	Culv End Sect, Conc, 12 inch	1	Ea	\$	<u>850.00</u>	\$	<u>850.00</u>
65	Culv End Sect, Conc, 18 inch	4	Ea	\$	<u>1,075.00</u>	\$	<u>4,300.00</u>
66	Culv, CI IV, RCP, 12 inch	12	Ft	\$	<u>67.25</u>	\$	<u>807.00</u>
67	Culv, CI IV, RCP, 18 inch	86	Ft	\$	<u>100.00</u>	\$	<u>8,600.00</u>
68	Trench Undercut and Backfill	250	Cyd	\$	<u>55.00</u>	\$	<u>13,750.00</u>
69	Station Grading, Roadway	65	Sta	\$	<u>1,450.00</u>	\$	<u>94,250.00</u>
70	Aggregate Base	2,582	Ton	\$	<u>22.00</u>	\$	<u>56,804.00</u>
71	Curb and Gutter, Conc, Det F4	30	Ft	\$	<u>72.50</u>	\$	<u>2,175.00</u>
72	HMA, Driveway, 3.5 inch	575	Syd	\$	<u>35.00</u>	\$	<u>20,125.00</u>
73	HMA, Roadway	15	Ton	\$	<u>300.00</u>	\$	<u>4,500.00</u>
74	Driveway, Nonreinf Conc, 6 inch	187	Syd	\$	<u>65.00</u>	\$	<u>12,155.00</u>
75	Gravel, Driveway, 6 inch	1,358	Syd	\$	<u>10.00</u>	\$	<u>13,580.00</u>
76	Gravel, Roadway, 8 inch	4,440	Syd	\$	<u>12.00</u>	\$	<u>53,280.00</u>
77	Maintenance Aggregate	300	Ton	\$	<u>40.00</u>	\$	<u>12,000.00</u>
78	Sidewalk, Conc, 4 inch	720	Sft	\$	<u>6.75</u>	\$	<u>4,860.00</u>
79	Mailbox, Remove and Reset	68	Ea	\$	<u>95.00</u>	\$	<u>6,460.00</u>
80	Sign, Relocate	9	Ea	\$	<u>50.00</u>	\$	<u>450.00</u>
81	Fence, Relocate	280	Ft	\$	<u>39.50</u>	\$	<u>11,060.00</u>
82	Emergency Excavation	3	Ea	\$	<u>15,000.00</u>	\$	<u>45,000.00</u>
83	Restoration	1	LSUM	\$	<u>85,000.00</u>	\$	<u>85,000.00</u>
84	Landscape Allowance	1	Dlr	\$	<u>75,000.00</u>	\$	<u>75,000.00</u>



85 Crew Days 350 CDay \$ 700.00 \$ 245,000.00

Total Bid Amount of Base Bid (Items 1-85) \$ 6,276,842.65

Item No.	Item Description	Qty	Unit	Unit Price	Total Price
Alternate Bid w/ Guided Pilot Tube Trenchless Method					
1	Mobilization, Max. 5%	1	LSUM	\$ <u>275,000.00</u>	\$ <u>275,000.00</u> D.D.
2	Audio Video Recording	1	LSUM	\$ <u>5,000.00</u>	\$ <u>5,000.00</u>
3	Erosion Control, Inlet Protection, Fabric Drop	5	Ea	\$ <u>100.00</u>	\$ <u>500.00</u>
4	Erosion Control, Silt Fence	7,500	Ft	\$ <u>3.15</u>	\$ <u>23,625.00</u>
5	Construction Fence	13,000	Ft	\$ <u>0.50</u>	\$ <u>6,500.00</u>
6	Tree, Rem, 19 inch to 36 inch	15	Ea	\$ <u>1,250.00</u>	\$ <u>18,750.00</u>
7	Tree, Rem, 6 inch to 18 inch	150	Ea	\$ <u>500.00</u>	\$ <u>75,000.00</u>
8	Oak Wilt Prevention	40	Ea	\$ <u>200.00</u>	\$ <u>8,000.00</u>
9	Stump, Rem, 19 inch to 36 inch	5	Ea	\$ <u>500.00</u>	\$ <u>2,500.00</u>
10	Clearing	2,800	Syd	\$ <u>10.00</u>	\$ <u>28,000.00</u>
11	Pavt, Rem	803	Syd	\$ <u>12.00</u>	\$ <u>9,636.00</u>
12	Sidewalk, Rem	82	Syd	\$ <u>7.00</u>	\$ <u>574.00</u>
13	Curb and Gutter, Rem	30	Ft	\$ <u>20.00</u>	\$ <u>600.00</u>
14	Sanitary Force Main, 6 inch, Rem	950	Ft	\$ <u>20.00</u>	\$ <u>19,000.00</u>
15	Sanitary Force Main Structure, Rem	7	Ea	\$ <u>1,150.00</u>	\$ <u>8,050.00</u>
16	Water Main, 16 inch, Rem	200	Ft	\$ <u>25.00</u>	\$ <u>5,000.00</u>
17	Barricade, Type III, High Intensity, Double Sided, Lighted	40	Ea	\$ <u>125.00</u>	\$ <u>5,000.00</u>
18	Lighted Arrow, Type C	2	Ea	\$ <u>1,500.00</u>	\$ <u>3,000.00</u>
19	Minor Traf Devices	1	LSUM	\$ <u>25,000.00</u>	\$ <u>25,000.00</u>
20	Plastic Drum, High Intensity	150	Ea	\$ <u>42.50</u>	\$ <u>6,375.00</u>
21	Sign, Portable, Changeable Message	2	Ea	\$ <u>5,500.00</u>	\$ <u>11,000.00</u>
22	Sign, Type B, Temp, Prismatic	600	Sft	\$ <u>8.50</u>	\$ <u>5,100.00</u>



23	Sign, Type B, Temp, Prismatic, Special	300	Sft	\$ <u>13.50</u>	\$ <u>4,050.00</u>
24	Traf Regulator Control	1	LSUM	\$ <u>25,000.00</u>	\$ <u>25,000.00</u>
25	Conc Barrier Ending, Temp, Detail 5, Adj	8	Ea	\$ <u>500.00</u>	\$ <u>4,000.00</u>
26	Conc Barrier Ending, Temp, Detail 5	2	Ea	\$ <u>1,500.00</u>	\$ <u>3,000.00</u>
27	Conc Barrier Ending, Temp, Detail 5, Relocated	8	Ea	\$ <u>700.00</u>	\$ <u>5,600.00</u>
28	Conc Barrier Reflector Replacement	10	Ea	\$ <u>100.00</u>	\$ <u>1,000.00</u>
29	Conc Barrier, Temp, Adj	500	Ft	\$ <u>5.00</u>	\$ <u>2,500.00</u>
30	Conc Barrier, Temp	500	Ft	\$ <u>27.50</u>	\$ <u>13,750.00</u>
31	Conc Barrier, Temp, Relocated	2000	Ft	\$ <u>3.50</u>	\$ <u>7,000.00</u>
32	High Intensity Light, Type B	2	Ea	\$ <u>150.00</u>	\$ <u>300.00</u>
33	Sign Cover	5	Ea	\$ <u>100.00</u>	\$ <u>500.00</u>
34	Pedestrian Type II Barricade, Temp	6	Ea	\$ <u>200.00</u>	\$ <u>1,200.00</u>
35	Pedestrian Ramp, Temp	2	Ea	\$ <u>250.00</u>	\$ <u>500.00</u>
36	Dewatering System	1	LSUM	\$ <u>215,000.00</u>	\$ <u>215,000.00</u> D.D.
37	Sanitary Force Main Bypass	1,200	Ft	\$ <u>60.00</u>	\$ <u>72,000.00</u>
38	Temporary Chain Link Fence	238	Ft	\$ <u>28.50</u>	\$ <u>6,783.00</u>
39	Water Main, 16 inch, Cut and Cap	4	Ea	\$ <u>1,725.00</u>	\$ <u>6,900.00</u>
40	Water Main, DI, CL 54, 16 inch	200	Ft	\$ <u>217.50</u>	\$ <u>43,500.00</u>
41	Fire Hydrant, Relocate	4	Ea	\$ <u>4,250.00</u>	\$ <u>17,000.00</u>
42	Fire Hydrant, Lead Extension	1	Ea	\$ <u>3,500.00</u>	\$ <u>3,500.00</u>
43	Water Service, Curb Stop and Box, Relocate	15	Ea	\$ <u>800.00</u>	\$ <u>12,000.00</u>
44	Water Service, Relocate	530	Ft	\$ <u>26.75</u>	\$ <u>14,177.50</u>
45	Connect to Existing Water Main	4	Ea	\$ <u>5,365.00</u>	\$ <u>21,460.00</u>
46	Temporary Water Service	2,651	Ft	\$ <u>13.00</u>	\$ <u>34,463.00</u>
47	Sanitary Force Main, 1.5 inch	65	Ft	\$ <u>43.50</u>	\$ <u>2,827.50</u>
48	Sanitary Force Main, 2 inch	21	Ft	\$ <u>57.65</u>	\$ <u>1,210.65</u>
49	Sanitary Force Main, 6 inch	38	Ft	\$ <u>115.00</u>	\$ <u>4,370.00</u>



50	Sanitary Sewer, PVC Truss, 12 inch	2,860	Ft	\$ <u>230.00</u>	\$ <u>657,800.00</u>
51	Sanitary Sewer, VCP, 12 inch, Pilot Tube	3,550	Ft	\$ <u>747.50</u>	\$ <u>2,653,625.00</u>
52	Sanitary Sewer, PVC Truss, 8 inch	650	Ft	\$ <u>172.30</u>	\$ <u>111,995.00</u>
53	Sanitary Force Main, Drop Connection	3	Ea	\$ <u>2,305.00</u>	\$ <u>6,915.00</u>
54	Sanitary Manhole, Tap, 12 inch	1	Ea	\$ <u>1,850.00</u>	\$ <u>1,850.00</u>
55	Sanitary Sewer Manhole, 48 inch dia, less than 15 feet deep	12	Ea	\$ <u>7,500.00</u>	\$ <u>90,000.00</u>
56	Sanitary Sewer Manhole, 60 inch dia, less than 15 feet deep	2	Ea	\$ <u>9,875.00</u>	\$ <u>19,750.00</u>
57	Sanitary Sewer Manhole, 48 inch dia, greater than 15 feet deep	4	Ea	\$ <u>11,400.00</u>	\$ <u>45,600.00</u>
58	Sanitary Sewer Manhole, 60 inch dia, greater than 15 feet deep	5	Ea	\$ <u>12,575.00</u>	\$ <u>62,875.00</u>
59	Sanitary Sewer Manhole, 72 inch dia	8	Ea	\$ <u>13,200.00</u>	\$ <u>105,600.00</u>
60	Sanitary Sewer Service Lead, 6 inch	2,500	Ft	\$ <u>53.65</u>	\$ <u>134,125.00</u>
61	Sanitary Service Lead, Connect to Exist LPS	4	Ea	\$ <u>1,400.00</u>	\$ <u>5,600.00</u>
62	Sanitary Service Lead, Interior Drop Connection	29	Ea	\$ <u>1,500.00</u>	\$ <u>43,500.00</u>
63	Grout in Place Existing Force Main, 6 inch	6,500	Ft	\$ <u>5.25</u>	\$ <u>34,125.00</u>
64	Culv End Sect, Conc, 12 inch	1	Ea	\$ <u>850.00</u>	\$ <u>850.00</u>
65	Culv End Sect, Conc, 18 inch	4	Ea	\$ <u>1,075.00</u>	\$ <u>4,300.00</u>
66	Culv, CI IV, RCP, 12 inch	12	Ft	\$ <u>67.25</u>	\$ <u>807.00</u>
67	Culv, CI IV, RCP, 18 inch	86	Ft	\$ <u>100.00</u>	\$ <u>8,600.00</u>
68	Trench Undercut and Backfill	250	Cyd	\$ <u>55.00</u>	\$ <u>13,750.00</u>
69	Station Grading, Roadway	65	Sta	\$ <u>1,450.00</u>	\$ <u>94,250.00</u>
70	Aggregate Base	2,582	Ton	\$ <u>22.00</u>	\$ <u>56,804.00</u>
71	Curb and Gutter, Conc, Det F4	30	Ft	\$ <u>72.50</u>	\$ <u>2,175.00</u>
72	HMA, Driveway, 3.5 inch	575	Syd	\$ <u>35.00</u>	\$ <u>20,125.00</u>
73	HMA, Roadway	15	Ton	\$ <u>300.00</u>	\$ <u>4,500.00</u>
74	Driveway, Nonreinf Conc, 6 inch	187	Syd	\$ <u>65.00</u>	\$ <u>12,155.00</u>
75	Gravel, Driveway, 6 inch	1,358	Syd	\$ <u>10.00</u>	\$ <u>13,580.00</u>
76	Gravel, Roadway, 8 inch	4,440	Syd	\$ <u>12.00</u>	\$ <u>53,280.00</u>



77	Maintenance Aggregate	300	Ton	\$ <u>40.00</u>	\$ <u>12,000.00</u>
78	Sidewalk, Conc, 4 inch	720	Sft	\$ <u>6.75</u>	\$ <u>4,860.00</u>
79	Mailbox, Remove and Reset	68	Ea	\$ <u>95.00</u>	\$ <u>6,460.00</u>
80	Sign, Relocate	9	Ea	\$ <u>50.00</u>	\$ <u>450.00</u>
81	Fence, Relocate	280	Ft	\$ <u>39.50</u>	\$ <u>11,060.00</u>
82	Emergency Excavation	3	Ea	\$ <u>15,000.00</u>	\$ <u>45,000.00</u>
83	Restoration	1	LSUM	\$ <u>75,000.00</u>	\$ <u>75,000.00</u> D.1)
84	Landscape Allowance	1	Dlr	\$ <u>75,000.00</u>	\$ <u>75,000.00</u>
85	Crew Days	<u>350</u>	CDay	\$ <u>700.00</u>	\$ <u>245,000.00</u>
Total Bid Amount of Alternate Bid (Items 1-85)					\$ <u>5,798,167.65</u>

If the foregoing Bid shall be accepted by the OWNER, the undersigned agrees to enter into the attached form of Agreement within ten (10) days after receiving notice of such acceptance, will furnish the OWNER satisfactory bonds and certificates of insurance coverage, and will complete the Project, at the price and within the time stated in this Bid.

The undersigned further agrees that if the foregoing Bid shall be accepted, work will commence immediately after the Contract has been awarded, the Agreement executed, and a Notice to Proceed received. **The undersigned shall complete the Work to Substantial Completion within 305 calendar days, and to Final Completion, including restoration and all punch list items, within 350 calendar days** from the date of commencement as set forth in the Notice to Proceed.

The undersigned attaches hereto its Bid security, as required by the Advertisement for Bids and Instructions to Bidders. The undersigned agrees that in case it shall fail to fulfill its obligations under the foregoing Bid, and/or shall fail to furnish bonds, as specified, the OWNER may, at its option determine that the undersigned has abandoned its rights and interests in such Contract and that its Bid security accompanying its Bid; has been forfeited to the said OWNER, but otherwise the Bid security shall be returned to the undersigned upon the execution of the Contract and the acceptance of the bonds.

The undersigned also agrees that for each and every calendar day that he may be in default of Substantial Completion of the Work, within the time specified in this Bid, the OWNER will suffer a damage of FIFTEEN HUNDRED AND FIFTY dollars (\$1,550.00) per day, and said OWNER shall be compensated therefore at the rate as liquidated damages in accordance with the Agreement.

In submitting this Bid, it is understood that the right is reserved by the OWNER to accept any bid, to reject any or all Bids, and to waive irregularities in bidding in the interest of the OWNER.



SUBMITTED on 10/31/18
Date*


6045 SIMS DR., SUITE #2,
Street*

STERLING HEIGHTS, MI 48313
City, State, ZIP*

586-979-0402
Telephone Number*

586-979-8295
Facsimile Number*

BY: D.V.M. UTILITIES, INC.
Name of Bidder*


Signature

DANIEL DILEGGE, PRESIDENT
Name and Title of Signatory*

*Typed or printed in ink.



MEMORANDUM



TO: ROB HAYES, DPS DIRECTOR/CITY ENGINEER
FROM: BEN CROY, WATER AND SEWER SENIOR MANAGER
SUBJECT: NINE MILE GRAVITY RELIEF SANITARY SEWER PROJECT
DATE: APRIL 18, 2016

You may recall that a recent analysis of the Park Place pump station and the downstream force main along Nine Mile indicated that there are capacity concerns in this area of the sanitary sewer system. This condition exists primarily because the Evergreen Estates pump station and many low pressure grinder pump connections to the 6-inch force main have had a more significant effect on the Park Place pump station than was originally assumed (see attached map). Due to this concern, it was determined that there was a need to temporarily defer any additional connections to the force main. While a few single family connections would be acceptable, the connection of a larger future development would likely cause pressure and capacity difficulties within the system. In addition to the capacity concerns, there is also a major concern that this sewer system does not have any redundancy because the Park Place pump station is 1.6 miles from the closest gravity outlet (near Kensington Drive), and in the event of a failure in the existing force main, the entire area served by the force main would be without service.

For these reasons, the Water and Sewer Division has been evaluating the various options to alleviate the capacity and redundancy shortfalls. The two options considered include varying lengths of gravity sewer and a second/parallel force main. Although both options are feasible, a gravity sewer has the following advantages:

- It would eliminate the need for additional residential grinder pump stations, and would provide the opportunity for the existing eleven grinder pump connections to be converted to standard gravity lead connections. Grinder pumps can prove to be a costly maintenance burden for residential customers, and we feel it would be a benefit to eliminate the need for this type of connection moving forward.
- Gravity sewer does not require power, so in the event of a power outage, any home with a standard gravity lead would not be affected.
- A shorter force main could continue to use the existing 5 hp pumps, rather than upgrading to 12 hp pumps, saving on the cost of the pumps and the long-term power consumption costs.
- Unlike a traditional gravity sewer, this relatively long force main (1.6 miles) has proven to be a complicated system with changing hydraulic-related variables as additional connections were made. Since we are unsure how this area of the City will eventually develop (single family or subdivisions with pump stations), we

are concerned that we may need to continually analyze this system to ensure that adequate operating pressures can be maintained throughout the system.

- During a recent conversation with Kelly Cave of Wayne County DPS (the agency that manages the sewage collection system downstream of Novi) it was indicated that they would view parallel force mains as having the total combined capacity of both pipes together, rather than basing permitted capacity upon our proposed design service area. This could create a point of contention during the sanitary permitting process resulting in permit delays and/or denials.

Therefore, it was determined that the best option would involve the replacement of the majority of the force main with gravity sewer, leaving only the western portion of the existing force main in service. This design would eliminate all concerns related to capacity and redundancy for the sanitary sewer system in this area, and would provide adequate sewer service for all future development along Nine Mile.

Staff completed a survey of the proposed project area in 2015, and based on the survey data determined that the preliminary estimate for this project is \$3.88 million, which has not yet been budgeted. A portion of this cost could be covered by the reallocation of funds for two other projects, totaling \$750,000, that are no longer necessary. Some of the project cost can be attributed to high costs for individual items such as dewatering (estimated to be \$380,000). The rest of the cost is generally related to the difficulty of construction because it would be a relatively deep sewer in somewhat confined conditions due to Nine Mile Road's narrow right-of-way width (mostly 66 feet) and several large trees that are in the right-of-way (the project's design process would include an evaluation of feasible alternatives to mitigate tree removal).

Based on the preliminary estimate (attached) and the urgent need for this relief sewer project, the Water and Sewer Division is requesting a budget amendment to establish the budget and fund the proposed Nine Mile Gravity Relief Sewer project.

Please let me know if you have any questions or comments regarding this memorandum.

cc: Brian Coburn, Engineering Senior Manger
Scott Roselle, Water and Sewer Asset Manager