



## Engineering and Public Works Department

**SUBJECT:** Pavement Marking Program

**MEETING DATE:** April 9, 2019

**FROM:** [Brigitte Berger-Raish](#), P.E, Director of Engineering and Public Works  
[Dan Manis](#), P.E., Village Engineer  
[Jorge Cruz](#), P.E., Assistant Village Engineer

<b>BUDGET IMPACT:</b>	Contract Cost	\$54,120
	Over/(Under) Budget	\$0

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### **Recommended Motions**

Move to approve a contract in the amount not-to-exceed \$54,120 with Precision Pavement Markings, Inc., Elgin, IL, for the 2019 Pavement Marking Program.

### **Background**

This program consists of re-marking the various pavement markings for traffic lane lines, crosswalks, school zone markings, railroad crossings, stop bars, edge lines and speed humps. Pavement markings last between two and five years depending on traffic volume and weather conditions. Pavement marking is regulated by the Federal Highway Administration through the Manual of Uniform Traffic Control Devices (MUTCD) and the State of Illinois.

Highest priority areas for refreshing pavement markings include school zones, downtown/business districts, and high volume roads. These areas tend to have higher pedestrian volumes or vehicle traffic and experience more wear and tear.

In addition, Engineering and Public Works has received communication from the CTA's management company that parking stall lines at the Linden Station have faded and have requested they be refreshed. Therefore, a portion of the Linden Station parking lot contractual grounds maintenance budget will be used to refresh parking lot pavement marking this year.

### **Discussion**

The Village of Wilmette led a Municipal Partnering Initiative (MPI) group to request bids for this program. The MPI allows area communities to collectively bid similar work to take advantage of economies of scale. The MPI group including the following eleven communities;

Bannockburn, Evanston, Glencoe, Highland Park, Lake Zurich, Lincolnshire, Morton Grove, North Chicago, Palatine, Wheeling and Wilmette.

Two bids were received by Marking Specialists Corporation and Precision Pavement Marking. Precision Pavement Marking submitted lower pricing and the bid tabulation is included as an attachment.

Precision Pavement Marking worked for the Village last year on this program and as a subcontractor on past roadway related projects with satisfactory results. For these reasons, the Engineering and Public Works Department recommends awarding the 2019 Pavement Marking Program to Precision Pavement Marking.

The 2019 Pavement Marking Program will be completed in the summer.

### **Budget Impact**

The 2019 Pavement Marking Program will be paid for as follows:

<b>Description</b>	<b>Account</b>	<b>Budget</b>	<b>Recommended Award Amount</b>
Pavement Marking Program	11202035-425220	\$53,000	\$53,000
CTA Contractual Grounds Maintenance	23763090-421150	\$1,120	\$1,120
Total Award:			\$54,120

### **Documents Attached**

1. Bid Tabulation
2. CIP Detail Sheets

Code	Pay Item Description	Units	Total 2019 Quantities	Marking Specialists Corp		Precision Pavement Marking	
				Unit Cost	Line Item Cost	Unit Cost	Line Item Cost
78000100	Thermoplastic Pavement Marking - Letters and Symbols	Sq Ft.	8,490	\$ 3.25	\$ 27,593.80	\$ 3.89	\$ 33,027.66
78000200	Thermoplastic Pavement Marking - 4"	Foot	223,553	\$ 0.72	\$ 160,958.16	\$ 0.54	\$ 120,718.62
78000400	Thermoplastic Pavement Marking - 6"	Foot	92,278	\$ 1.14	\$ 105,196.92	\$ 0.79	\$ 72,899.62
78000600	Thermoplastic Pavement Marking - 12"	Foot	22,291	\$ 2.28	\$ 50,823.48	\$ 1.75	\$ 39,009.25
78000650	Thermoplastic Pavement Marking - 24"	Foot	14,479	\$ 4.56	\$ 66,024.24	\$ 3.89	\$ 56,323.31
78001100	Paint Pavement Marking - Letters and Symbols	Sq Ft.	3,715	\$ 2.75	\$ 10,216.25	\$ 2.50	\$ 9,287.50
78001110	Paint Pavement Marking - 4"	Foot	68,100	\$ 0.56	\$ 38,136.00	\$ 0.25	\$ 17,025.00
78001130	Paint Pavement Marking - 6"	Foot	11,800	\$ 0.87	\$ 10,266.00	\$ 0.65	\$ 7,670.00
78001150	Paint Pavement Marking - 12"	Foot	4,000	\$ 1.74	\$ 6,960.00	\$ 1.25	\$ 5,000.00
78001180	Paint Pavement Marking - 24"	Foot	2,350	\$ 3.47	\$ 8,154.50	\$ 2.50	\$ 5,875.00
78005110	Epoxy Pavement Marking - Line 4"	Foot	67,149	\$ 0.78	\$ 52,376.22	\$ 0.45	\$ 30,217.05
78005120	Epoxy Pavement Marking - Line 5"	Foot	133	\$ 1.02	\$ 135.66	\$ 0.55	\$ 73.15
78005100	Epoxy Pavement MarkingS - Letters and Symbols	Sq Ft.	3,749	\$ 3.45	\$ 12,933.36	\$ 3.29	\$ 12,333.55
78005130	Epoxy Pavement Marking - Line 6"	Foot	12,452	\$ 1.22	\$ 15,191.44	\$ 0.89	\$ 11,082.28
78005150	Epoxy Pavement Marking - Line 12"	Foot	12,339	\$ 2.45	\$ 30,230.55	\$ 1.59	\$ 19,619.01
78005180	Epoxy Pavement Marking - Line 24"	Foot	5,045	\$ 4.90	\$ 24,720.50	\$ 3.29	\$ 16,598.05
78006100	Preformed Thermoplastic Pavement Marking - Letters and Symbols	Sq Ft.	77	\$ 186.50	\$ 14,360.50	\$ 50.00	\$ 3,850.00
78009004	Modified Urethane Pavement Marking - Line 4"	Foot	1,700	\$ 2.51	\$ 4,267.00	\$ 1.00	\$ 1,700.00
78009006	Modified Urethane Pavement Marking - Line 6"	Foot	2,075	\$ 3.77	\$ 7,822.75	\$ 1.50	\$ 3,112.50
78009012	Modified Urethane Pavement Marking - Line 12"	Foot	1,300	\$ 7.54	\$ 9,802.00	\$ 3.00	\$ 3,900.00
78009024	Modified Urethane Pavement Marking - Line 24"	Foot	200	\$ 15.08	\$ 3,016.00	\$ 6.00	\$ 1,200.00
78009000	Modified Urethane Pavement Marking - Letters and Symbols	Foot	100	\$ 8.00	\$ 800.00	\$ 6.00	\$ 600.00
78100100	Raised Reflective Pavement Markers	Each	4	\$ 855.00	\$ 3,420.00	\$ 25.00	\$ 100.00
78100300	Replacement Reflector	Each	100	\$ 20.00	\$ 2,000.00	\$ 7.50	\$ 750.00
78300100	Pavement Marking Removal	Sq Ft.	34,621	\$ 1.95	\$ 67,510.56	\$ 0.25	\$ 8,655.20
78300300	Raised Reflective Pavement MARKER REMOVAL	EACH	0	\$ -	\$ -	\$ -	\$ -
SPECIAL	Pavement MARKER FILL (Epoxy FILL)	EACH	25	\$ 17.50	\$ 437.50	\$ 4.00	\$ 100.00
X7830070	Grooving for Recessed Pavement Marking 5"	Foot	2,000	\$ 0.50	\$ 1,000.00	\$ 0.75	\$ 1,500.00
X7830078	Grooving for Recessed Pavement Marking 13"	Foot	250	\$ 1.50	\$ 375.00	\$ 3.00	\$ 750.00
				<b>Total</b>	<b>\$ 734,728.39</b>	<b>Total</b>	<b>\$ 482,976.75</b>
				<b>Marking Specialists Corp</b>		<b>Precision Pavement Marking</b>	

Calculated amount varies from amount in proposal by less than \$2.00.

<b>Pavement Marking Program</b>	2019	\$53,000	Operating
Streets, Sidewalks and Alleys	2020	\$54,500	
	2021	\$56,000	
	2022	\$57,500	
X Critical	2023	\$59,000	
- Recommended			
- Contingent on Funding			

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**Original Purchase Date & Cost**

Unknown

**Funding History**

2018	\$51,500
2017	\$50,000
2016	\$50,000
2015	\$40,000
2014	\$20,000
2013	\$20,000
2012	\$20,000
2011	\$40,000

**Project Description & Justification**

This safety program is for restriping pavement markings throughout the Village.

The pavement marking program stripes existing and new lane lines, center lines, school crosswalks, railroad crossings, stop bars, edge lines, and speed humps on Village streets. Pavement markings provide benefit to motorists, pedestrians and cyclists. The deterioration of pavement markings on Village streets varies. The life cycle of thermoplastic pavement marking on major streets is between two to five years and the life cycle for water-based paint pavement marking is yearly. The life cycle on residential streets is between five and eight years. Traffic volume and weather contribute the most to the deterioration of pavement marking (snowplows, salt, and rough pavements). Pavement marking is mandated by the Federal Highway Administration in the Manual for Uniform Traffic Control Devices (MUTCD) and the State of Illinois.

Staff determined that the previous funding level of \$20,000 was inadequate to keep up with the amount of striping needed on an annual basis. As a result, a detailed pavement marking inventory was completed in 2009 to quantify the amount of annual striping necessary to maintain adequate pavement markings on Village streets.

In recent years a large number of streets were striped as a part of traffic calming plans. Hunter Road, for example, was striped with centerlines, edge lines, and parking lanes for purposes of lane delineation and traffic calming. Also, concrete surfaces require epoxy pavement markings, which are

approximately double in cost. Concrete speed bumps and concrete bridges require extensive striping with epoxy material. Winter weather and excessive snow plowing have contributed to reduced striping visibility throughout the Village. Finally, arterial striping on high volume roads such as Sheridan Road, Lake Avenue, Ridge Road, Green Bay Road, and Glenview Road (west of Skokie) has been added to the Village street system, increasing the footage of pavement marking required every two to three years. Pavement marking is a safety element of road maintenance.

**Project Update**

The funding request of \$59,000 has been added to 2023.

**Project Alternative**

The striping is contracted out and is performed using thermoplastic and epoxy material. Public Works does not have the equipment to install thermoplastic or epoxy striping. Thermoplastic or epoxy will last approximately five times longer than water-based paint. In order to increase the amount of pavement marking footage installed by public works, additional personnel and a budget increase for materials to do the striping would be necessary.

**Operating Budget Impact**

Is this purchase *routine*  X  or *non-routine* \_\_\_\_\_?

ROUTINE	
Department Budget	Engineering
Account Number Description	Pavement Marking Program
Account Number	11202035-425220