



Village of Maple Park

302 Willow Street ♦ P.O. Box 220 ♦ Maple Park, Illinois 60151

Village Hall: 815-827-3309

Fax: 815-827-4040

Website: <http://www.villageofmaplepark.com>

INFRASTRUCTURE COMMITTEE MEETING AGENDA

Wednesday, May 27, 2015

7:00 p.m.

Maple Park Civic Center

302 Willow Street, Maple Park, IL

1. CALL TO ORDER / ESTABLISHMENT OF QUORUM
2. PUBLIC COMMENTS – *Any resident wishing to address the Board may do so according to the Rules of Public Comment and should register with the Village Clerk prior to the meeting.*
3. GENERAL DISCUSSION OF CAPITAL IMPROVEMENT PROJECTS – INCLUDING A DISCUSSION OF CRACK FILL AND SEAL COAT BIDS.
4. ADJOURNMENT

Committee Members

Trustee Goucher, Chair

Trustee Borg

Trustee Dries



TECHNICAL MEMORANDUM

Date: May 20, 2015
To: Maple Park Infrastructure Committee
From: Jeremy Lin
Subject: Crack Sealing Proposals

Per our previous discussions, I contacted three paving companies (Behm Pavement Maintenance, Inc., Meyer Paving, and SKC Construction) to provide crack sealing proposals for Ashton Dr and DeKalb Dr. Meyer Paving only provided a verbal estimate to Mike Miller, while the other two provided written proposals as attached.

The proposals are summarized as follows:

Company	Option 1 - Rubberized Sealant	Option 2 - Fiberized Sealant
Behm Pavement Maintenance	Crack Sealing: 30,000 L.F. @ \$0.46/L.F. = \$14,000 Street Sweeping: \$1,000 Total = \$15,000	Crack Sealing: 30,000 L.F. @ \$0.50/L.F. = \$15,000 Street Sweeping: \$1,000 Total = \$16,000
SKC Construction		Crack Sealing: 19,000 L.F. @ \$.65/L.F. = \$12,350 includes street sweeping
Meyer Paving	Only provided a verbal quote of \$0.35/L.F.	

As you can see in the summary above, the proposals varied somewhat in terms of footage quoted and the unit price. The Behm proposal has the most coverage at a reasonable unit price. Both Behm Pavement Maintenance and SKC were referred to us by Curran Contracting, the contractor for the Willow St project.

I have attached the IDOT specification for the fiber-asphalt sealant which is recommended due to the deep cracks down the center of the roads. Both Behm and SKC reference this specification in their proposals

State of Illinois
DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads and Streets

SPECIAL PROVISION
FOR
CRACK FILLING BITUMINOUS PAVEMENT WITH FIBER-ASPHALT

Effective: October 1, 1991
Revised: January 1, 2007

All references to Section or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation

Filling Cracks (Flexible Pavement). This work consists of cleaning and filling transverse and longitudinal joints and cracks in existing bituminous flexible pavement with fiber modified asphalt cement as shown in the plan details, as directed by the Engineer, and as described herein.

Materials. Materials shall meet the requirement of the following Articles of Section 1000 – Materials:

Item	Article
(a) Bituminous Materials (Note 1).....	1032.01-1032.05

Note 1 - Asphalt cement shall be PG 58-28, PG 58-22, or PG 64-22.

Fibers should be short cut polypropylene fibers meeting the properties listed below:

Length,	mm:	8 - 12
Denier	:	13 - 16
Crimps	:	None
Tensile Strength, minimum,	MPa (psi):	275 (40,000)
Specific Gravity (typical)	:	0.91
Moisture Regain @ 21 °C (70 °F) and 65% RH (typical)	%:	0.1

The fiber may be accepted on certification from the manufacturer that it meets the specified requirements.

Equipment. An oil jacketed double wall kettle equipped with an agitator (reversing rotary auger action) and separate thermometers for the oil bath and mixing chamber will be required. The unit shall also be equipped with a reversible hydraulic 50 mm (2 inch) hot asphalt pump and a recirculating pump to circulate the oil bath. An air compressor capable of producing a minimum 620 kPa (90 psi) at the end of the discharge hose will be required.

Preparation of Mixture. The fiber modified asphalt cement or fiber-asphalt shall consist of a minimum of 8.0% by weight fiber in the fiber-asphalt mixture. Operating temperatures in the kettle shall be between 124 and 141 °C (255 and 285 °F). The temperature shall never exceed 143 °C (290 °F) as the fibers will melt into the asphalt cement.

Construction Methods. The fiber-asphalt filler shall be applied only when the joints and cracks are dry and free of dirt, vegetation, debris and loose filler. The joints and cracks shall be blown out with the 620 kPa (90 psi) compressed air. The blowing out operations shall be kept close to the filling operations to prevent debris being carried back into the cracks before filling. Routing will not be required. A hot compressed air lance meeting the approval of the engineer may be used to clean the cracks.

The fiber-asphalt filler shall be applied using a pressurized wand delivery system with such devices as necessary to fill the cracks and form a nominal 3 mm (0.125 inch) thick by 75 mm (3 inch) wide overseal band centered so that the center of the 75 mm (3 inch) wide band is within 25 mm (1 inch) of the crack. The fiber-asphalt filler shall be applied taking care to not use excessive material in either thickness or location. The engineer will determine the extent that fine cracks are filled. Care should be taken to not place filler on top of pavement markings, manholes and drainage castings.

The ambient temperature during filling shall be above 4 °C (40 °F) and below 29 °C (85 °F). The filler must cure before being opened to traffic. The contractor may use fine sand, mineral filler or portland cement to dust the filler if necessary to more quickly open the road to traffic. Dusting will be considered incidental.

A technical representative from the fiber manufacturer shall be available for initial filling work. Any suggestions or recommendations shall be submitted to the Engineer for approval.

Method of Measurement. Filling of cracks will be measured for payment in kilograms (pounds) of fiber-asphalt used.

Basis of Payment. This work will be paid for at the contract unit price per kilogram (pound) of FIBER-ASPHALT. The unit price shall include the cleaning of the joints and cracks and the furnishing and placing of the filler.

Behm Pavement Maintenance, Inc.

3010 Rt. 176
Crystal Lake, IL 60014

Phone # 815-477-9400 behmpavement@gmail.com
Fax # 815-477-9401

Date	Estimate #
5/7/2015	103602

Name / Address

Village of Maple Park
302 Willow St.
P.O. Box 220
Maple Park, IL 60151-0220

Project

Description	Total
Crack seal Dekalb Dr and Ashton Dr in accordance with IDOT specifications section 451	
Rout transverse and longitudinal cracks to a depth of 3/4" and a width of 3/4" to provide a reservoir for sealant. Clean debris from routed cracks and seal using hot applied fiberized sealant. Clean and seal random and adjacent cracks that cannot be routed. Approximately 30,000 LF cracks	15,000.00
Street sweeping	1,000.00

Any changes from the above written amount of work performed involving extra cost of material or labor subjects the above contract to an additional charge unless said changes are accepted in writing. Null and void unless accepted in 90 days of date. We carry Workman's Compensation and Public Liability Insurance.

William J. Behm

ACCEPTANCE

You are hereby authorized to furnish all labor and materials required to complete the work in the above proposal, for which the undersigned agrees to pay the amount of the proposal, according to the terms of the proposal.

Signed

Total

\$16,000.00

Date

Behm Pavement Maintenance, Inc.

3010 Rt. 176
Crystal Lake, IL 60014

Phone # 815-477-9400 behmpavement@gmail.com
Fax # 815-477-9401

Date	Estimate #
5/7/2015	103602

Name / Address

Village of Maple Park
302 Willow St.
P.O. Box 220
Maple Park, IL 60151-0220

Project

Description	Total
Crack seal Dekalb Dr and Ashton Dr in accordance with IDOT specifications section 451	
Rout transverse and longitudinal cracks to a depth of 3/4" and a width of 3/4" to provide a reservoir for sealant. Clean debris from routed cracks and seal using hot applied rubberized sealant meeting federal specification ASTM D-3405, Clean and seal random and adjacent cracks that cannot be routed. Approximately 30,000 LF cracks	14,000.00
Street sweeping	1,000.00

Any changes from the above written amount of work performed involving extra cost of material or labor subjects the above contract to an additional charge unless said changes are accepted in writing. Null and void unless accepted in 90 days of date. We carry Workman's Compensation and Public Liability Insurance.

William J. Behm

ACCEPTANCE

You are hereby authorized to furnish all labor and materials required to complete the work in the above proposal, for which the undersigned agrees to pay the amount of the proposal, according to the terms of the proposal.

Signed

Total**\$15,000.00**

Date

P.O. BOX 503
WEST DUNDEE, IL. 60118

F A X (847) 214-9023

RUBBERIZED CRACK SEALING
DEKALB DR AND ASHTON DR. MAPLE PARK

RESPECTFULLY SUBMITTED,
S.K.C. CONSTRUCTION INC.
JAMES FERNANDEZ
OPER. MNGR