

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

Project Name:	<u>Pavement Preservation</u> (Asphalt Patching, Crack filling, Micro surfacing, and Rejuvenator)
Project Number:	<u>19-6</u>
Location:	VILLAGE OF OAK PARK, ILLINOIS
	Submitted to the President and Board of Trustees
	By: AC PAVEMENT STRIPING CO.
	Contractor's Name
	A. C. PAVEMENT STRIPING (%) 695 CHURCH ROAD
	Address ELGIN, IL 60123
	City



Notice to Bidders

Time and Place of Opening of Bids

Sealed proposals for the improvement described below will be received at the Office of the Village Engineer, Monday through Friday, 8:30 A.M. to 4:00 P.M. at 201 South Boulevard, Oak Park, Illinois 60302 until **10 A.M. Tuesday, June 11, 2019** at which time the proposals shall be publicly opened and read.

Description of Work

Name: Pavement Preservation

Location: Various Locations throughout the Village of Oak Park.

Description: This work consists of various sizes of asphalt patches, cleaning and sealing of any cracks, voids or joints less than 2" in width with asphalt cement reinforced by polypropylene or polyester fibers, micro-surface application, petroleum maltene-based rejuvenator application, and thermoplastic pavement marking application, and all appurtenant work thereto on various streets throughout the Village of Oak Park.

Bidders Instructions

- 1. Plans and proposal forms will be available in the Office of the Village Engineer, 201 South Boulevard, Oak Park, Illinois 60302. No plans will be issued to prospective bidders after 4 P.M. on the working day preceding the opening of bids. Proposals will not be accepted by the Village of Oak Park from Contractors who have failed to provide payment, if required, for obtaining proposal forms and have also failed to register with the Engineering Division of the Public Works Department as plan holders for this project.
- 2. At the bid opening, all proposals <u>must</u> be accompanied by a proposal guaranty in the amount of 5% of the bid amount. The proposal guaranty shall be in the form of a bid bond executed by a corporate surety company or a bank cashier's check.
- 3. If this proposal is accepted and the undersigned fails to execute an agreement and contract bond within ten (10) days after the Notice of Award, it is hereby agreed that the bid bond or check shall be forfeited to the Village.

- 4. The awarding authority reserves the right to waive technicalities and to reject any or all proposals as provided in Article 102.01 of the 2016 "Standard Specifications for Road and Bridge Construction," prepared by the Illinois Department of Transportation.
- 5. The work to be performed pursuant to this Proposal is subject to the Illinois Prevailing Wage Act, 820 ILCS 130/0.01 et seq.
- 6. Bidders need not return the entire proposal when bids are submitted. Portions of the proposal that must be returned include the following:
 - a. Proposal Cover

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- b. Notice to Bidders
- c. Contract Proposal (I)
- d. Contract Schedule of Prices Form (II) (if required)
- e. Proposal Bid Bond (III) (if required)
- f. Contractor's Certification (IV)
- g. Tax Compliance Affidavit (V)
- h. Fair Employment Practices Affidavit of Compliance (VI)
- i. Village of Oak Park EEO Report (VII)
- j. Participation Statement
- SCHEDULE C: Village of Oak Park Letter of Intent From MBE/WBE to Perform as a Subcontractor, Supplier, and/or Consultant
- SCHEDULE D: Village of Oak Park M.WBE Participation

Note: All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.

	By Order of	
RETURN WITH BID	Bill McKenna, Village Engineer	



Proposal

RETURN WITH	BID	
	A. C. PAVEMENT STRIPING CO.	
Proposal of	GOS CHURCH ROAD	<u> </u>

FIGIN IL 60123

For Project: 19-6 Pavement Preservation

- 1. The plans for the proposed work are those prepared by the Engineering Division of the Village of Oak Park, 201 South Boulevard, Oak Park, Illinois on May 23, 2019.
- 2. The specifications referred to herein are those prepared by the Department of Transportation and designated as 2016 "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications" there to, the "Standard Specifications for Water and Sewer Construction in Illinois", and the "Manual for Uniform Traffic Control Devices", adopted and in effect on the date of invitation of bids.
- The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Supplemental Specifications and Recurring Special Provisions" contained in this proposal.
- 4. The undersigned agrees to substantially complete all work by <u>September 27th, 2019</u> unless additional time is granted in accordance with the specifications. Any work adjacent to schools should be done in the summer months or on the weekend to avoid conflict.
- 6. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the awarding authority.
- 7. Each pay item should have a unit price and a total price.
- 8. The unit price shall govern if no total price is shown or if there is a discrepancy between the results of unit price multiplied by the quantity.
- 9. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
- 10. A bid will be declared unacceptable if neither a unit price nor a total price is shown.
- 11. The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a

responsible official of the firm. The undersigned firm further certifies that it is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.

12. This Contract is subject to "An act regulating wages of laborers, mechanics, and other workers employed in any public works by the State, County, City or any other public body or any political subdivision or by anyone under contract for public works". (See Special Provision for details).

Special Note: The Prevailing Wage Act / Federal Requirements require maintaining and submitting Certified Payroll records monthly for all entities working on this project.

13. Proposal Guaranty Check:

Attach Cashier's Check or Certified Check Here

In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties that would be required for each individual proposal.

If the proposal guaranty check is placed in another proposal; state below where it can be found.

The proposal guaranty check will be found in the proposal for: Village of Oak Park

Project 19-6 Pavement Preservation

14. The undersigned submits herewith this schedule of prices covering the work to be performed under this contract:

SCHEDULE OF PRICES

		1			
#	PAY ITEM	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	FIBER MODIFIED ASPHALT CRACK SEALING	POUND	20,000	1.57	31,400.00
2	MICROSURFACING, 1 PASS TYPE II @ 20LB/SY	SQ YD	48,706	2.95	143,682.70
3	MICROSURFACING, 2 PASS TYPE II @ 30LB/SY	SQ YD	887	10.00	8,870.00
4	PAVEMENT MARKING REMOVAL	SQ FT	2,777	1.25	3,471.25
5	THERMOPLASTIC PAVEMENT MARKINGS, L&S	SQ FT	10	9.00	90.00
6	THERMOPLASTIC PAVEMENT MARKINGS, LINE 4"	FOOT	25	1.25	31.25
7	THERMOPLASTIC PAVEMENT MARKINGS, LINE 6"	FOOT	690	1.65	1,138.50
8	THERMOPLASTIC PAVEMENT MARKINGS, LINE 12"	FOOT	1,372	2-75	3,773.00
9	THERMOPLASTIC PAVEMENT MARKINGS, LINE 24"	FOOT	495	5.75	2.846.25
10	BITUMINOUS MATERIAL PRIME COAT, ART 406	POUND	2,000	2.50	5,000.00
11	FINE AGGREGATE (FA-6)	TON	5	30.00	150.00
12	MICROSURFACE EDGE RUT	SQ FT	532	15.00	7,980.00
13	MICROSURFACE BUTT JOINT	FOOT	810	7.00	5,670.00
14	TRAFFIC CONTROL AND PROTECTION	LUMP	1	5,000,00	5,000.00
15	BITUMINOUS SURFACE PATCHING 2", TY-II	SQ YD	65	24.00	1,560.00
16	BITUMINOUS SURFACE PATCHING 2°, TY-III	SQ YD	75	23.00	1.725.00
17	BITUMINOUS SURFACE PATCHING 2", TY-IV	SQ YD	5,300	23.20	122,960,00
18	BITUMINOUS SURFACE PATCHING 4", TY-II	SQ YD	10	42.00	420.00
19	BITUMINOUS SURFACE PATCHING 4*, TY-III	SQ YD	20	40.00	800.00
20	BITUMINOUS SURFACE PATCHING 4", TY-IV	SQ YD	25	38.00	950.00
21	PAVEMENT PATCHING SPECIAL 8" MAX TY II	SQ YD	10	82.00	820.00
22	PAVEMENT PATCHING SPECIAL 8" MAX	SQ YD	20	79.50	1,590.00
23	PAVEMENT PATCHING SPECIAL 8" MAX	SQ YD	25	77.00	1,925.00
24	MALTENE BASED ASPHALT REJUVINATING AGENT	\$Q YD	13,209	1.20	15,850.80

TOTAL: 367,703.75

Addendums (If Any	\ Received	-4-	
I Warellaniis (ii Wii)	/ I VECEIVEU		1



RETURN WITH BID

Village of Oak Park, IL **Proposal Bid Bond**

WE A.C. Pavement Striping Co., 695 Church Road, Elgin, IL 60123 as PRINCIPAL, and International Fidelity Insurance Company
One Newark Center, Newark, NJ 07102-5207 as SURETY. are held and firmly bound unto the Village of Oak Park, IL (hereafter referred to as "VOP") in the penal sum of 5% of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly to pay to the VOP this sum under the conditions of this instrument. WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the VOP acting through its awarding authority for the construction of the work designated as the above section. THERFORE if the proposal is accepted and a contract awarded to the PRINCIPAL by the VOP for the abovedesignated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surely guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental

Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect. IN THE EVENT the VOP determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the VOP acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPA	L and the said SURETY have caused this ins	strument to be signed by
their respective officers this		
A.C. Pavement Striping Co.	PRINCIPAL	
By: William Brinati, Corporate Secreta	(Company Name)	-
(Signature & Tite) (If PRINCIPAL is a joint venture of two or more contract	(Signature & Title)	os of onch poster-to-
be affixed.)	o.e., and company homes, and addicines signature	es oi each contractor must
International Fidelity Insurance Company (Name of Surety) STATE OF ILLINOIS, COUNTY OF	SURETY (Signature of Attorney-in-Fact) Si	
I, See Attached that	, a Notary Public in and for said co	unty, do hereby certify
(Insert names of individuals signing who are each personally known to me to be the same properties of the same pro	in person and acknowledged respectively, that these and purposes therein set forth.	ey signed and delivered
Given under my hand and notary seal this	day of	A.D. 20
 Improper execution of this form (i.e. missing signate or seals or incomplete certification) will result in bid being declared irregular. 		
If bid bond is used in lieu of proposal guaranty chec it must be on this form and must be submitted with		Public

SURETY COMPANY ACKNOWLEDGMENT

COUNTY OF (COOK) ss:				
		une in the year				
Sharon A. Foul	lk, to me kno	own, who, being	by me duly	sworn, did o	depose and sa	ay that
she resides in	Island La	ake, Illinois;	that she is	the ATTC	RNEY-IN-FA	CT of
International F						
executed the ab						
affixed to said i	nstrument is	such corporat	e seal; that if	t was so aff	ixed by order	of the
board of directo	ors of said o	corporation, an	d that she si	igned her n	ame thereto	by like
order.						

OFFICIAL SEAL KAREN E SOCHA NOTARY PUBLIC - STATE OF ILLINOIS MY COMMISSION EXPIRES:01/13/20

STATE OF (ILLINOIS

Karen E. Socha

Notary Public

STATE OF (ILLINOIS COUNTY OF (KANE SS:

On this 11th day of June in the year 2019 before me personally came William Brinati to me known, who, being by me duly sworn, did depose and say that he/she resides in Norridge, IL and that he/she is the Corporate Secretary of the AC Pavement Striping Co., the corporation described in and which executed the foregoing instrument; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed by order of the board of said corporation and that he signed his/her name thereto by like order.

Therese J. Tabor

Notary Public

OFFICIAL SEAL THERESE J. TABOR NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 3-29-2020

POWER OF ATTORNEY

INTERNATIONAL FIDELITY INSURANCE COMPANY ALLEGHENY CASUALTY COMPANY

One Newark Center, 20th Floor, Newark, New Jersey 07102-5207 PHONE: (973) 624-7200

KNOW ALL MEN BY THESE PRESENTS: That INTERNATIONAL FIDELITY INSURANCE COMPANY, a corporation organized and existing under the laws of the State of New Jersey, and ALLEGHENY CASUALTY COMPANY a corporation organized and existing under the laws of the State of New Jersey, having their principal office in the City of Newark, New Jersey, do hereby constitute and appoint

JODIE SELLERS, KATHLEEN WEAVER, JON A. SCHROEDER, WILLIAM T. KRUMM, KAREN E. SOCHA, SHARON A. FOULK, HAROLD MILLER JR.

Rolling Meadows, IL

their true and lawful attomey(s)-in-fact to execute, seal and deliver for and on its behalf as surety, any and all bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof, which are or may be allowed, required or permitted by law, statute, rule, regulation, contract or otherwise, and the execution of such instrument(s) in pursuance of these presents, shall be as binding upon the said INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY, as fully and amply, to all intents and purposes, as if the same had been duly executed and acknowledged by their regularly elected officers at their principal offices.

This Power of Attorney is executed, and may be revoked, pursuant to and by authority of the By-Laws of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY and is granted under and by authority of the following resolution adopted by the Board of Directors of INTERNATIONAL FIDELITY INSURANCE COMPANY at a meeting duly held on the 20th day of July, 2010 and by the Board of Directors of ALLEGHENY CASUALTY COMPANY at a meeting duly held on the 10th day of July, 2015

"RESOLVED, that (1) the Chief Executive Officer, President, Executive Vice President, Vice President, or Secretary of the Corporation shall have the power to appoint, and to revoke the appointments of, Attorneys-in-Fact or agents with power and authority as defined or limited in their respective powers of attorney, and to execute on behalf of the Corporation and affix the Corporation's seal thereto, bonds, undertakings, recognizances, contracts of indemnity and other written obligations in the nature thereof or related thereto; and (2) any such Officers of the Corporation may appoint and revoke the appointments of joint-control custodians, agents for acceptance of process, and Attorneys-in-fact with authority to execute waivers and consents on behalf of the Corporation; and (3) the signature of any such Officer of the Corporation and the Corporation's seal may be affixed by facsimile to any power of attorney or certification given for the execution of any bond, undertaking, recognizance, contract of indemnity or other written obligation in the nature thereof or related thereto, such signature and seals when so used whether heretofore or hereafter, being hereby adopted by the Corporation as the original signature of such officer and the original seal of the Corporation, to be valid and binding upon the Corporation with the same force and effect as though manually affixed."

> IN WITNESS WHEREOF, INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY have each executed and altested these presents on this 31st day of December, 2017



STATE OF NEW JERSEY County of Essex

George R. James

Executive Vice President (International Fidelity Insurance Company) and Vice President (Allegheny Casualty Company)



CASUALT

, before me came the individual who executed the preceding instrument, to me personally known, and, On this 31st day of December, 2017 being by me duly swom, said he is the therein described and authorized officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and of ALLEGHENY CASUALTY COMPANY; that the seals affixed to said instrument are the Corporate Seals of said Companies; that the said Corporate Seals and his signature were duly affixed by order of the Boards of Directors of said Companies.



IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my Official Seal, at the City of Newark. New Jersey the day and year first above written.

> Cathy Cruz a Notary Public of New Jersey My Commission Expires April 16, 2019

CERTIFICATION

I, the undersigned officer of INTERNATIONAL FIDELITY INSURANCE COMPANY and ALLEGHENY CASUALTY COMPANY do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Sections of the By-Laws of said Companies as set forth in said Power of Attorney, with the originals on file in the home of said companies, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this day.

Mara H. Branco

A00659



IV

CONTRACTOR CERTIFICATIONS

- A. The undersigned hereby certifies that said vendor is not barred from bidding on the aforementioned contract as a result of a violation of either Section 33E-3 or 33E-4 of Article 33E of Chapter 38 of the Illinois Revised Statutes or Section 2-6-12 of the Oak Park - Village Code relating to "Bidding Requirements".
- B. The individual or entity making the foregoing proposal of bid certifies that he/she is not barred from contracting with the Village of Oak Park because of any delinquency in the payment of any tax administrated by the Department of Revenue unless the individual or entity is contesting, in accordance with procedures established by the appropriate revenue act, liability for the tax or the amount of the tax. The individual or entity making the proposal or bid understands that making a false statement regarding delinquency in taxes is a Class A misdemeanor and, in addition, voids the contract and allows the Municipality to recover all amounts paid to the individual or entity under the Contract in Civil action.
- C. The undersigned firm certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois and the Village of Oak Park, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm. The undersigned firm further certifies that it is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.
- D. The undersigned firm certifies that it is in compliance with House Bill 3337 which creates a Drug Free Workplace Act for Illinois with an effective date of January 1, 1992.

Organization Name

(Seal - If Corporation) By: Authorized Signature WILLIAM BRINATI
A. C. PAVEMENT STRIPING CO. CORPORATE SECRETARY
695 CHURCH ROAD Address
ELGIN, IL 60123847-214-9500
Telephone
Subscribed and sworn to before me this 1th day of June, 2019. OFFICIAL SEAL THERESE J. TABOR NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 3-29-2020 In the State of This of the state of the
My Commission Expires: 3-29-20.
(Complete Applicable Paragraph Below)
(a) <u>Corporation</u> The Vendor is a corporation, which operates under the legal name of
AC PAVEMENT STRIPING CO. and is organized and existing
under the laws of the State of Thin obs
The full names of its Officers are:
President Scott E. Kline
Secretary William Bringti
Treasurer

The corporation does have a corporate seal. (In the event that their proposal is executed by a person other than the President, attach hereto a certified copy of that section of Corporate By-Laws or other authorization by the Corporation that permits the person to execute the offer for the corporation.)

(b) Partnership Name, Signature and Addresses of all Partners					
	S	-90 -00			
		<u>.</u>	<u>.</u>		
	The partne	ership does l	business und	er the legal name of	
	-		 ,	, which r	name is registered with
				ir	n the county of
(c)	Sole Propr	<u>ietor</u>	Proprietor who	ose full name is	
		<u>.</u>		If the \	endor is operating under
	a trade nai	me, said trad	de name is _		
	which nam	e is register	ed with the o	ffice of	
	in the cour	ity of			
	Signed:			Oals Burning	
				Sole Proprietor	
Please	e provide th	e Name, So	fficer Inform cial Security er and / or O	Number, Drivers Lice	ense Number and State
Name		Title	SS#	Drivers License	State
NH					

CONTRACTOR'S CERTIFICATION

AC PAVEMENT STRIPING CO. , as part of its proposal on a contract for
(Name of contractor)
Pavement Prescription, Proj. #19-6 to the Village of Oak Park, hereby (General description of item(s) proposal on)
Certifies that said contractor is not barred from proposing on the aforementioned
contract as a result of a violation to either Section 33E-3 or 33E-4 of Article 33E of
Chapter 38 of the Illinois Revised Statutes or Section 2-6-12 of the Oak Park Village
Code relating to "Proposing Requirements".
By: (Authorized Agent of Contractor) WILLIAM BRINATI CORPORATE SECRETARY
Subscribed and sworn to
before me this 1+ day of
June , 2019. OFFICIAL SEAL THERESE J. TABOR NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 3-29-2020 Notary Public

CONTRACTOR'S CERTIFICATION (cont.)

AC PAVEMENT STRIPING CO. , as part of its proposal on a contract for
(name of contractor)
Povement Preservation (freely (general description of item(s) proposal on)
certifies that said contractor is in compliance with House Bill 3337 which creates a Drug
Free Workplace Act for Illinois with an effective date of January 1, 1992.
(Authorized Agent of Contractor) WILLIAM BRINATI CORPORATE SECRETARY
Subscribed and sworn to
before me this 1+ day of
June , 2019. OFFICIAL SEAL THERESE J. TABOR NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 3-29-2020 My Commission Expires 3-29-2020

TAX COMPLIANCE AFFIDAVIT

William Bringti		, being first duly s	sworn, deposes and
says: that he/she istorpo(Secretary r, officer, owner, etc.)	of
AC PAVEMENT STRI (contractor)	PING CO) <u>. </u>	
The individual or entity made certifies that he/she is not Oak Park because of any administered by the Department of the appropriate revenue at tax. The individual or entunderstands that making taxes is a Class A Misder and allows the municipality or entity under the contra-	t barred for delinque artment of cordance act, liabilitity makin a false si meanor a fity to reco	rom contracting with the process of Revenue unless the with the procedures early for the tax or the ang the proposal or proposal or proposal in addition, voids fover all amounts paid to	ne Village of any tax individual or established by nount of the linquency in the contract
WILLIAM BRINATI CORPORATE SECRETARY	(Name	of Partner if the Cont	ontractor is an Individual) ractor is a Partnership) actor is a Corporation)
The above statement mu	st be sub	scribed and sworn to	before a notary public.
Subscribed and sworn to this	1th	day of June	, 2019.
Meres e Jalin Notary Public	TI- NOTARY I	OFFICIAL SEAL IERESE J. TABOR PUBLIC, STATE OF ILLINOIS Imission Expires 3-29-2020	



Minority Business and Women Business Enterprises Requirements:

The Village of Oak Park in an effort to reaffirm its policy of non-discrimination, encourages and applauds the efforts of contractors and subcontractors in taking affirmative action and providing Equal Employment Opportunity without regard to race, religion, creed, color, sex, national origin, age, handicap unrelated to ability to perform the job or protected veteran's status.

Reporting Requirements:

The following forms must be completed in their entirety, notarized and included as part of the bid proposal document. Failure to respond truthfully to any question on this list or failure to cooperate fully with further inquiry by the Village of Oak Park will result in disqualification of your bid.

- VI. Fair Employment Practices Affidavit of Compliance
- VII. Village of Oak Park E.E.O. Report (2 Pages)

Disadvantaged Business Participation Reporting

In an effort to reaffirm its commitment to DBE participation the Village of Oak Park asks each general contractor bidding on Public Works Projects to report on their utilization of Minority and Women Business Enterprises. Please list the MBE/WBE companies working as sub-contractors and/or suppliers on the DBE participation statement included herewith. Feel free to make additional copies of this form if necessary and include with your bid.

FAIR EMPLOYMENT PRACTICES AFFIDAVIT OF COMPLIANCE

NOTE: Their affidavit must be executed and submitted with the signed proposal form. No proposals can be accepted by the Board of Trustees of the Village of Oak Park unless said affidavit is submitted concurrently with the proposal.

<u>William Brinat</u> , being first duly sworn, deposes and says that (name of person making the Affidavit)
(Name of Company) of AC PAVEMENT STRIPING CO. and that he/she
has the authority to make the following affidavit; that he/she has the knowledge of the
Village of Oak Park Ordinance relating to Fair Employment Practices and knows and
understands the contents thereof; that he/she certifies hereby that the Co. (Name of
is an "Equal Opportunity Employer" as defined by Section 2000 company)
(E) of Chapter 21, Title 42 of the United States Code Annotated and Federal
Executive Orders #11246 and #11375 which are incorporated herein by reference.
Marguett
Subscribed and sworn to before CORPORATE SECRETARY
me this Thy day of
June , 2019 OFFICIAL SEAL THERESE J. TABOR NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 3-29-2020 Notary Flublic
RETURN THIS PAGE WITH BID

VII

VILLAGE OF OAK PARK E.E.O. REPORT

Please fill out the form completely. Failure to respond truthfully to any questions on their form, or failure to cooperate fully with further inquiry by the Village of Oak Park will result in disqualification of proposal. An incomplete form will disqualify your proposal. For assistance in completing this form, contact Village Engineer Bill McKenna at (708) 358-5722.

1.	Vendor Name:	AC PAVEMENT STRIPING CO.		
2.	Check here if y	our firm is:		
		1BE		
	v	VBE		
		BE		
		Ion-MBE/WBE		
*Note	if your firm is ar	n M/WBE please fill out the attached affidavit (copies of all		
certifi	cation letters mu	ıst be included)		
3.	What is the size of the firm's current stable work force?			
	53 N	lumber of full-time employees		
		lumber of part-time employees		
4.		ation will be requested of all subcontractors working on their be furnished to the low responsible bidder or contractor with the		

RETURN THIS PAGE WITH BID

notice of contract award, and these forms must be completed and submitted to the

Village before the execution of the contract by the Village.

				VII (Cor	VII (Continued)						
Vendor Name AC PAVE	MENT ST	PAVEMENT STRIPING CO.		LAGE OF EEO R	AGE OF OAK PARK EEO REPORT	RK					
					Males			,			
Job Categories Total	Total	Total			American	Acian &		- 2	Females		Total
<u> </u>	Males	Females	Black	Hispanic	American Indian & Alaskan	Asian & Pacific Islander	Black	Hispanic	American Indian & Alaskan	Asian & Pacific Islander	Minorities
Officials & Managers	ב				INAUVE				Native		
Professionals											
Sales Western Day Oar	نو										
Office & Clerical		-									
Traffic a Safety Nove of 36	نر ار			70							
Laborers Lett Styles 1	کی	-		12				-			29
TOTAL TOTAL	0			94							2/2
Management Trainees	30			194							35
Apprentices	1										
This completed and notarized report must accompany your bid. It should be attached to your Affidavit of Compliance	port must a	ccompany y	our bid.	t should be	attached t	o vour Affid	avit of C	ompliance			
bid will be disqualify you from consideration.	nsideration									Tailore to include it with your	MIN YOUT
	An	An EEO-1 Report may be submitted in lieu of this report.	port ma	y be sub	mitted in	lieu of thi	s repor	:			
(Name of Person Making Affidavit) of Ar Politicate The Conference of Art Politicate The Conference	davit)	, being	first dul	y sworn, c	leposes aı	nd says th	at he/sh	e is the (being first duly sworn, deposes and says that he/she is the (2002)	Sacratary	Title or Officer)
The layenant of the latter above EEO Report information is true and accurate and is submitted with the intent that it	_and that t	ne above El	EO Rep	ort inform	ation is tru	le and acc	urate a	nd is subn	nitted with	the intent	that it
be relied upon. Subscribed and sworn to before me this	d sworn to	before me	this	The de	day of	June			20 19.		
(Sidwature)			ı	10-7-19	0	1					
				(Date)							

Participation Statement

(1) Instructions

Refer to: Minority and Women Business Enterprise Participation Program Vendor Handbook.

Submit: Schedule C and Schedule D with Bid Documents, see pages 23-26 of the Vendor Handbook).

SCHEDULE C:

VILLAGE OF OAK PARK LETTER OF INTENT FROM MBE /WBE TO PERFORM AS A SUBCONTRACTOR, SUPPLIER AND/OR CONSULTANT

M/WBE Firm:	Contract #	:	
Address:	_City/State/Zip:_		
Contact Person: F	Phone:	Fax:	
Certification Expiration Date:	Rac	e/Gender:	
Will the M/WBE firm be subcontracting a [] No [] Yes – Please attach explana Proposed Subcontractor:		mance of this contract to another fire	m?
The undersigned M/WBE is prepared to the above named Project/Contract:	provide the follo	owing Commodities and or Services	for
Indicate the <u>Total Dollar Amount</u> , the <u>I</u> described Commodities/Services:	Percentage, and	I the <u>Terms of Payment</u> for the abo	ve-
(If more space is needed to fully describ payment schedule, attach additional sho Prime Bidder/Proposer declares and aff are true and correct and no material fac	eets.) firms that the fact	ts and representations set forth here	
Signature (M/WBE)	Signature ((Prime Bidder/Proposer)	
Print Name	Print Name	9	
Firm Name	Firm Name	?	
Date	Date		
Subscribed and sworn before me this _	day of _	, 20,	
		_(SEAL)	
Signature of Notary Public			
My Commission expires on			

SCHEDULE D: VILLAGE OF OAK PARK M/WBE PARTICIPATION AFFIDAVIT

Contract #:			_ Contract Value: \$		
Contact Person:		Phone:	Fax:		
Description of Co	escription of Commodities/Services to be provided by the Bidder/Proposer on this Contract:				
Any questions re	garding compliance w	ith these re	quirements should be dire	ected to:	
	ent lk Park, 123 Madison 8.5460, FAX: 708.358		Park, Illinois 60302		
the submissions obidder/proposer r contract; that heir claiming by or thr bonding compani to the best of my	of this bid/proposal; the esponsiveness and rest, executors, and addrough the bidder/propes, or sureties are both knowledge, information	nat the M/W esponsibility ministrators oser includir ound by this on and belie	submit, as part of this bid	in element of spart of the persons or entities ance companies, re and affirm that, tations set forth in	
Signed		Nar	ne and Title (Print)		
Firm Name (Print)	<u> </u>	Firr	n Address (Print)		
Phone	Fax	City	/State/Zip		
SUBSCRIBED A	ND SWORN before	me this	day of	, 20,	
5	Signature of Notary Pub	olic			
(SE	AL)				

SCHEDULE D: M/WBE PARTICIPATION AFFIDAVIT

M/WBE firms may participate in the performance of this contract, either DIRECTLY or INDIRECTLY, as:

Prime Bidders/Proposers; Joint Venture Partners; Subcontractors; and/or Suppliers.

Name of M/WBE Firm:		Race / Gender:
Address:		
City/State/Zip:		
Telephone No.:		Fax:
Contact Person:		
Dollar Amount: \$	%	Schedule C attached? [] Yes [] No
Description of Commodity/Serv	/ice:	
Name of M/WBE Firm:		Race / Gender:
Address:		Race / Gender.
City/State/Zip:		
Telephone No.:		Fax:
Contact Person:		
Dollar Amount: \$	%	Schedule C attached? [] Yes [] No
Description of Commodity/Serv	/ice:	
Name of M/WBE Firm:		Race / Gender:
Address:		
City/State/Zip:		
Telephone No.:		Fax:
Contact Person:		
Dollar Amount: \$	%	Schedule C attached? [] Yes [] No
Description of Commodity/Serv	/ice:	
Total MBE \$		%
Total WBE \$		
Grand Total MBE \$		%
Grand Total WBE \$		*

The undersigned affirms that the foregoing statements are true and correct and include all material information necessary to identify and explain the terms and operations of our joint venture and the intended participation of each partner in the undertaking. Further, the undersigned covenants and agrees to provide to the Village of Oak Park current, complete and accurate information regarding actual joint venture work and the payment therefore, and any proposed changes in any provision of the joint venture agreement, and to permit the audit and examination of the books, records and files of the joint venture, or those of each partner relevant to the joint venture by authorized representatives of the Village of Oak Park.

Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under federal and state laws concerning false statements.

Note: If after filing this Schedule B and before the completion of the joint venture's work on the project, there is any change in the information submitted, the joint venture must submit a revised version of this document to the Village of Oak Park either directly, or through the prime contractor if the joint venture is a subcontractor.

Name of MBE/WBE Partner Firm	Name of non-MBE/WBE Partner Firm
Signature of Affiant	Signature of Affiant
Name and Title of Affiant	Name and Title of Affiant
Date	Date
On this day of	, 20, the above signed
(name	es of affiants)
	e are the persons described in the foregoing Affidavit, same in the capacity therein stated and for the purpose
IN WITNESS WHEREOF, I hereunto	set my hand and seal.
Signature of Notary Public	(SEAL)
Commission Expires:	,
DET III	RN THIS PAGE WITH BID
REIUI	KN INIƏ FAGE WIIN DID



RETURN THIS PAGE WITH BID

Contract Bond

NAME AND ADDRESS OF CONTRACTOR	, as PRINCIPAL,
and NAME AND ADDRESS OF SURETY	, as SURETY, is
held and firmly bound unto the Village of Oak Park (hereafter referred to as "Village") in the penal so	um of CONTRACT
AMOUNT IN WORDS (\$ AMOUNT IN NUMBERS), well and truly to be paid to the Village, for the	ne payment of which
its heirs, executors, administrators, successors and assigns, are bound jointly to pay to the Village under t	the conditions of this
instrument	

WHEREAS, THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the Principal has entered into a written contract with the Village, acting through its President and Board of Trustees, for the construction of work, which contract is hereby referred to and made a part hereof as if written herein at length, and whereby the Principal has promised and agreed to perform the work in accordance with the terms of the contract, and has promised to pay all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished to such Principal for the purpose of performing such work, including paying not less than the prevailing rate of wages in Cook County, where the work is for the construction of any public work subject to the Prevailing Wage Act, and has further agreed to save and indemnify and keep harmless the Village against all liabilities, judgments, costs and expenses which may in any manner accrue against the Village in consequence of granting such contract or which may in any manner result from the carelessness or neglect of the Principal, his agents, employees or workmen in any respect whatever; and has further agreed that this bond will inure to the benefit of any person, firm, company, or corporation, to whom any money may be due from the Principal, subcontractor or otherwise, for any such labor, materials, apparatus, fixtures or machinery so furnished and that suit may be maintained on such bond by any such person, firm, company, or corporation, for the recovery of any such money.

NOW THEREFORE, if the Principal shall well and truly perform the work in accordance with the terms of the contract, and shall pay all sums of money due or to become due for any labor, materials, apparatus, fixtures or machinery furnished to it for the purpose of constructing such work, and shall commence and complete the work within the time prescribed in the contract, and shall pay and discharge all damages, direct and indirect, that may be suffered or sustained on account of such work during the time of performance thereof and until the work shall have been accepted, and shall save and indemnify and keep harmless the Village against all liabilities, judgments, costs and expenses which may in any manner accrue against the Village in consequence of granting such contract or which may in any manner result from the carelessness or neglect of the Principal, his agents, employees or workmen in any respect whatever; and shall in all respects fully and faithfully comply with all the provisions, conditions, and requirements of the contract, then this obligation will be void; otherwise it will remain in full force and effect.

officers this day of	nd the SURETY have caused this instrument to be signed by their respective, 2019.
NAME OF PRINCIPAL	
By:Signature	
Signature	
By:Printed Name	
Its:	
Subscribed to and Sworn before me on the	
day of, 20	
Notary Public	
NAME OF SURETY	
By: Signature of Attorney-in-Fact	
Subscribed to and Sworn before me on the	
day of, 20	019.
Notary Public	

Contract

1.	Madison S	St., Oak Park, IL 60302 acting by and date address of contractor, its executors,	by and between the Village of Oak Park, 123 through its President and Board of Trustees and administrators, successors or assigns (hereinafter
2.	The following a. b. c.	ing documents set forth the terms of this Cor The Village of Oak Park's Notice to Bidders Project 19-6, Pavement Preservation; Contractor's Proposal dated The Contract Bond.	s, Special Provisions and Plans for
3. Bid			inflict with the terms set forth in the Village's Notice to to Bidders, Special Provisions and Plans shall control.
	essary to co		perform all the work, furnish all materials and all labor ns of this Contract and the requirements of the Director
wa	ilar characte ges for legal	ter on public works in Cook County, Illinois,	general prevailing rate of hourly wages for work of a and not less than the general prevailing rate of hourly workers and mechanics employed on this project and
6. bel	The Co		this Contract is authorized to execute this Contract on
	IN WIT	TNESS WHEREOF, the parties have execute	ed this Contract on the date above mentioned.
Atte	est:	V	ilage of Oak Park
		By	
Victoria Scaman Village Clerk (Seal)		nan ()	Cara Pavlicek Ilage Manager
		Name of	Contractor
		Ву:	
		Signature	
		Printed Na	ame

Its: _

Title

PAVEMENT PRESERVATION SPECIAL PROVISIONS

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Micro-surfacing Edge Rut

Micro-surfacing Butt Joint

Traffic Control & Protection

Pavement Patching Special

Bituminous Surface Patching

Maltene-Based Asphalt Rejuvinating

BDE Preventive Maintenance – Micro-surfacing

Introduction and Completion Dates

The contract and work shall be carried out in conformance with the Ordinances of the Village of Oak Park, the attached Plans and Special Provisions, and the latest editions of the following:

- Illinois Department of Transportation "Standard Specifications for the Road and Bridge Constructions" adopted January 1, 2016, hereinafter referred to as the "Standard Specifications".
- BDE Special Provisions
- "Supplemental Specifications and Recurring Special Provisions," adopted January 1, 2016
- "Standard Specifications for Traffic Control Items",
- "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways".

Plan notes shall take precedence over specifications. Special Provisions are supplemental to said specifications, and in case of conflict with any part or parts of said specifications, said special provisions shall take precedent and shall govern.

Completion of Contract:

All work shall be completed by **September 27, 2019**.

Failure to complete work on time will result in payment deductions as liquidated damages as per Article 108.09. Seasonal weather decline, broken equipment, late material supplies, or company's internal problems will <u>not</u> be considered as a basis for extension of contract time.

Alterations, Omissions and Extra Work:

The Village reserves the right to increase or decrease the quantity of any item or portion of the work, or to omit portions of the work, as may be deemed necessary.

Insurance Requirements:

The Contractor shall name the Village of Oak Park as additionally insured under the Contractor's general liability insurance policy in accordance with Article 107.27. Insurance coverage or limits of liability specified in Article 107.27 (d) Umbrella Liability shall be revised according to the limits specified.

1) Each Occurrence Limit

\$2,000,000.00

2) Aggregate Limit

\$2,000,000.00

GENERAL REQUIREMENTS

1. EXISTING MATERIALS:

If during the progress of work involving this contract, certain existing structures, equipment and material are removed from service, all items deemed of value by the Engineer such as street furniture, brick pavers, lighting units, frames and covers, hydrants, round ways, valve boxes and other such salvageable material shall remain the property of the Village of Oak Park. The contractor shall collect and store said material on the job site for pick-up by the Village or as otherwise specified herein.

2. SPRINKLING SYSTEMS

The contractor shall be careful not to damage sprinkling systems that may be located in parkways or lawns adjacent to the curbs and sidewalks, and any damage done to the sprinkling systems due to his negligence shall be repaired by the contractor at his expense to the satisfaction of the Engineer.

If adjustments to the sprinkling systems are needed due to pavement widening or change to the parkway grade, the Contractor shall retain a licensed irrigation contractor to make such adjustments. This work will be paid for separately as specified in this contract.

3. STORAGE OF MATERIALS AND EQUIPMENT

At no time shall the contractor store material and equipment in areas other than those specified by the Engineer. Any damage to sidewalks, curbs, trees, and parkways due to the negligence of the contractor shall be restored by the contractor at his own expense. No additional compensation shall be allowed the contractor for compliance with this requirement.

At no time will the Contractor store material and equipment in parkways areas within tree drip line. The General Contractor is encouraged to protect these areas with "snow fencing" to avoid accidental material dump.

The contractor shall maintain during the entire construction period barricades and warning lights at all material storage areas and around parked construction equipment.

4. EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND

WORK:

The bidder shall comply with Article 102.05 of the Standard Specifications relative to examination of the Plans, Specifications, Special Provisions and site of work and hereby is advised that due to the nature of the contract, special emphasis shall be placed on inspection in detail of the site of the proposed work and familiarization with all local conditions, traffic and otherwise, affecting the contract and the detailed requirements for construction.

5. EXISTING UTILITIES

The contractor shall call JULIE at telephone number: 1 (800) 892-0123 for location of underground utilities prior to beginning of construction so that buried services in

the location of construction may be located and staked. Where adjustments of the utility frames are necessary, the contractor shall contact the respective utility company and make arrangements for their adjustments.

The contractor shall also notify the Water and Sewer Division of the Village of Oak Park as well as the Street Lighting Division prior to the start of construction at any location. Any damage by the contractor to street light cables and water services shall be repaired or replaced by the contractor at his own expense.

The contractor shall make his own investigation to determine the existence, nature and location of all utility lines and appurtenances within the limits of the improvement.

The contractor shall be held responsible for any damage to existing utility lines and appurtenances resulting from the operations of his equipment or men. No extra compensation will be allowed to the contractor for any expense incurred because of delays, inconvenience or interruption to his work resulting from compliance with the above requirements.

6. CLEANING EXISTING STRUCTURES:

All catch basins, manholes, inlets and similar structures newly constructed, adjusted or reconstructed under this contract shall be cleaned of any accumulation of silt, debris, or foreign matter of any kind and all shall be free from such accumulations at the time of final inspection.

7. FIELD OFFICE AND FIELD LABORATORY:

Engineer's field office and field laboratory will not be required for this improvement.

8. LANDSCAPING WORK

Use of Pesticides:

The Contractor is hereby notified that in the event pesticides are to be used in any of the landscape operations of this project, he and/or his subcontractors shall comply with the requirements of Village Code, Chapter 20, Section 10. This code requires the applicator to be licensed in the Village, that the area treated shall be posted at time of application, and the time and location be logged by the applicator.

The work necessary to fulfill these requirements as well as any license fees shall be considered incidental to the Landscaping Pay Items.

Planting and Sodding

To prevent drying of materials during excessive heat, the Contractor shall schedule final planting / sodding operations AFTER September 1st.

9. STAGING AND COMPLETION OF CONTRACT

The contractor shall stage his work in such a way as to cause the least amount of disruption to local traffic access. Close attention shall be paid to the proposed schedule included in these Special Provisions. Specific Pay Items have been included in this project for the contractor to provide the necessary protection to the pavements so that safe and sufficient access to the area is not hampered.

The contractor is hereby reminded of the deadline for completion of this project. The contractor shall pay close attention to this completion date. All work under this contract must be completed by this date. Should the Contractor fail to complete work by the completion date, the Village will assess liquidated damages in accordance with Section 108.09 of the Standard Specifications.

The completion date pertains to the work items outlined in this contract. Any "Punch List" work that is required shall be completed within 30 days of the completion date of this project. Failure to complete any/all punch list work will result in forfeiture of any retainer held in this contract.

As indicated in Article 108.02 of the Standard Specifications, the contractor shall provide the Engineer with a progress schedule prior to starting work, preferably at the time of the pre-construction meeting.

10. MAINTENANCE OF ROADWAYS:

Beginning on the date that the contractor begins work on this project, he shall assume responsibility for the <u>normal</u> maintenance of all existing roadways with the limits of the improvement. This <u>normal</u> maintenance shall include all repair work deemed necessary by the Engineer. (e.g. pot hole patching, street sweeping, refilling trenches over proposed installations, etc.)

Specific Pay Items have been included in this contract to assure that this maintenance work is performed to the satisfaction of the Village. We strongly urge the contractor to utilize these resources so as to reduce the inconvenience of the residents living in these construction areas.

11. CONCRETE BREAKERS:

When removing pavement, curb and gutter, shoulder, and/or any other structures, the use of any type of concrete breakers which might damage underground public or private utilities will not be permitted. Under no circumstances will the use of a frost ball be permitted.

12. FINE AGGREGATE FOR PORTLAND CEMENT CONCRETE AND CLASS SI CONCRETE:

The gradation for fine aggregate for Portland Cement Concrete and Class SI Concrete shall conform to gradation FA 2 as called for under Article 703.02(c) of the Standard Specifications.

13. PROVISIONS FOR CURING TEST SAMPLES:

The contractor will be required to provide storage space, meeting the approval of the Engineer for the initial curing of quality control test specimens made on the project. The storage space shall be such that it will give full protection against direct sunlight, the elements, pilfering and damage. When requested by the Engineer, heat shall be provided by the contractor, with a minimum temperature of 60 degrees Fahrenheit maintained for as long as required.

14. COOPERATION BY CONTRACTOR AND WEEKLY PROGRESS MEETINGS:

Attention is hereby focused on Article 105.06 of the Standard Specifications with regards to the Contractor having on site at all times "A competent English Speaking

Superintendent". This superintendent shall be able to be reached at all times including the days subcontractors are only working on the site. All work instructions shall be channeled through the superintendent.

Weekly progress meetings will be conducted in the Engineer's office. These meetings will focus on the work slated for the upcoming week and highlight of work completed the prior week. If work is found to be progressing smoothly, these meetings may be scheduled on a bi-weekly basis.

15. WORK HOURS AND SCHEDULING LAYOUT OF LINES AND GRADES

The Village of Oak Park Code restricts construction to the hours of 7:00 A.M. and 6:00 P.M., 7 days a week. No equipment may be started on any part of the project prior to 7:00 A.M. Violations of this code are subject to Police enforcement and subsequent fines as outlined in the code.

The contractor shall notify the Resident Engineer a full 24 hours in advance of any layout and/or grade requests. Any requests for layout and grades that are made less than 48 hours in advance will require payment of premium time for the Resident Engineer and Engineering Technician. Such costs will be billed directly to the contractor at a rate of \$75.00 per hour for the two staff members.

16. WORKING IN THE AREA OF EXISTING PARKWAY TREES:

No nails or tacks of any sort shall be used for installing temporary "No Parking" signs on any trees. The contractor shall notify the Village Forester of any potential conflicts between their equipment and parkway trees. The Forester will determine the course of action necessary to reduce such conflict. Also any excavation which disturbs tree roots shall be brought to the attention of the Village Forester. In the event roots need to be trimmed, the hand tools (saw, axe) capable of making a clean, smooth cut shall be used to trim such roots. This work shall be considered incidental to the contract.

17. STREET CLOSURES AND PARKING CONFLICTS

The Village of Oak Park requires a notice of a street closure. The Contractor must notify the Oak Park Police Dept. and Fire Dept. of these closures.

The Contractor shall notify the Engineer 48 hours prior to the street closure.

When the Contractor will be working on a block that requires closure and/or changes to parking restrictions they must coordinate with the Parking Dept. to develop an alternate parking plan for permitted parkers and provide information and notice so residents/permitted parkers are aware of their alternatives.

18. STREET CLOSURE NOTIFICATION

The Contractor shall notify residents 24 hours before the street closure. The notification flyers shall be hand delivered to every house within the closure zone, and NO PARKING signs shall be installed along the block.

For the Village of Oak Park, refer to the Oak Park General Requirements Special Provision, Paragraph 17:

The Village of Oak Park requires a notice of a street closure. The Contractor must notify the Police Dept. and Fire Dept. of these closures.

When the Contractor will be working on a block that requires closure and/or changes to parking restrictions they must coordinate with the Parking Dept. to develop an alternate parking plan for permitted parkers and provide information and notice so residents/permitted parkers are aware of their alternatives.

This item shall be considered incidental to the contract and no additional compensation will be made to comply with the requirements as set forth in the standards outlined above.

19. USE OF FIRE HYDRANTS

If the Contractor desires to use water from fire hydrants, meters and keys shall be obtained from Water and Sewer Department with a \$1000.00 deposit. This applies to all pay items which require using the water, including but not limited to parkway restoration, watering plants, dust control, maintenance of roadways, trenches jetting, asphalt cold milling operations, asphalt rolling operations, etc.

The Contractor shall be held responsible for any damage to fire hydrants, meters, and keys resulting from the operations of his equipment or men. The damaged parts and/or tools shall be replaced and/or repaired by the contractor at his expense to the satisfaction of the Water and Sewer Supervisor and project Engineer.

Fire hydrants shall be accessible at all times to the Fire Department. No materials or other obstructions shall be placed closer to a fire hydrant than 15 feet. Any arrangements of less than 15 feet must be approved by the Fire Department.

20. DISPOSAL OF DEBRIS AND EXCAVATED OR REMOVED MATERIALS

The Contractor is responsible for removal and disposal of all waste material, asphalt, grindings, concrete, stone, dirt or debris generated in the course of the work. The temporary storing of excavated materials on the parkways is not allowed. It shall be the Contractor's responsibility to find an approved dump site for debris and any excavated material.

21. TRAFFIC CONTROL AND PROTECTION

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction Section 700, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards.

During patching operations the contractor or sub-contractor shall maintain through traffic at all times and shall furnish all necessary signs, markings, cones, barricades, warning lights,

flagmen and other traffic control devices as may be required to provide for a safe work environment.

During crack-fill operations and curing time the contractor shall maintain through traffic at all times and shall furnish all necessary signs, markings, cones, barricades, warning lights, flagmen and other traffic control devices as may be required to provide for a safe work environment.

During micro-paving operation and curing time the contractor shall keep the street closed and shall furnish all necessary signs, markings, cones, barricades, warning lights, flagmen and other traffic control devices as may be required to provide for a safe work environment.

This item will be considered incidental to the contract and no additional compensation will be made to comply with the requirements as set forth in the standards outlined above.

22. FINAL PAYMENT AND RETAINAGE

Payments to the Contractor shall be made as estimates of satisfactory work completed to date minus a 5% (five percent) retainage. Final payment and any remaining retention shall be made upon satisfactory completion of contracted work, submission of material quantity tickets and certified payroll.

23. DEFICIENCIY DEDUCTIONS

In addition to Article 105.03 (a - d):

e) Small Quantities and Low Priced Pay-items Deficiency Deductions.

If the Contractor fails to address or correct deficiencies of small quantities or low priced pay-items within specified time frame, a daily deduction up to \$1,000 will be imposed for every working day or fraction after specified time frame until deficiency is corrected. The specified time, which begins upon notification, will be from ½ hour to 10 working days based on the urgency of the situation and the nature of the deficiency. The Engineer will be a sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with specifications. Small quantities and low priced pay-items include but are not limited to prime coat, protective coat, temporary ramps, cleanup, protecting sewer system, and other items which are incidental or result in low total cost, but are essential to quality of final product or public safety.

A Contractor provided laboratory shall develop the Job Mix Formula (JMF) for the micro-surfacing mixture, shall verify the functioning of the set regulating additives, and shall present certified test results for the Engineer's approval. This laboratory shall be recognized by the International Slurry Surfacing Association as being capable of performing mix designs. The Engineer will verify that the laboratory tests required in ISSA A143 have been conducted.

The Contractor shall provide the Engineer with letters of certification from each supplier that all materials used in the project comply with the Standard Specifications and Special Provisions indicated. Final payment will not be made until all letters of certification have been received.

Contractor provided testing laboratory shall provide <u>one</u> field report confirming micro-surfacing mixture compliance with mix design. The test shall be performed on the first day of paving.

Quality Assurance laboratory provided by the Village will randomly repeat compliance tests during paving days at the mixing site and in the field.

25. 44 ILLINOIS ADMINISTRATIVE CODE SEC. 650.320

RULES FOR PREQUALIFICATION OF CONTRACTORS, AUTHORIZATION TO BID:

Section 650.320 b) is waved. The "contractor's Available Work Rating for all applicable categories" does not have to be "equal or exceed 50 percent of the estimated value of contract."

THERMOPLASTIC PAVEMENT MARKINGS

Description:

The installation of Thermoplastic Pavement Markings shall meet the requirements of Section 780 of the Standard Specifications.

Method of Measurement:

Lines will be measured for payment in place in feet to the nearest tenth. Double yellow lines will be measured as two separate lines.

Basis of Payment:

This work will be paid for at the contract unit price per <u>LINEAL FOOT</u> for THERMOPLASTIC PAVEMENT MARKINGS – LINE, of the size and color specified. The price shall be payment in full for furnishing all materials, labor and equipment necessary to complete the work as specified herein and to the satisfaction of the Engineer.

FIBER MODIFIED ASPHALT CRACK SEALING

Description

This item shall meet the requirements of the Section 451 of Standard Specifications and the BDE Special Provision for Preventive Maintenance – Micro-surfacing, except as specified herein, and consists of sealing and cleaning of cracks, voids or joints with asphalt cement reinforced by polypropylene fibers.

<u>Material Inspection:</u> The Contractor shall provide the Village of Oak Park with letters of certification from each supplier that all materials used in the project comply with the Standard Specifications and Special Provisions indicated.

<u>Street Sweeping</u>: Immediately prior to crack filling the Contractor shall sweep and clean the streets to make sure the surface is in acceptable condition. Any mechanical sweeping, hand brooming and/or clean up before or after crack fill application will be included in the cost of FIBER MODIFIED ASPHALT CRACK SEALING.

<u>Material</u>: The sealant shall consist of a mixture either polypropylene or polyester fibers with liquid asphalt cement. The use of ready-mixed fiberized asphalt blocks shall not be allowed. The asphalt cement shall be PG 64-22 and meet the requirements of Article 1032.05 of Standard Specifications.

Fibers shall either be short cut polypropylene or polyester fibers chosen by the contractor. A certificate from the supplier showing that the fibers meet the physical properties stated in the BDE Special Provision b), (1), b. (Attached).

<u>Preparation of Mixture:</u> The sealant materials shall be combined in an oil jacketed double wall kettle (min 350 gallon capacity) equipped with a reversing rotary auger action agitator and separate thermometers for the oil bath and the mixing chamber. The unit shall also be equipped with a reversible hydraulic two inch hot asphalt pump and a recirculating pump to circulate the oil bath. Operating temperature in the kettle should be between 255 and 285° F, and shall never exceed 290° F.

Construction Methods: The sealant material shall only be applied when the joints and cracks and adjacent pavement surfaces are dry and clean. The cracks and joints to be sealed shall be cleaned by air blasting, hand tools, or other method approved by the Engineer to remove all foreign material for proper bonding of the sealant. The mixture shall be installed under high pressure directly into and over the crack or joint. The crack shall be completely filled to its full depth and a membrane 1/8 inch (+/-1/16 inch) by 3 inches wide shall be formed on the surface of the pavement.

The Contractor must use caution to avoid excessive use of the material in either thickness or location. Material placed in excess of 103% of the historic application rates of 0.19, pounds per square yard for streets designated as light application, 0.26 pounds per square yard for medium application and 0.35 pounds per square yard for heavy application will not be paid for without prior approval of the Engineer.

The Contractor must ensure that material does not come into contact with structure frames or lids. Any misplaced material must be immediately removed and the frame or lid cleaned.

Traffic shall not be allowed on the sealant until properly cured. The sealant shall be dusted with fine aggregate (FA-6) if the ambient temperature is greater than 75 F and the street must be opened to traffic. The Contractor is cautioned on the excessive use of sand.

Method of Measurement

The FIBER MODIFIED ASPHALT CRACK SEALING will be measured in pounds of crack-fill material installed.

At the end of each working day the Contractor shall obtain a weight certification and shall submit the documentation to the Engineer daily. Work shall not begin until weight certifications for the previous day's work have been submitted to the Engineer.

Basis of Payment

This work will be paid for at the contract unit price per POUND for FIBER MODIFIED ASPHALT CRACK SEALING and will be considered full compensation for all labor, equipment, transportation, and materials to complete the described work.

PAVEMENT MARKING REMOVAL

Description

This work shall consist of removing existing pavement markings (thermo-plastic) at those locations necessary to insure a smooth existing condition for micro-surfacing. The engineer shall mark these locations prior to the onset of work.

The Contractor shall be responsible for supplying all the equipment and material necessary for the completion of this work. The existing pavement markings shall be removed from the by a method that does not cause excessive materially damage to the pavement surface.

Refer to Sections 783.01 to 783.06 of the Standard Specifications for Road and Bridge Construction adopted April 1, 2016 for acceptable equipment and cleaning.

Basis of Payment

This work will be paid for at the contract unit price per SQUARE FOOT for PAVEMENT MARKING REMOVAL, which price shall be considered as full compensation for all labor, equipment, transportation, and materials to complete the described work.

FINE AGGREGATE (FA-6)

Description

This item of work shall consist of providing and applying to the freshly laid sealant a dusting coat of Fine Aggregate (FA-6) where directed by the Engineer to prevent tracking.

The Contractor shall be responsible for sweeping and cleaning streets to make sure the street surface is in an acceptable condition after crack filling. All loose fine aggregates shall be removed from the pavement surface by means of mechanical sweepers or hand broom within 72 hours. Removal and sweeping operations shall be included in the cost of FINE AGGREGATE (FA-6).

Basis of Payment

Sanding of the sealant will be paid for at the contract unit price per TON applied for "FINE AGGREGATE (FA-6), which price shall be considered as full compensation for all labor, equipment, transportation, and materials to complete the described work.

MICRO-SURFACING 1 PASS, MICROSURFACING 2 PASSES

Description

This item shall meet the requirements of the BDE Special Provision for Preventive Maintenance – Micro-surfacing Effective: January 1, 2009, revised April 1, 2016 (a copy is attached). Prior to applying the mixture, the Contractor shall clean and fill the pavement cracks and voids, which are paid for separately.

Micro-Surfacing material shall be placed at locations shown on the attached listing sheets and location maps.

During construction, it is important to maintain the mixture consistent rendering a finished product that is uniform in color and composition.

The Contractor must provide a neat, straight line edge along the toe of the curb and at the Micro-Surfacing limits.

The Contractor shall protect manhole covers and other structure frames and lids from being coated.

Material Inspection and Testing

A Contractor provided laboratory shall develop the Job Mix Formula (JMF) for the microsurfacing mixture, shall verify the functioning of the set regulating additives, and shall present certified test results for the Engineer's approval. This laboratory shall be recognized by the International Slurry Surfacing Association as being capable of performing mix designs. The Engineer will verify that the laboratory tests required in ISSA A143 have been conducted.

The Contractor shall provide the Engineer with letters of certification from each supplier that all materials used in the project comply with the Standard Specifications and Special Provisions indicated. Final payment will not be made until all letters of certification have been received.

Method of Measurement

Micro-surfacing 1 Pass and Micro-surfacing 2 Passes will be measured as follows:

- Width: in Lineal Feet and Tenths, edge to edge of paved area
- Length: the limits will be measured in the field in relation to property lines and converted to the total length based on 3 inch aerial photographs from Village of Oak Park database.
- All additional smaller areas, i.e. around curb radii, will be measured in the field separately or estimated based on geometry standards.

Basis of Payment

This work will be paid for at the contract unit price per SQUARE YARDS for MICROSURFACING, 1 PASS, TYPE II, 20 LB/SQ YD. or MICROSURFACING 2 PASSES, totaling 30 LB/SQ YD which price shall be considered as full compensation for all labor, equipment, transportation, and materials to complete the described work.

BITUMINOUS MATERIAL (TACK COAT)

Where specified on the plans, prime coat will be applied prior to micro-surfacing. All material and equipment used in application of BITUMINOUS MATERIAL TACK COAT shall conform to Article 406 of the Specifications.

Basis of Payment

This work will be paid for at the contract unit price per POUND of residual asphalt BITUMINOUS MATERIAL (TACK COAT), which price shall be considered as full compensation for all labor, equipment, transportation, and materials to complete the described work.

MICROSURFACING EDGE RUT FILLING

Description

This work consists of correcting ruts-like depressed pavement mostly along the curbs with Micro-surfacing material Type II or Type III. The type of the material shall be approved by the Engineer.

This item shall generally meet the requirements of the BDE Special Provision for Preventive Maintenance – Micro-surfacing Effective: January 1, 2009, revised April 1, 2016 regarding RUT FILLING.

Prior to applying the mixture, the Contractor shall clean and remove all loose material along the curb edge at least one day prior to the 1 PASS MICRO-SURFACING application.

The Contractor shall pay special attention to removing all loose pavement material (either by hand work or mechanical means) in the location of the MICRO-SURFACING EDGE RUT FILLING to produce a smooth and even surface for the application of the 1 PASS MICRO-SURFACING operation.

The Contractor shall protect manhole covers and other structure frames and lids from being coated.

Basis of Payment

This work will be paid for at the agreed upon unit price per SQUARE FOOT for MICRO-SURFACING EDGE RUT FILLING which price shall be considered as full compensation for all labor, equipment, transportation and materials to complete the described work.

MICRO-SURFACING BUTT JOINT

Description

This work consists of creating a butt joint at the end of a block as a sharp, straight line perpendicular to center line of the street. The joint can be created by using non-melting covers nailed or taped to existing surface, by dragging a small spreader box or by other means. If covers and tapes are used, they shall be removed before curing of micro-surfacing material and without tearing it off. The thickness of the material at created joint shall be no more than ½ inch.

Using only a hand squeegee or lute may be approved by the Engineer after a successful test strip. The failed test strip will not be paid for, but its area will be included in Micro-surfacing area paid by square yards.

Method of Measurements

The butt joint will be measured in place along created line in feet and tenths. For the typical butt joint outside of intersections, the length of the butt joint shall be equal to agreed width of paved block used to calculate micro-surfaced area.

Basis of Payment

This work will be paid for at the agreed upon unit price per LINEAL FOOT for MICRO-SURFACEING BUTT JOINT, which price shall be considered as full compensation for all labor, equipment, transportation and materials to complete the work as described.

TRAFFIC CONTROL AND PROTECTION

Traffic control shall be in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards contained herein.

Prior to beginning work, the Contractor will furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by a subcontractor, consent shall be requested of the Engineer in accordance with Article 108.01 of the Standard Specifications for Road and Bridge Construction. This shall not relieve the Contractor of the foregoing requirement for a responsible individual in his direct employ. The Village Engineering Division will provide the Contractor the name of its representative who will be responsible for the administration of the Traffic Control Plan.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the following 1) Highway Standards, 2) Supplemental Specifications and Supplemental Special Provisions, and 3) other special provisions relating to traffic control.

- 1) Article 107, 701, and 702 of the Standard Specifications
- 2) Utility work zone traffic control standards and guidelines

The contractor shall maintain through traffic at all times during the work period and shall furnish all necessary signs, markings, cones, barricades, warning lights, flagmen and other traffic control devices as shown on the attached drawings and/or as directed by the Engineer.

Barricades and/or cones used for channelization or delineation and warning signs shall subsequently placed in the direction of the traffic flow and removed in reverse order. Lane closure signs and flagmen signs shall be erected prior to barricades and/or cones and remain erected until such time as all traffic control devices have been removed from the pavement. All vehicles and/or non-operating equipment shall be parked at least eight (8') feet from the moving traffic stream during working hours except that privately owned vehicles by workers will not be allowed to park within the construction zone at any time.

During non-working hours, all vehicles and equipment shall be parked in an area approved by the Engineer. Work zone signs referring to temporary lane closures used during working hours shall be removed or covered during non-working hours. Flashing lights installed above the first two signs on each approach to a work area involving a night-time lane closure shall be high intensity units. These units shall operate 24 hours per day. Open flame burners will not be permitted. All traffic control devices shall meet the approval of the Engineer.

Towing of Vehicles Parked in Work Zone

It is the responsibility of the Contractor to keep the work zone clear of parked cars to be able to perform the necessary scheduled work activities. Areas which require clearance shall be properly posted with temporary "NO PARKING, CONSTRUCTION AREA, TOW ZONE" signs spaced a maximum of 200 feet apart. Also barricades shall be placed in the parking lane every 50 feet apart to warn potential parkers.

Should it be necessary to remove and relocate a vehicle the Contractor shall immediately notify the Engineer and/or VOP Police Department, to contact the Village's towing service for relocating said vehicle. The cost for this relocation shall be the responsibility of the Contractor and consider incidental to the Traffic Control and Protection pay item. If the area is not properly posted 24 hours in advance, no vehicle towing will be allowed.

Any delays or adjustment in work scheduling required due to illegally parked vehicle and their relocation will not be paid for separately but shall be considered incidental to the contract. Any outstanding charges not paid for by the contractor for this relocation service will be deducted from the final payment.

Traffic Control and Protection Standard 701606 Major Streets

Bituminous surface patching on major streets requires staging work to allow traffic in both directions. If necessary, the Contractor to provide No-Parking signs.

(see attachment)

BASIS OF PAYMENT

This item will be paid for at the contract LUMP SUM price for TRAFFIC CONTROL AND PROTECTION LOCAL STREETS and TRAFFIC CONTROL AND PROTECTION STANDARD 701606 MAJOR STREETS which shall be payment in full for compliance with the above requirements and for all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain, and remove all traffic control devices as specified herein.

BITUMINOUS SURFACE PATCHING

This item shall meet the requirements of the Sections 442 OF Standard Specifications for Road and Bridge Construction, and the applicable guidelines contained in Special Provisions and Details.

The work shall consist of sawing bituminous surface, removing existing bituminous surface material to the depth specified (two and four inches), priming, and replacing it with Hot Mix Asphalt Surface Course, Mix "D", N50.

If removal of existing surface course reveals aggregate layer or unsuitable Material, additional material shall be removed, to the Max depth of 8 inches. Exposed base shall be compacted and primed.

The patch will be considered paid for as 4 inch thick only after visual inspection by the Village representative. The 4 inch patch shall consist of 2 inches of Hot Mix Asphalt Binder Course IL-19, N50 and 2 inches of Hot Mix Asphalt Surface Course, Mix "D", N50.

Required traffic control and protection will be paid for separately.

BASIS OF PAYMENT

This work will be paid for at the contract unit price per SQUARE YARD for BITUMINOUS SURFACE PATCHING of the type and thickness specified, which price shall include all labor, equipment, materials, removal, and disposal of excavated material required to perform this work.

PAVEMENT PATCH "SPECIAL"

This item shall meet the requirements of the Sections 442 OF Standard Specifications for Road and Bridge Construction, and the applicable guidelines contained in Special Provisions and Details.

DESCRIPTION OF WORK

The PAVEMENT PATCH SPECIAL item will be used when in the process of milling and-or removing pavement for a Class "D" patch, unsuitable base or subbase materials are encountered.

The work shall consist of full depth (8" max.) sawcutting, removing existing pavement material (bituminous and or concrete) and any unsuitable base materials to the maximum depth of 8 inches. The Contractor then shall prime the exposed base and place Hot Mix Asphalt Binder Course IL-19, N50 to a depth allowing placement of 2 inches of Hot Mix Asphalt Surface Course "D", N50.

If removal of existing pavement materials reveals unsuitable base or sub base material (aggregate, asphalt or portland cement concrete), this material shall be removed, to a depth acceptable to the engineer. The Contractor shall then replace removed material with compacted Aggregate CA-6 to a depth acceptable to the engineer. Full depth sawcutting will be considered incidental to this item.

Required traffic control and protection paid for separately.

BASIS OF PAYMENT

This work will be paid for at the contract unit price per SQUARE YARD for PAVEMENT PATCH "SPECIAL" of the type and thickness specified, which price shall include all labor, equipment, materials and removal of all excavated material required to perform this work.

Disposal of any excavated "Mixed Soil" material will be paid for from the ENVIROMENTAL CONTINGENCY item. This item shall include all additional labor and equipment use required to remove, transport and dispose of all above mentioned material. The price paid for ENVIROMENTAL CONTINGENCY shall be the cost of disposal ticket (s) times a multiplier of 1.4.

Additional base or sub base material (if req.) will be paid for at the contract unit price per cubic yard for SUBBASE GRANULAR MATERIAL TYPE B (31101100).

Emulsified Maltene-Based Rejuvenator:

- A. General Scope: This work shall consist of furnishing all labor, material and equipment necessary to perform all operations for the application an Emulsified Maltene-Based Asphalt Rejuvenating Agent to bituminous asphaltic concrete surface courses. The rejuvenation of surface courses shall be by spray application of a cationic Maltene-Based Rejuvenating Agent composed of petroleum oils and resins emulsified with water. The base used for the emulsion shall be naphthenic. All work shall be in accordance with the specifications, any applicable drawings, and subject to the terms and conditions of this contract.
- B. **Pre-Construction:** The CONTRACTOR shall present samples of materials, laboratory reports, calibration reports, and proof of work experience as required by these specifications to the Resident Engineer at the pre-construction meeting.
- C. Material Specifications: The emulsion will be a naphthenic petroleum <u>maltene-based</u> rejuvenating agent composed of four petroleum <u>maltene components</u> (listed below) <u>uniformly emulsified with water</u>. Each bidder must submit with his bid a certified statement from the asphalt rejuvenator manufacturer showing that the asphalt rejuvenating emulsion conforms to the required physical and chemical requirements.

MALTENE-BASED PETROLEUM ASPHALT REJUVENATOR SPECIFICATIONS:

Property	Test Method ASTM Min.	OR SPE	Requirement Max.	s
Viscosity @ 25°C, SFS	D244		15	
40				
Residue, w%	D244 (Mod) ³	60		65
Miscibility Test	D244 (Mod.)2		Pass	
Sieve Test, w%	D244(Mod.)1	-		0.1
Particle Charge Test	D244		Positive	
Tests on Distillation Residue:				
Flash Point, COC, C	D92	196		-
Viscosity@ 60C, C 200	D2170		100	
Asphaltenes, %w	D2006-70	er.		1.00

Maltene Dist. Ratio (Polar Compounds) + (First Acidaffins) (Saturates) + (Second Acidaffins)	D2006-70	0.3		0.6
Polar Compounds/Saturates Ratio	D2006-70	0.5		
Asphaltenes, w% Saturated Hydrocarbons, w%	D2006-70 D2006-70		21	1.0

1Test procedure identical with ASTM D-244 except that distilled water shall be used in place of two (2) percent sodium oleate solution.

2Test procedure identical with ASTM D-244 except that .02 Normal Calcium Chloride solution shall be used in place of distilled water.

3ASTM D-244 Modified Evaporation Test for percent of residue is made by heating 50 gram sample to 149 C (300 F) until foam ceases, then cool immediately and calculate results.

- D. Material Performance: The rejuvenating agent shall have record of at least two years of satisfactory service as asphalt rejuvenating agent and in-depth sealer. Satisfactory service shall be based on the capability of the material to penetrate, replace lost maltene fractions, and decrease the viscosity and increase the penetration value of the in-place asphalt binder as follows; the viscosity shall be reduced by a minimum of forty-five (45) percent, the penetration value shall be increased by a minimum of twenty-five (25) percent. Testing shall be performed by an independent testing laboratory on extracted asphalt cement from pavement to a depth of three-eighths inch (3/8"). In addition, the pavement shall be in-depth sealed to prevent the intrusion of air and water. The bidder must submit with their bid:
 - 1. Asphalt Rejuvenator product name and descriptive literature. Literature shall be descriptive and detailed information and shall show it at least meets the material specifications.
 - 2. A current Material Safety Data Sheet (MSDS) for the material.
 - 3. The manufacturer's certification that the material proposed for use is in compliance with these specification requirements.
 - 4. Previous use documentation and test data conclusively demonstrating that the rejuvenating agent has been used successfully for a period of two years by government agencies such as Cities, Counties, or DOT's.
 - Testing data from a minimum of five projects showing that the asphalt rejuvenating agent has been proven to perform, as heretofore required, through field testing by an independent testing laboratory as to the required change in the asphalt binder viscosity and penetration number.

- E. **Product Standards:** The product <u>"Reclamite"®</u> produced by Tricor Refining, LLC is the standard for the naphthenic emulsified petroleum maltene-based asphalt rejuvenating agent requirements and the prices quoted on the Bid Sheet Base Bid shall be for one of these standards.
- F. Applicator Experience: The asphalt rejuvenating agent shall be applied by an experienced applicator of such material. The bidder shall have a minimum of 5 years experience in applying the product proposed for use on municipal streets. The Contractor must submit with his bid a list of five (5) projects on which he applied said rejuvenator. He shall indicate the project dates, number of square yards treated in each and the name and phone number of the manager in charge of each project.

 A project superintendent knowledgeable and experienced in application of the asphalt rejuvenating agent must be present and in control of each day's work. The bidder shall submit at the preconstruction meeting a written experience outline of the project superintendent.
- G. Application Temperature and Weather Limitations: The temperature of the asphalt rejuvenation emulsion, at the time of application shall be as recommended by the manufacturer. The asphalt rejuvenating agent shall be applied only when the existing surface to be treated is thoroughly dry. The asphalt rejuvenating agent shall not be applied when the ambient temperature is below 40 degrees Fahrenheit or when temperatures are forecasted to fall below 35 degrees Fahrenheit within twenty-four (24) hours of application. It shall be the discretion of the Resident Engineer to determine when weather conditions are not appropriate for the application to occur. Contractor shall halt the application process when so ordered by the Resident Engineer.
- H. Handling of Asphalt Rejuvenating Agent: Contents in tank cars or storage tanks shall be circulated at least forty-five minutes before withdrawing any material for application. When loading the distributor, the asphalt rejuvenating agent concentrate shall be loaded first and then the required amount of water shall be added. The water shall be added into the distributor with enough force to cause agitation and thorough mixing of the two (2) materials. To prevent foaming, the discharge end of the water hose or pipe shall be kept below the surface of the material in the distributor which shall be used as a spreader. The distributor truck will be cleaned of all of its asphalt materials, and washed out to the extent that no discoloration of the emulsion may be perceptible. Cleanliness of the spreading equipment shall be subject to inspection and the Contractor shall halt the application process when so ordered by the Project Manager.
- I. Application Equipment: The distributor for spreading the emulsion shall be self- propelled, and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the asphalt rejuvenating agent uniformly on variable widths of surface at readily determined and controlled rates from 0.05 to 0.5 gallons per square yard of surface, and with an

allowable variation from any specified rate not to exceed five (5) percent of the specified rate. Distributor equipment shall include full circulation spray bars, pump tachometer, volume measuring device and a hand hose attachment suitable for application of the emulsion manually to cover areas inaccessible to the distributor. The distributor shall be equipped to circulate and agitate the emulsion within the tank. A check of distributor equipment as well as application rate accuracy and uniformity of distribution shall be made when directed by the Resident Engineer. The truck used for sanding shall be equipped with a spreader that allows the sand to be uniformly distributed onto the pavement. The spreader shall be able to apply 1 to 4 pounds of sand per square yard in a single pass. The spreader shall be adjustable so as to not broadcast sand onto driveways or tree lawns. Any equipment which is not maintained in full working order, or is proven inadequate to obtain the results prescribed, shall be repaired or replaced at the direction of the Resident Engineer.

- J. Application of Rejuvenating Agent: The asphalt rejuvenating agent shall be applied by a distributor truck at the temperature recommended by the manufacturer and at the pressure required for the proper distribution. The emulsion shall be so applied that uniform distribution is obtained at all points of the areas to be treated. Distribution shall be commenced with a running start to insure full rate of spread over the entire area to be treated. Areas inadvertently missed shall receive additional treatment as may be required by a hand sprayer application. Application of the asphalt rejuvenating agent shall be on one-half width of the pavement at a time. When the second half of the surface is treated, the nozzle nearest the center of the road shall overlap the previous by at least one-half the width of the nozzle spray. In any event the construction joint of the pavement shall be treated in both passes of the distributor truck. Before spreading, the asphalt rejuvenating agent shall be blended with water at the rate of 60% rejuvenating agent and 40% water, by volume or as specified by the manufacturer. The combined mixture of asphalt rejuvenating agent and water shall be spread at the rate of 0.05 to 0.10 gallons per square yard, or as approved by the Resident Engineer following field testing. Where more than one application is to be made, succeeding applications shall be made as soon as penetration of the preceding application has been completed and approval is granted for additional applications by the Resident Engineer. Grades or super elevations of surfaces that may cause excessive runoff in the opinion of the Resident Engineer shall have the required amounts applied in two (2) or more applications as directed. Said treatment shall be uniformly applied by a method acceptable to the Resident Engineer. Care should be taken during all rejuvenator applications to not get excessive material on the curb and gutter. Additional cleaning may be required if this occurs at the contractor's expense. After the rejuvenating emulsion has penetrated, a coating of sand shall be applied to the surface in sufficient amount to protect the traveling public as required by the Resident Engineer. The Contractor shall furnish a quality inspection report showing the source and manufacturer of asphalt rejuvenating agent. When directed by the Resident Engineer, the Contractor shall take representative samples of material for testing.
- K. Field Testing: Viscosity and penetration testing shall be done on three different streets during the application process. Four (4) cores shall be taken at each location prior to and

approximately 50 days following the application of the maltene-based asphalt rejuvenator. Core locations will be determined by the Project Manager and core holes shall be filled with approved mix. The top three-eighths (3/8) inch of each core shall be removed and the asphalt extracted and recovered using California Test Method 365 (CTM 365). Viscosities of the recovered asphalt binder shall be determined using a sliding plate microviscometer (CTM 348). Penetration numbers shall be calculated from a nomograph. The results from the pre-treatment and the post-treatment cores from each street shall be compared and the present change in each calculated. The average value of the pre- treatment results and the post treatment results will be used to determine the final Viscosity and Penetration value. No compensation will be made for material not meeting specifications. Test indicating failure to meet the specifications may result in additional tests being required on other streets. No additional compensation will be made for additional testing. Testing shall be performed by an independent third party testing laboratory that has experience with the specified test methods and equipment. Testing shall be coordinated with owner's materials testing laboratory and in their presence when cores are extracted or when required by the Project Manager. The owner reserves the right to extract treated cores 1 year after rejuvenator application. Viscosity and Penetration values shall be determined using California Test Method 365 (CTM 365) and compared to the original untreated values.

- L. Street Sweeping: The Contractor shall be responsible for sweeping and cleaning of the streets prior to and after treatment. Prior to treatment, the street will be cleaned of all standing water, dirt, leaves, foreign materials, etc. This work shall be accomplished by hand brooming, power blowing or other methods approved by the Resident Engineer. If hand cleaning is not sufficient, then a self-propelled street sweeper shall be used. All sand used during the treatment must be removed no later than forty-eight (48) hours after treatment of the street. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc. must be cleaned and free of any material that would interfere with the treatment. All debris generated by sweeping shall be picked up and disposed of by the contractor. Street sweeping shall be included in the price bid per square yard for asphalt rejuvenating agent. If after sand is swept and it is determined that a hazardous condition exists on the roadway, the Contractor must apply additional sand and sweep no later than twenty-four (24) hours following reapplication. No additional compensation will be allowed for reapplications and removal of sand.
- M. Traffic Control and Safety: The Contractor shall schedule his operations and carry out the work in a manner to cause the least disturbance and/or interference with the normal flow of traffic over the areas to be treated. Treated portions of the pavement surfaces shall be kept closed and free from traffic until penetration has become complete and the area is suitable for traffic. Cure time shall be no longer than 90 minutes. When traffic must be maintained at all times on a particular street, then the Contractor shall apply asphalt rejuvenating agent to one (1) lane at a time. Traffic shall be maintained in the untreated lane until the traffic may be switched to the completed lane. Access to adjacent properties shall be maintained during the application. The Contractor shall be responsible for all traffic control and signing required to permit safe travel. All signing and barricading of the work zone shall comply with MUTCD guidelines and State standards. The Contractor shall notify the Resident Engineer as to the streets that are to be treated each

day. All support vehicles used shall also have flashing beacons that can be seen from all sides of the vehicle, for safety considerations for all work on major arterials. If the Contractor fails to provide the required signing, the Contractor shall stop all operations until safe signing and barricading is achieved.

N. Spreading/Ordering of Sand or Screenings: The Contractor will furnish and apply sand or lime screenings. The contractor shall furnish all equipment, tools, labor and incidentals necessary to perform the sanding operation in accordance with this contract. Spreading shall consist of applying free flowing sharp sand, FA2 or limestone screenings to insure even distribution of the sand or screenings to be worked into any voids in the payment surface as directed by customer representative. A twin spinner, rubber belt feed system aggregate distributor shall be used for uniform application. The aggregate distributor shall apply sand or screenings at a rate of 1-4 pounds per square yard.

Aggregate distributor must be able to carry enough aggregate to cover an applied load of the rejuvenating agent, at least (9) nine tons. Repeated sanding may be required on some areas of pavement and contractor must be available on an as needed basis to provide the required sanding.

- O. Resident Notification: The Contractor shall distribute by hand, a typed notice to all residences and businesses on the street to be treated. The notice will be delivered no more than 24 hours prior to the treatment of the road or as required by each individual agency. The notice will have a local phone number that residents may call to ask questions. The contractor shall also place the notice on the windshield of any parked cars on the street
- P. <u>Basis of Payment</u>: Asphalt rejuvenating agent shall be measured by the SQUARE YARD of material in place and will be paid for at the contract unit price for Maltene Based Asphalt Rejuvenating Agent per square yard. Prices shall be full compensation for furnishing all materials, equipment, labor and incidentals to complete the work as specified and required.

To:

All Regional Engineers

From:

Maureen M. Addis

Subject:

Special Provision for Preventive Maintenance -

James In Black

Micro-Surfacing

Date:

April 15, 2016

This special provision was developed by the Bureau of Materials and Physical Research to:

- · clarify crushed aggregate requirement,
- add polyester fibers to Jobsite-Mixed Sealant, and
- revise tack coat application rate to reflect residual asphalt.

This special provision should be inserted into preventive maintenance – microsurfacing contracts and should be used in lieu of Check Sheet #30 Preventive Maintenance – Micro-Surfacing.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the July 29, 2016 and subsequent lettings. The Project Development and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory April 15, 2016.

80374m

PREVENTIVE MAINTENANCE - MICRO-SURFACING (BDE)

Effective: January 1, 2009 Revised: July 1, 2016

Description. This work shall consist of micro-surfacing hot-mix asphalt (HMA) surfaces.

Materials. Materials shall be according to the following.

(a) Micro-Surfacing. Materials shall be according to the following Articles/Sections of the Standard Specifications.

Item (1) Mineral Filler (Note 1)	Article/Section
(2) Water	1002
(3) Coarse Aggregate (Note 2)	1004.03
(5) Latex-Modified Emulsified Asphalt (Note 3)(6) Additives (Note 4)	

Note 1. The mineral filler shall be Type 1 portland cement.

Note 2. The coarse aggregate material shall be selected from the table in Article 1004.03(a) of the Standard Specifications based upon the friction aggregate mixture specified. The quality of the aggregate shall be Class B and the gradation shall be as shown in the table below.

Sieve Size	Type II % Passing	Type III % Passing 1/
3/8 in. (9.5 mm)	100	100
#4 (4.75 mm)	95 ± 5	80 ± 10
#8 (2.36 mm)	77 ± 13	57 ± 13
#16 (1.18 mm)	57 ± 13	39 ± 11
#30 (600 µm)	35 ± 10	26 ± 8
#50 (330 µm)	19 ± 6	18 ± 7
#100 (150 µm)	15 ± 6	12 ± 6
#200 (75 µm)	10 ± 5	10 ± 5

1/ Rut filling mixes shall be constructed using a Type III gradation. All surface mixes shall be constructed using a Type II gradation.

When coarse aggregate is used, it shall be crushed gravel, crushed stone, crushed slag, crushed sandstone, or crushed steel slag. The blending, alternate use, and /or substitutions of aggregates from different sources for use in this work will not be permitted without the approval of the Engineer. Any blending shall be by interlocked

mechanical feeders. The blending shall be uniform, compatible with the other components of the mix, and the equipment shall be approved by the Engineer.

If blending aggregates, the blend shall have a washed gradation performed every other day or a minimum of three tests per week. Testing shall be completed before the aggregate receives final acceptance for use in the mix.

Aggregates shall be screened at the stockpile prior to delivery to the paving machine to remove oversized material or contaminants.

Note 3. CSS-1h Latex Modified Emulsified Asphalt. The emulsified asphalt shall be a quick-traffic latex modified asphalt emulsion containing a minimum of 3.0 percent latex solids by weight of asphalt binder. The latex shall be milled or blended into the emulsifier solution prior to the emulsification process. The CSS-1h latex modified emulsified asphalt shall be according to the following.

Test (AASHTO T 59)	Result
Viscosity, Saybolt Furol, 77 °F (25 °C), SFS	20-100
Storage Stability Test, 24 hours, %	1 max.
Particle Charge Test	Positive
Sieve Test, No. 20 (850 µm), retained on sieve, %	0.10 max.
Distillation Test, Residue from distillation test to 347 ± 9 °F (175 \pm 5 °C), %	62 min.

Tests on residue from distillation	Result
Penetration, 77 °F (25 °C), 100 grams, 5 seconds, (AASHTO T 49), dmm	40-90
Ductility, 77 °F (25 °C), 50 mm/min, (AASHTO T 51), mm	400 min.
Solubility in trichloroethylene, (AASHTO T 44), %	97.5 min.
Softening Point, (AASHTO T 53), °F (°C)	135 (57) min.
Absolute Viscosity, 140 °F (60 °C), (AASHTO T 202), Poises (Pa · sec)	8,000 (800) min.

Note 4. Additives may be added to the emulsion mix or any of the component materials to provide the control of the quick-traffic properties. They shall be included as part of the mix design and be compatible with the other components of the mix.

- (b) Crack/Joint Sealant. The crack/joint sealant shall be a fiber-modified asphalt binder mixed at the jobsite or premixed.
 - (1) Jobsite-Mixed Sealant. The sealant shall consist of an asphalt binder and fibers, and be according to the following.

- a. Asphalt Binder. The asphalt binder shall be PG 58-28, PG 58-22, or PG 64-22 and meet the requirements of Article 1032.05 of the Standard Specifications.
- b. Fibers. Fibers shall be short cut polypropylene or polyester fibers meeting the properties listed below. The fiber will be accepted by certification. The Contractor shall supply a certification from the manufacturer stating that it meets the specified requirements.

Property	Value	
Toperty	Polypropylene	Polyester
Length, in. (mm)	0.3 - 0.5 (8 - 12)	0.25 ± 0.02 (6.3 ± 0.5)
Denier	13 - 16	3 - 6
Crimps	None	None
Tensile Strength, min., psi (kPa)	40,000 (275,000)	70,000 (482,000)
Specific Gravity (typical)	0.91	1.32 - 1.40
Moisture Regain @ 70 °F (21 °C) and 65% RH (typical), %	0.1	N/A
Elongation at Break, %		35 - 38
Melt Temperature, °F, °C		475 – 490 (246 – 254)
Percent Fibers by weight (mass)	8.0	5.0 ± 0.5

- c. Sealant Heating. The sealant shall be heated in the kettle at temperatures between 255 and 285 °F (124 and 141 °C).
- (2) Premixed Sealant. The sealant shall be packaged and consist of an asphalt binder, fibers, and other modifiers meeting the following requirements. The sealant and its components will be accepted by certification. The Contractor shall submit a certification from the manufacturer stating that it meets the specified requirements.
 - a. Asphalt Binder. The asphalt binder shall be PG 64-22 and meet the requirements of Article 1032.05 of the Standard Specifications.
 - b. Fibers. Fibers shall be short cut polyester fibers meeting the properties listed in the table above for Jobsite-Mixed Sealant.

The sealant, in its final form, shall meet the following requirements when sampled and heated to the manufacturer's recommended maximum heating temperature according to ASTM D 5167.

Test	Value
Cone Penetration @ 77 °F (25 °C), ASTM D 5329	10-35 dmm

Softening Point, ASTM D 36	175 °F (79 °C) min.
Maximum Heating Temperature	400°F (204 °C)
Application Temperature	350°F (177 °C) min.

Equipment. Equipment shall be according to the following.

- (a) Micro-Surfacing. Equipment shall be according to the following.
 - (1) Micro-Surfacing Mixing Machine. The machine shall be either a continuous (self-loading) machine or a non-continuous (self-contained) machine depending on the size of the project as described below. Both types of machines shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, control additive and water to maintain an adequate supply to the proportioning controls. The mixing unit shall be able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, control setting additive, and water to a revolving multi-blade, double-shafted mixer.

Machines that are the continuous (self-loading) type shall be an automatic-sequenced, self-propelled, continuous-flow mixing unit able to discharge the mixed product on a continuous-flow basis. The machine shall be equipped to allow the operator to have full control of the forward and reverse speeds during applications of the material and be equipped with opposite-side driver stations to assist in alignment.

Non-continuous (self-contained) machines will be allowed on projects with a length of 2 lane-miles (3.2 lane-km) or less. For mainline paving, the Contractor shall have at least three self-contained machines in continuous operation to ensure appropriate production rates. Self-contained machines will also be allowed on shoulders, ramps, short applications such as bridge decks, or where the material can be placed in a single loading capacity of the machine.

Each mixing unit to be used in the performance of the work shall be calibrated in the presence of the Engineer prior to construction. Each new or different aggregate requires a new calibration. Previous calibration documentation covering the exact materials to be used may be acceptable, provided that no more than 30 days have lapsed. The documentation shall include an individual calibration of each material at various settings, which can be related to the machine metering devices. Prior to the calibration process, portable scales used to calibrate the mixing machine for emulsion and aggregate shall be checked with 25 lb and 50 lb weights, respectively. Results from the standard weight checks shall be furnished to the Engineer. No machine will be allowed to work on the project until the calibration has been completed and/or accepted.

(2) Micro-Surfacing Spreader. The mixture shall be agitated and spread uniformly in the surfacing box by means of twin shafted paddles or spiral augers fixed in the spreader box. A front seal shall be provided to insure no loss of the mixture at the road contact point. The rear seal shall act as a final strike-off and shall be adjustable. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The spreader box shall have suitable means provided to side shift the box to compensate for variations in the pavement geometry.

A secondary strike-off shall be provided to improve surface texture on the surface course. The secondary strike-off shall have the same adjustments as the spreader box and shall not bounce, wobble, or chatter.

When required on the plans, before the final surface course is placed, preliminary micro-surfacing material may be required to fill ruts, utility cuts, depressions in the existing surface, etc. Ruts of 1/2 in. (13 mm) or greater in depth shall be filled independently with a rut-filling spreader box, either 5 or 6 ft (1.5 or 1.8 m) in width. For irregular or shallow rutting of less than 1/2 in. (13 mm) in depth, a full-width scratch-coat pass may be used as directed by the Engineer utilizing either a stiff primary rubber or else a metal primary strike off. Ruts that are in excess of 1 1/2 in. (38 mm) in depth may require multiple placements with the rut-filling spreader box to restore the cross-section. All rut-filling level-up material should cure under traffic for a minimum of 24 hours before additional material is placed on top of the level up.

- (3) Micro-Surfacing Proportioning Devices. Individual volume or weight controls for proportioning each material to be added to the mix (i.e. aggregate, mineral filler, emulsified asphalt, additive, and water) shall be provided and properly marked. These proportioning devices are used in material calibration and determining the material output at any time. Calibration records, conversion formulas, and daily run sheets including the beginning and final numbers shown on the proportioning devices shall be submitted to the Engineer for approval. During production any deviations from the original JMF shall be approved by the Engineer.
- (b) Crack/Joint Sealing. Equipment shall be according to the following.
 - (1) Air Compressor. The air compressor shall be capable of producing a minimum pressure of 90 psi (620 kPa) at the end of the discharge hose. The air stream shall discharge onto the pavement through an appropriate air lance. The tool lubricator shall be bypassed and a filter installed on the discharge valve to keep water and oil out of the line.
 - (2) Oil Kettle. The crack sealant shall be heated in an oil jacketed double wall kettle equipped with an agitator (reversing rotary auger action) and separate thermometers for the oil bath and mixing chamber. The unit shall also be equipped with a reversible hydraulic 2 in. (50 mm) hot asphalt pump and a recirculating pump to circulate the oil bath.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The paving mixture shall be capable of filling up to 1 1/2 in. (38 mm) wheel ruts in one pass, be capable of field regulation of the setting time, and be suitable for nighttime placement. The compatibility of all ingredients of the mix, including the mix set additive, shall be certified by the emulsified asphalt manufacturer.

Weather Limitations. Placement of the micro-surfacing shall be done between May 1 and October 15, and when the temperature is at least 50 °F (10 °C) and rising and the forecast for the next 24 hours is above 40 °F (5 °C).

Mix Design. A Contractor provided laboratory shall develop the mix design for the microsurfacing mixture, shall verify the functioning of the set regulating additives, and shall present certified test results for the Engineer's approval. This laboratory shall be recognized by the International Slurry Surfacing Association (ISSA) as being capable of performing mix designs. The Engineer will verify the laboratory tests required in ISSA A143 have been conducted.

Proportions for the mix design shall be within the following limits.

Mineral Aggregate, dry weight (mass) lb/sq yd (kg/sq m)	15-50 (8-30)
Latex Emulsified Asphalt Residue, % by wt. of Aggregate	5.5-10.5
Latex Base Modifier	As required with % by weight (mass) of binder, min. of 3.0
Mix Set Additive	As required
Mineral Filler, % by weight (mass) of Aggregate	0.25 - 3 depending on weather conditions

The amount of mineral filler needed shall be determined by the laboratory mix design and will be considered as part of the aggregate gradation.

The amount and type of latex shall be determined by the laboratory performing the mix design. The minimum amount required shall be based on asphalt weight content and shall be certified by the emulsion supplier.

Compatibility of the aggregate, latex-modified emulsified asphalt, mineral filler, and other additives shall be verified by the mix design. The materials shall meet the following requirements for ISSA A143.

ISSA Test No.	Description	Specification
ISSA TB-139	Wet Cohesion	
	@ 30 minutes min. (Set)	12 kg-cm min.
	@ 60 minutes min. (Traffic)	20 kg-cm min. or Near Spin
ISSA TB-109	Excess Asphalt by LWT Sand Adhesion	50 gm/sq ft (538 gm/sq m) max.
ISSA TB-114	Wet Stripping	Pass (90% min.)
ISSA TB-100	Wet-Track Abrasion Loss	
•	One-hour Soak	50 gm/sq ft (538 gm/sq m) max.
	Six-day Soak	75 gm/sq ft (807 gm/sq m) max.

ISSA TB-147	Lateral Displacement	5% max.
	Specific Gravity after 1,000 Cycles of 25	2.10 max.
	lb (11.34 kg)	
ISSA TB-144	Classification Compatibility	11 Grade Points min. (AAA, BAA)
ISSA TB-113	Mix Time @ 77 °F (25 °C)	Controllable to 120 seconds min.

The mixing test and set-time test shall be checked at the highest temperatures expected during construction.

The mix design shall report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect). The report shall clearly show the proportions of aggregate, mineral filler (minimum and maximum), water (minimum and maximum), additive usage, and latex-modified asphalt emulsion based on the dry weight of the aggregate.

For the aggregate blend in the mix design, test results for AASHTO T 176 shall be provided with the mix information to the Engineer. Aggregate test values below 65 shall require review and approval from the Engineer.

Before the work commences, the Contractor shall submit to the Engineer a complete mix design covering the specific materials to be used on the project. The percentages of each individual material required shall be shown in the laboratory report. The Engineer shall approve the mix design prior to its use. After approval, no substitutions will be permitted, unless approved by the Engineer, and the Contractor shall maintain continuous control of the latex-modified emulsified asphalt to dry aggregate proportioning to conform to the approved mix design within a tolerance of ± 2 gal/ton (± 8 L/metric ton).

<u>Test Strip.</u> For projects over 100,000 sq yd (83,600 sq m), at least one day prior to starting the project the Contractor shall designate a mutually agreeable location and apply a test strip of micro-surfacing using the aggregate indicated in the mix design. The Engineer will evaluate the micro-surfacing application rate and cure time.

<u>Surface Preparation</u>. Pavement markings shall be removed according to Article 783.03(a) of the Standard Specifications. Only very small particles of tightly adhering existing markings may remain in place.

When specified in the plans, pavement markers shall be removed according to Article 783.03(b) of the Standard Specifications.

Bumps greater than or equal to 1/2 in. (13 mm) shall be removed by grinding. The Contractor shall determine bump grinding locations in the presence of the Engineer by using a 16-ft (5-m) straightedge with the scratcher bolts set to 1/2 in. (13 mm). All locations marked by the scratcher bolts shall be ground using either a grinding machine consisting of multiple saws or a cold-milling machine with a double- or triple-wrap milling head.

Joints and cracks 3/16 in. (5 mm) or wider shall be cleaned of loose and unsound material and sealed. The sealant shall be applied only when the joints and cracks are clean and dry, and the

ambient temperature is 40-85 °F (4-29 °C). The sealant shall be applied using a pressurized wand delivery system with such devices as necessary to seal the cracks/joints and form a nominal 0.125 in. (3 mm) thick by 3 in. (75 mm) wide overseal band centered so that the center of the 3 in. (75 mm) wide band is within 1 in. (25 mm) of the crack. The sealant shall be allowed to cure before opening to traffic. When approved by the Engineer, the sealant may be dusted with fine sand, portland cement, or mineral filler to prevent tracking.

Micro-Surfacing. The micro-surfacing shall be applied as shown on the plans and the following.

(a) Preparation. Prior to applying the micro-surfacing, the pavement surface shall be cleaned. On highly oxidized surfaces, a tack coat shall be applied at a rate of 0.025 lb/sq ft (0.122 kg/sq m) according to Article 406.05(b) of the Standard Specifications. Manholes, valve boxes, drop inlets, and other service entrances shall be protected from the micro-surfacing by a suitable method. The surface preparation shall be approved by the Engineer prior to the application of the micro-surfacing. No dry aggregate either spilled from the lay-down machine or existing on the road will be permitted.

The Contractor shall apply the micro-surfacing according to the following methods.

- (1) Micro-Surfacing Rut Filling. This method shall consist of filling each of the two wheelpath ruts in a lane using the specially designed rutbox and the rutfill (Type III) mix. It shall be the Contractor's responsibility to determine and estimate the quantities of rutfill mix required for rut filling. This work is then followed by one pass of micro-surfacing as described below.
- (2) Micro-Surfacing, Single Pass. This method shall consist of applying the surface mix over the entire width of each lane in one pass at an application rate of 20 lb/sq yd (11 kg/sq m).

Determinations of application rates shall be from daily readings taken from the material control devices during the progress of the work.

The pavement surface shall be prewetted by water fogging ahead of the spreader box when road conditions require, as determined by the Engineer. The rate of fogging shall be adjusted during the day based on pavement temperature, surface texture, and dryness.

The paving mixture shall be spread to fill minor cracks and shallow potholes and leave a uniform surface. Care shall be taken when rut filling to restore the designed profile of the pavement cross section. Excess crowning (over-filling) of rut areas shall be avoided. A sufficient amount of material shall be carried at all times in all parts of the spreader box to ensure complete coverage. Overloading of the spreader shall be avoided. No lumps or uncoated aggregate will be permitted in the finished surface.

Adjustments to the mix design may be required during construction, based on field conditions. The percent of mineral filler in the mix design may be increased or decreased by less than 0.3 percent when the slurry seal is being placed if it is found to be necessary for better consistency or set times. The Engineer will give final approval for all adjustments.

- (b) Mix Consistency. The finished product shall be uniform in color and composition. No streaks, such as those caused by oversized aggregate, shall be left in the finished surface. If excess streaking develops, the job will be stopped until the Contractor proves to the Engineer that the situation has been corrected. Excessive streaking is defined as more than four drag marks greater than 1/2 in. (13 mm) wide and 4 in. (100 mm) long, or 1 in. (25 mm) wide and 3 in. (75 mm) long, in any 30 sq yd (25 sq m) area. No transverse ripples or longitudinal streaks of 0.25 in. (6 mm) in depth will be permitted, when measured by placing a 10 ft (3 m) straightedge over the surface.
- (c) Mix Stability. The micro-surfacing shall possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess water or emulsified asphalt and free of segregation of the emulsified asphalt and aggregate fines from the coarser aggregate. Under no circumstances shall water be sprayed directly into the lay-down box while placing micro-surfacing material.
- (d) Joints and Edges. The Contractor shall devise a joint plan according to ISSA A143 and submit to the Engineer for approval. When practical, the surface course joint shall be at least 10 in. (255 mm) away from the nearest edge of any subsequent permanent pavement markings.

Micro-surfacing edges shall be parallel with the existing pavement edges. If the existing pavement edge cannot be used to give a straight edge, a stringline or other guide will be required. Edge lines shall not vary by more than ± 2 in. (50 mm) horizontally in any 100 ft (30 m) of length.

A smooth, neat seam shall be provided where two passes meet. Excess material shall be immediately removed from the ends of each run. Any damage to, or irregularities in, the micro-surfacing shall be repaired, as directed by the Engineer. All repairs shall be made with a paver box, except areas designated as hand work areas.

(e) Hand Work. Those areas inaccessible to the spreader box and approved by the Engineer shall be designated as hand work areas. Adjustments to the additive will be permitted to provide a slower setting time when hand spreading is needed. If hand spreading is necessary, the mixture shall be poured in a small windrow along one edge of the surface to be covered and then spread uniformly by a hand squeegee or lute. Hand work areas shall have an appearance consistent with that being placed with a spreader box. <u>Clean-Up</u>. All areas, such as manholes, gutters, and intersections, shall have the microsurfacing mix removed as specified by the Engineer. The Contractor shall, on a daily basis, remove any debris associated with the performance of the work.

Sampling and Testing. The Contractor shall check yield of the application after the first 1000 ft (300 m), and throughout each day's paving, with a minimum of three tests per day. Yield check results shall be furnished to the Engineer daily.

The Contractor shall submit a daily "run sheet" for each day's work as soon as all the data is available. The run sheet shall provide a breakdown of the actual meter numbers and quantities of all materials actually used each day, as well as the respective locations.

Opening to Traffic. The micro-surfacing shall be opened to traffic within one hour of its application.

<u>Curing</u>. The micro-surfacing shall cure for a minimum of 7 days before placement of the permanent pavement markings.

Method of Measurement. This work will be measured for payment as follows.

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- (a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a) of the Standard Specifications.
- (b) Measured Quantities. Crack/Joint sealing will be measured for payment in feet (meters), measured along the crack.

Pavement marking removal will be measured for payment according to Article 783.05 of the Standard Specifications.

The micro-surfacing will be measured according to the following for the method of application provided in the plans.

- (1) Micro-Surfacing Rut Filling. Micro-surfacing rut filling will be measured for payment in place in feet (meters) along the wheel path or filled rut.
- (2) Micro-surfacing, Single Pass. Micro-surfacing, single pass will be measured for payment in place and the area computed in square yards (square meters). The width for measurement will be the width of the top surface as shown on the plans or as directed by the Engineer.

PrimeTack coat, when required, will be measured for payment according to Article 406.13(b) of the Standard Specifications.

<u>Basis of Payment</u>. Crack/joint sealing will be paid for at the contract unit price per foot (meter) of FIBER-MODIFIED ASPHALT CRACK SEALING.

Bump removal will be paid for at the contract unit price per each for BUMP REMOVAL.

Pavement marking removal and pavement marker removal will be paid for according to Article 783.06 of the Standard Specifications.

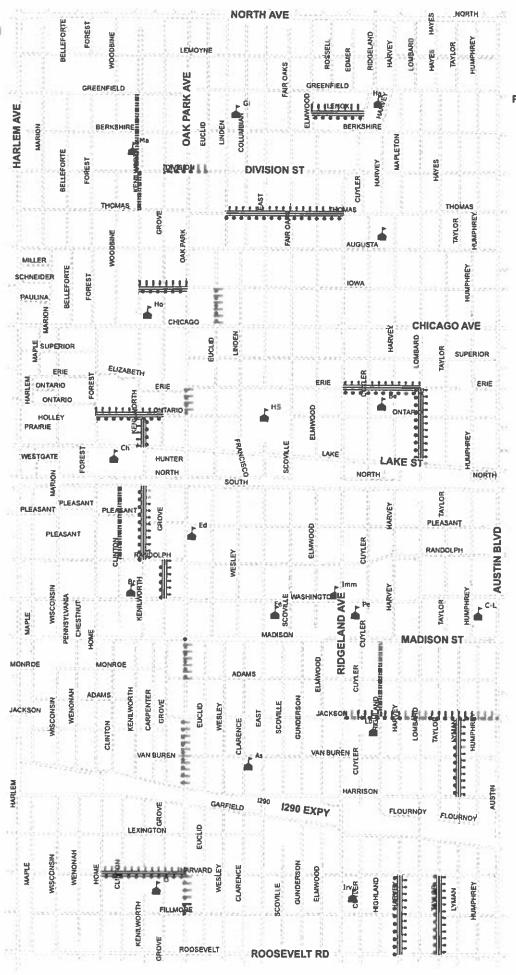
Rut filling will be paid for at the contract unit price per foot (meter) for MICRO-SURFACING RUT FILLING.

Micro-surfacing, single pass will be paid for at the contract unit price per square yard (square meter) for MICRO-SURFACING, SINGLE PASS, of the gradation type and friction aggregate mixture specified.

Tack coat, when required, will be paid for according to Article 406.14 of the Standard Specifications.

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PVMNT PRESERVATION PROJECT OVERVIEW

Patching
 Microsurfacing
 CrackFill
 Rejuvinator
 Schools



Patches will be marked out on pavement prior to start of project. Specific patching maps will be provided.

Rejuvinator Locations subject to change. Will remain residential streets and similar square yardage