City of Lincoln Park
1355 Southfield
Lincoln Park, MI 48146

INVITATION TO BID FOR AS NEEDED ROAD MAINTENANCE SERVICES

To whom it may concern:

The City of Lincoln Park is accepting sealed bids for as-needed Road Maintenance Services. The goal of this work is to provide maintenance, as well as preventative maintenance, to City roads and parking lots so as to extend their life. The City reserves the right to accept or reject any portion of bids. **The contract shall commence upon signing and continue for a term of three years.**

The purpose of this bid is to secure a company for road maintenance. The City reserves the right to reject any/or all bids and to accept/reject partial bids. The City reserves the right to split any/all bids. The bid award may not be based solely upon the lowest pricing, other factors such as references, equipment, qualifications, and the needs of the City may be considered.

Insurance Requirements

All successful bidders must provide the City of Lincoln Park with a certificate of insurance that meets all City of Lincoln Park requirements. Bidder must also provide all licenses as required by law.

Bidder Qualifications and Requirements

The following must be included in your bid:

1. Please include 3 references with current contact information on past and/or current accounts.

2. Include a list of equipment that will be used to complete assigned work.

3. Number if years in the business

Subcontracting

The Contractor shall not subcontract any or all portions of the work unless prior written approval is granted by the City. Any subcontractor, so approved, shall be bound by all the terms and conditions.

Conditions

The City of Lincoln Park will make payment for work under this Contract at the price provided, only after receipt of a bill for work assigned and the work is satisfactorily completed.

Bid Instructions

All pricing must include all costs (delivery, fuel charge, etc…)

To bid for this work, please provide numbers for the unit and total costs on the items listed below.

A 24-hour emergency contact number must be provided and contractor must be able to respond to emergency calls on a timely basis.

The City of Lincoln Park is tax exempt.

BITUMINOUS SURFACE TREATMENT-DOUBLE CHIPSEAL

Proposals will be received from contractors having a current prequalification with the Michigan Department of State Highways for chipseal or that has performed (3) similar sized projects within the last year.

1 – DESCRIPTION:

This work shall consist of one or more applications of bituminous material applied to the prepared surface with each application being covered with either course or fine aggregate before the next application of bituminous material. The work shall be done in accordance with this specification or in accordance with applicable drawings or plans of this contract.

2 - CONSTRUCTION EQUIPMENT:

All equipment used shall be sufficient size and in such mechanical condition as to produce a satisfactory job.

A. PRESSURE DISTRIBUTORS - The pressure distributor shall have a computerized application rate and speed control. This control shall have a radar ground-sensing device that controls the application rate regardless of ground speed or spray bar width. The pressure distributor shall be capable of maintaining the asphalt emulsion at the specified temperature. The spray bar nozzles shall produce a uniform fan spray, and the shutoff shall be instantaneous, with no dripping. Each pressure distributor shall be capable of maintaining the specified application rate within ∀0.015 gal/syd for each load.

B. AGGREGATE CHIP SPREADER- The aggregate chip spreader shall be self-propelled and have a computerized spread control capable of spreading the cover material uniformly for widths of 1 to 20 feet and have a screen to remove oversized material.

C. COMPACTION EQUIPMENT - Shall be self-propelled, vibratory, rubber tired, three wheel or tandem rollers. Rollers shall weigh not less than 6 ton nor more that 9 ton.

D. MISCELLANEOUS EQUIPMENT - Sufficient equipment for hauling of cover material shall be provided to insure continuance covering of bituminous material, hand tools, thermometers, etc. Chain link fence drag shall be available for use when required by Owners Representative.

3 - MATERIALS AND RATE OF APPLICATION:

A. BITUMINOUS MATERIAL - Shall be HF-RS2M

1. The first bituminous surface shall be applied at a rate of 0.35-0.40 gallons per sq.yd.
2. The second bituminous surface shall be applied at a rate of 0.38-.40 gallons per sq.yd.

B. BITUMINOUS PRIME COAT - Shall be AE-PB

1. The prime coat over gravel of shall be applied at a rate of 0.20 to 0.30 gallons per sq.yd.

C. AGGREGATE FOR COVER MATERIAL - Shall be 29A Slag, limestone or Natural Aggregate or as specified by Owner's Representative.

1. First application (bottom layer) shall be applied at 18 to 22 pounds per sq. yd.
2. Second application (top layer) shall be applied at 20 to 25 pounds per sq. yd.

4 - PREPARATION:

Work required on existing surface such as base repair, patching, sweeping shall be done by contractor.

5 - CONSTRUCTION:

EXISTING SURFACE - The bituminous material shall be applied at the rate specified immediately followed by the self-propelled chipper covering the bituminous material with aggregate. In no instance shall the chipper be more than 400 ft. behind the distributor. The aggregate should be compacted into the bituminous material by a self-propelled roller directly behind the chipper. At no time shall the aggregate cover material be left unrolled for more than 10 minutes. The second application shall be applied as soon as it can reasonable be expected.

GRAVEL SURFACE - The seal coating operation shall not be started until the prime coat has properly cured. Twenty-four (24) hours curing time may be required depending on existing conditions. The seal coating construction procedure over prime shall be the same as described in above paragraph.

6 - WEATHER LIMITATIONS:

No bituminous material shall be applied during rainy weather or when the air temperature in the shade is less than 50 F and rising except by the approval of the contracting officer.

7 - METHOD OF MEASUREMENT:

The engineer, in the presence of the contractor and/or with his concurrence, shall determine field measurements of the areas seal coated in square yards.

8 - BASIS OF PAYMENT:

Double seal coat will be paid for at the contract price per square yard (as described above) which price shall be payment in full for furnishing, heating, hauling and applying the bituminous material, furnishing, hauling and placing the cover material, dragging, rolling, replacing disturbed material; maintaining traffic and constructing the surface complete.

MICRO SLURRY SPECIFICATION

1. SCOPE:

The work covered by this specification consists of furnishing all labor, equipment and materials to perform all operations necessary in connection with the application of an emulsified asphalt slurry seal surface upon the designated surface, in complete and strict accordance with this specification.

2. CONTRACTOR'S QUALIFICATION:

A. The contractor submitting a bid shall have a current pre-qualification with the MDOT for Slurry Seal or shall have performed satisfactory Slurry Seal in at least four (4) communities or sites of similar type work.

B. The bidders general questionnaires attached to this specification shall be completed to the satisfaction of the engineer.

3. APPLICABLE SPECIFICATIONS:

The following specifications and methods form a part of this specification:

ASTM - American Society for Testing and Materials
ISSA - International Slurry Surfacing Association.

AGGREGATE AND MINERAL FILLER

ASTM D75 Sampling Stone, Slag Gravel, Sand and Stone Block for use as Highways Materials.

ASTM C136 Sieve Analysis of Fine or Coarse Aggregate.

ASTM C117 Amount of Material Finer than No. 200 Sieve in Aggregate.

ASTM D2419 Plastic Fines in Graded Aggregate and Soils by use of the Sand Equivalent Test.

ASTM C128 Specific Gravity and Absorption of Fine Aggregate.

ASTM C29 Unit Weight of Aggregate.

ASTM C131 Abrasion of Coarse Aggregate by use of the Los Angeles Machine.

ASTM C183 Sampling Hydraulic Cement.

ASTM D546 Sieve Analysis of Mineral Filler.

ASTM D242 Mineral Filler for Bituminous Paving Mixtures.

EMULSIFIED ASPHALT

ASTM D140 Sampling Bituminous Materials.

ASTM D244 Testing Emulsified Asphalt

ASTM D977 Specifications for Anionic Emulsified Asphalt.

ASTM D2397 Specifications for Cationic Emulsified Asphalt.

ASTM D2172 Bitumen Content of Paving Mixture by Centrifuge.

ISSA T100 Measurement of Wear of Slurry Seal Mixtures by Wet Tract Abrasion.

4. DESCRIPTION:

The slurry seal surface shall consist of a mixture of emulsified asphalt, mineral aggregate, and water, properly proportioned, mixed and spread evenly on the surface as specified herein and as directed by the engineer. The cured slurry shall have a homogeneous appearance, fill all cracks, adhere firmly to the surface and have a skid resistant texture.

5. MATERIALS:

A. ASPHALT EMULSION. The emulsified asphalt shall conform to the requirement of International Slurry Surfacing Association Specification, for type CSS-1H.

B. AGGREGATE. The mineral aggregate shall consist of natural or manufactured sand, slag, crusher fines, and others, or a combination thereof. Smooth-textured sand of less that 1.25 percent water absorption shall not exceed 50 percent of the total combined aggregate. The aggregate shall be clean and free from vegetable matter and other deleterious substances. When tested by ASTM D2419, the aggregate blend shall have a sand equivalent of not less than 45. When tested according to ASTM C88 the aggregate shall show a loss of not more that 15%. When tested according to ASTM C131 the aggregate shall show a loss of not more that 30%.

Mineral fillers such as Portland cement, limestone dust, fly ash, and others shall be considered as part of the blended aggregate and shall be used if required by the mix design. They shall meet the gradation requirements of ASTM D242.

The combined mineral aggregate shall conform to the following gradation when tested by the previously mentioned test.

	TYPE II
SIEVE SIZE	PERCENT PASSING
3/8	100
No. 4	90-100
No. 8	65-90
No. 16	45-70
No. 30	30-50
No. 50	18-30
No. 100	10-21
No. 200	5-15

Theoretical Asphalt Content
% Dry Aggregate 7.5-13.5

TYPE II. This aggregate blend is used when it is desired to fill surface voids, correct severe surface conditions, and provide sealing and a minimum wearing surface. An application rate of 18 (plus or minus) 2 pounds per square yard based on dry aggregate weight is used when standard aggregates are utilized.

C. WATER. All water used with the slurry mixture shall be potable and free from harmful soluble salts.

D. LABORATORY TESTING. Sources of all materials shall be selected prior to the time the materials are required for use in the work. All samples shall be taken according to procedures previously mentioned. All materials shall be pretested in a qualified laboratory as to their suitability for use in slurry. The theoretical asphalt content shall be determined. The laboratory shall also determine if a mineral filler is required, and if so how much should be used. Test samples shall be made and tested on Wet Track Abrasion Machine. A complete laboratory analysis and test report accompanied by abraded and un-abraded slurry test samples shall be submitted by the Contractor before the job starts.

E. STOCKPILING OF AGGREGATES. Precautions shall be taken to insure that stockpiles do not become contaminated with over-sized rock, clay, silt, or excessive amounts of moisture. The stockpile shall be kept in areas that drain readily. Segregation of the aggregate will not be permitted. Owner will provide yard site for stockpiling aggregates and keeping emulsion storage tanks within one mile of the projects, or closer when possible.

F. STORAGE. The contractor shall provide suitable storage facilities for the asphalt emulsion. The container shall be equipped to prevent water from entering the emulsion. Suitable heat shall be provided if necessary to prevent freezing.

G. SAMPLING. The Contractor as directed by the Engineer shall furnish samples of materials and the finished slurry surfaces during progress of the work. Test reports may be requested from the Contractor as additional materials arrive.

H. DESIGN. The bidder shall submit to the Owner's Representative a complete laboratory design made in a qualified laboratory before the work commences. A complete analysis of the materials and job Mix Formula proposed for use in the performance of the work shall be made in accordance with procedures outlined in the current issue of International Slurry Surfacing Association Technical Bulletin No. 111 as indicated by the engineer. The Owner's Representative shall select from the data presented by the bidder the optimum design for the materials selected by the Contractor. The bidder shall follow the recommendations and calibrate their machines to apply the materials including mineral filler if called for by the mix design for better mix performance. The Owner's Representative may waive the design submittals provided the bidder has previously applied in this subdivision a satisfactorily designed and applied slurry with substantially the same materials proposed for this work. In any case, untried materials may not be

introduced into this work without complete analysis and design of a Job Mix Formula for each new material approved by the Owner's Representative.

6. EQUIPMENT:

All equipment used in the performance of this work shall be maintained in satisfactorily working order at all times.

A. SLURRY MIXING EQUIPMENT. A minimum of two (2) continuous flow slurry machines, minimum capacity of eight (8) tons shall be provided. They shall be capable of delivering accurately a predetermined proportion of aggregate, water and asphalt emulsion to the mixing chamber and to discharge the thoroughly mixed product on a continuous basis. The aggregate shall be pre-wetted immediately prior to mixing with the emulsion. The mixing unit of the mixing chamber shall be capable of thoroughly blending all ingredients together. No violent mixing shall be permitted.

The mixing machine shall be equipped with an approved fines feeder that provides an accurate metering device or method to introduce a predetermined proportion of mineral filler into the mixer at the same time and location that the aggregate is fed. The feeder shall be used whenever added mineral filler is a part of the aggregate blend.

The mixing machine shall be equipped with a water pressure system and fog type spray bar adequate for complete fogging the surface preceding spreading equipment with a maximum application of 0.05 gallons per square yard.

B. CALIBRATION. Each material delivery function (a) fines feed, (b) aggregate feed, and (c) emulsion feed, shall be independently operated and monitored with digital counters capable of giving accumulated readings of the material usage on a daily basis.

All instruments, gauges and meters shall be accurate within +5% of the operating range required. All instruments and controls shall be centrally mounted in a protected console and shall be readily accessible during operation to the Engineer or his designated representative.

The bidder will submit calibration sheets for each machine to substantiate meter readings and aggregate openings (gal/count, #/count). Daily counter readings will be supplied to the inspector with yardage applied to verify application rates. If readings do not confirm correct application rates, recalibration on site will be required before additional work is applied.

C. SLURRY SPREADING EQUIPMENT. Attached to the mixer machine shall be a mechanical type squeegee box equipped with flexible material in contact with the surface to prevent loss of slurry from the box. It shall be maintained so as to prevent loss of slurry on varying grades and crown by rotating at center of box. There shall be a steering device and a flexible strike-off. The spreader box shall have an adjustable width from 8 to 12 feet. The box shall be kept clean, and build-up of asphalt and aggregate on the box shall not be permitted. The Engineer shall approve the use of burlap drags or other drags.

D. CLEANING EQUIPMENT. Power brooms, power blowers, air compressors, water flushing equipment, and hand brooms shall be suitable for cleaning the surface and cracks of the old surfaces.

E. AUXILIARY EQUIPMENT. Hand squeegees, shovels and other equipment shall be provided as necessary to perform work.

7. PREPARATION OF SURFACE:

Contractor will sweep the streets before the slurry seal application.

A tack coat will be applied if the slurry is being placed over a brick or concrete surface, highly absorbent asphalt surface, or over a surface where the aggregate has become exposed and is polished and slick, a 1 part emulsion, 3 part water, tack coat of the same asphalt emulsion type and grade as specified for the slurry is recommended. This can be applied with an asphalt distributor or slurry machine adapted to apply tack coat. The normal application rate is 0.05 to 0.10 gallons of the diluted emulsion per square yard of surface. The Engineer should give final approval.

8. COMPOSITIONS AND RATE OF APPLICATION OF THE SLURRY MIX:

The amount of asphalt emulsion to be blended with the aggregate shall be that as determined by the laboratory report after final adjustment in the field. A minimum amount of water shall be added as necessary to obtain a fluid and homogeneous mixture. The Engineer shall give final approval to the design and rate of application used.

9. WEATHER LIMITATION:

The slurry seal surface shall not be applied if either the pavement or air temperature of 55 F or below and falling, but may be applied with both the air and pavement temperature is 45 F or above and rising. The mixture should not be applied if high relative humidity prolongs the curing beyond a reasonable time.

10. TRAFFIC CONTROL:

Suitable methods such as barricades, flagmen, pilot cars, etc., shall be used to protect the uncured slurry surface from all type of traffic, owner to do necessary barricading and/or flagging of traffic. Any damage to the uncured slurry will be the responsibility of the Contractor. The Engineer shall give final approval as to the method used. If damage occurs where suitable means have been made to protect the uncured slurry, violators will be prosecuted and the Contractor will be reimbursed for the amount of the damages. The Contractor shall co-ordinate the scheduling of street to be surfaced with the Owner's Representative.

11. APPLICATION OF THE SLURRY SURFACES:

A. GENERAL. The surface shall be fogged with water directly preceding the spreader. The slurry mixture shall be of the desired consistency when deposited on the surface and no additional elements shall be added. Total time of mixing shall not exceed four (4) minutes. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that complete coverage is obtained. No lumping, balling or unmixed aggregate shall be permitted. No segregation of the emulsion and aggregate fines shall be permitted. If the course aggregate settles to the bottom of the mix, the slurry will be removed from the pavement. No excessive breaking of the emulsion will be allowed in the spreader box. No streaks such as caused by oversized aggregate will be left in the finished pavement.

B. JOINTS. No excessive build-up or unsightly appearance shall be permitted on longitudinal or transverse joints

C. HAND WORK. Approved squeegees shall be used to spread slurry in non-accessible areas to the slurry mixer. Care shall be exercised in leaving no unsightly appearance from handwork.

D. CURING. Treated areas will be allowed to cure until such time as the Owner's Representative permits their opening to traffic.

E. INTERSECTION. Care should be taken to achieve a clean straight line as directed by the Engineer by use of 15 pound roofing felt or equal. All roofing felt will be removed at completion of work.

12. MEASUREMENTS AND PAYMENT:

The slurry seal surface shall be measured and paid for by the square yards of work completed and accepted as designated by the Owners Representative.

13. NOTICES TO RESIDENTS:

It is recommended that the following advance public notice be made by the use of flyers:

"Residents shall be notified of the proposed application of a coat of slurry seal the day before it is to be applied by written notices being delivered to each place of residence."

OVERBAND CRACK SEALING SPECIFICATION

A. DESCRIPTION: This work consists of furnishing all labor, equipment, and materials necessary for application of a **field blended** fiberized joint and crack sealant. Bidders will be MDOT prequalified or give (3) references of similar sized jobs. All surface preparation and crack sealing shall be done in accordance with these special provisions. Only field blended (no box material) will be accepted.

B. MATERIALS: AC-20, POLYESTER FIBER, LATEX RUBBER ADDITIVE.

1. General - All joints and cracks will be waterproofed using the following hot asphalt based crack sealant. The material shall be extruded under high temperature [275-325 degrees F] and high pressure [100 P.S.I. max.] directly into and over the joints and cracks.

2. Composition
   Liquid Rubber Compound.....5.0% +/- 1/2% by weight of asphalt

The liquid rubber compound shall be able to be blended rapidly with asphalt cements in bituminous pressure distributors and crack sealing kettles without special equipment. It shall not cause boiling or foaming when blended with liquid asphalt at 300 degrees F.

The liquid rubber compound shall be a virgin non-vulcanized synthetic rubber compound, which meets the following requirements:

Ash, % of total rubber solids ASTM D297.....……..2.0 max
Volatile Content, 2 hrs. @ 105 degrees C. %.....……5.0 max
Coagulum on 80-mesh screen, %.....……..0.2 max
Mooney Viscosity of polymer (M/L 4 @ 212 degrees F.....95 min
Brookfield Viscosity @ 77 degrees F., cps.....…….20,000-80,000
Flash point, degree F., Pensky-Martin method ASTM D93.....300 min

The manufacturer shall furnish certification that the liquid rubber compound furnished meets the above specification.

Polyester Fibers (HY-Tech, Bonifiber or approved equal).....5.0% +/- 1/2% by weight of asphalt

The fibers shall be polyester fibers meeting the following requirements:

Denier ASTM D 1577*.....……3.0 to 6.0
Length, inch.....……0.25 +/- 0.02
Crimps; ASTM D 3937.....……None
Tensile strength, minimum, psi ASTM D 2256*.....……..70,000
Specific gravity.....……1.32 to 1.40
Minimum melting temperature.....…….475 F
Ignition temperature.....……1000 F min.

Note: The 5.0% fibers shall be a dry weight adjusted for moisture content.

3. Ingredient Specifications
   Asphalt.....……PG 64-22

4. Membrane/Sealant Physical Properties
   Thickness.....……..0.065" minimum
   0.125" maximum
   Width.....……..Variable (4" to 12")

C. Construction Methods:

1. Preparation of Surface - The surface shall be thoroughly clean and dry when the sealant/membrane is applied. Cleaning of cracks will be with minimum 100 psi. Use of compressed air and hand tools as necessary to remove dust, dirt, moisture, vegetation, and foreign materials that would prevent bonding of the material. Cleaning work is to be done concurrently with the application process. Air compressors shall

be portable and capable of furnishing not less than 100 psi air pressure at the nozzle.

The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.

2. Mixing Procedures - The material shall be blended in an oil-jacketed double wall kettle equipped with an agitator (reversing rotary auger action) and separate thermometers for the oil bath and the blending vat. A 2-inch recirculation pump is required to provide circulation of the materials when not applying the crack sealant. The unit shall be capable of mixing 2,500 pound minimum batches of material. The temperature of the material shall be maintained between 275-350 degrees F. Automatic temperature controls and an automatic safety shutoff system shall be used. Weight tickets for the asphalt cement shall be used in determining the specified weight of fiber and liquid rubber compound to be blended into the asphalt cement. The fibers and liquid rubber compound shall be added to the asphalt cement and thoroughly mixed in the kettle.

3. Application - The material is to be applied to the crack and pavement surface with specially designed applicator heads which are round and concave. The diameter of these heads determines the width of the band of material on the pavement surface. These heads should range in size from 4" to 12" in diameter. The contract owner shall specify the head sizes to be used after discussion with the contractor. The 5" diameter head shall be used whenever possible. The applicator wand is to be equipped with a material shutoff control operated by the applicator person. This control is necessary for a neat job and prevents excess material from being applied.

4. Weather Limitations - No material shall be applied unless the ambient air temperature is 40 F and rising. No material shall be applied while the surface is wet.

5. Opening to Traffic - Traffic shall be kept off the newly placed sealant until it has cooled and set enough to prevent tracking and/or pullout of the sealant.

D. Basis of Payment:

Payment for this work shall be made at the contract unit price per pound (#) of crack sealant. The unit price includes all materials, equipment, tools, and labor incidental to the preparation and sealing of cracks (unless otherwise specified). The paid quantity will be the number of pounds of hot applied sealant in place, completed, and accepted.

Pay Item	**Pay Unit**
Overband Crack Sealing	Pounds Mixed Material

SPECIAL PROVISIONS FOR
PROFILE-TEXTURIZING BITUMINOUS PAVEMENT

A: Description – This work shall consist of grinding and planning bituminous material form the existing pavement surface with the Intent to remove significantly the existing specified. The surface shall be ground and planed to produce a uniform texture consisting of a pattern of discontinuous longitudinal striations on an otherwise flat surface.

The pavement crown shall be maintained to provide transverse drainage to the outside shoulder as directed by the Engineer.

This work shall include the removal and disposal of the milled material and cleaning the milled surface.

B: Equipment – The equipment used shall be self-propelled and shall be capable of accurately and automatically establishing profile grade by referencing either form the existing pavement or from an independent grade control. It shall have a positive means of controlling cross-slopes. Further, the machine shall have an effective means for removing the salvaged milled material from the road surface and for preventing dust, resulting from the operation, from escaping into the air. The machine used for grinding and planning the bituminous surface shall be capable of milling at least a 7-foot minimum width in one pass. The milling drum or mandrel shall have at least a 44-inch diameter.

The grinding and texturing mandrel shall have a minimum of three wraps of flighting with carbide tipped cutting tips. The Carbide teeth on the drum shall have a spacing of not more the 5/16 of an inch.

The carbide cutting teeth in the mandrel are to be uniform in size. The length of the carbide teeth shall be uniform within plus or minus 0.020 inch.

The height of the tooth holder blocks are to be uniform and not vary the cutting radius of the mandrel by more than plus or minus 0.020 inch.

The milling machine shall be equipped with a moldboard capable of loaning any raised surface irregularities immediately behind the mandrel.

C: Construction Methods – The grinding and planning operations shall produce a uniform finish of the texture required.

The areas designated on the detailed sketches and established by the Engineer shall be ground. The operation shall result in a pavement that conforms to the proposed cross-section. It is the intent that substantially all of the high areas within the milling area be ground and textured to match the existing cross-slope or the adjacent milled area. A minimum of 0.015 foot per foot cross-slope shall be maintained on normal crown sections. If the edges of the ground surface do not match the adjacent surface, the Engineer shall require the Contractor to regrind the area.

When only changing intermittent teeth, an existing sample carbide tooth is to be removed from the machine and measured to determine the amount of wear and/or gage height. Replacement teeth shall be machined to existing height of the sample carbide tooth, plus or minus 0-020 inch to ensure even grading.

When it is necessary to replace teeth due to excessive wear, all teeth on the drum shall be replaced.

The forward speed of the grinding and planning machine shall be as determined by the Engineer and shall not exceed 35 feet per minute unless specific written approval is issued by the Engineer.

After the forward speed has been established by the Engineer, for the best pattern, the grinding operation is not to be halted for the loading or unloading of trucks. The grinding operation shall be continuous.

Grinding shall be performed in the longitudinal direction so that grinding begins and ends at lines normal to the pavement center.

The pavement temperature shall be 35 degrees and rising as the work is performed. The nature and condition of the equipment and the manner of performing the work shall be such that the ground and planed surface is not torn, gouged, shoved, or otherwise injured. Sufficient cutting passes shall be made so that all irregularities or high spots are eliminated.

D: Method of Measurement – The completed work as measured for Profile Texturizing Bituminous Payment will be measured by the square yard of the work. The square yards measured will be that area within the outside edges for the milled surface. The square yards measured will be paid for only once, regardless of the number of passes required to achieve the results specified.

E: Basis of Payment – Profile-Texturizing Bituminous Pavement as measured will be paid for at the contract unit price for the following contract item (pay item):

Pay Item	**Per Unit**
Profile-Texturizing	Square Yards

which price shall be full payment for equipment, labor, and materials necessary to complete the work.

Sweeping and cleaning of the milled surface and disposal of the ground bituminous material will not be paid for separately, but shall be included in the pay item "Profile-Texturizing".

Excess material and debris removed by the sweeping operation may be wasted on the adjacent slope as directed by the Engineer.

BID SHEET

The undersigned, as bidder, declares that he has familiarized himself with the location of the proposed work and the conditions under which it must be performed, and agrees that he will contract with the City to furnish, at and for the following prices, all materials, labor, equipment and all things necessary to complete the entire work, in accordance with the plans, specifications and related documents.

ITEM NO	ITEM OF CONSTRUCTION	UNIT PRICE BID
1.	Milling & Shaping	@ $_____ per sq. yard
2.	Overband Crack Seal	@ $_____ per pound
3.	Micro Slurry-Spot Patching	@ $_____ per sq. yard
4.	Double Chipseal	@ $_____ per sq. yard
5.	Sweeping	@ $_____ per sq. yard
6.	Seal Patching	@ $_____ per ton
7.	Pot hole filling (“cold patch”)	@ $_____ per ton
	Pot hole Filling (“hot patch”)	@ $_____ per ton

_____ Company Name

_____ Authorized Representative (Please type or print)

_____ Address

_____ Title

_____ City, State, Zip

_____ Authorizing Signature

_____ Telephone Number

Send all bids to:
Donna Breeding, City Clerk
City of Lincoln Park
1355 Southfield Road
Lincoln Park, MI 48146

Deadline for receiving bids is 3:00 p.m. Friday March 18, 2011. No late bids will be accepted.

***All bids should be sealed and clearly marked "Road Maintenance Services".**

Bids shall be publicly opened and read at:
7:30 p.m. (local time), Monday March 21, 2011
City of Lincoln Park
City Council Chambers
1355 Southfield Road
Lincoln Park, MI 48146