

Farmer, Chair
Ellinger, Vice Chair
Gorton
Kay
Ford
Blues
Lawless
Beard
Martin
Henson

AGENDA PLANNING & PUBLIC WORKS COMMITTEE

October 4, 2011
1:00 P.M.

1. **Re Paving Program - Martin** (1-8)
2. **Renegotiate & Expand Paving Warranties –** (1-2,5,8-48)
Referred from Environmental Quality Link
3. **Sustaining Salting Services: Work with Fayette County Public Schools**
– Referred from Environmental Quality Link (2,6)
4. **Sidewalk Specifications & Regulations** (49-52)
5. **Todds Road Widening Phase 2 Update - Stinnett** (53)
6. **Oliver Lewis Way Project Update - Blues** (54)
7. **Items Referred to Committee** (55)

"Planning & Public Works Committee, to which should be referred matters relating to the Division of Planning and including, but not limited to, matters relating to housing, infill & redevelopment, purchase of development rights and historic preservation, and any related partner agencies and the Department of Public Works and its related divisions, including capital improvement projects and any related partner agencies."

-Council Rules & Procedures, Section 2.102(1)

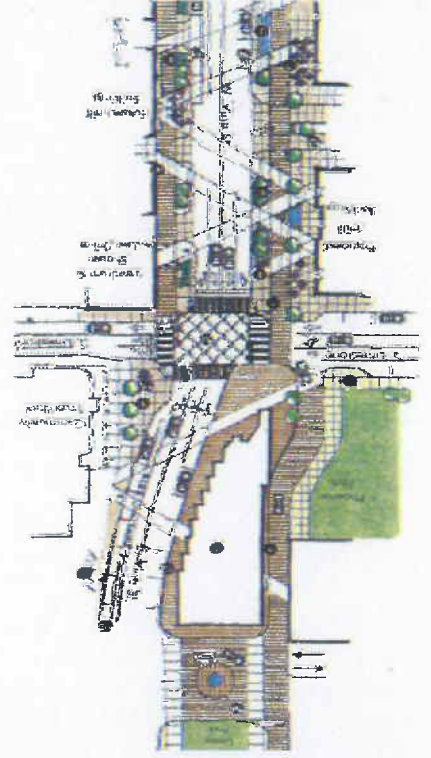
Committee Schedule

October 4
November 1
December 6



Department of Environmental Quality & Public Works

**Planning & Public Works Committee
October 4, 2011**



Talking Points:

**Pavement Management System
& Road Resurfacing**



2011/2012 Snow Plan Update



Road Warranties



Leaf Collection



Pavement Management System & Road Resurfacing

Step 1 – Road Assessment and Data Collection
-Division of Engineering



COMPLETE

*** Now assessing half of LFUCG-maintained roads every year.

Step 2 – Pavement Management System updated
-Division of Engineering



COMPLETE

*** Currently working to convert Pavement System into GIS application

Step 3 – Determine from the collected data, the total linear footage of pavement rated 65 or less within the Urban Service Area.
-Division of Streets, Roads & Forestry
COMPLETE

Step 4 – From the calculated total linear footage, determine the percentage of pavement (rated 65 or less) within each Council District.
-Division of Streets, Roads & Forestry
COMPLETE

Road Resurfacing Figures/Statistics for FY12

- \$6,449,443.62 allocated for resurfacing within the Urban Service Area
- \$947,333.03 allocated for County Road resurfacing
- 14 % of LFUCG maintained roads have a rating of 65 or less
- Resurfacing all 14% would require roughly \$29 Million
- Resurfacing figures are based upon milling and resurfacing 1 ½ inches in depth
- This equates to \$35.79 per foot
- The following maintenance items are deducted:
 - 2% for traffic loop replacement
 - 4% for crack seal operations (on Roads resurfaced after 5 years)
 - 5% for asphalt rejuvenation (on Roads resurfaced after 3 years)
 - 6% for manhole adjustment (Mr. Manhole)

- Percentage of fund allocation per Council District was calculated as follows:

District 1	7%	\$451,461.05
District 2	10%	\$644,944.36
District 3	5%	\$322,472.18
District 4	8%	\$515,955.49
District 5	11%	\$709,438.80
District 6	11%	\$709,438.80
District 7	11%	\$709,438.80
District 8	5%	\$322,472.18
District 9	7%	\$451,461.05
District 10	13%	\$838,427.67
District 11	7%	\$451,461.05
District 12	5%	\$322,472.18

Road Warranties

- 1 year warrantee on both Resurfacing and New / Capital Construction
- All resurfacing specifications outlined in contract bid packet (Purchasing)
- Jefferson County experimented with lowest bid / best warrantee contracts
- KYTC does not warrantee capital construction
 - Proactive inspection limits need for road warrantee
 - Use of State-trained inspectors to monitor all capital construction

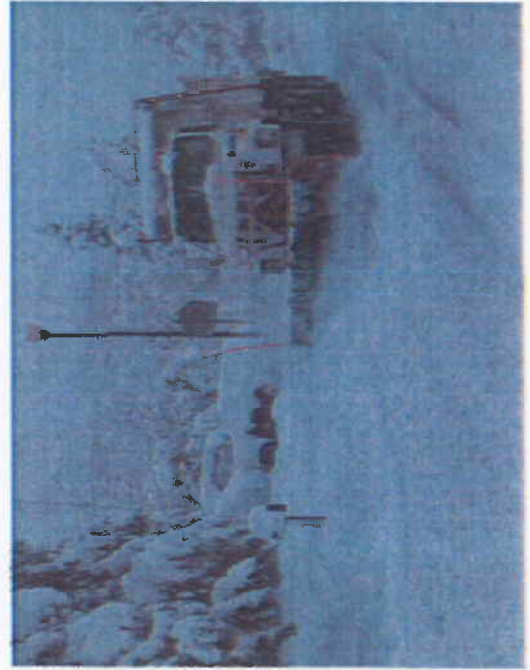
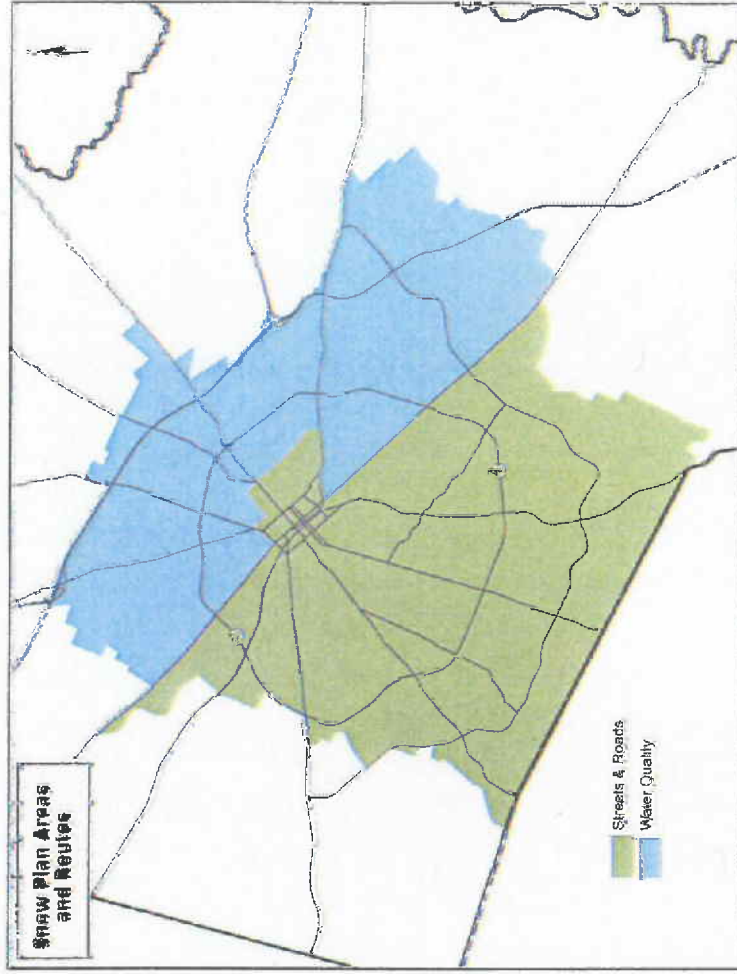
Items to note:

- Resurfacing is a maintenance function, not Capital Construction
- Extended warrantees for construction materials & longevity will come at a premium cost



2011/2012 Snow Plan

- Reassignment of area routes
 - Streets & Roads (South)
 - Water Quality (North)
- Snow Emergency Routes
 - Signage updated
 - Reverse Call Notification
 - LEAD (E911)



- Edits made to area maps
- Trucks outfitted Mid-October
- \$1,000,000 Salt budget
- Est. 8000 Tons of salt to start winter season

Leaf Collection Update:



- Resolution # 348-2000 (July 1; 2000) provides for one vacuum leaf collection per season in USF areas served by DWM
- Budget Amendment for 2012 collection services estimated at \$175,000+
- Leaf collection will begin **November 28** – DWM newsletter to homes Oct. 10
- Future plans for citizens to use Lennys, free bags, mulching, composting vs. collection





THANK YOU



LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

DIVISION OF STREETS, ROADS AND FORESTRY

PROPOSAL FOR STREET RESURFACING

BIDS WILL BE RECEIVED UNTIL 2:00 P.M. E.D.T., ON THE 20th DAY OF May 2010 AND AT THAT TIME WILL BE PUBLICALLY OPENED AND READ.

We propose to furnish all necessary labor, machinery, tools, apparatus and other necessary supplies and all materials, and to construct and/or improve in strict accordance with the terms of the specifications, hereto attached, all of the streets, as hereinafter set out, and, described in the list identified and "FY2010 CITY STREET RESURFACING" and. A certified check of bid bond, in the amount of five (5%) percent of the total bid shall accompany the proposal.

Agreed liquidated damages will be One Thousand Dollars (\$1,000.00) per calendar day. Time of completion of this contract will be prior to June 30, 2010. THE URBAN COUNTY GOVERNMENT RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS. We further propose to execute contract within ten (10) days after the date of receiving note of award, to begin work when notified to do so by the URBAN COUNTY GOVERNMENT, and to complete same within the specified time to the satisfaction of the URBAN COUNTY GOVERNMENT, or in the event of failure to complete the work within the specified time, to pay the URBAN COUNTY GOVERNMENT, the daily amount of agreed liquidated damages set out above. We also propose to insure that terms of the contract and requirements of the specifications and plans shall be fully complied with by furnishing either a surety bond for the total amount of the contract price, as determined from the unit prices bid and estimated quantities, acceptable to the URBAN COUNTY GOVERNMENT, or such other form of bond as may be required by the URBAN COUNTY GOVERNMENT, and that the surety company, if used, will be satisfactory to the URBAN COUNTY GOVERNMENT and the amount of its bond be within the limit set for it by the U.S. Treasury Department's quarterly report. We enclose, herewith, proposal guaranty for the amount set out above, payable to the URBAN COUNTY GOVERNMENT as guarantee of good faith, and which, if the contract be awarded to us, we AGREE to forfeit as liquidated damages to the URBAN COUNTY GOVERNMENT, in the event of our failure to enter into contract and furnish satisfactory bond to the URBAN COUNTY GOVERNMENT within ten (10) days after receiving official notice of award. We have examined the plans and specifications and the location of the work and are fully informed as to what is to be done and the conditions relating to the work. We understand that the quantities shown on the estimate are approximate ONLY and are subject to either increase or decrease. Should the quantities of any or all of the items of work be increased, we propose to do the additional work at the above unit prices, and should the quantities be decreased, we propose to make no claim for anticipated profits. The URBAN COUNTY GOVERNMENT will award the bids on a unit price basis for the project. This Unit Price Contract may also be used for parking lots, cart paths, jogging/walking paths and other projects so designated by the Division of STREETS, ROADS and FORESTRY.

ACCEPTANCE AND FINAL PAYMENT:

Within sixty (60) days after final inspection and acceptance of the street improvement by the URBAN COUNTY GOVERNMENT, the final estimate for all work done, including all retained percentage shall be compiled by the Engineer and furnished to the Commissioner of the Department of Public Works. Upon the latter's approval, in whole or in part, the amount of money thus found due the contractor, after the total amount of all previous payments, liquidated damages and other claims, if any, are deducted, will be certified for payment. Before final payment is made to any contractor on any work or portion thereof, the contractor will be required to satisfy the URBAN COUNTY GOVERNMENT to the effect that ALL claims for labor done on the contract and all material put into the work, have been fully paid or satisfactorily secured; BUT, the Commissioner of Public Works shall be held harmless by the Contractor and surety on his bond from the payment of any money paid under the belief that said claims for labor and materials have been settled satisfactorily when they have NOT been so settled, and the rights of claimants for labor or materials are not to be prejudiced by any missed payment. The acceptance by the Contractor of the said final estimate shall operate as and shall be a release to the URBAN COUNTY GOVERNMENT and the Commissioner of Public Works. KENTUCKY TRANSPORTATION CABINET, DEPARTMENT OF HIGHWAYS, FRANKFORT, STANDARD

SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 2005 with applicable amendments, and the following special specifications and provisions apply on this project. The Kentucky Department of Labor rules and regulations shall be strictly complied with.

UNIT PRICE WORK:

Where the Contract Documents provide that all or part of the work is to be Unit Price Work, initially the contract price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining the initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by the Contractor will be made by the Division of STREETS, ROADS and FORESTRY. The Lexington-Fayette Urban County Government reserves the right to require additional work based on the unit prices offered in this Contract for a period of one (1) year after contract acceptance. The Unit Prices may also be used for other work besides city streets. This may include parking lots, cart paths, walking/jogging paths and other projects as designated by STREETS, ROADS and FORESTRY.

PERFORMANCE BOND:

The Contractor shall furnish a performance bond and payment bond in an amount equal to one hundred percent (100%) of the Contract Price as security for the faithful performance of the contract and for the payment of all persons performing labor and furnishing materials in connection with the Contract. This bond shall be executed on standard form by a Surety authorized to do business in the state and acceptable to the Owner.

RETAINAGE:

Retainage will be capped at ten (10) percent until fifty (50) percent of project is completed, the retainage will then be reduced to five percent on the remainder of the project payments; with complete release of all retainage within 30 days of substantial completion of a project if there are no disputes.

SPECIAL PROVISION CONTRACT TIME EXTENSION:

In case of delays in the progress of a project due to the inability of the Contractor to secure materials, it will be the policy of the Urban County Government to grant an extension of time, if requested by the Contractor with presentation of evidence, satisfactory to the Director of STREETS, ROADS and FORESTRY, that materials for use on the project were not available from any reasonable source.

QUALIFICATION OF BIDDERS:

Due to the extent of this proposed work, it is required of the Contractor submitting a proposal that he be on the certified list of the State Highway Department for paving work or has the capabilities to complete the proposed work and present evidence of said capabilities to the satisfaction of the Urban County Government.

The successful bidder shall comply with sections 337.520 and 337.540, of the Kentucky Revised Statutes which says in part--that each contractor shall furnish weekly a sworn affidavit with respect to the wages paid each employee during the preceding week and such relative information as may be required by the Kentucky Department of Labor. Any laborer, workman, mechanic, helper, assistant or apprentice worked in excess of eight (8) hours per day or forty (40) hours per week, except in cases of emergency shall be paid not less than one and one-half (1 1/2) times the basic hourly rate of pay as defined and fixed under this chapter for all overtime worked, and each contract for the construction of public works shall so provide.

The public authority letting the contract shall make the determination of exception provided in this section of when an emergency exists. In the performance of this contract, the contractor agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex, or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.

It is the policy of the Lexington-Fayette Urban County Government that all contractors for supplies and services support the affirmative action policies of this Government. All offices, departments, and divisions shall follow the following regulations:

- A. All Urban County Departments shall include in every direct or indirect publicly funded contract for supplies, materials, services, or equipment the following provisions:

During the performance of the contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, or handicap.
 2. The Contractor will state in all solicitations or advertisements for employees placed by or on behalf of the Contract that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, or handicap.
- B. Contractors who are awarded contracts for more than \$50,000 and who have fifteen (15) or more employees shall place on file with the Equal Opportunity Officer a copy of their Affirmative Action Program containing goals and objectives and timetables for achieving those goals and objectives. The Affirmative Action Officer shall have the power to monitor the plans of contractors who meet the above criteria. These regulations are in addition to and do not supersede those required by KRS 45.550 at et. seq.
- C. Contractors doing business with the Urban County Government pursuant to federal grant funds must follow the affirmative action guidelines as set out in Executive Order 11246, as amended.
- D. Contractors doing business for the Urban County Government shall obtain a photo identification badge from the Division of Human Resources, prior to commencement of work. Contact the Division of STREETS, ROADS and FORESTRY at 859-258-3451 one (1) week prior and ID times will be scheduled. Once the contract is complete, all ID badges will be collected.
- E. Noncompliance with any of the above requirements shall be reported forthwith and shall be cause for possible:
1. Suspension of contract,
 2. Debarment from future bidding, and
 3. Hearings and court action under the laws applicable for such noncompliance.

Defined Terms

Terms used in these Instructions to Bidders that are defined in General Conditions of the Construction Contract have the meanings assigned to them in the General Conditions.

Qualifications of Bidders

The OWNER may make such investigations as he deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the OWNER all such information and data for this purpose as the OWNER may request. The OWNER reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the OWNER that such bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein. Conditional bids will not be accepted. The award will be made to the lowest qualified bidder.

In determining the lowest qualified bidder, the following elements will be considered: (1) Does the bidder involved maintain a permanent place of business; (2) Does the bidder have adequate plant and equipment to perform the work properly and expeditiously; (3) Does he/she have suitable financial resources to meet obligations incidental to the work; (4) Does he/she have sufficient and appropriate technical experience; (5) Has he/she performed satisfactorily on previously awarded projects; (6) The percentage of DBE and the value of DBE subcontracts in relation to the total amount; (7) The quality of the Bidders Affirmative Action Plan; and (8) Documentation of "good faith" efforts to achieve 10% minimum DBE goal.

Corporate Firms

Foreign Corporations: are required to be registered with the Secretary of State of the Commonwealth of Kentucky for doing business within the Commonwealth and must be in good standing.

Domestic Corporations: are required to be in good standing with the requirements and provisions of the Office of the Secretary of State, Commonwealth of Kentucky.

Good Standing with Public Works Act: Any Contractor and/or Subcontractors in violation of any wage or work act provisions (KRS 337.510 to KRS 337.550) are prohibited by Statutory Act (KRS 337.1990) from bidding on or working on any and all public works contracts, either in their name or in the name of any other company, firm or other entity in which he might be interested. No bid from a Prime Contractor, in violation of the Act can be considered, nor with any Subcontractor, in violation of the Act, be approved and/or accepted. The responsibility of the qualifications of the Subcontractor is solely that of the Prime Contractor.

Examination of Contract Documents and Site

Before submitting his bid, each Bidder must examine the Contract Documents thoroughly and familiarize himself with federal, state, and local laws, ordinances, rules, and regulations affecting performance of the work.

The submission of a bid is considered to be an incontrovertible statement by the Bidder that he has fulfilled the requirements above.

Interpretations

All questions about the meaning or intent of the Contract Documents shall be submitted to the Director in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by the Director as having received the Bidding Documents. Questions received less than seven working days prior to the date for opening of bids will not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Contract Time

Unit prices in the Contract shall remain in effect for one (1) year from the date of the Contract, Project time and Provisions for Liquidated Damages to be specified in the "Notice to Proceed." Unit prices may be extended for an additional year with written agreement between LFUCG and the Contractor.

Subcontractors, Etc.

If the Supplementary Conditions or Specifications require the identity of the certain Subcontractors or other persons or organizations to be submitted to the OWNER in advance of the Note of Award, the Bidder, will within seven calendar days after the day of the Bid Opening submit to the OWNER a list of all Subcontractors and other persons and organizations (including those who are to furnish the principal items of material and equipment) proposed for those portions of the work as to which such identification is so required. An experience statement with pertinent information as to similar projects and other evidence of qualifications shall accompany such list for each Subcontractor, person and organization if requested by OWNER. If OWNER or DIRECTOR after due investigation has reasonable objection to any proposed Subcontractor, other person or organization, he may before giving Notice of Award, request the Bidder to submit an acceptable substitute without an increase in the Bid price. (If the Bidder declines to make any such substitution, he will not thereby sacrifice his Bid Security.) Any Subcontractor, other person or organization so listed and to whom OWNER or DIRECTOR does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER and DIRECTOR.

CONTRACTOR shall not be required to employ a Subcontractor, other person or organization against which he/she has reasonable objection.

Bid Form

The Bid Form is included in the Contract Documents; additional copies may be obtained from OWNER.

Bid Forms must be completed in ink or by typewriter. The Bid price of each item on the form must be stated in words and in numerals. In case of a conflict, words will take precedence.

The President or Vice-President (or other corporate officer accompanied by evidence of authority to sign) must execute bids by corporations in the corporate name and the corporate seal must be affixed and attested by the Secretary, or an Assistant Secretary. The corporate address and state of incorporation shall be shown below the signature.

Bids by partnerships must be executed in the partnership name and signed by a partner, his title must appear under his signature and the official address of the partnership must be shown below the signature. All names must be typed or printed below the signature.

The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form.)

Submission of Bids

Bids shall be submitted at the time and place indicated in the Invitation to Bid and shall be included in an opaque sealed envelope, marked with the Project title and name and address of the Bidder.

Modification and Withdrawal of Bids

Bids may be modified or withdrawn by an appropriate document, duly executed (in the manner that a bid must be executed) and delivered to the place where bids are to be submitted, at any time prior to the opening of the bids.

Opening of Bids

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Bids will be opened as indicated in the Invitation to Bid and shall remain open for sixty (60) days after Bid Opening. OWNER may, however, at his sole discretion release any bid and return Bid Security prior to that date.

Award of Contract

OWNER reserves the right to reject any and all bids and waive any and all informalities, and the right to disregard all non-conforming or condition bids or counter proposals.

In evaluating bids, OWNER shall consider the qualifications of the Bidders, whether or not the bids comply with the prescribed requirements, and alternates and unit prices, if requested in the Bid Forms. OWNER may consider the qualification and experience of the Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment) proposed for portions of the work as to which the identity of Subcontractors and other persons or organizations must be submitted as specified in Special Conditions or Specifications. He may conduct such investigations, as he deems necessary to establish the responsibility, qualifications or financial ability of the Bidders, proposed Subcontractors and other persons or organizations to do the work. In accordance with the Contract Documents, to OWNER'S satisfaction within the prescribed time. OWNER reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to OWNER'S satisfaction.

If a Contract or Contracts is to be awarded, OWNER will give the apparent successful Bidder a Notice of Award within sixty (60) calendar days after the day of the Bid Opening.

The successful Bidder shall, within fifteen (15) days after acceptance of his proposal, enter into written agreement with OWNER. The required Contract Security shall be delivered along with the executed agreement.

CONTRACTOR'S RESPONSIBILITIES

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SUPERVISION:

Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but Contractor shall not be responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence, or procedure of construction, which is indicated in and required by the Contract Documents. Contractor shall be responsible to see that the finished work complies accurately with the Contract Documents.

SUPERINTENDENCE:

Contractor shall keep on the work site at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to the Division of STREETS, ROADS and FORESTRY except under extraordinary circumstances. The superintendent will be Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to Contractor.

LABOR:

Contractor shall provide competent, suitably qualified personnel to perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all work at the site shall be performed during regular working hours, and Contractor will not permit overtime work or the performance of work on Saturday, Sunday, or any legal holiday without Owner's written consent given after prior written notice to the Division of STREETS, ROADS and FORESTRY.

START-UP AND COMPLETION OF WORK:

Unless otherwise specified, Contractor shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, and completion of the work.

ONE YEAR CORRECTION PERIOD:

If within one (1) year after the date of completion or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any work is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such defective work, or, if it has been rejected by Owner, remove it from the site and replace it with non-defective work. If Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective work corrected or the rejected work removed and replaced, and all direct, indirect, and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals) will be paid by Contractor. In special circumstances where a particular item of equipment is placed in continuous service before completion of all work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Change Order.

FORM OF PROPOSALPlace: Lexington, Kentucky

Date: _____

The following Form of Proposal shall be followed exactly in submitting a proposal for this work.

This Proposal Submitted by:

(Name and Address of Bidding Contractor)

(Hereinafter called "Bidder"), organized and existing under the laws of the state of

_____:doing business as:

"a corporation," "a partnership", or an "individual" as applicable

To: Lexington-Fayette Urban County Government (hereinafter called "Owner")
Office of the Director of Purchasing
200 East Main Street, Third Floor
Lexington, KY 40507

Gentlemen:

The bidder, in compliance with your Invitation for Bids for the 2009-2010 City Street Resurfacing, Lexington, Kentucky; having examined the Plans and Specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the lump sum and/or unit prices stated hereinafter. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is part.

The Bidder hereby agrees to commence work under this Contract on a date to be specified in written "Notice to Proceed" of the Owner and to fully complete the project by June 30, 2010.

The Bidder further agrees to pay as liquidated damages, the sum of Two Hundred Dollars (\$200.00) for each consecutive calendar day thereafter as stated herein.

The Bidder hereby acknowledges receipt of the following addenda:

Addendum No. _____ Date _____; Addendum No. _____ Date _____

Addendum No. _____ Date _____; Addendum No. _____ Date _____

Addendum No. _____ Date _____; Addendum No. _____ Date _____

Addendum No. _____ Date _____; Addendum No. _____ Date _____

Here insert the number and the date of any Addendum issued and received. If none has been issued and received, the word "NONE" should be inserted.

STATEMENT OF BIDDER'S QUALIFICATIONS

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FORM OF PROPOSAL

The following statement of the bidder's qualifications is required to be filled in, executed, and submitted with the Proposal:

1. Name of Bidder: _____
2. Permanent Place of Business: _____
3. When Organized: _____
4. Where Incorporated: _____
5. Construction Plant and Equipment Available for this project: _____

(Attach Separate Sheet if Necessary)

6. Financial Condition:

The apparent low Bidder is required to submit its latest three (3) years audited financial statements to the Owner's office of Central Purchasing within seven (7) calendar days following the bid opening.

7. In the event the Contract is awarded to the undersigned, surety bonds will be furnished by:

_____ (Surety)

Signed: _____ (Representative of Surety)

8. The following is a list of similar projects performed by the bidder: (Attach a separate sheet if necessary).

<u>NAME</u>	<u>LOCATION</u>	<u>CONTRACT SUM</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. The bidder is now under contract and bonded the following projects:

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<u>NAME</u>	<u>LOCATION</u>	<u>CONTRACT SUM</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

10. List key bidder personnel who will work on this project:

<u>NAME</u>	<u>POSITION DESCRIPTION</u>	<u>NO. OF YRS. W/BIDDER</u>
_____	Superintendent	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

11. We acknowledge that, if we are the apparent low bidder, we will submit to the Owner within seven (7) calendar days following the Bid Opening, the required three (3) years audited financial statements, our latest three (3) year loss history for all insurance claims including losses arising from coverages required by this Contract, a sworn statement on the Owner's form regarding all current work on hand and under contract, and a statement on the Owner's form of the experience of our officers, office management, and field management personnel, all in accordance with the Special Conditions of the Project Specifications and Bid Documents.

Respectfully submitted:

(Name of Contracting Firm)

BY: _____

TITLE: _____

DATE: _____, 20____

STATEMENT OF EXPERIENCE

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FORM OF PROPOSAL

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF
EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF
EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF
EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

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POSITION/TITLE: _____

STATEMENT OF
EXPERIENCE: _____

NAME OF INDIVIDUAL: _____

POSITION/TITLE: _____

STATEMENT OF
EXPERIENCE: _____

BY: _____

Name of Firm

DATE: _____

BY: _____

TITLE: _____

Include all officers, office management, and field management personnel. Attach separate sheets if necessary.

LIST OF PROPOSED SUBCONTRACTORS

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FORM OF PROPOSAL

The following list of proposed subcontractors is required by the Owner to be executed, completed, and submitted with the Bidder's Form of Proposal. All subcontractors are subject to approval of the Lexington-Fayette Urban County Government. Failure to submit this list completely filled out may be cause for rejection of Bid.

BRANCH OF WORK - LIST EACH MAJOR ITEM

Such as: Grading, bituminous paving,
concrete, seeding and protection,
construction staking, etc.

SUBCONTRACTOR

1. _____

Name: _____

Address: _____

2. _____

Name: _____

Address: _____

3. _____

Name: _____

Address: _____

4. _____

Name: _____

Address: _____

5. _____

Name: _____

Address: _____

6. _____

Name: _____

Address: _____

7. _____

Name: _____

Address: _____

8. _____

Name: _____

Address: _____

PRELIMINARY PREPARATIONS:

Prior to any resurfacing, the Director of STREETS, ROADS and FORESTRY, or his representative, will make an inspection of the existing pavement to determine what repairs shall be made. Where there are depressions in the surface of the existing pavement, but the existing base is satisfactory, the surface material shall be cut out, squared up and refilled with bituminous base to the height of the surrounding surface; where it is determined that there is a failure of the base, this portion shall be cut out, squared up and base concrete of a compressive strength of three thousand five hundred (3,500#) pounds per square inch is to be placed to the height of the surrounding base. Concrete supplied as base material will be paid for at the unit price bid under BASE CONCRETE. Asphalt surface removal and base removal will be paid for on the basis of actual quantities removed at the respective unit prices bid. Where there are humps, waves, or other irregularities in the existing surface, bituminous binder shall be applied to level up the surface prior to application of surface. All material and labor involved in supplying and laying the bituminous binder, mentioned above, will be paid for at the unit price bid on "Bituminous Concrete for Base".

CLEANING SURFACE:**Curb and Gutter Section of Street**

The pavement shall be swept with a mechanical sweeper of an approved type and with wire hand brooms, when necessary; the sweeping to be continued until the surface is thoroughly cleaned. Special care shall be taken to clean the edges of the surface so that the full width of the roadway to be treated shall be uniformly clean. Where any mud or earth exists, it shall be removed long enough in advance of application of bituminous material to allow the surface to become thoroughly dry. All grass and/or weeds must be removed before sweeping. All sweeping is to be done from the edge of the pavement or front face of the curb toward the center, then picked up and disposed of off site. This is to be completed before the application of a tack coat. No additional payment will be paid for cleaning. This work will be considered incidental to bituminous pavement.

Streets Without Curbs and/or Gutters

The existing road surface shall be prepared by using a grader or similar equipment to expose the full width of the existing pavement. The material is to be picked up and disposed of off site. This work will be considered incidental to placing of bituminous pavement and no additional payment will be paid.

TACK COAT:

Apply the tack coat with a spray bar that can be raised to a sufficient height so as to uniformly and completely coat the entire surface. When a uniform application, at the rate required, cannot be obtained from a spray bar, then apply the tack coat by fogging with a hand spray attachment.

The STREETS, ROADS and FORESTRY' Representative will only accept complete and uniform coverage. Unless otherwise specified in the requirements for the asphalt mixture being placed, apply tack at a rate to achieve an undiluted residue of 0.40 pounds (0.05 gallons) per square yard.

When furnishing RS-1 or CRS-1 for tack, apply them undiluted.

When furnishing SS-1, SS-1h, CSS-1, or CSS-1h for tack, the Division of STREETS, ROADS and FORESTRY will allow diluted or undiluted application provided uniform and complete coverage is achieved. When applying tack in a diluted form, apply it a sufficient time in advance to ensure that all water has evaporated before placing the asphalt mixture.

On newly constructed base and binder courses, adjust the application rate as the STREETS, ROADS and FORESTRY' Representative directs.

When placing asphalt material adjacent to curbs, existing pavements, or other structures, first coat the contact surface of the existing structure with tack material.

If the initial application of any tack material is not uniform, apply additional material as directed at no additional expense to the Lexington-Fayette Urban County Government.

Remove asphalt material applied in excess of the requirements, or cover it with a blotter course of dry sand or stone chips as the STREETS, ROADS and FORESTRY' Representative directs.

On projects over which public traffic is being maintained, apply the tack coat over one-half of the pavement width, not to exceed one-half day's work, in advance of the construction of the asphalt cover course. Do not end the tack coat application at a location hazardous to traffic. Do not apply tack coat to a lane that requires overnight closure, unless the Streets, Roads & Forestry Representative approves it in writing. Schedule the work so that at the end of the day's production all tack is covered with the asphalt mat or a sand blotter course. At road intersections or other traffic crossings, the STREETS, ROADS and FORESTRY' Representative may require the application of a sand blotter course over the tack coat.

When Sand for Blotter is included in the Contract as a bid item, cover the tack coat with surface-dry, natural sand in a minimum quantity sufficient to prevent the tack coat from being picked up by traffic. Apply the sand uniformly at the rate the STREETS, ROADS and FORESTRY' Representative directs but not exceeding five pounds per square yard. The normal rate is two to three pounds per square yard.

Asphalt Material for Tack. STREETS, ROADS and FORESTRY will not measure tack for payment and will consider it incidental to the asphalt courses.

BASE COURSE:

Where existing asphalt surface is removed and elsewhere when used as a leveling course, bituminous concrete, base course shall be used as directed by the Engineer. It may be hand raked or machine spread and rolled ahead of the surface course. The preparation of the materials for this course and the laying are to be in accordance with Division 400 of the KENTUCKY TRANSPORTATION CABINET, DEPARTMENT OF HIGHWAYS, FRANKFORT, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 2004.

SURFACE COURSE:

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This shall be C.L.2 bituminous concrete Surface 0.38D PG64-22, one and one half (1 ½") inches thick, weighing approximately one hundred and sixty five (165) pounds per square yard or as directed by the Engineer. The preparation of the material for this course and the laying of this course shall be in accordance with the KENTUCKY TRANSPORTATION CABINET, DEPARTMENT OF HIGHWAYS, FRANKFORT, STANDARD SPECIFICATIONS AND FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 2004, Section 403 and Section 404.

BITUMINOUS CONCRETE LEVELING AND WEDGING

The estimated quantity of bituminous concrete binder and or surface for wedging and leveling is to be distributed by grader over areas as directed by the Engineer. The unit price bid per ton for leveling and wedging shall include base repairs, edge patching and correction of other irregularities. All grader leveling and wedging shall be done as a separate operation from the surfacing and shall be completed before the normal paving operations are begun. All areas to be treated shall be thoroughly cleaned and tacked with the same type of tack material as specified in the contract. The bituminous mixture shall be spread satisfactorily with a motor patrol grader and thoroughly compacted by rolling.

BASE REMOVAL:

Where there is evidence of base failure and the STREETS, ROADS and FORESTRY Representative orders the removal of the existing base, payment will be made at the unit price bid for milling per ton.

BASE CONCRETE:

Where there is base removal and new base installed, the new base shall have a minimum compressive strength of three thousand five hundred (3,500#) pounds per square inch.

RAISING MANHOLES:

Manholes shall be adjusted after resurfacing has been completed. The Contractor will spot the locations of manholes and the Contractor shall remove the frames and covers and adjust them to conform to within 1/8 of an inch of to the asphalt surface, replace the disturbed concrete base, and resurface the area around the frames and covers. The minimum width of pavement to be removed around manholes shall be six (6") inches. The cast iron frames and covers to be adjusted shall be removed and reset on a full course of concrete mortar. The use of wedges or other similar devices shall not be permitted. The entire area disturbed in the removal of the frame and cover shall be completely refilled with concrete to the required height around the frame to receive the bituminous material. The unit price bid for adjusting manholes, frames, and covers shall include all necessary labor, equipment, and materials necessary to replace the concrete base and bituminous concrete surface of disturbed areas around the manholes. Frames and covers, which, in the opinion of the Director of STREETS, ROADS and FORESTRY are unsuitable for reinstallation will be replaced by other frames and covers supplied by the URBAN COUNTY GOVERNMENT for installation by the Contractor at the unit price bid. Before adjustment or replacement of any manhole frame is undertaken, the entire bottom of the manhole shall be covered solidly by use of lumber or heavy canvas, or both, or, by other methods fully as effective. The method to be used shall be approved by the Director of STREETS, ROADS and FORESTRY. The protective covering shall remain in place until all mortar and concrete work has been completed. The Contractor shall promptly remove all bricks, mortar, and other waste materials dropped into manholes. Lifting rings, as manufactured by National Utility Products Company, 29355 Ranney Parkway, Cleveland, Ohio 44145, or equal, may be used on frames manufactured after 1960. The method to be used shall be approved by the Director of STREETS, ROADS and FORESTRY or his representative.

THE MANHOLES SHALL BE RAISED TO THE GRADE OF THE NEW ASPHALT TO WITHIN 1/8 OF AN INCH OF, USING ONE (1) RING ONLY, IF THE LIFTING RING METHOD IS USED. IF THE MANHOLE HAS AN EXISTING RING IT SHALL NOT BE RAISED USING A RING, BUT THE OTHER METHOD WILL BE USED.

Manhole adjusting rings that are removed and not reused are the property of the URBAN COUNTY GOVERNMENT and shall be delivered to the STREETS, ROADS and FORESTRY Maintenance Facility located at 1791 Old Frankfort Pike, Lexington, Kentucky. 25

All manholes that are covered with asphalt shall be marked by using I.D. Locator that is 3.5" sq x 4 1/4" High with adhesive backing.

The Contractor at no cost to the URBAN COUNTY GOVERNMENT will raise manholes of the type that have leveling screws unless the manhole has to be removed. In that case, the payment for the work will be at the unit price bid. The Division of STREETS, ROADS and FORESTRY will provide the Contractor with the wrench to raise these manholes, along with the lock down tabs.

SIGNING:

The Contractor will provide proper "Signing" during resurfacing activities to provide proper safety to both vehicular traffic and pedestrians. This shall comply with the American Traffic Safety Services Association Guide for work area traffic control, Part VI of the Manual on Uniform Traffic Control Devices (MUTCD), 1988 Edition of MUTCD, Revision 3, September 3, 1993.

"NO PARKING" SIGNS:

The Contractor must post "NO PARKING" signs twenty-four (24) hours in advance on streets or roads to be resurfaced or milled. This will require a safety officer's presence to witness the date and time of installation of the signs to insure that vehicles will be towed. It will be the Contractor's duty to notify and meet with the Police Department. In addition to posting "NO PARKING" signs, Contractor will leave a "notice of work to be performed" at each residence and on vehicles parked on the street at the same time the "NO PARKING" signs are posted. The Division of STREETS, ROADS and FORESTRY will furnish the notices and "NO PARKING" signs. No additional payment will be made for this procedure. The contractor must remove all posted "No Parking" signs on Friday if they will not be able to complete the street(s) unless they are working on Saturday or Sunday.

SAFETY VESTS:

All members of the paving crew that are on the ground shall wear a type of safety vest that has been approved by KOSH or OSHA.

WEEKEND WORK:

There shall be no work on Saturdays or Sundays unless given forty-eight (48) hours written notice to the Director of STREETS, ROADS and FORESTRY.

PERMIT:

The contractor must obtain a permit for resurfacing forty-eight (48) working hours in advance from the Division of Traffic Engineering of the Lexington-Fayette Urban County Government, 101 E. Vine St., Lexington, Kentucky prior to resurfacing each particular street. Saturdays and Sundays are not considered normal working days. For work to be done on Monday, a permit must be obtained no later than the previous Thursday by 9:00 a.m. For work to be done on:

Tuesday, a permit must be obtained no later than the previous Friday by 9:00 a.m.

Wednesday, a permit must be obtained no later than the previous Monday by 9:00 a.m.

Thursday, a permit must be obtained no later than the previous Tuesday by 9:00 a.m.

Friday, a permit must be obtained no later than the previous Wednesday by 9:00 a.m.

SPECIAL PROVISION FOR RUMBLE STRIPS

26

Contractor will install rumble strips on the edge of the road in conjunction with the paving operation.

Time the rolling operation so indentations are at the specified size and depth without causing unacceptable displacement of the asphalt mat. Correct unacceptable rolled in rumble strips by sawing.

No rumble strips will be required if the section of roadway has a rolled curb, boxed curb, or header curb.

Method of Payment:

No additional payment will be made for rumble strips as this shall be considered as incidental to the asphalt mixture.

SPECIAL PROVISION FOR ROLLING AND SHAPING

This work shall consist of shaping the gravel base as necessary to produce a uniform appearance and rolling to ensure compaction of the gravel base prior to the construction of a base course.

Basis of Payment

Pay Item

Pay Unit

Rolling and Shaping

Lump Sum

SPECIAL PROVISION FOR TREE DAMAGE

Description

Pruning

Basis of Payment

Description:

EXTREME CARE shall be used to avoid damage to any trees during the resurfacing contract.

Trees that are damaged shall be pruned to minimize any harmful effects.

Pruning:

All damaged branches shall be cut with a slanting cut just above a live and healthy bud whenever possible.

All ends of broken and damaged branches shall be removed with a clean cut made flush with a parent timber trunk.

Care shall be taken in pruning to preserve the natural character of the tree.

All cut surfaces over 3/4 inch/19 mm in diameter shall be painted with an approved tree paint.

Basis of Payment:

The work necessary to maintain the trees will be considered incidental to the resurfacing contract and no separate payment shall be made for such.

SPECIAL PROVISION FOR EDGE KEYS

27

Description
Construction
Measurement and Payment

Description

Edge keys to be either longitudinal or transverse. Shall be used only at the direction of the Division of STREETS, ROADS and FORESTRY's representative.

Construction

Edge keys to be neat and straight on all edges. Depth of key will be the same as the thickness of the bituminous course to be laid. Width shall be enough to allow a smooth transition, but in no case should be less than 18" (eighteen inches)/0.4575 mm, nor more than 36" (thirty-six inches)/0.915 mm before laying new bituminous courses. All edge keys shall be cleaned of dust and debris and sprayed with a bituminous tack coat.

Measurement and Payment

Edge keys shall be measured by linear foot. Payment will be by linear foot or meter and prices shall be full compensation for furnishing, hauling, labor, equipment, tools, and all incidentals necessary to complete this work.

Basis of Payment

<u>Pay Item</u>	<u>Pay Unit</u>
Edge Key	Linear foot or meter

SPECIAL PROVISION FOR ASPHALT CURB – 6" HIGH

Description: Construct asphalt curbs 6" high and a constant width either by hand or machine.

Materials and Equipment:

Asphalt Materials: For tack and paint coats use:

SS-1H
SS-1
C SS-1
C SS-1H
AE-60
RS-1 or
C RS-1

Asphalt Mixture: Use:

P664022 or
58-22

Aggregate: Use a gradation within the master range in the following table:

<u>Sieve Size</u>	<u>Percent Passing</u>
12.5 mm	100%
4.75 mm	60 – 80%
2.36 mm	45 – 65%

300 µm
75 µm

13 – 25%
6 – 12%

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Use an asphalt binder with content between 6 to 8 percent by weight of the mixture. When using a porous aggregate, increase the asphalt content as needed to compensate for asphalt absorption by the aggregate. May also use Class "I" surface if installed at the same time as paving the street.

Machine:

Furnish a self-propelled machine for placing asphalt curb. Ensure that it is equipped with a material hopper, a distributing screw, and adjustable forming devices and capable of placing and compacting the asphalt mixture in a smooth section free of honeycomb areas.

Construction:

The surface should be cleaned where the curb is to be placed. Apply tack at a rate to achieve a residue of approximately 0.23 L/Square meter of undiluted material. Allow the tack material to cure before covering it.

Apply an asphalt paint coat to the curb after construction.

Asphalt Curb:

Quantities will be measured in linear feet along the top of the curb. Tack and paint coats will not be measured for payment but will be considered incidental to this item of work.

Payment:

Payment will be made for the completed and accepted quantities under the following:

<u>Pay Item</u>	<u>Pay Unit</u>
Asphalt Curb 6"	Linear Foot

Payment will be full compensation for all work required under Asphalt Curb 6".

BITUMINOUS PAVEMENT MILLING AND TEXTURING

This Special Provision shall apply when indicated in the proposal.

Description

This work shall consist of improving the profile, cross section, and surface texture of an existing bituminous pavement, and shall include all labor, materials, equipment, and incidentals necessary to complete the work, including disposal of all resultant cuttings.

Construction Requirements

Equipment

The equipment for milling and texturing the pavement shall be a power-operated, self-propelled planing machine or grinder capable of removing bituminous concrete to the required depth, profile, cross slope, and surface texture. The machine shall be capable of accurately establishing profile grades by referencing from either the existing pavement or from an independent grade control, and shall have positive means for controlling cross slope. The machine shall have a floating moldboard with sufficient down pressure to plane

the milled surface. The machine shall have an effective means of removing cuttings from the pavement and²⁹ for preventing dust from escaping into the air.

The textured pavement shall be thoroughly swept immediately behind the machine and all materials swept up shall be loaded and hauled away. A water truck shall be furnished and used to control dust from the work, when deemed necessary by the Director of STREETS, ROADS and FORESTRY or his representative.

Supplemental equipment shall be provided as necessary to remove material adjacent to curbs, railroad crossings, and other areas that cannot be removed by the milling machine.

Milling and Texturing

- (1) General – After milling and texturing, the finished surface shall provide a smooth riding surface free from gouges, ridges, oil film, and other imperfections of workmanship, having a uniform texture, and true to the required grade and cross section. The elevation of the longitudinal edges of adjacent cuts shall not be more than 1/8 inch/4 mm. When practical, vertical longitudinal faces shall not be left during non-working hours in areas exposed to public traffic. When it is necessary to expose public traffic to vertical longitudinal faces, the faces shall be no more than 1 ¼ inches/30 mm in height and shall be tapered in a manner approved by the STREETS, ROADS and FORESTRY representative to avoid creating a hazard for traffic.

Where sound pavement has been gouged, torn, or otherwise damaged during the milling operations, or damage is done to any other property of any kind including utility frames, grates, covers, curbs, driveways or sidewalks, repairs shall be made by the CONTRACTOR at no cost to the Lexington-Fayette Urban County Government.

- (2) Cut more than 1-inch/25 mm – Where a cut deeper than 1-inch/25 mm is required. The depth of the cut shall be determined by the Streets, Roads and Forestry Representative. The cut shall be measured at the edge of the cutting drum. Each cut shall be completed over the entire length and width of the area; the next cut shall not be started until the area has been examined by the STREETS, ROADS and FORESTRY representative and the representative determines that additional cutting is necessary or desirable.

The depth of cut indicated in the Contract is approximate only. The STREETS, ROADS and FORESTRY representative on the project will determine the actual depth of cut.

- (3) Texture – The texture shall be uniform throughout the project and shall provide, in the judgment of the STREETS, ROADS and FORESTRY representative, a satisfactory riding surface.
- (4) Surface Tolerance – The finished surface after the final cut shall not show a deviation greater than 1/8 inch/4 mm from a 10-foot/3 meter straightedge, and the cross slope shall not deviate more than 3/8 inch/10 mm in 10 feet/3 meters. All irregularities exceeding these limits shall be corrected.
- (5) Approaches and Tapers – Approaches and tapers shall be acceptably textured when required by the STREETS, ROADS and FORESTRY representative. The STREETS, ROADS and FORESTRY representative will determine length, width, and depth of cut on approaches and tapers. The approaches and tapers shall match the finished cut on the main line and shall be transitioned to the existing surface to with +/- 1/8 inch/4 mm.
- (6) Hauling – Unless otherwise specified, the cuttings shall be delivered to the Lexington-Fayette Urban County Government, STREETS, ROADS and FORESTRY Maintenance Facility at 675 Byrd Thurman Drive and/or 1313 ½ Old Frankfort Pike. The STREETS, ROADS and FORESTRY representative will make the site determination on site of the milling. STREETS, ROADS and FORESTRY will be responsible for stockpiling the material at both locations.
- (7) Milled Streets – all milled streets **must** have a scratch coat or be resurfaced within 48 hours of being milled. No street will be left milled over a weekend or a holiday period.

- (8) Manholes – Any manholes that are higher than the milled surface shall be covered using a manhole protector to provide safety to vehicles or by using asphalt to provide a smooth transition over the manhole. **In no case shall the manhole be left exposed.**

Adjusting Small Drainage Structures

The CONTRACTOR shall keep all small drainage structures, utility valves, etc. free of cuttings and other debris during the milling operation.

Method of Measurement

Bituminous Pavement Milling and Texturing – The material removed from areas acceptably milled and textured will be measured in tons.

The CONTRACTOR will make all necessary arrangements to have material weighed and verified to be correct as to tons hauled. No additional payment will be made for this.

Water used to control dust will not be measured for separate payment but will be considered incidental to the milling and texturing.

Basis of Payment

Bituminous Pavement Milling and Texturing – The accepted quantity of Bituminous Pavement Milling and Texturing will be paid for at the contract unit price per ton, which payment will be full compensation for all labor, materials, equipment, and incidentals necessary to mill and texture the pavement, and control dust. When the Contract does not include a separate bid item for Hauling Cuttings, then payment for Bituminous Pavement Milling and Texturing shall also include full compensation for all hauling necessary to deliver the cuttings.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Bituminous Pavement Milling and Texturing	Ton

SPECIAL PROVISION FOR POLYPROPYLENE FIBER – REINFORCED BITUMINOUS CONCRETE MIXTURES

Description

This work shall consist of furnishing all materials and placement of fiber-reinforced bituminous concrete courses.

This work is intended to provide bituminous material having increased rutting resistance. **SPECIAL ATTENTION** shall be given to all aspects of the work to ensure that only high quality materials, equipment, and workmanship are utilized at all times.

Materials

- A. FIBERS – The fibers for reinforcement of bituminous mixtures shall be polypropylene, and be specifically manufactured for use in bituminous concrete mixes. The job mix shall include a minimum of 6 pounds of fibers per ton of mix. The fibers shall have a uniform singular shape, a uniform singular color, and the manufacturer shall provide documentation or certification that the following properties are met:

Material:	Polypropylene
Denier per filament:	4 +/- 1
Length:	10 +/- 2mm
Crimps:	None

Tensile Strength:	40,000 psi, minimum
Moisture Regain:	
(@70 degrees F & 65% relative humidity)	0.1%, minimum
Melting Point:	290 degrees F, minimum
Asphalt Retention:	35x @ 280 degrees F
Elongation:	100% minimum
Specific Gravity:	0.91
Alkali Resistance:	100% Strength Retained
(HCl solution at 70 degrees F)	
Shrink Test:	0% at 295 degrees F
Acid Resistance	
(HCl solution at 70 degrees F)	100% Strength Retained
Moisture Regain At	
(70 degrees F + 50% RH)	Less than 0.1%
Asphalt Affinity Test:	Equal to or more than 7.0 lbs.
U.V. Stability:	Min. 50% greater than natural
Glass Transition Temperature:*	-18 C (0 F)

*GGT is the temperature at which a fiber loses its flexibility and becomes brittle; therefore, it would tend to easily break, and as in the case of asphalt reinforcement, would lose its value.

- B. MIXTURE REQUIREMENTS – The bitumen content shall be increased (normally 0.3%) to account for the added surface area taken up by the fiber.

The polypropylene fibers shall be added to the mix at the rate of six pounds per ton of mix.

1. At least two weeks prior to the start of asphalt concrete production, the manufacturer of the fiber shall furnish the following information and samples to the Division of STREETS, ROADS and FORESTRY:
 - a. Certified test data for the fibers
 - b. A 10 foot uncut sample (tow) of the fiber

STREETS, ROADS and FORESTRY will use this information from testing to determine the acceptability of the fibers.

2. The CONTRACTOR will obtain a random 0.5-pound sample of the finished fibers for each 25,000 pounds of fiber to be used on the project and these samples will be test to assure consistency of quality.

- C. MIXING – Prior to the start of full production, the CONTRACTOR shall produce a test batch of fiber asphalt concrete to demonstrate to STREETS, ROADS and FORESTRY how the fibers will be introduced and mixed into the asphalt concrete. The Director will determine the acceptability of the fiber asphalt concrete mixture at this time. If during production, the CONTRACTOR starts producing an unsatisfactory mix, production shall cease until the CONTRACTOR can produce a satisfactory test batch as described above.

When a batch type plant is used, the fibers shall be added as per the manufacturer's recommendation to the heated aggregate prior to introduction of the asphalt cement. The aggregate and fibers shall be mixed for minimum of 20 (twenty) seconds after introduction of the fibers. Mixing time may be increased if satisfactory results are not obtained.

When a drum mix type plant is used, the fibers shall be introduced into the aggregates by the reclaimed material feed system or by an adjustable pipe near the bitumen feed pipe.

The CONTRACTOR shall provide suitable means to calibrate and check the rate and quantity of fibers being added. Such checks will be performed when deemed necessary by STREETS, ROADS and FORESTRY.

The manufacturer's technical representative of the polypropylene fiber shall be available during the initial start up. If the Streets, Roads and Forestry Representative requests.

- D. **MIXTURE CONTROL** – Mixture temperature control is critical. The fiber mixture must not be overheated. The maximum temperature of the aggregate shall not exceed 290 degrees F. The asphalt cement temperature shall not exceed 300 degrees F. The temperature of the finished mixture shall not exceed 290 degrees F. Mixture found to have been heated above 290 degrees F may be rejected. Any mixture found at such temperature shall be evaluated. If placed, the resulting pavement may be required to be removed and replaced, left in place with suitable price adjustment, etc. The lay down temperature of the fiber mix will be no higher than 290 degrees F nor lower than 260 degrees F.
- E. **CERTIFICATION OF UTILIZATION** – The CONTRACTORS CERTIFICATION OF UTILITIZATION OF BITUMINOUS MIXTURE MODIFIERS form shall be completed and submitted as indicated on the form.
- F. **METHOD OF MEASUREMENT** – Measurement of the bituminous concrete mixture, including the fibers, will be by the ton.
- G. **BASIS OF PAYMENT** – Payment for the accepted quantity of the bituminous mixture specified at the contract unit price shall be full compensation for all work and materials necessary to furnish and place the mixture including the fibers, and including any special equipment or extra labor necessary, any special mixing, placing, or compacting procedures and all incidentals associated with construction of the fiber reinforced pavement.

TRAFFIC MARKINGS

Contractor shall be responsible for replacing the lane markings. Temporary and/or permanent markings shall be maintained at all times. Markings shall meet the Kentucky Transportation Cabinet Standard Specifications.

PAY ITEM

PAY UNIT

6" Asphalt Milling and Texturing
4" C 4 Base 1.0D, PG 76-22
2" C 4 Surface 0.38D, PG 76-22

Ton
Ton
Ton

PAVEMENT MARKING

DESCRIPTION:

This special note covers requirements for pavement markings to be furnished and applied by the Contractor.

Special markings, such as crosswalks and railroad crossings, are required unless otherwise specified.

Section references herein are to the Department's Standard Specifications for Road and Bridge CONSTRUCTION, EDITION OF 2004.

PAVEMENT STRIPING:

A. Criteria for Use

1. If there are no centerline pavement markings on the existing pavement at the time the project is advertised for bids, no markings will be required, unless otherwise specified.
2. Pavement markings shall be applied when any course of a new pavement is driven over by the public, or on each course constructed on resurfacing projects including patching, milling, leveling, and wedging courses, except when existing centerline markings have not been obscured and are plainly visible. Pavement marking material for centerlines and lane lines shall be installed on the top course constructed every day before sunset that day unless otherwise indicated in the plans or proposal. The installation of edge line markings may be deferred until all shoulder paving is complete. When rain or other unavoidable

occurrences prevent marking before sunset, it shall be done as soon as conditions permit during daylight hours. 33

3. On resurfacing, pavement restoration, and pavement rehabilitation projects, pavement markings on courses to be overlaid shall consist of centerline and lane line markings. No-passing zones will be located as outlined in Section E, Records. Markings on the final surface course shall include edge line markings if they were in place on the existing pavement at the time the project was advertised for bids. On all other projects, the markings to be placed will be as specified in the contract or as otherwise designated by the STREETS, ROADS and FORESTRY Representative. Centerline markings, those separating traffic moving in opposite directions, shall be yellow in color. Lane line markings, those separating traffic moving in the same direction, shall be white in color. These markings shall be skip lines and solid lines as required by Part III of the Manual on Uniform Traffic Control Devices (MUTCD). Skip lines shall meet requirements of Paragraph II.C.5 herein. Edge lines shall be solid lines and the color shall be determined by Part III of the MUTCD.

4. Final markings, as described above, shall be applied to Portland Cement concrete pavement before opening the highway to the public.

B. Materials

Materials for striping may be paint with glass beads.

The paint must generally comply with specifications for Type III Chlorinated Rubber-Alkyd type paint, as described in Federal Specifications TT-P-115E, with the following exceptions:

- (1) The weight per gallon must exceed 12.00 lbs.
- (2) Drying time must not exceed one minute to touch nor five minutes to no pick up when applied at 120 degrees F.
- (3) The viscosity at 77 degrees F must be 75-90 Krebs Units.
- (4) The percent of pigment by weight must be 45-55 percent.
materials noted below, in excess of the minimum weight in pounds per gallon of paint:
- (5) Composition of the pigment must include a portion of the following

	<u>White</u>	<u>Yellow</u>
Titanium Dioxide	1.00	0.25
Magnesium Silicate	2.20	2.20
Zinc Oxide	0.25	0.25
Calcium Carbonate	2.20	2.00
Chrome Yellow	0	1.00

- (6) Composition of the vehicle must include a portion of the following materials noted below, in excess of the minimum weight of pounds per gallon of paint:

	<u>White</u>	<u>Yellow</u>
Alkyd Resin Solution	1.00	1.00
Chlorinated Rubber	1.00	1.00
Chlorinated Paraffin	0.75	0.75
Methyl Ethyl Ketone	2.00	1.75
Toluene	0.25	0.25
Xylene	0.3	0.3

- (7) The vehicle must include trace amounts, to exceed 0.01 pounds per gallon of paint, of lead drier, cobalt drier and anti-skinning agent. 34
- (8) All bids should include documentation of actual chemical composition and reference to governmental agencies and specifications whereby the materials bid are successfully being used. The Lexington-Fayette Urban County Government reserves the right to reject delivered materials if a laboratory examination determines that the composition does not conform to the documentation included with the bid.

C. Application of Striping

1. Application and maintenance of pavement striping shall be as specified in Section 746.05. Paint shall be applied at a rate of not less than 38.8 liters per kilometer (16.5 gallons per mile) of solid 102-millimeter (4-inch) line and 58.3 liters per kilometer (24.8 gallons per mile) of solid 152-millimeter (6-inch) line. Glass beads shall be applied at a rate of not less than 0.6 kilograms per liter (5 pounds per gallon) of paint. Pavement striping shall be maintained throughout the duration of the project at no additional cost to the Lexington-Fayette Urban County Government.
2. All Pavement Striping (Temporary) shall be 102 millimeters (4 inches) in width.
3. The 102-millimeter (4-inch) lines shall have clean edges and shall not be less than 102 millimeters (4 inches) or more than 152 millimeters (6 inches) nor more than 203 millimeters (8 inches) in width. These tolerances may not apply when deviations are caused by undulation in the pavement surface.
4. The skip lines shall have stripe-to-gap ratio of 3-meter (10-foot) paint stripe to a 9.1-meter (30-foot) gap. The length of the stripe shall not be less than 3.0 meters (10 feet) nor longer than 3.2 meters (10 feet 6 inches). The stripe-gap cycle shall not be less than 12.0 meters (39 feet 6 inches) nor longer than 12.3 meters (40 feet 6 inches).

D. Application Equipment

1. The striper used for the markings on the final course must be self-propelled and capable of heating the paint to provide uniform flow and enhance quick drying of the paint.

This striper must have a guide boom or optical pointer in order to attain smooth and straight lines. The equipment must use air pressure or pump pressure to maintain proper paint pressure at all times. The equipment shall be capable of applying a single line or parallel lines of the specified width and in any combination of a skip line and a solid line in one pass.

2. The equipment shall be equipped with a paint cutoff device to provide clean, square marking ends of the paint lines.

F. Marking Removal

Any markings done in error or which do not conform to the traffic operation in use must be removed. Markings may be removed by either an abrasion or burning process to the satisfaction of the Lexington-Fayette Urban County Government. Painting of existing markings with bituminous or other material to obliterate the markings shall not be allowed.

MEASUREMENT AND PAYMENT:

Pavement striping will be measured by the linear foot. Measurement of pavement striping for payment will be made only once per course. Payment will be made under:

<u>ITEM</u>	<u>UNIT</u>
102-mm (4") Pavement Striping, (Temporary)	meter or linear foot
102-mm (4") Pavement Striping, (Permanent)	meter or linear foot
152-mm (6") Pavement Striping, (Temporary)	meter or linear foot

Striping Specifications

HOT MELT MARKINGS SPECIFICATIONS

1. GENERAL :

It is the intent and purpose of this specification to describe and/or define preformed thermoplastic retroreflective pavement markings designed for use as stop bars, crosswalks, arrows, legends, etc. in highway road markings.

The Lexington-Fayette Urban County Government, Division of Traffic Engineering reserves the right to reject any and all materials or to waive portions of these specifications.

- 1.1 The material must be resilient white or yellow (and other colors as required) thermoplastic product with uniformly distributed glass beads throughout the material. The material must be resistant to the effects of motor fuels, lubricants, hydraulic fluids, etc. All material must be capable of being affixed to bituminous and/or concrete pavements by the use of the normal heat of a propane torch.
- 1.2 The markings must be capable of conforming to pavement contours, breaks, and faults through the action of traffic at normal pavement temperatures. The markings shall have resealing characteristics, such that it is capable of fusing with itself and previously applied thermoplastic when heated with the propane torch.
- 1.3 The material must be able to be applied in temperatures down to 32 degrees F., with no other minimum road or air temperature. No special storage, preheating or treatment of the material or special heating of the road surface other than normal removal of wetness of the highway surface shall be required.

2. MATERIAL :

Must be composed of an ester modified rosin resistant to degradation by motor fuels, lubricants etc. in conjunction with aggregates, pigments, binders, glass beads with have been factory produced as a finished product, and meets the requirements of the current edition of the Manual on Uniform Traffic Control Devices for Streets and Highways. The thermoplastic material must conform to AASHTO designation M249-79 (86), with exceptions due to the material being supplied in a preformed state.

- 2.1 The material must contain a minimum of thirty percent-intermixed graded glass beads by weight. The intermixed beads shall be clear and transparent.
- 2.2 The material must have factory applied coated surface beads (unless stated otherwise) in addition to the intermixed beads at a rate of 1 pound (+/- 10%) per 11 square feet.

3. PIGMENTS:

- 3.1 White - Sufficient titanium dioxide pigment is to be used to ensure a color similar to Federal Highway White, Color No. 17886, as per Federal Standard 595.

Striping Specifications

3.2 Yellow - Sufficient yellow pigment is to be used to ensure a color similar to Federal Highway Yellow, Color No. 13655, as per Federal Standard 595. The yellow pigment must contain no lead chromate.

4. **HEATING INDICATORS:**

The top surface of the material shall have regularly spaced indents that shall act as an indicator system for the operator to properly gauge the correct amount of heat to apply during installation. The indents shall work by closing together to show that the material has reached a molten state.

5. **SKID RESISTANCE:**

The surface, with properly applied and embedded surface beads, must provide a resistance value of 45 BPN to 55 BPN when tested according to ASTM: E303.

If available, substitution of a "High Skid" (or equivalent) resistant pavement marking material may be requested at no additional charge.

6. **THICKNESS:**

The material must be installed at a minimum thickness of 125 mils (3.155 mm), unless otherwise stated.

7. **ENVIRONMENTAL RESISTANCE:**

The material must be resistant to deterioration due to exposure to sunlight, water, salt, or adverse weather conditions and impervious to oil and gasoline.

8. **APPLICATION:**

8.1 Asphalt - The material shall be applied using the propane torch method. The material must be able to be applied at ambient and road temperatures down to 32 degrees F. without any preheating of the pavement to a specific temperature.

8.2 Concrete - The same application procedure shall be used as for asphalt, however, a compatible primer sealer may be applied before application to assure proper adhesion.

In addition to requirements listed above, all materials will comply with the requirements and/or specifications and testing as listed in the "Standard Specifications For Road and Bridge Construction, Edition of 2000" (or later) as published by the Kentucky Transportation Cabinet/Department of Highways.

Dated: January, 2001

ESTIMATED RESURFACING QUANTITIES**FY 2010 - CITY STREET RESURFACING**

BIDDERS ARE REQUIRED TO MAKE EXTENSIONS AND ADDITIONS
SHOWING UNIT PRICES AND TOTAL AMOUNT BID USING FIGURES ONLY

ITEM NO.	ITEM	APPRX. UNIT QTY	UNIT BID PRICE	AMOUNT
1.	C 4 Asphalt Base 1.0D, PG 76-22	1419 Tons	\$	\$
2.	C 4 Asphalt Surface 0.5 A. PG 76-22	4154 Tons	\$	\$
3.	C 4 Asphalt Surface 0.38D, PG 76-22	21156 Tons	\$	\$
4.	Removal of Asphalt Surface Concrete	100 S.Y.	\$	\$
5.	Base Concrete	100 C.Y.	\$	\$
6.	Removal and Replacement of ten (10") inch Dense Graded Aggregate Base with Asphalt Surface	100 S.Y.	\$	\$
7.	Adjustment of Manholes	252 Each	\$	\$
8.	Bituminous Concrete for Leveling and Wedging	1290 Tons	\$	\$
9.	Bituminous Pavement Milling and Texturing	22252 Tons	\$	\$
10.	Bituminous for Base	1290 Tons	\$	\$
11.	Fiber Reinforced Bituminous Concrete	16512 Tons	\$	\$
12.	Asphalt Pavement Wedge	1000 Tons	\$	\$
13.	Edge Key	300 L.F.	\$	\$
14.	Rolling and Shaping	1 Lump Sum Each	\$	\$
15.	Asphalt Curb	300 L.F.	\$	\$
16.	Shouldering (Trench)	500 L.F.	\$	\$
17.	Pavement Striping (Temporary) 102-mm (4-inch)	193500 L.F.	\$	\$
18.	Pavement Striping (Permanent) 102-mm (4-inch)	193500 L.F.	\$	\$
19.	Pavement Striping (Temporary) 152-mm (6-inch)	1000 L.F.	\$	\$
20.	Pavement Striping (Permanent) 152-mm (6-inch)	1000 L.F.	\$	\$
21.	Stop Bar - Thermoplastic Markings	700 L.F.	\$	\$
22.	Cross Walks - Thermoplastic Markings	1830 L.F.	\$	\$
23.	Curve Arrows - Thermoplastic Markings	62 Each	\$	\$
24.	Combination Arrows - Thermoplastic Markings	10 Each	\$	\$
25.	Straight Arrows - Thermoplastic Markings	10 Each	\$	\$
26.	School - thermoplastic Markings	10 Each	\$	\$
27.	Bike Symbols	10 Each	\$	\$
28.	Pavement Marker - Type IV	400 Each	\$	\$
29.	Pavement Marker - Type V	400 Each	\$	\$

TOTAL AMOUNT BID

\$ _____

SIGNED:**Bid must be signed and must be original signature**

**ALTERNATE BID FOR
BITUMINOUS PAVEMENT MILLING AND TEXTURING**

39

This Special Provision shall apply when indicated in the proposal.

The millings will belong to the CONTRACTOR.

Description

This work shall consist of improving the profile, cross section, and surface texture of an existing bituminous pavement, and shall include all labor, materials, equipment, and incidentals necessary to complete the work, including disposal of all resultant cuttings.

Construction Requirements

Equipment

The equipment for milling and texturing the pavement shall be a power-operated, self-propelled planing machine or grinder capable of removing bituminous concrete to the required depth, profile, cross slope, and surface texture. The machine shall be capable of accurately establishing profile grades by referencing from either the existing pavement or from an independent grade control, and shall have positive means for controlling cross slope. The machine shall have a floating moldboard with sufficient down pressure to plane the milled surface. The machine shall have an effective means of removing cuttings from the pavement and for preventing dust from escaping into the air.

The textured pavement shall be thoroughly swept immediately behind the machine and all materials swept up shall be loaded and hauled away. A water truck shall be furnished and used to control dust from the work, when deemed necessary by the Director of STREETS, ROADS and FORESTRY or his representative.

Supplemental equipment shall be provided as necessary to remove material adjacent to curbs, railroad crossings, and other areas that cannot be removed by the milling machine.

Milling and Texturing

- (1) General – After milling and texturing, the finished surface shall provide a smooth riding surface free from gouges, ridges, oil film, and other imperfections of workmanship, having a uniform texture, and true to the required grade and cross section. The elevation of the longitudinal edges of adjacent cuts shall not be more than 1/8 inch/4 mm. When practical, vertical longitudinal faces shall not be left during non-working hours in areas exposed to public traffic. When it is necessary to expose public traffic to vertical longitudinal faces, the faces shall be no more than 1 ¼ inches/30 mm in height and shall be tapered in a manner approved by the STREETS, ROADS and FORESTRY representative to avoid creating a hazard for traffic.

Where sound pavement has been gouged, torn, or otherwise damaged during the milling operations, or damage is done to any other property of any kind including utility frames, grates, covers, curbs, driveways, or sidewalks, repairs shall be made by the CONTRACTOR at no cost to the Lexington-Fayette Urban County Government.

- (2) Cut more than 1-inch/25 mm – Where a cut deeper than 1-inch/25 mm is required. The depth of the cut shall be determined by the Streets, Roads and Forestry Representative. The cut shall be measured at the edge of the cutting drum. Each cut shall be completed over the entire length and width of the area; the next cut shall not be started until the area has been examined by the STREETS, ROADS and FORESTRY representative and the representative determines that additional cutting is necessary or desirable.

The depth of cut indicated in the Contract is approximate only. The STREETS, ROADS and FORESTRY'40 representative on the project will determine the actual depth of cut.

- (3) Texture – The texture shall be uniform throughout the project and shall provide, in the judgment of the STREETS, ROADS and FORESTRY' representative, a satisfactory riding surface.
- (4) Surface Tolerance – The finished surface after the final cut shall not show a deviation greater than 1/8 inch/4 mm from a 10-foot/3 meter straightedge, and the cross slope shall not deviate more than 3/8 inch/10 mm in 10 feet/3 meters. All irregularities exceeding these limits shall be corrected.
- (5) Approaches and Tapers – Approaches and tapers shall be acceptably textured when required by the STREETS, ROADS and FORESTRY' representative. The STREETS, ROADS and FORESTRY' representative will determine length, width, and depth of cut on approaches and tapers. The approaches and tapers shall match the finished cut on the main line and shall be transitioned to the existing surface to within +/- 1/8 inch/4 mm.
- (6) Hauling – The cuttings shall belong to the CONTRACTOR. The CONTRACTOR shall be responsible for the disposal and/or stockpiling of cuttings.
- (7) Milled Streets – all milled streets **must** have a scratch coat or be resurfaced within 48 hours of being milled. No street will be left milled over a weekend or a holiday period.
- (8) Manholes – Any manholes that are higher than the milled surface shall be covered using a manhole protector to provide safety to vehicles or by using asphalt to provide a smooth transition over the manhole. **In no case shall the manhole be left exposed.**

Adjusting Small Drainage Structures

The CONTRACTOR shall keep all small drainage structures, utility valves, etc. free of cuttings and other debris during the milling operation.

Method of Measurement

Bituminous Pavement Milling and Texturing – The material removed from areas acceptably milled and textured will be measured in tons.

The CONTRACTOR will make all necessary arrangements to have material weighted and verified to be correct as to tons hauled. No additional payment will be made for this.

Water used to control dust will not be measured for separate payment but will be considered incidental to the milling and texturing.

Basis of Payment

Bituminous Pavement Milling and Texturing – The accepted quantity of Bituminous Pavement Milling and Texturing will be paid for at the contract unit price per ton, which payment will be full compensation for all labor, materials, equipment, and incidentals necessary to mill and texture the pavement, and control dust. When the Contract does not include a separate bid item for Hauling Cuttings, then payment for Bituminous Pavement Milling and Texturing shall also include full compensation for all hauling necessary to deliver the cuttings.

Payment will be made under:

Pay Item

Pay Unit

Bituminous Pavement Milling and Texturing

Ton

**ALTERNATE BID FOR ESTIMATED RESURFACING QUANTITIES
FY 2010 - CITY STREET RESURFACING**

41

BIDDERS ARE REQUIRED TO MAKE EXTENSIONS AND ADDITIONS
SHOWING UNIT PRICES AND TOTAL AMOUNT BID USING FIGURES ONLY

ITEM NO.	ITEM	APPRX. UNIT QTY	UNIT BID PRICE	AMOUNT
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7.	Adjustment of Manholes	252 Each	\$	\$
8.	Bituminous Concrete for Leveling and Wedging	1290 Tons	\$	\$
9.	Bituminous Pavement Milling and Texturing	22252 Tons	\$	\$
10.	Bituminous for Base	1290 Tons	\$	\$
11.	Fiber Reinforced Bituminous Concrete	16512 Tons	\$	\$
12.	Asphalt Pavement Wedge	1000 Tons	\$	\$
13.	Edge Key	300 L.F.	\$	\$
14.	Rolling and Shaping	1 Lump Sum Each	\$	\$
15.	Asphalt Curb	300 L.F.	\$	\$
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29.	Bike Symbols	10 Each	\$	\$
30.	Pavement Marker - Type IV	400 Each	\$	\$
31.	Pavement Marker - Type V	400 Each	\$	\$

TOTAL AMOUNT BID

\$ _____

AN INDIVIDUAL *

42

A CO-PARTNERSHIP **

A CORPORATION ***

NAME OF CONTRACTING FIRM (Please type or print plainly)

SIGNATURE AND TITLE OR REPRESENTATIVE OF CONTRACTING FIRM

CITY _____ STATE _____

*If an individual, the proposal must be signed by the individual.

**If a co-partnership, the proposal must be signed by one of the partners.

***If a corporation, the proposal must be signed by an official of the corporation and the following certificate completed.

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____ certify that I am the
_____, Secretary of the corporation named as principal
in the above proposal; that _____, who
signed the said proposal on behalf of the principal, was then
_____ of said corporation; that I know his
signature and his signature thereon is genuine and that said proposal was duly
signed and sealed for and in behalf of said corporation by authority of its
governing body.

_____(CORPORATE SEAL)


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FHWA Hot Mix Asphalt Pavement Guidelines

[Word Version \(99 kb\)](#) | [PDF Version \(79 kb\)](#)

Project Information:

Project Description:			Contract No:
Series (50, 60, 70, 80):	Nominal Layer Thickness (mm):	Item Number:	PIN:
In company with:			
Date of Inspection:	Inspection Made By:		Time of Day:
Contractor:	Contract Amount:	Time Elapsed (%):	Work completed (%):

This guideline was prepared utilizing the below references. The checks included in the guidelines are considered to be the major items and can be supplemented as deemed necessary by the inspecting party. The Area Engineer is provided the flexibility of using the guideline in its entirety or portions depending on the job conditions and/or time limitations.

NOTE: The vast majority of paving done on __DOT projects today utilize performance related specifications. Under performance related specifications, the contractor is responsible for compacting the pavement within a specified density range (Series 50, 60, and 70). Because the contractor is responsible for compacting the pavement, then the contractor should have the authority to dictate factors such as mix temperature (165 °C is the maximum), rolling trains, patterns, or passes.

References:

1. Standard Construction Specifications
2. Current Quality Assurance Program for Hot Mix Asphalt and Concrete Pavements
3. Applicable Special Provisions
4. Hot-Mix Bituminous Paving Manual, Federal Highway Administration
5. Hot-Mix Asphalt Paving Handbook, US Army Corps of Engineers
6. Hot Mix Asphalt Construction, Participant Manual for NHI Course 13132

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HOT-MIX ASPHALT PAVING SAMPLE SPECIFICATION FOR LOW-VOLUME APPLICATIONS

INTRODUCTION

The Plantmix Asphalt Industry of Kentucky (PAIKY) is a statewide trade association representing the interests of the asphalt industry. The association office has received numerous calls this year for a sample specification for hot-mix asphalt in private and commercial applications. For this reason, the PAIKY Technical Committee has developed this document as a sample specification to be used for hot-mix asphalt paving. The specification is targeted at low volume applications such as residential developments, office parks, school parking lots, and commercial/retail developments. Contact the PAIKY office for guidance on mixture and binder selection for high stress applications, intersections, ESAL loads greater than 300000, or heavy truck facilities.

BACKGROUND

The specifications produced by architects and specifiers have traditionally referenced the latest edition of the Kentucky Transportation Cabinet's (KTC) Standard Specifications for Road and Bridge Construction. Most contractors are now producing Superpave mixtures for state projects and some continue to produce Marshall mixtures for private and commercial work. Other contractors may strictly produce Superpave mixtures based on their location and workload. It is important to note that Superpave was developed for high stress and high traffic volume applications (interstates, parkways, collector streets, etc.) and not necessarily intended for residential streets or commercial parking lots. Asphalt mixtures designed using Superpave rely more on stone-on-stone contact and are generally much more coarse and open graded than the dense Marshall mixture. Some of the Superpave mixtures do not result in the surface texture desired for private and commercial applications. Both design systems (Marshall and Superpave) will result in a durable and long lasting pavement when properly constructed and maintained.

In developing this specification, the PAIKY technical committee has tried to specify mixtures that have the dense surface texture desired in these types of applications. For this reason, the specification allows the use of dense Marshall mixtures utilized in the state for many years. The specification also allows for Superpave mixtures with some special provisions to allow for a fine-graded, dense, and visually appealing mixture.

DISCLAIMER

The Plantmix Asphalt Industry of Kentucky (PAIKY) shall not be held responsible for use or misuse of this specification. Selection of a reputable mix production contractor as well as a reputable placing contractor is imperative to producing a quality and long lasting asphalt pavement. Quality control throughout every phase is critical to the end result.

HOT-MIX ASPHALT PAVING

PART 1 - GENERAL

1 RELATED DOCUMENTS

- A Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

2 SUMMARY

- A Related Sections include the following:
 - 1 Division 2 Section "Earthwork" for aggregate subbase and base courses and for aggregate pavement shoulders.

3 SYSTEM DESCRIPTION

- A Provide hot-mix asphalt paving according to materials, workmanship, and other applicable requirements of standard specifications of the Kentucky Transportation Cabinet (KTC), except as modified herein.
 - 1 Standard Specification: Kentucky Transportation Cabinet (KTC) Standard Specifications for Road and Bridge Construction, latest edition, and Supplemental Specifications to the Standard Specifications.
 - 2 Additional Reference: Asphalt Institute MS-2
 - 3 Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

4 SUBMITTALS

- A Job-Mix Designs: For each job mix proposed for the Work.

5 QUALITY ASSURANCE

- A Hot Mix Asphalt Producer Qualifications: Engage a firm experienced in producing hot-mix asphalt similar to that indicated for this Project and with a record of successful in-service performance.
 - 1 Producer firms shall be qualified through the Kentucky Transportation Cabinet as an approved Asphalt Mix Producing Firm.
- B Testing and inspection: The owner shall retain a qualified testing laboratory for testing and inspection.

6 PROJECT CONDITIONS

- A Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp. Comply with the provisions of KTC Standard Specifications Section 403.03.01 for temperature requirements. Asphalt Pavement may be placed between November 15th and April 1st if the ambient temperature requirements are met or if approved by the architect/engineer.

PART 2 - PRODUCTS

1 AGGREGATES

- A General: Use materials and gradations that have performed satisfactorily in previous installations.
- B Coarse Aggregate: Sound, angular crushed stone, or crushed gravel, complying with KTC Standard Specifications Section 805.
- C Fine Aggregate: Natural sand or sand prepared from stone, gravel, properly cured blast-furnace slag, or combinations thereof complying with KTC Standard Specifications Section 804.
- D Recycled (Reclaimed) Asphalt Pavement (RAP): milled or removed asphalt pavement may be utilized in accordance with KTC Standard Specifications Section 409.

2 ASPHALT MATERIALS.

- A Asphalt Binder: AASHTO MP 1, Performance Graded Binder PG 64-22 for general applications.
- B Tack Coat: Comply with provisions in KTC Standard Specifications Section 406.

3 MIXES

- A Hot-Mix Asphalt: Hot-laid, hot-mix asphalt plant mixes meeting the requirements of the Standard Specifications of the Kentucky Transportation Cabinet (KTC) or Asphalt Institute (AI) MS-2 and complying with the following requirements:
 - 1 Base Course: Produce KTC mixture designation Class 2 Base or a Marshall mixture from AI MS-2. There shall be no restrictions on polish resistant aggregates (utilize KTC Type "D" aggregates). Recycled Asphalt Pavement (RAP) may be utilized in accordance with KTC Standard Specifications Section 409.
 - 2 Surface Course: KTC mixture designation Class 2 Surface or a Marshall mixture from AI MS -2. The mixture gradation may pass through the restricted zone and there shall be no restriction on polish resistant aggregates (utilize KTC Type "D" aggregates). Recycled Asphalt Pavement (RAP) may be utilized in accordance with KTC Standard Specifications Section 409.

- B Hot-Mix Asphalt: Hot-laid, hot-mix asphalt plant mixes designed according to procedures established by the Kentucky Transportation Cabinet (KTC) or Asphalt Institute (AI) MS-2 and complying with the following requirements.
 - 1 Provide mixes complying with composition, grading, and tolerance requirements in KTC Standard Specifications or AI MS-2 for the following nominal, maximum aggregate sizes:
 - a Base Course: Mixture with a nominal maximum aggregate size of .75 inch (19 mm) with a minimum Voids in the Mineral Aggregate (VMA) of 12 percent.
 - b Surface Course: Mixture with a nominal maximum aggregate size of 0.38 inch (9.5 mm) with a minimum VMA of 14 percent.

PART 3 - EXECUTION

1 EXAMINATION

- A Verify that subgrade is dry and in suitable condition to support paving and imposed loads.
- B Proof-roll subbase using loaded dump trucks or heavy rubber-tired construction equipment to locate areas that are unstable or that require further compaction.
- C Proceed with paving only after unsatisfactory conditions have been corrected.
- D Repairs to Base Course: Fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact flush with adjacent surface.
- E Patching: Partially fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact. Cover asphalt base course with compacted, hot-mix surface layer finished flush with adjacent surfaces.

2 SURFACE PREPARATION

- A General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
 - 1 Sweep loose granular particles from surface of unbound-aggregate base course. Do not dislodge or disturb aggregate embedded in compacted surface of base course.
- B Tack Coat: Comply with provisions in KTC Standard Specifications Section 406.

3 HOT-MIX ASPHALT PLACING

- A Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents

segregation of mix. Comply with applicable provisions of KTC Standard Specifications Section 403 for delivery, placement, spreading and compaction of the mixture.

- 1 Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent.

4 INSTALLATION TOLERANCES

- A Thickness: Compact each course to produce the thickness indicated within the following tolerances:

- 1 Base Course: Plus or minus 1/2 inch (13 mm).
- 2 Surface Course: Plus or minus 1/4 inch (6 mm).
- 3 Design for a minimum fall of 1% to facilitate drainage (2% recommended)

END OF SECTION

ORDINANCE NO. _____

AN ORDINANCE AMENDING SUBSECTION 17-148(a) OF THE CODE OF ORDINANCES OF THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT TO LIMIT ENFORCEMENT TO THOSE DEFECTS WHICH CREATE A HAZARD TO PUBLIC SAFETY AND TO PROVIDE FOR THE ADOPTION OF ENFORCEMENT REGULATIONS BY THE URBAN COUNTY COUNCIL, AND AMENDING SUBSECTION 17-152(b) TO DECREASE THE MAXIMUM CIVIL PENALTY FROM \$1,000 TO \$500.

BE IT ORDAINED BY THE COUNCIL OF THE LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT:

Section 1 - That subsection 17-148(a) of the Code of Ordinances be and hereby is amended to read as follows:

Whenever the urban county engineer or any code enforcement officer in the division of code enforcement ascertains the existence of holes or other defects in sidewalks of the urban county ~~[meeting the criteria set forth in section 17-147,]~~ which create a hazard to public safety, it shall be the duty of the urban county engineer or the code enforcement officer, as appropriate, to notify forthwith, in writing, the owner of the property abutting upon such defective sidewalk to repair or replace the same at his own expense within a reasonable period of time as stated in such notice. This notice shall be personally served upon the owner or shall be mailed via regular mail to the last known address of the owner of the property as it appears on the current tax assessment roll. If such owner be a nonresident of the urban county, or cannot be found, the notice may be delivered to his agent having charge of the property; and if there be no such agent, it may be delivered to the occupant of the property. The Urban County Council shall adopt regulations for the enforcement of sidewalk violations pursuant to this section.

Section 2 - That subsection 17-152(b) of the Code of Ordinances be and hereby is amended to read as follows:

In the alternative, any owner or agent of such owner, or occupant of property who shall fail to make the repairs in defective sidewalks as provided in sections 17-148 and 17-149 within the period of time stated in the notice provided for therein may be assessed a civil penalty of ten dollars (\$10.00) per square foot of unrepaired sidewalk panel, up to a maximum civil penalty of five

hundred dollars (\$500.00) [~~one thousand dollars (\$1,000.00)~~], for each thirty-day period such work remains undone after the time stated in the notice elapses.

Section 3 - That this Ordinance shall become effective on the date of its passage.

PASSED URBAN COUNTY COUNCIL:

MAYOR

ATTEST:

CLERK OF URBAN COUNTY COUNCIL

PUBLISHED:

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Regulation 17-148.

The following regulations shall apply to Chapter 17, Article IV. Sidewalk Repairs, of the Code of Ordinances, Lexington-Fayette Urban County Government.

Section 1. Standards for Determining Violation

The following defects related to the condition of a sidewalk shall support the issuance of a notice to repair or replace the sidewalk (or portions thereof) or any related civil penalty by the Lexington-Fayette Urban County Government:

1. Any defect which is likely to result in injury or harm to a person or property, including but not limited to a tripping or falling hazard;
2. A crack(s) with one-half of one inch (1/2") or greater horizontal displacement;
3. A vertical displacement(s) of three-quarters of one inch (3/4") or greater;
4. A slope of greater than one inch (1") to twelve inches (12");
5. A hole(s) or popout(s) one inch (1") or greater in diameter measured across the width and one inch (1") in depth;
6. Severely spalled area(s) having loose gravel or pieces and/or that are capable of holding or ponding water; or
7. A missing or loose piece(s) that creates a hazard, allows the growth of vegetation, or otherwise impedes pedestrian traffic.

Section 2. Standards for Replacement or Repair.

Unless replacing the defective sidewalk is the only reasonable method of correcting the defects(s), the owner or person responsible for the condition of the sidewalk shall have the option of repairing, rather than replacing the defective sidewalk.

Section 2.1. Replacement.

Any sidewalk that is replaced shall be built in accordance with LFUCG specifications (Standard Drawings and Engineering Manuals) and any necessary permits shall be obtained prior to commencement of any work.

Section 2.2. Repair.

Any material used in the repair of a sidewalk shall be of similar grade and texture to that used in the construction of the sidewalk.

ADOPTED BY THE URBAN COUNTY COUNCIL ON _____, 2011.

00314714

KY 1927 – Liberty/Todds Road Widening
Section 2
October 4, 2011

Project Description

The project begins on Todds Road near Andover Forest Drive, where the Liberty/Todds Road Section 1 improvements ended, and extends 1.6 miles southeast to the future Polo Club intersection just east of the I-75 overpass. The project will widen the existing rural 2-lane section of Todds Road to an urban 2-lane section plus a center turn lane, bike lanes, curb and gutter and sidewalks. Existing right of way will be utilized for new construction as much as possible to minimize new right of way acquisition.

Design Phase

The design plans are approximately 60% complete. A contract modification was approved April 14, 2011, to complete the design, incorporating changes resulting from the Practical Solutions Review with the project review team. Once a Supplemental Agreement is received from KYTC we can move forward with these design changes. We have also requested a consultant proposal to split the project into 2 phases due to the considerable construction cost anticipated. Phase 2A will be from Kimbolton Drive/Cypress Point Way to Andover Forest Drive/Forest Hill Drive and Phase 2B will be from Polo Club Blvd to Kimbolton Drive/Cypress Point Way.

Right of Way Phase

When design is nearly complete, the right of acquisition process may begin. Funding is programmed in the Transportation Improvement Program (TIP) for FY12.

Utility Relocation Phase

Utility Relocation funding is programmed in the TIP for FY13.

Construction Phase

Construction funding, currently estimated at \$10 million, is beyond FY14 in the TIP.

Newtown Pike Extension

October 4, 2011

Phase I (Redevelopment/Mitigation Area)

Located on the 33 parcels targeted for acquisition are 37 structures. To date, 32 structures have been demolished or are in the process of being demolished. The remaining 5 are located on properties which are involved in legal action.

Utility costs are estimated at \$520,000 and funds are programmed for FY 2010.
Construction costs are estimated at \$10 million and funds are programmed for 2012.

Community Land Trust

The Lexington Community Land Trust is planning a Board Retreat for Tuesday October 11, 2011 at the Hilary J. Boone Center, University of Kentucky campus, from 8:30am to 4:30pm.

Noise Wall

KYTC is still negotiating with the Norfolk Southern Railroad to purchase the property needed to construct the noise wall. Norfolk Southern Railroad required relocation of the wall from its initial design location, forcing the need to re-evaluate a section of the proposed Southend development. The letting of the noise wall construction contract will likely slip from its scheduled October 2011 letting. Construction funding is authorized and the KYTC will oversee construction of the noise wall.

Phase II (Versailles Road to South Broadway)

KYTC is overseeing property acquisitions for this phase. Right-of-Way Plans (containing 21 parcels which are total acquisitions) were submitted 9/13/2011 to the KYTC. A Right-of-Way revision (containing approximately 38 parcels which are partial acquisitions as well as parcels with construction easements) will be submitted in November/December containing partial takes and easements. The KYTC has allocated approximately one year to complete right-of-way acquisitions.

Utility costs are estimated at \$2.4 million and funds are programmed for FY 2012.
Construction costs are estimated at \$10 million and funds are programmed for FY 2012.

Phase III – (Scott Street Connector)

Final design has not begun on this section as of this date.

Utility costs are estimated at \$3.5 million and funds are programmed for FY 2011.
Construction costs are estimated at \$8.7 million and funds are programmed for FY 2012.

Phase IV – (Main Street to Versailles Road)

Utility companies continue to work through the KYTC to bury cables. To date only one aerial communication cable remains to be buried.

Planning & Public Works Committee Referrals

Item	Referred By	Date	Status
Oliver Lewis Way Project	Blues	4-9-09	Quarterly Update/ Moved from PS/PW Committee
Erecting Large Utility Poles in ROW	Martin	3-12-10	
Todds Road Widening Phase II	Stinnett	4-15-10	Quarterly Update/ Moved from PS/PW Committee
Sidewalk Specifications	Farmer	1-16-11	Revisions Ready
2012 Comprehensive Plan Goals & Objectives	Farmer	3-16-11	
Re Paving Program	Martin	4-13-11	Moved from PS/PW Committee
Fence Issue	Blues	5-24-11	
Renegotiate & Expand Paving Warranties	EQ Link	6-19-11	
Develop a Better Relationship with Madison &			
Jessamine Counties re Valley View Ferry Authority	EQ Link	6-19-11	
Working with Fayette County Public Schools to Sustain			
Road Salt Services	EQ Link	6-19-11	Moved from PS/PW Committee
Traffic Management & Revitalization Study			
Right of Entry & Administrative Warrants	Stinnett	8-16-11	Law/Building Inspection Review
Department of Planning Commissioner Position	Farmer	9-6-11	
Addressing Ordinance	Farmer	9-14-11	Review/Revise UCG Ord 17-2

9-16-11