

URBAN COUNTY COUNCIL

Planning & Public Works Committee
Summary/Table of Motions
October 1, 2011
1:00 p.m.

Committee Chair, CM Farmer called the meeting to order at 1:02 p.m. Committee members Vice Mayor Gorton, CMs Ellinger, Kay, Ford, Blues, Martin, Lawless and Beard were all present. CM Henson was absent. CM Stinnett also attended the meeting.

1. **Repaving Program**
2. **Renegotiate and Expand Paving Warranties
(Referred from Environmental Quality Link)**

Cheryl Taylor began the presentation by stating her intention to discuss repaving concerns as well as upcoming leaf collection and snow plans. She asked Kevin Wentz to begin the discussion on repaving and paving warranties.

Wentz provided the four now-completed steps of the paving management system:

- Road assessment and data collection (Div. of Engineering): Currently assessing half of LFUCG-maintained roads per year, alternating east and west areas of the county
- Updating the Pavement Management System (Div. of Engineering): Currently working to convert Pavement System into GIS application
- Process collected data (Div. of Streets & Roads): Determined from the collected data the total linear footage of pavement rated 65 or less within the Urban Service Area
- Rates for each Council district (Div. of Streets & Roads): From the calculated total linear footage, determined the percentage of pavement rated 65 or less within each Council district.

Wentz stated that resurfaced roads have warranties of one year. Resurfacing specifications are outlined in LFUCG paving contracts and are based on specific engineering guidelines. Crack seal applications are performed every five years as warranted. Resurfacing is a maintenance function rather than a capital construction project.

Wentz recently met with James Ballinger from the Kentucky Transportation Cabinet (District 7). Ballinger explained to Wentz that having experienced inspectors onsite during repaving work greatly reduced the need for warranties. The inspectors check for consistency and make sure the grading is to specification as the work is being done.

Wente stated that to extend warranties for capital construction and the longevity that would ensue would greatly increase costs.

Wente went on to discuss a recent meeting with the Fayette County School Board and the University of Kentucky. He said that there was some talk of reassignment of areas to be salted during snow events. He stated that this is a work in progress between the schools, Street and Roads and the Division of Water Quality. He mentioned that E-911 is planning to issue snow declarations via landline phones, and that the Lexington's Emergency Alerts and Notifications (LEAN) program is key to alerting the public to snow emergencies. Signage has also been updated along snow emergency routes.

Wente stated that 1 million dollars is allocated in the FY12 budget for salt. There will be 8,000 tons available to begin the salt season. Local school systems will continue to work toward a reimbursement agreement for areas outside the current area map. There has also been preliminary discussion about reimbursement from utility companies should, for example, there be a water main break and subsequently a need for treatment in the area.

Wente went on to provide an update for the FY12 leaf collection schedule. He said that by ordinance, LFUCG is required to make one pass-through within the Urban Service Area. There will be an educational push for residents to use Lennys and yard waste bags to offset costs associated with the program. Last year, over 900 tons of leaf matter were collected. The program is scheduled to begin on November 28th, and letters will be sent to all residents regarding the program.

CM Farmer thanked Wente for his presentation and opened the floor for questions.

CM Lawless asked for clarification on street/paving ratings provided for the 3rd District. Many of the streets in that district are rated at 90 or higher, but in reality "ride" more like they should be rated under 65. She stated that roads in that district are heavily traveled and sustain more wear and tear than districts outside the downtown core. She stated that traffic volume should factor into calculations made per district when money is allocated for resurfacing.

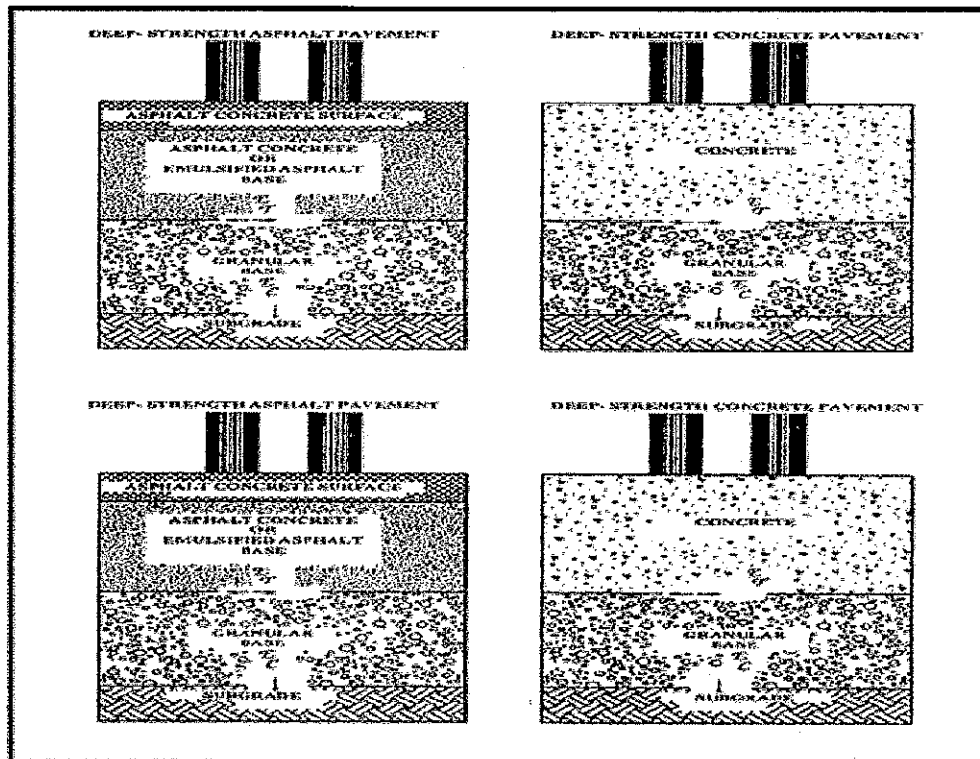
Wente responded that GPS tracking during inspection would better indicate what roads needed the most attention. He stated that graphic representation would be helpful in creating a better dialog in this regard. As to more heavily-traveled arterials, he pointed to Sir Barton Way as an example of a road that had an expectation of longevity of 20 years, but with such traffic volume, its timeline had been reduced to approximately 5 years.

CM Beard asked how the decision to distribute repaving funds per district was determined. Beard stated that there seems to be a disparity between the districts. Wente replied that the number of streets rated 65 or lower was the first factor per

district. Each district's percentage of such roads determined how much funding would be allocated. He stated that in years past, money was distributed equally across the county, but that practice created an inequity because some of those districts did not have as many troubled areas, which resulted in some roads being repaved when they could have lasted longer.

CM Beard asked how Streets and Roads decides the best manner in which to close roads during construction work. Sam Williams responded that road crews assess base issues and cut out areas of obvious failure; these areas mostly include roads that were constructed in the past when lesser standards were adhered to during construction. The goal in such situations is to cut out all bad material. He addressed the four components of paving, as shown below.

FIGURE 4. 1 - Pavement Design



CM Martin asked that the process and specifications for the resurfacing program be explained. Brian Billings from ATS stated that milling and prep work takes place first—more often “curb cut” milling, which preserves a crown at the top of the road. Crews then “tie in” to the curb, or if the curb has been overlaid in the past, the old asphalt is removed and replaced with new.

Martin inquired specifically about base failures and how they are addressed. Billings stated that his crews follow the instructions of the inspector onsite and base failures are removed at his or her discretion. He concurred with Martin that fixing base failures is included in the specifications in repaving contracts. He stated ATS is paid by the amount of work they do each day; the removed milling is weighed by the ton; to remove extra base failures would be to incur additional costs calculated by tonnage. The same applies for the placement of asphalt.

Martin asked Billings if he could provide an estimate or percentage per district of base failings found in each. Billings stated that such an estimate would be difficult to provide because assigned work is based on what is provided by LFUCG Council direction. Martin asked how they determine when to pave over base failures. Billings replied that as a general rule, if the base is crumbling enough to be picked up by hand, it needs to be replaced. If it is just cracked, then it is acceptable to pave over it.

For clarification, Martin then asked if ATS repairs all base failures. Billings said they do not; they lay out the milling limits and make adjustments with Streets and Roads crews as directed by LFUCG inspectors. They are required only to lay out the repaving repairs. It is up to LFUCG to review, inspect and make recommendations as to which base failures are removed and replaced. Martin asked Billings if he agreed that the ATS/LFUCG contract required that they replace base failures. Billings stated that he is required to do that at LFUCG’s direction.

CM Martin suggested that the contracts be examined.

(Repaving specifications are outlined at the end of this summary.)

Martin stated that to his knowledge, none of the base failures [in the 10th District] were fixed in 2010 or during 2011. He stated that he wants to know who is authorizing that the contract specifications not be followed. Billings stated that ATS would be glad to do as much work as the city wants them to. He again stated that it is based on the amount of work that they do—milling, surfacing and the replacement of surfacing. He said that the removal and replacement of base failures is at the discretion of Sam Williams (Director of Streets and Roads). Martin responded that the Urban County Council approves contracts, from which neither hired entities nor LFUCG employees can vary.

Martin went on to say that it has been his understanding that ATS is drastically cutting corners and putting down cheap paving jobs that the city will have to replace in five years. Billings stated that he disagreed with that assessment.

CM Stinnett inquired of Kevin Wentz as to whether all of the paving lists had been turned in from the 12 Council districts. Wentz responded that they are moving through the lists they have received, and those represent the majority of the 12 districts. Sam Williams added that Streets and Roads has completed almost one third of the lists submitted. He stated that the submitted lists will "keep them busy" until the beginning of December. Lists that have not yet been submitted will more than likely be held until spring due to weather constraints.

CM Stinnett asked Williams if, while he has served as Director of Streets and Roads, he has noticed any shortcuts or similar issues in relation to paving jobs. He also asked if recent harsh winters were more of a contributing factor to accelerated failures. Williams responded that the life of a standard design pavement is 15-20 years, but due to growth and the resulting heavy traffic, roads are starting to mature at a faster rate. He added that Lexington has progressed as a city in specification requirements for redevelopments from a standard of 8 to 9 inches of total paving depth to an upgrade of over 12 inches. However, those areas that were constructed under the lesser specifications are starting to fail.

CM Stinnett suggested that the paving specifications are not "keeping up with the design" of redeveloped areas. Williams stated that during the first years of construction in newly developed areas, there is tremendous stress placed on new paving due to the heavy weight of construction vehicles and equipment.

CM Stinnett suggested that Streets and Roads take core samples of areas slated for repaving and go down to the original base of the roads. Williams responded that they have done that in certain areas, but the cost is prohibitive considering the amount of repairs needed across the county. CM Stinnett countered that doing so would save money "down the road" and that there is a trade-off in investing now rather than later. Williams agreed to look into implementing such measures in the future.

CM Ford turned the discussion to paving allocations for FY12. He stated that the need for repaving far outweighs the funds available in FY12. He said that in the past, there was equitable distribution across district lines for such repairs. He asked why that distribution practice was changed. Kevin Wentz responded that the number of streets rated 65 or lower was the first factor per district. Each district's percentage of such roads determined how much funding would be allocated. He said that there are districts that have a higher percentage of roads that rate 65 or lower. He stated that a rating of 65 is a breakpoint for immediate repair because degradation increases rapidly once a road reaches that rating.

CM Beard stated that there is a need to continually maintain roads that lead into or are within the "hub of the city" no matter their rating because of heavy traffic flow. Traffic patterns should be considered. Cheryl Taylor responded that when the distribution practice was changed, the purpose was to address priority issues. She stated that suggestions for change are welcome.

CM Lawless agreed with CM Beard's suggestion. She stated that many of the roads in the 3rd District are rated 75 and above, yet they are in obvious disrepair. She said that she receives calls from constituents from across the county from people who travel the "hub streets" complaining about bad road conditions. She also stated that certain areas that have been repaired were not milled down enough, the result of which are drains and curbs that have been overpaved.

Cheryl Taylor responded that Council has the authority to reject reported ratings. She also suggested that in the future, there might possibly be created a "pool of funds" created by taking a portion of available repaving dollars out of the budget before the districts are each given their percentage. This would result in funding for the more heavily-traveled roads in the city's core. She again suggested that she is open to suggestions to better the process.

CM Martin stated that the 10th District has the worst roads in the county, and suggested that to go back to the old distribution process would put the county in a place where it could not catch up. Martin asked if a tack coat is applied before repaving begins. Brian Billings from ATS responded that there is functionally no need to apply a tack coat. CM Martin asked Billings what measurement of asphalt is applied during repaving. Billings responded that currently most roads are paved to 1¼ inches. CM Martin referred to the specifications and contracts, which state that paving should be applied at 1½ inches. He pointed to Lyon Drive as an example where the depth is not up to specifications. He also stated that there are curbs next to which the roads have been milled down by ½ inch and the pavement has begun to flake. He asked for clarification as to this application.

Billings responded that there are situations where the curb has been overlaid with asphalt and ATS has removed that asphalt to the curb line. It is then up to the discretion of the inspectors to determine that the exposed area is unsafe and needs to be covered back up. In such situations, milling down to ½ inch is not beneficial. Billings went on to speak to thin asphalt paving. He stated that ATS is paid by what they "put down" and it isn't in their best interest to provide thin paving.

CM Martin asked if the administration has discussed paving warranties. Billings said ATS has met with Cheryl Taylor, Sam Williams and Kevin Wente. He has also met with the Asphalt Institute. He said that in a perfect world, paving warranties are a good idea. However, using Sir Barton Way as an example, Billings explained that warranties are unrealistic. He stated that when roads are designed in newly developed areas like Hamburg, the design does not take into

account the continual influx of heavyweight construction vehicles travelling the roads during the period of time it takes to establish the new development. These vehicles place tremendous strain on the roads, and diminish their lifespan. By the time construction is complete, the new roads have endured "100 times" what they were designed to endure during the first few years of their existence. He also made the point that often utility companies come in after the roads are constructed and dig trenches to lay their lines. The replacement work that follows is often substandard. Therefore, warranties cannot be adequately estimated due to disclaimers that must be assumed.

CM Ford again brought up the inequity of paving allocations and his concerns regarding the rating schedule. He stated that the attempt by the administration lacks a comprehension of strategy, "meaning the need will always outweigh the resource, and so just to allocate funds based upon a rating at face value may demonstrate an attempt to address the areas in greatest need, but it does not necessarily do so." CM Ford suggested that in FY13, there should be an equitable split of funding across the 12 districts.

CM Farmer stated that a rating of 65 has been the standard with which LFUCG has dealt for the past 15 years or more. He suggested that several factors will be considered as future paving allocations are decided upon.

Vice Mayor Gorton stated that there is room for discussion for ways to determine how funds are allocated. She referred to a study that was completed before the allocation equation was changed. She said that based on the study, it was determined that many roads that were in need of repaving were not being paved, creating a greater inequity than one related just to funding. She stated that she would not be in favor of across-the-board funding per district.

CM Stinnett revisited the idea of "shaving funds off the top" of each district's funding in order to apply said funds to the paving of major arterials. He mentioned that no matter the allocation per district, there is never enough to cover what needs to be repaired and repaved. Each district must work to repave the areas that are in the most need, and each district finds doing so challenging.

CM Blues asked Wentz how often roads are evaluated for repair. Wentz responded that in the past, based on a four-year time period, one third of the county was evaluated per year until the fourth year, at which point the entire county had been assessed. Currently, the full county is evaluated every other year so that the rating numbers stay current based on impact of winter damage and the like.

CM Blues referred to the matter of equity as unfair due to the fact that some districts have more roads than others. He also stated that some areas with ratings higher than 65 must be repaved in order to connect those that are lower.

CM Beard made the statement that Lexington long ago passed the tipping point of keeping roads up-to-date. Funding is now more directed toward maintenance.

Vice Mayor Gorton reminded the committee that district lines will soon be redrawn and certain roads will be the responsibility of new representation. She inquired as to whether a new assessment would be in order based on the new district boundaries. Wentz said the new boundaries will be considered in the new evaluation. There will also be opportunity for an updated level of assessment of degradation through a GIS component that will allow for graphic representation of areas that need repair.

Motion by CM Martin to allow additional time for questions from the committee: Seconded by CM Beard. Motion passed without dissent.

CM Lawless asked that the ratings for the 3rd District be readdressed, as they don't accurately represent the level of degradation in several areas.

CM Martin requested that a study be conducted to evaluate the degradation of roads and base failures to better address contracts and specifications listed therein. He stressed that preservation is critical to extending the life of roads throughout the county.

Motion by CM Ford to request that the administration present options that would help ensure the equitable distribution of repaving funds. Motion failed for lack of a Second.

Cheryl Taylor suggested the use of an independent source of expertise to evaluate the repaving evaluation process. She will present findings as soon as they are available.

3. Sustaining Salting Services: Working with Fayette County Public Schools

Kevin Wentz recently met with members of the Fayette County School Board and the University of Kentucky. Discussed were reimbursements of materials requested by Fayette County Public Schools. Also discussed was the option of FCPS hiring outside contractors to provide additional support for other services. Wentz will meet again with these entities and present to the committee a report on progress made.

Vice Mayor Gorton asked that Wentz provide a list of streets and roads that are serviced by LFUCG at the request of FCPS—specifically those that fall outside the LFUCG snow plan. Wentz also will provide historical information detailing where FCPS has requested service.

CM Farmer stated that this item will remain in committee.

CM Kay asked why the leaf collection schedule had not been changed based on the snow issues experienced during the 2011 season. Cheryl Taylor explained that she had met with Parks and Recreation and the decision was made to wait until late November to make the collection effort in order to maximize the collection effort. She stated that if the collection is scheduled too early in the season, there aren't enough leaves on the ground yet and residents typically have not addressed raking issues.

CM Farmer asked when Council could expect a presentation on the matter and stated that the public will need information regarding the 2012 schedule. Taylor responded that Parks and Recreation will likely present that information. She also stated that the public will be urged to use Lennys and leaf collection bags in order to manage costs associated with the program. Currently in Lexington, over 60,000 residents use Lennys. LFUCG spends \$300,000 on leaf collection bags and offers them to the public free of charge.

CM Blues asked that the environmental impact of moving to one leaf collection per year be discussed when Council is presented with the changes to the program.

4. Sidewalk Specifications & Regulations

David Barberie stated that if the committee is comfortable with the changes made to the draft ordinance 17-148(a), his suggestion would be for Council to adopt the ordinance with the proposed changes. He stated that the changes in the ordinance would move from strictly corrections in sidewalks to tying those corrections to public safety. CM Farmer asked if the changes would make the ordinance less stringent. Barberie stated that citations currently address issues that could be considered less than a safety hazard. The driving force in the ordinance change was to clarify that sidewalk corrections will be based on whether they are public safety hazards. The proposed recommendations also decrease the maximum penalty from \$1,000 to \$500 per panel and clarify what regulations should be used to determine sidewalk safety.

David Jarvis stated that these changes are reasonable and will encourage repairs moving forward.

CM Lawless asked if pitted sidewalks are still considered for citations. Barberie stated that those sidewalks are no longer addressed under the draft ordinance.

Vice Mayor Gorton expressed her appreciation for the lowering of civil penalties. She also asked if the standards in the ordinance are the same as inspectors currently use. Jarvis stated that there are only slight changes to those standards, again referring to the move toward public safety as the primary reason for citations.

CM Kay asked how “a reasonable period of time” is determined. Jarvis responded that cited property owners have 30 days to correct their sidewalks; after 60 days, the property owner receives a letter. This gives the property owner essentially 90 days to perform sidewalk repairs. Property owners are given a specific date by which repairs need to be made. Jarvis said that inspectors are given a certain amount of leeway when making citations to allow for increment weather and other obstacles that could delay repair work. CM Kay asked how Code Enforcement defined “leeway” and when it is deemed appropriate. Jarvis referred again to obstacles such as weather that could delay repair work.

CM Kay asked how inspectors determine how and when civil penalties are assessed. Barberie stated that it is left to the discretion of the inspector and that if a property owner needs more than 90 days to make repairs, the comfort level of the inspector making the decision determines whether an extension should be granted. The ordinance allows for such discretion.

CM Beard asked if there is any money left in the budget to split the cost of the repairs with the property owner. Jarvis responded that regrettably there is not. Vice Mayor Gorton asked where such funds were housed in years past. Jarvis replied that the funds were housed in Code Enforcement and distributed by Social services. There were no funds allocated specifically for low-income property owners. Vice Mayor suggested creating a pool for these residents, and Jarvis stated that approximately \$25,000 would be sufficient to do so.

Motion by CM Lawless to approve to adopt the draft ordinance to Council for approval: Seconded by Vice Mayor Gorton. Motion passed without dissent.

5. Todds Road Widening Phase 2 Update

Bob Bayert stated that there is currently a pending agreement with the state for additional funds so that additional design changes can be made to the project. Once approval is obtained the project will move to the right-of-way phase. The pending agreement also includes funds for the right-of-way acquisitions for sections 2A and 2B.

6. Oliver Lewis Way Project Update

Andrew Grunwald referred to the Newtown Pike Extension update in the packet and asked if there were any questions. There were none. Several CMs did express their gratitude and applaud the success of the project. Grunwald stated that the project won an award from the American Association of State Highway and Transportation Officials (AASHTO) for Best Project in the Southeast Region. The project is also up for a national award, and the public is welcome to vote for this honor.

The links necessary to do so are <http://www.americastransportationaward.org/> and <http://www.americastransportationaward.org/Default.aspx?ContentID=203>.

CM Kay asked why the noise wall is still in negotiation. Grunwald responded that it will be built on the railroad right-of-way. Norfolk Southern Railroad has not yet been agreeable to the actual location of the wall. Plans should be approved within the next few months.

CM Ford asked if there are still people living in temporary housing, having been dislocated during the project's construction. Grunwald stated that there are people living in 18 manufactured homes and they anticipate that they will stay there for approximately three more years.

Items Referred to Committee

Changes to Chapter 4 of the Code of Ordinances: Animals and Fowl (sections 4-11 and 4-12 specifically).

Motion by Vice Mayor Gorton to adjourn: Seconded by CM Blues. Motion passed without dissent.

The meeting was adjourned at 3:16 p.m.

Resurfacing Specifications Summary

One Year Guarantee (Pg. 19)

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.

Base Preparation (Pg. 28)

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.

Tack Coat (Pg. 29)

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.

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.

Base Course (Pg. 29)

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 Coat (Pg. 30)SURFACE COURSE:

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.

Milling (Pg. 35-36)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.