T&E COMMITTEE #3
March 9, 2009

MEMORANDUM

March 6, 2009

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: Glenn Orlin, Deputy Council Staff Director

SUBJECT: Resolution regarding the use of brick pavers in the public right-of-way

On February 24 six Councilmembers co-sponsored a resolution establishing the policy that, generally, brick pavers would no longer be used in the construction or reconstruction of streets, sidewalks, and other public rights-of-way under the County's jurisdiction. Brick pavers could continue to be used as edge treatments and other decorative elements. Certain projects that are designed to have brick pavers would be grandfathered:

- County projects for which construction funds have already been appropriated; and
- development projects for which brick pavers are part of improvements that are conditions of already-approved subdivision or site plans.

For these projects the pavers would be required to be laid out according to certain specifications. The introduced resolution is on ©1.

Brick pavers have been commonly used on sidewalk surfaces in several of the urban areas of the county, particularly Bethesda and Silver Spring, but also to a degree in Wheaton, and other smaller urban centers. They are also being used in several municipalities in the county. They are attractive and have been generally in demand by businesses and residents alike. However, pavers are much more expensive to install than concrete sidewalks and, when not correctly and carefully installed, result in an uneven surface that can be hazardous to pedestrians, and especially unsafe for people with disabilities.

In its July 24, 2007 letter to the Council and Executive, the Commission on People with Disabilities (CPD) opposed the use of brick pavers in public paths of travel. CPD would allow for pavers to be used as decorative elements, and where they are installed in the paths of travel it suggested certain specifications as to how they are to be laid (©2). On several occasions the Department of Transportation (DOT) has noted its dissatisfaction with brick pavers, citing the higher cost of installation and difficulty in maintaining them. CPD and DOT reiterated their respective positions at the T&E Committee's September 29, 2008 worksession on ADA-related transportation issues.

Committee Chair Floreen then wrote to the Planning Board Chair asking for his recommendations on this matter (©3). He noted that, according to interviews with people with disabilities conducted by Planning staff, there were mixed opinions regarding pavers versus concrete sidewalks, and that most of the problems cited with pavers would be alleviated by their proper installation and maintenance (letter on ©4-7, interviews on ©8-16). Councilmember Floreen asked CPD for its reaction. CPD discussed the issue at its December 10 meeting and reiterated its opposition to pavers in the main travel way and extended its opposition to stamped concrete as well (©17). CPD Commissioner Simon, in a correspondence with the Council President, asked that the ban be extended to both stamped concrete and cobblestones (©18).

Subsequently the Council has received correspondence from several groups of stakeholders where pavers are prominent. The Bethesda Urban Partnership (BUP), Bethesda Urban District, and the Bethesda-Chevy Chase Chamber of Commerce oppose the resolution, asserting that the experience of pavers in Bethesda—designed and installed according to the Planning Board's Bethesda Streetscape Standards, and followed by regular maintenance—has been positive (©19-20). These stakeholders are suggesting amending the resolution to permit brick pavers if they are implemented in accordance to the Bethesda Streetscape Standards and applicable master and sector plans (©21).

Excerpts from the Bethesda Streetscape Standards are on ©22-26. The diagram on ©23 shows that the 4"x8" pavers are set against each other hand-tight (i.e., with virtually no gap between pavers) on a thin adhesive layer of neoprene modified asphalt (to hold them in place), atop a ¾-inch thick asphalt layer (which adjusts to heating and cooling), in turn atop a concrete base and an aggregate sub-base. The brick pavers themselves are the Watsontown "Garden Blend"-type, which have a tacky surface and are not slippery in wet weather. These pavers and their installation are unlike the pavers in other areas which were made of concrete or a slicker brick, set in sand, and/or with larger gaps between the pavers.

Friendship Heights, a municipality that is home for a large number of seniors, supports the continued use of pavers, and has had good experience when installing them according to the Bethesda Streetscape Standards (©27-28). The residential Town of Chevy Chase Village, which features brick pavers on most of its streets, has had success with bricks in a 4"-deep stone dust base. It, too, opposes the resolution (©29). The Silver Spring Urban District also opposes the resolution in its current form, asking that urban districts be exempt from the ban (©30-31). The Potomac Chapter of the American Society of Landscape Architects (ASLA) opposes the ban, for many of the same reasons cited by the Planning Board and others (©32).

The Planning Board staff's Urban Design and Transportation Divisions have reviewed this issue again (©33-34) and have the following recommendations:

1. Supports the installation details described in the proposed policy and in addition recommends that language be added to require all brick pavers to be set on a concrete sub-base in accordance with the industry standards as forth by the Brick Institute of America.

2. Recommends that the use of brick pavers not be precluded in urban districts with special taxes for maintenance and approved installation details that achieve a rigid, stable walking surface.
3. Recommends that brick pavers be set diagonally or in another pattern not in the primary direction of travel (e.g. "herring bone" pattern as approved by Montgomery County in the Bethesda Streetscape Plan).
4. Recognizes the need to clarify the language to preclude the use of poor quality paving such as stamped concrete and the installation of concrete pavers without a concrete sub-base.

Soon after the resolution's introduction, Council staff asked the Office of the County Executive to coordinate an Executive Branch response. Many Executive Branch departments and offices have an interest in the issue: the budgets of the B-CC, Silver Spring, and Mid-County Regional Service Centers are responsible for sidewalk maintenance in Bethesda, Silver Spring, and Wheaton, respectively; the Department of Housing and Community Affairs has completed and under design several urban revitalization projects that feature pavers; the Department of Permitting Services reviews the plans and oversees installation of pavers as part of private development projects; the Department of Health & Human Services is responsible for providing aging and disability services and staffing the CPD; and DOT maintains pavers where they are outside urban districts and is responsible for some capital projects that feature pavers, including the Bethesda CBD Streetscape project.

As of late Friday afternoon Executive Branch staff were still in the process of developing their coordinated recommendations. They will be presented at Monday's worksession.

As noted above, brick paver installation costs more than building a sidewalk with concrete slabs. BUP, which builds and repairs both types, reports that brick pavers cost 2½-3 times as much to install:

New Installation

Install new concrete sidewalk 0 to 100 sq.ft.:	$12 per sq.ft.
Install new concrete sidewalk 100 sq.ft.>:	$9 per sq.ft.
Install new brick sidewalk 0 to 100 sq.ft.:	$30 per sq.ft.
Install new brick sidewalk 100 sq.ft.>:	$26 per sq.ft.

Maintenance costs are a different story. On a per square foot basis, BUP has found that brick pavers are only marginally more expensive to repair:

Repair

Remove/repair existing concrete sidewalk 0 to 100 sq.ft.:	$16 per sq.ft.
Remove/repair existing concrete sidewalk 100 sq.ft.>:	$14 per sq.ft.
Remove/repair existing brick sidewalk 0 to 100 sq.ft.:	$18 per sq.ft.
Remove/repair existing brick sidewalk 100 sq.ft.>:	$15 per sq.ft.

However, a crack in a concrete sidewalk will require the entire 5'x5' slab to be replaced, while a crack in brick only requires replacing the affected bricks. Therefore, if a sidewalk is to be maintained equally well, it is likely that brick-paved sidewalks are less costly to maintain. Furthermore, while it is nearly impossible to match the shade of a concrete slab, the color of newer bricks fit in quite well.

For this worksession, Council staff suggests hearing for a few minutes from each of several interested parties who plan to be in attendance:

- Executive Branch (DOT, DHCA, DPS, DHHS, Center Directors)
- Planning Board
- Commission on People with Disabilities
- Bethesda Urban Partnership
- Silver Spring Urban District Advisory Board
- Town of Friendship Heights
- Town of Chevy Chase Village

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Resolution: _____
Introduced: February 24, 2009
Adopted: _____

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

By: Councilmembers Floreen, Andrews, Elrich, Ervin, Leventhal and Trachtenberg

Subject: Policy regarding the use of brick pavers in the public right-of-way

Background

1. The Commission on People with Disabilities has recommended that brick pavers no longer be installed on paths of travel in the design of sidewalks, streets and facilities in Montgomery County. The Commission notes that wheelchair users and others with limited mobility find brick-paver surfaces to be extremely difficult to travel over and can increase injuries due to falls. The Commission states that these pavements create barriers for people with mobility and visual disabilities.

2. The County Department of Transportation has reported that brick-paver surfaces are more difficult and costly to maintain than concrete or asphalt surfaces.

3. In its July 22, 2008 discussion regarding a supplemental appropriation for the Silver Spring Transit Center project, the Council indicated that it did not support the installation of brick pavers for the walking surfaces of the center. The Transportation, Infrastructure, Energy and Environment Committee reviewed this matter on September 29, 2008 and received remarks and correspondence from the Commission on People with Disabilities and the Department of Transportation opposing the installation of brick pavers in walkways. The Planning Board supports the continued installation of brick pavers in walkways.

Action

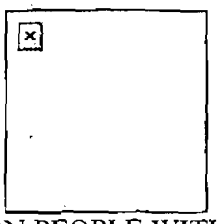
The County Council for Montgomery County approves the following resolution:

Brick pavers may continue to be used in public rights of way as edge treatments and decorative elements, but they must no longer be installed in the paths of travel in the public right of way in Montgomery County, unless they are included in a County capital improvement for which construction funds have been appropriated prior to February 24, 2009, or they are included in a requirement for a subdivision or site plan approved prior to February 24, 2009.

Where brick pavers are installed in the paths of travel, the gap between the pavers must not exceed 1/4", the depth of the crack between them must be between 1/16" and 1/8", and they must be set diagonally to the primary direction of travel.

This is a correct copy of Council action.

Linda M. Lauer, Clerk of the Council _____ Date



COMMISSION ON PEOPLE WITH DISABILITIES
July 24, 2007

The Honorable Isiah Leggett
Montgomery County Executive

The Honorable Marilyn Praisner
President, Montgomery County Council

Dear Mr. Leggett and Mrs. Praisner:

On behalf of the Commission on People with Disabilities, I am writing to request that you take action to stop the installation of brick pavers on paths of travel in the design of sidewalks, streets and facilities in the County. Instead we recommend that pavers be used as decorative and design elements for cost effectiveness, safety and wellbeing, Salted or broom-finish concrete provides good slip resistance; and this surface finish is recommended in the path of travel versus pavers.

It is our understanding the Maryland National Capital Park and Planning promotes the use of pavers on the street and on sidewalks because it is felt that they create design excellence. Though many would agree that they look good, these pavers can increase fall injuries, create barriers for people with mobility and visual disabilities and people in general, as they pose tripping hazards

Wheelchair users and others with limited mobility find the pavers extremely difficult to travel over as most paved surfaces are uneven and spaced too far apart. It is recommended that pavers be used at a minimum, that the gap between pavers not exceed 1/4", that the depth of the crack be between 1/16" and 1/8", and that the pavers be set up at a diagonal and preferably lined up and not to be perpendicular to the path. It is also recommended that the County use larger pavers rather than small ones and that texture and consistency in tiles is important. The District of Columbia had problems in the past of pavers shifting, but they now require that the pavers be laid on a concrete foundation.

We hope that this information is of use to you in better meeting the access needs of our community. We offer our assistance as you deem appropriate. If you have any questions, please contact me at the Commission office at 240-777-1246.

Sincerely,
Nelson Jackson
Nelson Jackson
Chairman

Attachment

MONTGOMERY COUNTY COUNCIL
ROCKVILLE, MARYLAND

MEMORANDUM

NANCY FLOREEN
COUNCILMEMBER AT-LARGE

October 3, 2008

TO: Royce Hanson, Chair, Montgomery County Planning Board

FROM: Nancy Floreen, Chair NF
Transportation, Infrastructure, Energy and Environment Committee

SUBJECT: Brick pavers on sidewalks

During the T&E Committee's discussion of Americans with Disabilities Act (ADA) transportation issues on September 29, we heard opposition from members of the Commission on People with Disabilities as to the problems they encounter with brick-paved sidewalks. The Commission has recommended that brick pavers no longer be installed on paths of travel in the design of sidewalks, streets and facilities in Montgomery County. It notes that wheelchair users and others with limited mobility find brick-paved surfaces to be extremely difficult to travel over and the cause of increased injuries due to falls. It states that these pavements create barriers for people with either mobility or visual disabilities. The County Department of Transportation also reiterated its opposition to this use of brick pavers, noting their higher capital cost and that they are more difficult and costly to maintain than concrete or asphalt surfaces.

Based on our conversation on September 29, there appears to be general agreement that pavers are no longer an appropriate choice for walkway streetscaping. Please advise us as to your recommendations for the appropriate alternative to be required in the future.

We look forward to seeing your response.

Copies: Councilmembers
Arthur Holmes, Jr., Director, Department of Public Works and Transportation

(3)

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MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIRMAN

November 4, 2008

Councilmember Nancy Floreen
Montgomery County Council
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

SUBJECT: Brick Pavers on Sidewalks

Dear Nancy:

I am responding to your letter of October 3, 2008 concerning problems encountered by people with disabilities when using sidewalks with brick pavers. I also recently met with the Commission on People with Disabilities and discussed the issues with them. In response to your letter and my meetings, we have investigated these concerns. This letter summarizes the issues and findings.

ISSUES

Wheelchair users and others with limited mobility have indicated a concern with brick pavers on sidewalks. The staff also identified the following issues with brick pavers:

- **Installation** - The brick sidewalks have often not been installed according to the specifications in the approved streetscape manuals.
- **Maintenance** - Poor maintenance often results in shifting bricks that separate and create gaps greater than ½ inch that catch wheelchairs or canes.
- **Specifications (Smooth Surfaces)** - The original brick pavers in the Silver Spring CBD often become slippery when it rains or snows.
- **Cost of Brick Sidewalks** - Brick sidewalks are more costly to install than concrete sidewalks.

ANALYSIS

Staff have continued to address streetscape issues since the original specifications were created for the Planning Board and Montgomery County Department of Transportation in 1984. The streetscape in our central business districts represents a hallmark of outstanding planning in the nation, and the specifications are often copied by other jurisdictions. Modifying the specifications to improve pedestrian accessibility continues to be a focus of the Planning Board.

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www.MCParkandPlanning.org E-Mail: mcp-chairman@mncppc.org

The Planning Board is concerned with the function, maintenance, and appearance of the sidewalks.

Staff conducted interviews with representatives from the Silver Spring and Bethesda CBDs, and with others concerned with the safety of brick pavers. The following paragraphs summarize the findings:

Bethesda CBD Interviews - The urban district managers in Bethesda indicated that they were extremely pleased with the sidewalks with brick pavers and other streetscape elements. They do not have complaints regarding safety and accessibility. They indicated that brick pavers installed in accordance with the approved streetscape details are safe, easy to maintain, and preferable to concrete sidewalks or concrete pavers. The managers stated that residents and business owners in the Woodmont Triangle area of the Bethesda CBD have requested that brick paving be used in new projects. They feel strongly that such a streetscape treatment will help this area to compete more successfully with other areas of the Bethesda CBD that already have brick pavers along with the other elements of the streetscape standards.

Silver Spring CBD Interviews - Staff also conducted interviews with representatives concerned with sidewalk access issues in the Silver Spring CBD. The consensus is that brick pavers are not the most significant access issue in the Silver Spring CBD. A majority of the persons interviewed preferred brick pavers to concrete sidewalks or concrete pavers. The original concrete pavers along Georgia Avenue and Colesville Road were installed without an adequate concrete base to reduce costs. These concrete pavers often have gaps and heaving that concern people with disabilities. Recent installation of concrete pavers to match the existing paving includes a concrete base that minimizes accessibility concerns, but this installation is more costly than the use of brick pavers.

Interviews with Representatives of People with Disabilities - The results of the interviews indicated that sidewalks with brick pavers were not the most significant issue for persons with disabilities. The most significant issues were identified as follows:

- Metal grates that provide access to underground service and utility areas are often slippery, and they should not be located in areas with high pedestrian traffic.
- Low hanging transportation signs are often not detectable.
- Utility poles, fire hydrants, and guide wires should be carefully located.
- Sidewalks that accommodate outdoor cafes and restaurants often reduce the width of sidewalks.

- Crosswalks are often too long, full of potholes, and difficult to distinguish from the surrounding concrete sidewalks and curbs.

The results of the interviews indicated the need for better installation and improved maintenance for all sidewalks. The interviews also recognized the need to modify the specification for brick sidewalks in Silver Spring.

CONCLUSION

Our interviews and experience indicate that brick pavers, if installed and maintained correctly, are safe and provide adequate accessibility. The analysis also indicates that brick sidewalks are often preferable to concrete sidewalks in areas with high pedestrian traffic. Concrete sidewalks have a narrow section (4-5 inches of concrete, and 4-5 inches of gravel). Concrete sidewalks need to have expansion or control joints every 4-8 feet. A properly functioning concrete sidewalk is designed to shift or separate at these joints to minimize cracking on the surface. Extensive separation and cracking occurs with older concrete sidewalks. This expansion causes a significant safety concern that does not occur with brick sidewalks that do not need these expansion joints. The approved detail for brick sidewalks requires 8-12 inches (2¼ inches of brick, a ¾ inch setting bed, 5 inches of concrete base, and 4-5 inches of gravel). This additional thickness for brick sidewalks adds stability, and helps resist heaving from freezing and tree roots.

The following actions have already been taken to address concerns and improve the safety and accessibility of sidewalks without compromising other requirements.

- **Improve Installation** - To improve installation, the Planning Department has worked with the Department of Permitting Services to ensure that the installation of sidewalks with brick pavers is done in accordance with the approved specifications. The specifications are required on all approved Site Plans. The Department of Permitting Services provides inspections at the time of installation.

- **Address Maintenance** - Proper installation reduces the need for maintenance. These problems are often caused by poor replacement of the bricks after repairs have been made by utility companies. The use of unit paving such as brick is easier to replace and match the existing materials than the uneven, patches required to replace concrete sidewalks. The urban maintenance districts were created in part to address the needs of maintenance.

- **Modify Specifications (Smooth Surface)** - To eliminate the smooth surface of pavers in Silver Spring, the specification for the brick pavers in Silver Spring (Belden Paver #470-479) has been changed to increase the roughness of the surface and reduce slipping. The manufacturer has created a rough, slip resistant surface for this paver. The new pavers are being specified and installed on new projects in the Silver Spring CBD. The interviews indicate that the Bethesda brick paver has the necessary roughness to reduce slipping.

- **Cost of Brick Pavers** - Brick pavers installed as specified in the streetscape manuals for the CBDs are more costly than concrete because of the additional base. The additional base will support the weight of vehicles and reduce heaving that occurs in high traffic areas. These costs are justified to provide a functioning sidewalk that requires limited maintenance and satisfies the needs of pedestrians. The use of sidewalks with brick pavers should be limited to CBDs or other areas with urban maintenance districts.

Based on the findings, we conclude that changing the sidewalk material from brick to concrete or concrete pavers will not significantly improve accessibility. The use of brick sidewalks has specific advantages of long term maintenance and stability over the use of concrete sidewalks. We will ensure that the appropriate details and specifications are included in all approved Site Plans. We will also proceed with the revision of the streetscape standards and to include changes that will address the concerns of persons with disabilities. Thank you for your comments, and I hope we have addressed your concerns. Please contact me with any additional concerns of specific individuals or organizations.

Sincerely,

Royce Hanson
Chairman

G:Marcolin/brick2
2008-1090

Interview #1

at Fenton and Cameron Streets, Silver Spring, MD.

September 11, 2008

(interview done through written notes)

John Marcolin: I work for Park and Planning Commission and am investigating sidewalk accessibility in Silver Spring. Do you have problems with brick pavers?

Interviewee: *I noticed there are a lot of things on sidewalks that block the way for blind people.*
JM: Are they benches, light poles, traffic signs?

Interviewee: *I am not sure about near hear* (Fenton and Cameron) *but I live at Sligo Ave. and the sidewalk is not friendly at all-too many branches and light poles.*

JM: Do you ever trip over bricks in the sidewalks?

Interviewee: *(Nods yes) That's why I tried to avoid sidewalk and walk on side of road-I did report this to County and nothing is changed.*

JM: Is it both with brick and concrete sidewalk? Do you have problems with the concrete sidewalks too?

Interviewee: *(Nods Yes) Also-I work at American Association of Deaf-Blind right here and a lot of my co-workers and clients complain that this city is not friendly to walk around independently.*

JM: Because of the bricks or the trees and light poles?

Interviewee: *All*

JM: Do you ever trip over cracks in concrete sidewalks?

Interviewee: *Yes. Also-crosswalk to cross Georgia Avenue – there are a lot of holes on the crosswalks which a lot of people trip over.*

JM: On a scale of 1 to 10, (1=Bad, 10= Great), how to do you like Brick vs. Concrete Sidewalks?

Interviewee:	*Brick:*	*4*
	Concrete:	*4*

JM: Can I quote you?

Interviewee: *(Nods yes)*

JM: With sidewalks, what can we do to make the surface better?

Interviewee: *I think it's best to interview people by showing them the sidewalk, then asking for specific improvements (suggestions)*

Interview #2

Walking tour of Silver Spring, MD.

October 09, 2008

Interviewee lives and works in Silver Spring, is disabled by tunnel vision (can only see in a very narrow area directly in front of him-objects above, below or to the side are not visible). Also suffers from hearing loss. He depends upon a cane (with a small ball at the end) to navigate the streets of Silver Spring.

- Interviewee likes completely smooth pavements, no cracks, because his cane gets caught in the cracks. He said half jokingly: "I would love it if the sidewalks were carpeted" in Silver Spring. As we walked the CBD Interviewee's cane got caught continuously in the control joints between the concrete panels, in one case causing the cane to jab him in the stomach as he walked.
- As we moved from concrete sidewalks to brick, Interviewee immediately noticed that his cane was now lightly bumping over each brick as he walked, creating a continuous "click click" sound. He commented that he liked that sound because it acted to alert other pedestrians that he was coming, and they stepped out of his path as though he were "Royalty".

- On a scale from 1-10, 1 being the worst and 10 being the best, Interviewee rated them as follows:

  Brick: *7-8*
  Concrete: *3*

- Interviewee #1 stated that the newer brick sidewalks in Silver Spring become slick and shiny when wet. The shininess affects one's ability to see at night. However, he still prefers brick to concrete because it does not rain every day, while the cracks in the sidewalks are always there, rain or shine. Informed Interviewee that the brick specification has been changed so that the wearing surface is much rougher.

- Interviewee #1 related his experience on a recent trip to Seattle, Washington. In a neighborhood where he was visiting, the concrete sidewalks were buckled in many places by tree roots. He twisted his ankle as a result of one of these areas of buckles concrete.
- Interviewee noted that crosswalks with pedestrian refuges (in middle of busy streets such Colesville Road) that are at grade are nerve-racking because there is not a step up or curb to indicate they are in a safe zone-so they don't know if they are still in the road or not. Interviewee also noted that disabled persons in wheelchairs don't like step ups or ramps because they are difficult for wheelchairs to negotiate.
- Interviewee stated that visually impaired persons are often in disagreement with disabled persons in wheelchairs regarding accessibility of sidewalks and crosswalks.
- The only concrete Interviewee #1 likes is brand new concrete, before tree roots and frost heave have cause the sidewalks to buckle and shift causing tripping hazards.
- In some areas of the sidewalk on Ellsworth, access between sidewalk cafés and the street curb is very narrow.
- **The main problems with the Sidewalks**:
  -Fire Hydrants located in middle of sidewalks.
  -Overhanging signs. Randy has received bloody noses from running into these.
  Manholes and grates located in sidewalks are very slippery when it rains.
  -Phone Booths
  6'-0" tall transformer at the corner of 16th street and East West Hwy hides him from oncoming traffic as he steps into crosswalk.
  -Cable stays or guys for telephone poles in the sidewalks are very difficult to detect with a cane. Often first part of body to detect them is the head.
  -Lack of detectable paving/material between curb and sidewalk.
  -Low hanging branches from street trees. Interviewee #1 ran into a few of these on our tour.
  -Cobbles over top of tree pits are rough and un-even making then difficult to walk on; easy to trip over.

-Low decorative wire fencing around tree pits on Ellsworth is a hazard because canes get caught in them.

Most crosswalks are very difficult to cross for the following reasons:

-The signals are difficult to see.

- There is no change in color or texture in the paving.

-The pedestrian refuges in the middle of the crosswalks are very unpleasant, because they are narrow and one does not know when they have arrived at one because there are often no changes in grade or paving texture.

-Interviewee indicated that the yellow bump strips work well but that they often come loose or the edge peels up, presenting a tripping hazard.

- **Suggests the following:**

-For crosswalks: Install paving of different texture (bricks, stamped asphalt, yellow detectable panels) in all crosswalks. Make the pedestrian refuges clearly different from the rest of the cross walk.

-Install different texture paving or plant material, such as grass, between the back of curb and sidewalk to help blind persons detect presence of curb. Walking adjacent to curb in very un-nerving.

-Eliminate Guy wires (for telephone poles) anchored to sidewalks.

-Change cobbles or grates at tree pits to vegetation/ground covers.

-Eliminate large metal grates in sidewalks. Make manhole covers flush with paving or cover with bricks.

Interview #3

and walking tour of Silver Spring, MD.

October 10, 2008

Interviewee is a disabled person who lives in Silver Spring, adjacent to the CBD. His disability limits his vision such that he requires a cane to walk and is very uncomfortable on streets that he is not familiar with. He cannot see obstructions in his path such as overhead signs hanging below head height, overhanging shrubs or tree limbs or changes in paving heights (were a section of paving is 1" above or below an adjacent paving section). The following are the main concerns that Interviewee has:

- Brick piers on Fenton Street protrude into the sidewalk creating an obstacle that Victor often runs into. They also decrease the passing distance to about 3'0" when adjacent to a light pole.
- Brick pavers are slippery when it rains and reflect light upward creating a very disorienting environment.
- The metal utility covers and utility grates are very slippery in the rain. The worst place in the Silver Spring CBD is on Fenton Street at the corner of Colesville Road, adjacent to City Place.
- No sidewalks on Houston Street and Grove Street in East Silver Spring.
- There is a drainage problem at Southeast corner of Bonifant Street and Fenton Street.
- There is no lighting on north side of Bonifant Street.
- No Street light at Georgia and Bonifant Street.
- Ice freezes at curb cut on Easley Street.
- Sidewalk on Grove Street peters out to nothing at mid-block, between Easley and Thayer.
- Ice freezes on sidewalk at corner of Bonifant and Fenton Street, south side.
- On the section of Easley (outside of the CBD) where Victor lives, the sidewalks are paved in asphalt. They are difficult to negotiate because they have an uneven and bumpy surface, have many cracks and the curbs

are rolled or sloped, without a clean edge. This makes it difficult to determine if one is approaching a bump in the paving or ancurb, increasing the likelihood of tripping and injuring oneself.

Interview #4

October 15, 2008

Interviewee is a disabled person who lives in the Silver Spring CBD. Interviewee is disabled by hearing loss and inability to see details. She has good peripheral vision. Interviewee indicates the following as the most important issues in Silver Spring:

- Sidewalks (brick and concrete) present challenges to her balance because of un-evenness in the surfaces
- Brick paver and concrete sidewalks present the same challenges.
- The bricks in the SS CBD tend to be slippery when they are wet-because the wet brick reflect the light more than concrete, it is difficult to determine whether the surface is simply wet paving or a puddle.
- Manhole covers and metal grates are very slippery when it rains.
- Interviewee likes the audible signals at the crosswalks.
- The crosswalks themselves are OK.
- The pedestrian refuges (indicates the one at Colesville Road and Georgia) are fine because she can see well enough to recognize them.
- People who ride bikes on the sidewalks are reckless and present a hazard to disabled persons who cannot see them coming and avoid them in a timely manner. The bike paths should be clearly marked.
- There are some handicap hand rails that project too far out into sidewalks; present a hazard to people who cannot see them.
- There is a large 6' tall utility box at the northeast corner of Colesville Road and East West Hwy. It blocks the view of pedestrian to drivers at this corner, making it hazardous for pedestrians to step out into traffic, because they are not seen. Impatient drivers in 2nd lane can't see pedestrians in crosswalk and pull around waiting cars, almost hitting pedestrians.
- Crosswalks have uneven pavement -but there are no clues to its unevenness.
- The street signs are not well marked -poor contrast. Not all corner marked.

Interview #5

October 15, 2008

Interviewee is a disabled person who lives in Silver Spring, adjacent to the CBD. She is disabled by hearing loss, poor balance and vision that is limited by distance; she cannot see objects clearing beyond a distance of 15'-20'. Interviewee has good peripheral vision so she does not need a cane to navigate when she walks. Her greatest concerns are the following:

- Snow; sidewalks and Bus stops are often left un-shoveled making walking very difficult. One is often is forced to walk in the street to get around.
- Brick paver sidewalks are often slippery when it rains or when shop owners hose down the brick sidewalks in front of their establishments.
- The metal utility covers and utility grates are very slippery in the rain.
- The rough granite cobbles placed over the street tree pits are difficult to walk on (balance issue).
- The Metal utility covers and exhaust grates are very slippery, especially when it rains. Fenton Street at City Place is the worst.

Overall, Interviewee prefers concrete because she does not use a cane and therefore is not affected by deep or shifting control joints. She finds concrete sidewalks require less concentration that brick sidewalks when she is wearing high heels. Low signs or fire hydrants placed in the middle of sidewalks are not an issue because she can see them and avoid them without too much thought.

On a scale of 1 to 10, with one rating the least, and ten rating the best, Interviewee rated concrete and brick sidewalks in the following:

Concrete:	8 or 9	when grates are present: 4 or 5
Brick:	6 or 7	when grates are present: 2 or 3

Montgomery County Commission on People with Disabilities
Portion of December 10, 2008 meeting minutes

Councilmember Nancy Floreen wrote a letter to Cindy Buddington regarding Dr. Royce Hanson's, Chairman, Park and Planning Commission, letter that he interviewed individuals in urban districts who said they like red brick pavers. Montgomery County Park and Planning will continue to use them in new construction. Betsy contacted Arlington County about pavers and their response was:

> Arlington no longer uses brick pavers in the path of travel of sidewalks and crosswalks. This applies to all new site plans approved in the last few years. Brick pavers are still used as borders and accent areas, but are not allowed in the travel zone. Brushed or stamped concrete are the preferred materials.

Responses from Commissioners have been to eliminate the use of red brick pavers and they would prefer stamped or brushed concrete in the path of travel. Betsy Luecking, Staff Member, asked what position the Commissioners would like to take.

Cindy Buddington, Chair, said that stamped concrete is the same as pavers as it is bumpy and has ¼" or wider gaps. She personally favors brushed concrete sidewalks and using pavers only as decoration along the borders. Jackie Simon, Commissioner, concurred that stamped concrete is slippery during bad weather and the uneven surface causes wear and tear on wheelchairs, and can induce seizures. Charles Crawford, Commissioner, suggested following the public rights of way report. Harold Snider, former Commissioner, said that the most recent draft is not clear and the Commission should recommend best practices. He suggested using truncated domes 24" from the sidewalk to indicate a crosswalk and using concrete for the crosswalk. Sandra Sermons, Commissioner, noted that individuals who are blind or have low vision need to be able to easily detect crosswalks. There needs to be a compromise. She would prefer stamped concrete be used for crosswalks and sidewalks. Steve Hage, Commissioner, said that borders along the crosswalks should be used for guidance. Charles said that a 12" border would be wide enough. Jackie motioned for a vote to modify Arlington's language to:

> Arlington no longer uses brick pavers in the path of travel of sidewalks and crosswalks. This applies to all new site plans approved in the last few years. Brick pavers and stamped concrete are to be used as borders and accent areas, but are not allowed in the travel zone. Brushed concrete is the preferred material for all crosswalks and sidewalks.

Charles seconded the motion. A vote was taken and unanimously approved.

-----Original Message-----
From: Jackie Simon [mailto:jackiesimon@verizon.net]
Sent: Wednesday, February 18, 2009 8:36 PM
To: Floreen, Nancy; Andrews, Phil
Cc: Luecking, Betsy; cbuddington@hotmail.com
Subject: Pavers

Nancy and Phil- Thank you so much for your support of our position on making our community more inclusive. The Commission understands that the Resolution is to be considered Tuesday. The Commission on People with Disabilities extends their thanks as well. This evening the Steering Committee of the Commission asked that it be understood that when we say "pavers" it is shorthand for brick, cobblestone, pavers and stamped concrete and perhaps they should be so defined. They also asked that any permitted "pavers" under the resolution be required to be installed on a concrete base to increase their stability. I hope you don't consider us presumptuous in our added suggestions or request for clarification. Again, our many thanks. We'll see you at the meeting. Jackie Simon

BETHESDA-CHEVY CHASE REGIONAL SERVICES CENTER

Isiah Leggett
County Executive

Kenneth B. J. Hartman
Director

MEMORANDUM

March 3, 2009

TO: Arthur Holmes, Jr., Director
Department of Public Works and Transportation

FROM: Kenneth B. J. Hartman, Director
Bethesda-Chevy Chase Regional Services Center

Subject: Proposed ban on the use of brick pavers in sidewalk construction.

Thank you for this opportunity to comment on Councilmember Floreen's resolution concerning the use of brick pavers in sidewalk construction.

On behalf of the Bethesda Urban District, and after consultation with the Bethesda Urban Partnership and Greater Bethesda-Chevy Chase Chamber of Commerce, I oppose this resolution for the reasons outlined below.

1. We have not received ADA complaints.

   Overall, the experience with brick pavers in downtown Bethesda has been positive. We have not received ADA complaints/concerns about brick sidewalks in Bethesda.

2. The Bethesda CBD Sector Plan requires brick pavers as a streetscape design requirement.

   The Bethesda CBD Sector Plan envisions a uniform and aesthetically pleasing streetscape which includes the use of brick pavers. This vision has been implemented in about 3/4 of downtown Bethesda through County and developer investments. Eliminating brick pavers from the standard would lead to a "patchwork" of differing sidewalk designs as future projects are built.

3. Problems experienced with brick pavers elsewhere stem from installation techniques.

   If brick pavers are installed according to the Bethesda Streetscape Standards (concrete sub-base, asphalt base, asphalt mastic adhesive) it is a highly durable and lasting treatment with very little heaving and unevenness. Repairs, when necessary,

(19)

are simple and inexpensive. Many of the problems experienced in Rockville Town Square resulted from the installation of pavers over a sand base.

4. Concrete sidewalks are more expensive to maintain than brick.

   The Bethesda Urban Partnership is proactive in identifying and repairing loose bricks. Crews can in most cases repair the loose bricks without outside contracts.

   When a concrete section heaves, the entire section of sidewalk must be repaired. The Bethesda Urban Partnership does not have the tools or expertise to replace concrete and must contract out the repairs, which is more costly. A majority of the annual Bethesda Urban District sidewalk repair budget is spent on concrete sidewalk repairs.

5. Brick pavers are popular with businesses and business patrons.

   Business owners in areas that currently do not have brick sidewalks routinely request the treatment because they say it makes the area more inviting to visitors. Sections of Bethesda that have brick sidewalks are the places people tend to go more frequently (*i.e.*, Bethesda ROW vs. Woodmont Triangle).

Thank you again for this opportunity to comment on this matter. I am happy to address any questions you have at your convenience.

cc: Diane Schwartz-Jones, ACAO
Tom Street, ACAO
David Dabney, Executive Director, BUP

Suggested additional language (underlined and in italics below):

Subject: Policy regarding the use of brick pavers in the public right-of-way

****

Action

The County Council for Montgomery County approves the following resolution:

Brick pavers may continue to be used in public rights of way as edge treatments and decorative elements, but they must no longer be installed in the paths of travel in the public right of way in Montgomery County, unless they are included in a County capital improvement for which construction funds have been appropriated prior to February 24, 2009, or they are included in a requirement for a subdivision or site plan approved prior to February 24, 2009.

Where brick pavers are installed in the paths of travel, the gap between the pavers must not exceed ¼", the depth of the crack between them must be between 1/16" and 1/8", and they must be set diagonally to the primary direction of travel.

Notwithstanding the above, installation of brick pavers will continue to be permitted in paths of travel in the public right-of-way as long as the pavers are implemented in accordance with the Bethesda Streetscape Standards and applicable Master Plan or Sector Plan recommendations. The Streetscape Standards include important installation requirements with a concrete sub-base, an asphalt base and asphalt mastic adhesive, which is recognized as a highly durable and lasting treatment with very little heaving, unevenness, expense or safety concerns where implemented properly, such as the Bethesda CBD. The specific installation requirements must be included on the plans required for permits for the brick paver installation in the public right-of-way.

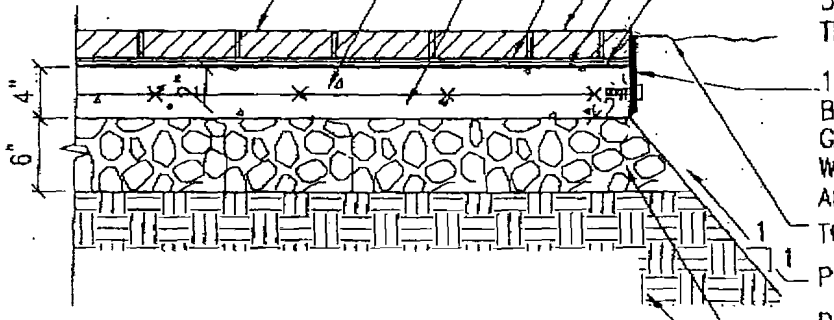
BETHESDA STREETSCAPE PLAN

Standards

APPROVED PLAN FOR THE METRO CORE DISTRICT

2/12A TYPICAL STREETSCAPE FURNISHINGS

NOT TO SCALE



4" X 8" BRICK PAVERS, WITH HAND TIGHT JOINTS WITH 3:1 SAND CEMENT SWEEP.

POURED CONCRETE BASE, 3500 PSI AT 28 DAYS

6" X 6" X 2.1 X 2.1 WELDED WIRE MESH CONTINUOUS WITHIN SLAB

ADHESIVE COAT– NEOPRENE MODIFIED ASPHALT ADHESIVE

FINISH GRADE OF PAVEMENT

PRIMECOAT– LOW VISCOSITY LIQUID ASPHALT

3/4" BITUMINOUS SETTING BED – ADJUST THICKNESS IF PAVER THICKNESS VARIES

1/4" X 5" STEEL EDGE FRAME (SHOP PRIMED AND PAINTED BLACK) BOLTED TO CONCRETE BASE WITH 1/2" X 4" GALVANIZED STEEL LAG BOLT IN EXPANSION ANCHOR WITH WASHER, AT 18" O.C.– PROVIDE WHERE BRICK DOES NOT ABUT A RIGID STRUCTURE

TOP OF MULCH

PLANTED AREA

DENSE GRADED AGGREGATE SUBBASE, COMPACTED TO 97%

COMPACTED SUBGRADE

(23)

SPECIFICATIONS OF MATERIALS

The following specifications are developed to provide quality control and uniformity between the various public and private developers in Bethesda. The specifications cover only products recommended in the streetscape plan. They are not to be considered a complete set of specifications for bid. Demolition, site preparation, contractor's responsibilities and guarantees, and installation techniques are not included in these specifications.

A. BRICK PAVERS

TYPE	Watsontown "Garden Blend" or approved equal. "Equal" must be submitted to staff of Urban Design Division, M-NCPPC for approval.
ABSORPTION RATE	Average water absorption rate 4%.
COMPRESSIVE STRENGTH	Shall be not less than 10,000 pounds per square inch for any 5 bricks tested.
FREEZE-THAW CYCLES	Shall be capable of withstanding a minimum of a 100 freeze-thaw cycles.
TOLERANCES	Shall conform to ASTM Designation C-902-79a.
BOND	Herringbone, square with curb.
BORDER	8" sailor course.

B. BITUMINOUS SETTING BED

TYPE	Asphalt cement shall conform to ASTM Designation D-3381. Fine aggregates shall be clean, hard sand, and free form adherent coating, lumps of clay, alkali salts and organic matter. Aggregates shall meet the standard method of test for sieve analysis of fine and coarse aggregates ASTM Designation C-136-81.
VISCOSITY GRADE	Shall be A.C. 10 or A.C. 20.
PROPORTION OF MATERIAL	Approximate proportion shall be 7% asphalt cement and 93% fine aggregate. The mix shall be heated to approximately 380 degrees Fahrenheit.

I. SIDEWALK PAVEMENT

C. NEOPRENE - MODIFIED ASPHALT ADHESIVE UNDER PAVERS

MASTIC	
(Asphalt Adhesive)	Solids (base) ..... 75%+- 1%
	Lbs./Gal ..... 8-8.5 lbs.
	Solvent ..... Varsol (Over 100°F Flash)
BASE	
2% Neoprene, 10% Fibers,	
88% Asphalt)	Melting Point ASTM D-36 ..... 200°F Min.
	Penetration ..... 77°F 100 Gram Load 5 Second
	(1m.m.) 23-27
	Ductility ..... ASTM D-113-44 @ 25°C 5 cms/per
	minute ..... 125 cm Min.

D. JOINT FILLER

TYPE	Portland Cement shall conform to ASTM C-150 and sand shall conform to ASTM C-33.
PROPORTION OF MATERIALS	One part Portland Cement to three parts sand.

E. CONCRETE SUBBASE

CONCRETE MATERIALS	Portland Cement - ASTM C150, Type 1. Use only one brand of cement throughout the project.
	Aggregates - ASTM C33, fine and coarse aggregates shall be clean, sharp, and free from clay, organic matter and other deleterious substances.
	Coarse aggregates shall be crushed stone with a maximum size no larger than one-fifth of the narrowest dimension between side forms, one-third the depth of the slab, nor three-fourths of the minimum clear spacing between individual reinforcing bars.
	Water shall be clean, drinkable and meet the PH requirements of AASHTO T-26 Method B.
REINFORCING MATERIALS	Reinforcing Bar shall conform to ASTM A615, Grade 60.
	Welded Wire Fabric shall conform to ASTM A285.

Supports for reinforcement shall comply with CRSI recommendations. Wood, bricks or other devices will not be acceptable as supports for reinforcement.

ADMIXTURES

Air.....entraining admixtures shall conform to ASTM C260.

Water.....admixtures shall conform to ASTM C494, Type A.

Set ...control admixtures shall conform to ASTM C494 as follows:

1. Type B.....Retarding
2. Type C.....Accelerating
3. Type D ..... Water reducing and retarding
4. Type E.....Water reducing and accelerating
5. Calcium chloride shall meet the requirements of AASHTO M.144, Type 1 or 2.

COMPRESSIVE STRENGTH

Minimum of 3,000 psi shall be achieved by the 28th day of a strength test. Control testing shall be in conformance with Montgomery County Standards.

SLUMP REQUIREMENTS

2"-4" range is acceptable.

AIR CONTENT

5% to 8%

A. TYPE A /STREET TREE WELL

II. GRANITE BLOCK

TYPE

Dakota Mahogany granite, Rough Cut

SIZES

60% .....4" x 4" granite sets

40% .....8" x 4" belgium block

SETTING BED

Sand to be fine, clean sharp and free from clay, organic matter and other deleterious matter.

A. INTERSECTION AND WOODMONT AVENUE LIGHTING

III. STREET LIGHTING

LAMP TYPE

150 watt, color-corrected Sodium Vapor.

REFLECTOR TYPE

"Gardco" type 3 distribution.

HOUSING TYPE

Rectangular.

HOUSING FINISH

"Bronze" color heat set epoxy.

MOUNTING HEIGHT

30'

POWER SUPPLY

Montgomery County.

ACTIVATION

Solar cell mounted in Pole Top

POLE TYPE

Spun aluminum, round section.

POLE HEIGHT

30'

(Note: A large number of intersection lighting poles will also serve as traffic signal or walk signal poles.)

From: Julian Mansfield [mailto:jmansfield@friendshipheightsmd.gov]
Sent: Wednesday, February 25, 2009 4:49 PM
To: Floreen's Office, Councilmember
Subject: Brick Pavers

Hi Nancy:

I hope you're doing well. I spoke to Jocelyn in your office this afternoon and she suggested I email you directly.

We are concerned about the proposal to ban the use of brick pavers in public areas. In our community we are about to install bricks in our crosswalks as the final phase of a road repaving project that began last September. We debated using brick pavers vs. regular striped crosswalks but chose the bricks partly because of our very positive experience with bricks in our public parks and walkways.

Accordingly, we need to know if the proposed County ban would apply to us, which would require that we abandon our plan. Please advise as soon as possible--thanks very much for your assistance,

Julian Mansfield
Village Manager
Village of Friendship Heights

Marcolin, John

From: Julian Mansfield [jmansfield@friendshipheightsmd.gov]
Sent: Wednesday, October 08, 2008 12:00 PM
To: Marcolin, John
Subject: RE: Brick Pavers

Sure. We are now undertaking a major project to replace concrete sidewalks throughout our community to correct trip hazards. This is a common problem with concrete sidewalks adjacent to trees in the strip between the sidewalk and curb, especially next to mature trees.

The thickness of the typical concrete sidewalk (about 4 inches) is far less likely to withstand pressure from adjacent tree roots than the brick pavers using the Bethesda standard (about a foot of subbase). We have numerous cases of mature tree roots pushing up the sidewalk and creating a trip hazard.

Julian Mansfield
Village Manager
Village of Friendship Heights

"Marcolin, John" <John.Marcolin@mncppc-mc.org> wrote:
Thanks Julian. Could you say something in your e-mail regarding the problem with concrete sidewalks being subject to heave by frost and tree roots due to their relatively thin cross-section 3"-4" compared to the thicker 12" section of the Bethesda standard?

Thanks again,

John

From: Julian Mansfield [mailto:jmansfield@friendshipheightsmd.gov]
Sent: Wednesday, October 08, 2008 9:52 AM
To: Marcolin, John
Subject: Brick Pavers

John:

As we discussed yesterday, the Village of Friendship Heights has had a very positive experience with brick pavers in our public park. We renovated Hubert Humphrey Park (adjacent to our community center) four years ago and removed all the bricks (with mortar joints) and installed new bricks using the Bethesda standard (thick subbase of concrete and asphalt with no mortar). This standard, while more expensive to install, is very durable and can withstand the typical freeze/thaw cycle that causes mortared brick joints to erode and loosen, which can lead to trip hazards. We have had hardly any maintenance work to do since the new bricks were installed.

Our community has a large number of elderly residents, many of whom walk through the park on a regular basis. We have seen a significant decrease in the number of trip/fall incidents since we installed the new bricks.

I hope this is helpful. Please feel free to contact me if you need any additional information.

Julian Mansfield
Village Manager
Village of Friendship Heights

CHEVY CHASE VILLAGE
5906 CONNECTICUT AVENUE
CHEVY CHASE, MD 20815
Telephone (301) 654-7300
Fax (301) 907-9721
ccv@montgomerycountymd.gov

March 6, 2009

The Honorable Phil Andrews
President
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Dear Mr. Andrews:

As Chair of the Board of Managers of Chevy Chase Village, I write on behalf of our residents to ask that you not adopt the recently introduced County Resolution limiting the use of brick pavers in the public right-of-way. We understand that the objective of the Resolution is to achieve and maintain a minimum smoothness standard for finished sidewalk surfaces so as not to present the disabled with mobility obstacles or hazards. Our experience with brick pavers allows us to offer an alternative proposal.

Chevy Chase Village's public sidewalks are predominantly brick, and the community takes great pride in them. Some are nearly one-hundred years old. Our own Public Works Department repairs and maintains these walkways, and we have found that with proper installation (on stone dust), brick paver walkway surfaces can be just as smooth and stable as concrete and asphalt surfaces. Additionally, brick paver sidewalk installations are preferred where trees are nearby. Concrete and asphalt sidewalks require extensive excavation that can severely damage tree root systems. This is not the case with brick pavers. Our Public Works Department has been quite successful at installing brick sidewalks immediately adjacent to mature trees with no adverse impacts to the trees' roots.

We respectively suggest that the County Council not institute a policy prohibiting the continued use of brick pavers. Instead, we recommend a policy that states desired outcomes (such as smoothness standards) and/or specifies approved construction techniques. Chevy Chase Village staff would be happy to consult with your staff about these issues and share our experience. Please contact Geoffrey Biddle, Village Manager, at your convenience.

Thank you for considering our request.

Sincerely,

Douglas B. Kamerow, Chair
Chevy Chase Village Board of Managers

cc: Montgomery County Council

SILVER SPRING URBAN DISTRICT ADVISORY COMMITTEE

March 6, 2009

The Honorable Phil Andrews
Montgomery County Council
100 Maryland Avenue
Rockville, MD 20850

Dear Mr. Andrews:

The Silver Spring Urban District Advisory Committee opposes the Montgomery County Council proposal to stop installing brick pavers in public right-of-ways within the Silver Spring Urban District. Brick pavers have been a standard part of streetscape design within the Silver Spring Central Business district for more than thirty years, providing enhanced and attractive sidewalk surfaces.

The Silver Spring Urban District Advisory Committee also shares the concerns of Commission on People with Disabilities that our walkways are safe and do not impede access to people with mobility and visual disabilities. Brick paving where not installed improperly, provides less-than-optimal conditions. For example, if brick paving is installed on a sand base without a concrete sub-base, freeze and thaw cycles can move the pavers, making sidewalks unlevel, creating unsafe walking conditions.

The Silver Spring Urban District believes that if properly specified, installed and maintained, brick pavers provide safe walking surfaces that are aesthetically superior to concrete sidewalks.

Over the years, the Park and Planning staff has upgraded Silver Spring's streetscape paving installation details to provide for a concrete sub-base for all brick paving installations. As part of its responsibility to provide enhanced services within the Silver Spring CBD, the Silver Spring Urban District regularly inspects and maintains brick paving surfaces. Repairs to brick paving are less disruptive, and simpler, than the re-installation of concrete paving.

The Silver Spring Urban District Committee recommends that brick paving continue to be installed within the county's urban districts where 1) brick paving is installed according to

Silver Spring Regional Services Center
8435 Georgia Avenue • Silver Spring, Maryland 20910 • 301-565-7300 • 301-565-7365 FAX
www.montgomerycountymd.gov/silverspring

approved installation details on concrete sub-bases and, 2) the Urban District staff continue to provide maintain the brick surfaces in a safe condition.

The Silver Spring Urban District Committee believes discontinuing brick installations within the Silver Spring CBD is counter productive, will undermine years of improvements and investment and will create a hodgepodge of paving for pre-existing and new projects for decades to come.

Thank you.

Sincerely,

Jon Lourie
Chair

cc: The Honorable Isiah Leggett

March 5, 2009

POTOMAC
ASLA

POTOMAC
CHAPTER
AMERICAN
SOCIETY OF
LANDSCAPE
ARCHITECTS

P.O. Box 18184
Washington, DC
20036-8184

Glenn Orlin, Deputy Council Staff Director
Montgomery County Council
100 Maryland Avenue
Rockville, Maryland 20850

Dear Mr. Orlin:

On behalf of the Potomac Chapter of American Society of Landscape Architects, I am writing you in support of Montgomery County's continued use of brick pavers in public places and in rights-of-way.

Landscape Architects often specify brick pavers in projects throughout the Metropolitan region because brick pavers increase quality, add charm and long term financial value. Montgomery County should continue to allow the use of brick as a paving choice for public areas.

Some major projects and streetscapes in the region that have successfully used brick paving are: Pennsylvania Avenue, D.C.'s Washington Harbor, Rockville's Town Center, City of Falls Church's Main Street, and Bethesda's Central Business District, to name just a few.

We are sympathetic to the concerns raised by the wheelchair disabled community, although ADA considers properly installed brick an acceptable surface. We understand that some brick sidewalks are difficult to use and create barriers for the disabled, especially older installations that have been installed on a sand setting bed and poorly maintained. The best way to address access needs, we feel, is to require proper installation of brick pavers and to provide adequate maintenance.

The key to a stable, long lasting surface is a paving installation with a concrete sub-base and reinforcing wire mesh in accordance with paving industry standards. The Bethesda Streetscape Paving Detail, approved by Montgomery County, is a good example of such a detail and has been successful wherever used.

Please reconsider the proposed resolution that will eliminate bricks from future public areas and rights-of-ways. Instead, consider improved maintenance of existing brick sidewalks and require proper installation procedures for new ones. Brick as a paving option should be allowed if it has the proper installation detail ensuring a stable surface.

Please note that the Potomac Chapter of ASLA has no financial interest in the use of brick or any other specific paving material; we are simply providing our professional recommendation. Thank you for consideration of this request.

Sincerely,

Lisa Siri, President-Elect
Potomac Chapter ASLA

(32)

March 5, 2009

Memorandum

To: Glenn Orlin, Deputy Council Staff Director
Montgomery County Council

From: John Carter, Chief
Urban Design and Preservation Division
Montgomery County Planning Department

Subject: Brick Paver Policy

Recommendations

1. Supports the installation details described in the proposed policy and in addition recommends that language be added to require all brick pavers to be set on a concrete sub-base in accordance with the industry standards as forth by the Brick Institute of America.
2. Recommends that the use of brick pavers not be precluded in urban districts with special taxes for maintenance and approved installation details that achieve a rigid, stable walking surface.
3. Recommends that brick pavers be set diagonally or in another pattern not in the primary direction of travel (e.g. "herring bone" pattern as approved by Montgomery County in the Bethesda Streetscape Plan)
4. Recognizes the need to clarify the language to preclude the use of poor quality paving such as stamped concrete and the installation of concrete pavers without a concrete sub-base.

Discussion

The Planning Department has been concerned with meeting the functional requirements of persons with disabilities that struggle to walk or use wheelchairs on poorly installed brick pavements and other paving materials such as stamped concrete and concrete unit pavers without an adequate sub-base. Montgomery County has been nationally recognized for the on-going attention to providing for safe and attractive sidewalks in the central business districts. Providing safe and attractive sidewalks that improve access to transit stations and the variety of uses and services is essential to creating successful mixed-use places.

Over the last thirty years, brick pavers have been installed in Central Business Districts, and Town Centers such as Germantown. This form of pavement has distinguished many projects and established safe and highly valued public spaces. Many community organizations and developers consider brick paving to be a quality material essential to creating an attractive and functional design for the public right of way.

The Planning Department is also highly concerned with proper installation of all pavers on a rigid concrete sub-base. Montgomery County's experience with brick set on a rigid concrete base has been successful. The experience of the Bethesda Urban Partnership and Federal Realty with brick pavers and their continued support for brick paving is evidence that brick paving can be successfully used.