Item 7C.
BCWMC 7-20-17

Commentary: Application of MIDS Requirements to Linear Projects—Distinguishing between Existing Impervious Area and Increases in Impervious Area

This commentary is *not* concerned with the BCWMC's recent policy revision exempting the application of MIDS (Minimal Impact Design Standards) to the *existing* portions of impervious surfaces in new linear projects. The application of this now-exempted requirement proved to be impractical, burdensome, and overreaching. Thus, the Commission appropriately revised its policy and waived the MIDS requirement for the existing portions of new linear projects.

However, by not only relaxing this requirement but by exempting *increases* in impervious areas *up to one acre* from the application of MIDS, we have swung the pendulum too far in the other direction. Although—for increases in impervious surface areas less than the one-acre trigger point—the Commission's new policy commendably requires the use of the "best reasonable technologies to improve water quality . . . and reduce stormwater runoff," the terms "best" and "reasonable," are prone to varying interpretations. There is a lot of wiggle room here. Essentially, this aspect of the Commission's new policy requires a *good faith effort*, and a good faith effort, unfortunately, is not an explicit, operationally defined performance standard. Its essence is more like a plea than that of a requirement, and a plea is too weak and ambiguous when a project involves *increases* in impervious surface areas, even those less than an acre in size, because an acre is truly a lot of impervious surface.

Consider a typical residential street, 30 feet in width, one block (700-800 feet) in length, and with an impervious area of roughly a half acre. Now, visualize walking the length of two such city blocks and the one-acre expanse comprising this street surface area. With 30-plus inches (2.5 feet) of annual precipitation, consider the size of a pond that 2.5 acre-feet of water could fill. Consider the pond that could be filled when, project after project, the stormwater accumulations from multiple one-acre increases in impervious surface are allowed to run-off because the application of MIDS requirements has been waived.

In a largely built-up urban area, retrofitting and correcting the deficiencies of past projects' may not be feasible in any practical manner. However, for *new increases* in impervious area, minimal stewardship would seem to require that, at the very least, we should avoid *any* aspects of those past practices which, while being acceptable for their times, nevertheless degraded our water quality and intensified flooding. It is the application of MIDS standards and its flexible treatment options to these increases that ensures this avoidance and most assuredly prevents any further burdening of our runoff load. To be clear, this minimal stewardship would require the application of MIDS standards for *all new impervious surface increases*, not just those of an acre or larger in size, because a trigger point of this size is just too high.

Another troubling aspect of the Commission's our recently adopted policy is that it does not consider the overall size of the linear project. A project could consist of two acres of which just slightly less than one acre, half the project, hypothetically could result from a net increase in impervious area. Under our in-force policy, we would request but not absolutely require mitigating measures for this project. Likewise, a project a hundred times this size and involving an equal, nearly one-acre net increase in impervious area would be treated identically. Granted, the net

increase in impervious area is the same in each case, but the little project's increase seems to be more bothersome and proportionately less worthy.

In sum, the Commission should reconsider its recently-adopted policy and aim for standards that are closer to the middle of the road. The italicized content that follows shows the TAC's original proposals, those in red show the subsequent changes as adopted by the Commission at its May meeting, and those in blue show the edits being additionally recommended here. The latter include a reduction in the MIDS trigger for net new impervious areas from one acre to a tenth of an acre. These new policy changes ultimately will have to be reflected in the BCWMC's "Requirements for Improvements and Development Proposals."

> *For linear projects, the following policies and standards apply:*
> *1. Trails and sidewalks are exempt from BCWMC water quality performance standards. However, wherever feasible and practical, these projects shall utilize technologies and best management practices, such as the establishment of buffers, to improve water quality and reduce stormwater runoff.*
> *2. ~~For~~ Projects that create less than one-tenth (1/10th) of an acre of net new impervious surface~~, the project~~ must include the installation~~/construction~~ of best, reasonable technologies to improve water quality conditions and reduce stormwater runoff.*
> *3. Net new impervious surface calculations ~~will be~~ are based on the street surface from back of curb to back of curb; trails/sidewalks (as noted above) and driveways are not included in the net new impervious surface calculations.*
> *4. For linear projects that create one-tenth (1/10th) of an acre or more of net new impervious surface, the project must capture and retain ~~0.55~~ 1.1 inches of runoff off of the net new impervious area and treat this runoff in accordance with MIDS.*
> *5. The project must use the MIDS flexible treatment options for the net new impervious area if it is not possible to capture and retain ~~0.55~~ 1.1 inches of runoff from these areas.*

To sum up, if a member city rebuilds a street within the same footprint or an equal-sized footprint, there would be no MIDS requirements, only the requirement of a good-faith effort. Yet, even here, there are always things that can be done—done in good faith. Project streets (or nearby streets), often with neither detriment to pedestrian needs nor parking requirements, can sometimes be narrowed with the additional benefit of calming traffic. Curb lines can be extended near the throats of intersections. Trench drains can be installed between driveways and driveway aprons to divert runoff to turfed or vegetated swales. Porous pavement options can be considered, especially near intersections or steeper grades where salt otherwise might be liberally applied.* Et cetera. And let us not forget that reductions in street surface area also mean reductions in future maintenance expenses as well as reductions in urban heat island effects.

To potentially ignore the equivalent addition of two new city blocks of residential street in each and every future linear project is a disheartening policy outcome. On behalf of our stakeholders and our environment, I believe that we can and should do better. The exact wordings of these suggested policy revisions, of course, are likely to benefit from further review and editing. As such, I would

welcome comments and suggestions from my fellow commissioners as well as those from the Commission's staff. In the end, if we trust our dedicated, professional engineering staff to do the right thing as I do, there should be no hesitation in defining what the right thing to do is. For increases in impervious surface in linear projects, which to say *all* increases, the right thing to is to apply MIDS or its flexible treatment options.

Guy Mueller, Crystal BCWMC Commissioner

_____

*For more information about porous pavement's performance, safety, and stormwater benefits and limitations, see http://www.dot.state.mn.us/research/TS/2012/201212TS.pdf. Robbinsdale has also built some porous pavement streets. It would be good to get an update on the findings and results of these projects from the city engineer.