11/8/2023

to: City of Madison Transportation Commission members

re: Agenda #2, Geometry of Mineral Point Rd's widened sidewalk

Thanks to the City for improvements made since the last public meeting.

I encourage the T.C. to ask for these further changes to the Mineral Point Road (MPR) sidewalk geometry:

- 1. Eliminate four redundant driveways between Randolph and the Beltline
- 2. At the Memorial HS driveway, separate the path and MPR by one car length
- 3. Remove two short, tight jogs (one near Memorial HS, one near Montessori school)
- 4. Explore raised crossings at the two "non-streets" near UW Health and Sunset Memorial Gardens
- 5. Eliminate the 5' sidewalk by Isle of View Apartments, next to Nautilus Park
- 6. Integrate Grand Canyon Drive NB lane markings into the new path

Each is explored in more detail below, along with a discussion of why the City's reliance on "widened" sidewalks is a troubling trend.

I also wonder if anyone knows why last summer Kwik Trip was allowed to move their underground gas tanks to a spot that prevents the sidewalk from ever being widened. The BRT plans were well-known at the time.

Thank you,

Craig Weinhold Madison WI

PS - If this letter's images are missing, view the original at https://beeline.org/tc

1. Eliminate four redundant driveways

- Kwik Trip (7502-7520) has two MPR driveways. For years, the western one exclusively served the car wash, so it was naturally metered. Since their 2022 reconstruction, it now acts as an overflow for when the other driveway is backed up. Close it.
- The Montessori school (7610) has a calm back entrance on Westward Way. They also installed bicycle parking along where the widened sidewalk will go, a very thoughtful step that suggests they may be open to closing their MPR driveway.
- The Associated Bank (7722) and its MPR driveway were both built in 2020. It was a mistake to allow that driveway to be built since the bank's main entrance on High Point can easily serve the same traffic. Their driveway should be closed.
- The Oakbridge Commons strip mall (7874) is very well served from High Point Rd and Tree Lane. Its middle MPR driveway should be closed. The freed-up space can be used to add between 14 and 30 more parking spaces.

Removing these will greatly improve safety of the section from Randolph / Kwik-Trip to the beltline. That $\frac{1}{3}$ mile section is heavily used, and already has more bike/ped crashes than the other 2+ miles of MPR.

2. Add a buffer to the Memorial H.S. driveway

Today the outside bus lane provides an buffer for turning drivers to accelerate after turning onto MPR. Without that, turning drivers will be much more aggressive in finding openings in road traffic. Few will look for cross-path traffic. An obvious spot where this will be a problem is the driveway from Memorial H.S. that gets busy at the end of every school day.

The current plan moves the path closer to the street. I recommend doing the opposite (in red) so there is space for one right-turning car on the driveway apron.



3. Remove two short, tight jogs

One jog is on the western side of Mansfield athletic fields by Memorial H.S. It's 50' long, which is approximately 2¹/₄ seconds for a bicyclist. It will feel unnatural and be a pinch spot given the proximity to trees, an electrical box, and a light pole. It should be stretched out to 100' (similar to the culvert jog to the east). That will require removing one or both trees circled in green.





There's a similar short jog near the Montessori School's bike parking east of Westward Way that should also be stretched out. Again, one or both trees circled in green will need to go. This will be easier if the redundant driveway is also removed.



4. Raised crossings

Is there a chance for **raised crossings?** These would help on the "non-street" between Chiptole and UW Health and the other "non-street" entering Sunset Memorial Garden. By "non-street", I mean a driveway that is designed like a street. A raised crossing could also be in the future for Tree Lane, a street that lacks traffic signals and has a history of bike crashes.

5. Eliminate the 5' sidewalk by Isle of View Apartments, next to Nautilus Park

Here is the City's assessment of this spot:

Sta 158+50	Isle of View Apts	125	2 (2x19" Honey Locust)	This section is in front of an apartment complex parking lot and directly east of the Nautilus Park sidewalk section. If in the near future the Nautilus Park sidewalk was widened, there would be value in having this section already widened. There would be parking damages associated with widening the sidewalk to the north inside of the Apartment Parking lot. For this section the most feasible option would be to widen the sidewalk into the terrace, which would remove the two trees.
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The parking lot's aisle is 30' wide. Google tells me such aisles are 14 to 24', and the neighboring apartment's aisle is 22'. Shrinking that parking lot by 6' would create space for an 8-10' widened sidewalk. It will result in the loss of at most one parking spot and require moving some electrical utility boxes. This seems like a no-brainer, especially with the City's optimism to eventually widen the path by Nautilus park.



6. Grand Canyon Drive NB markings

Grand Canyon Dr is one of the area's most heavily-biked roads, as shown in the Strava heatmap. Please consider lane/paint changes to help NB bicyclists turn left onto the new widened sidewalk. E.g., a left turn lane, a two-stage turn box, a lane lines, etc.





When does a Sidewalk become a Path?

Sidewalk-biking is *much* more dangerous than road-riding¹ and *widening the sidewalk doesn't make it safer!* Safety can be marginally improved by painting driveways, raising the crossings, adding signage, removing visual obstructions, and other minor touch-ups. However, the most significant safety improvement is to *eliminate crossings* and *exaggerate* the ones that remain. Exaggerated intersections improve visibility and force all road users to actively acknowledge each other. That is one pillar of European path design².

segment	segment length (ft)	crossing count	aggregate crossing length (ft)	how much of segment is in a crossing	average seconds between crossings @15mph
Whitney to Yellowstone	4,515	10	362	8.02%	19
Yellowstone to Gammon	3,595	9	409	11.38%	16
Gammon to Randolph / Kwik-Trip	2,645	6	276	10.43%	17½
Randolph to Beltline	1,898	10	389	20.50%	6½
Randolph to Beltline (w/o redundant driveways)	1,898	6	282	14.86%	12

Here is crossing detail (driveways, cross-streets, etc) for the 2.5-mile MPR widened sidewalk:

Notice how the Randolph/Beltline segment stands out. It will by far be the most "sidewalk-like" portion. Imagine bicycling from Kwik-Trip to the Beltline and never being out of danger for more than 6½ seconds. At each driveway and crossing, you must glance backwards, listen for the engine sounds, look left, look right, peer around or through holes in shrubs and building signage, maybe brake a little, or maybe brake a lot. It will only be low-stress for the foolhardy.

For comparison, here are some other area bike routes:

path	segment length (ft)	crossing count	aggregate crossing length (ft)	how much of segment is in a crossing	average seconds between crossings @15mph
Cap City Path, Blair to Yahara River	6,184	8	304	4.92%	33
SW Commuter Path, Brittingham to Breese	6,948	10	500	7.20%	29
SW Commuter Path, Breese to Hammersley	16,630	5	251	1.51%	149
U-Ave Path, Whitney to Allen	6,284	21	772	12.29%	12
U-Ave Widened Sidewalk, Hill St to Farley (future)	2,010	21	764	38.01%	21/2
Fish Hatchery Path, Beltline to Post Rd (2021)	2,165	12	483	22.31%	6

The "how much" column suggests that 10-12% is a good dividing line between the low-stress paths suitable for everyone and the high-stress widened sidewalks that

¹ <u>https://bicyclesafe.com</u>, "Sidewalk Slam"

² Together We Cycle (2020) file documentary

Below is a photo of the Fish Hatchery sidepath that is roughly comparable to the MPR Randolph/Beltline segment. Curiously, four of the six visible crossings are redundant.



I feel the City needs to acknowledge that many widened sidewalks *will fail* the "*All Ages & Abilities Bike Network*" clause of Madison's Complete Green Streets ordinance³. That clause is not a lowest-common denominator. I.e. Just because a widened sidewalk may be suitable for pedestrians and casual 5-10 mph bikers doesn't make it safe for 15-20 mph commuters or 20-28 mph e-bikers. Nor is it realistic to expect the higher-speed bikers to slow down *for miles* on what is supposedly a major transit corridor.

One simple remedy is to keep on-street bike lanes. That's what Madison did with University Ave west of Hill St and Fitchburg did with the newly rebuilt Lacy Rd. In my opinion, the City should always begin major corridor projects expecting to have **both an off-street widened sidewalk AND on-street bike-lanes**.

³ https://www.cityofmadison.com/transportation/initiatives/complete-green-streets