

**Minutes of the Ad Hoc Stormwater Committee
Village of Shorewood Hills**

Tue., Sept. 17, 2019

(approved at Nov. 6, 2019 Committee meeting)

- 1) **Called to Order:** at 7:03 PM.
 - a) **Roll Call:** Committee Members Present: Chair/Village President Dave Benforado, Carolyn Benforado, Gloria Beach, Greg Brauer, Mark Mandel, Eric Riedner. Peter Hans was excused.
 - b) **Others Present:** Village Administrator Karl Frantz, Village Trustees Mark Lederer and Cokie Albrecht, Amber Lefers PE (AE2S), Cary Hirner PE (Black & Veatch Corp.), Mike Bakalars PE (KL Engineering), Sustainability Committee Chair Anne Readel, and numerous Village residents.

- 2) **Meeting Notice:** D.Benforado inquired and K.Frantz confirmed that the meeting had been properly posted in compliance with open meeting laws.

- 3) **AE2S presentation by A.Lefers regarding University Avenue flood relief tunnel feasibility study:**
 - a) **Link to AE2S PowerPoint presentation on Village web site:** [University Avenue Flood Relief Tunnel Feasibility Study](#)
 - b) **Summary:** Ambers recapped the need, purpose and objective of this tunnel feasibility study; data used and collected; options evaluated; two tunneling approaches analyzed; estimated project costs and key factors; key unknowns.
 - i) **Model:** Ambers reminded the Committee that these results utilize the City's stormwater computer model for the Willow Creek watershed, that it is a conservative model and that it probably overpredicts. She noted there is not much difference between the estimated reach of a 25-year flood and a 100-year flood in the corridor, and that the model assumes the railroad ballast will fail.
 - ii) **Tunnel Inlets/Outlet:** Assumes two 10' X 120' inlet structures, one in Midvale Blvd median just south of Univ Ave and one north of Univ Ave right between Janet's Antiques and UWCU. Assumed above grade discharge into Lake Mendota rather than an under water discharge, the former making it more challenging to dissipate the energy in the stormwater before it reaches the Lake. Some discussion of an outfall structure, the aim being to dissipate energy and capture solids in the stormwater.
 - iii) **Tunnel Options:** the tunnel options analyzed varied between minimizing open cut/maximizing tunnel to maximizing open cut/minimizing tunnel, the latter found to be not being feasible, the best approach being a combination of open cut and tunneling; this assumes beginning tunnel in NW corner of Garden Homes. Redevelopment of Garden Homes would increase future costs substantially. The two tunneling approaches analyzed were microtunneling and an earth pressure balance machine.
 - iv) **Costs:** Probable costs for this project were estimated to be in the range of between \$23.2M-\$30.7M, \$14.8M of which were tunneling costs, \$1.9M for

the two inlets, \$2.4M for the energy dissipater at the Lake Mendota point of discharge.

- v) **Timeline:** If tunnel project could be funded, 4 year project timeline (12-16 months for design, 3-4 months for bidding and award, 24 months for construction).

- 4) **General Update on Village/City discussions regarding potential new stormwater relief tunnel:** K.Frantz updated the Committee on recent discussions between the Village and the City of Madison regarding University Ave stormwater matters. MPO has very limited interest in attaching this tunnel project to the pending University Ave reconstruction project because of its cost. City is focused on flood relief and is looking into potential for leveraging federal funding; the University Ave reconstruction project may be delayed as this is all sorted out. The City plans to commence a Willow Creek Watershed Study at some point in the future.

- 5) **Revised Village Sustainability Plan presentation by Sustainability Committee Chair Anne Readel.**
 - a) A.Readel thanked the Committee for its prior input, summarized the revised draft Village Sustainability Plan dated 8/29/19, and said the Committee's plan was to continue to meet with other Village Committees, to hold more general public input sessions, and then to present a final draft Village Sustainability Plan to the Village Board by year end.

- 6) **Review Prior Meeting Minutes:** Committee reviewed draft meeting minutes from June 5, 2019, meeting. **Motion to approve by M.Mandel, second by C.Benforado. Approved (5-0) at 9:13 PM (G.Beach left the meeting at 9 PM).**

- 7) **Future Meeting Dates:** Committee confirmed their next meeting dates:
 - a) Wed., Oct. 2, 2019 (7 PM).
 - b) Wed., Nov. 6, 2019 (7 PM).
 - c) Wed., Dec. 4, 2019 (7 PM).

- 8) **Adjournment:** Committee adjourned at 9:16 PM.

Respectfully submitted by Dave Benforado on October 26, 2019.