

**From:** [Monica Tierney](#)  
**To:** [Lynn Todd](#)  
**Subject:** FW: [EXTERNAL]: ADA boardwalk notes  
**Date:** Tuesday, May 9, 2023 12:20:49 PM  
**Attachments:** [PECO Grant ADA Boardwalking-3-13-2023.xlsx](#)

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**From:** John Heilferty <fivemilewoods@gmail.com>  
**Sent:** Monday, March 13, 2023 3:00 PM  
**To:** Monica Tierney <monicat@lmt.org>  
**Subject:** [EXTERNAL]: ADA boardwalk notes

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Monica: Attached is a revised spreadsheet that I used for my most recent cost estimates.

I was able to find some savings if we *were* required to go to a 5' wide boardwalk (I know - shooting myself in the foot re: this argument, but I'm being transparent ...). When I first ran this, I assumed that eliminating waste would be most cost effective. But it turns out 12' Veranda boards are so much cheaper per linear foot that 16' boards (the same is typically true for real lumber) that getting only two 5' deck boards out of 12' stock (with 2' of waste per 2 boards) is still cheaper than getting three 5' deck boards out of a 16' stock (only 2 feet of waste per 6 boards). So, the net difference in overall cost ends up not being much different than the net difference in size - sort of as you would expect. "Net cost" is still a concern, and you certainly get fewer linear feet of boardwalk at 5'. But I had assumed the difference in costs would be a greater percentage than it apparently is.

Anyway, shorter context is as follows:

- 1. User expectations:** Visitors, including those with access restrictions, visit nature preserves to seek a remote, intimate experience with nature. This is best afforded by a trail system that restricts the built environment to that which is minimally necessary for access.
  - ADA compliance only requires a 36" clear width walking surface.
  - US Forest Service trails only req. a 36" clear width walking surface.
  - **A 4' wide boardwalk, with timber curbing on each side, provides a 41" clear width.** "Passing areas" (60" min. clear width) would be afforded no less than every 200'.While a wider clear width pathway may be warranted at more developed park locations such as Macclesfield Park or Memorial Park, it is neither necessary for compliance nor desirable for the typical facility user at Five Mile Woods.
- 2. Minimizing impact:** The Guide for Preservation directs the Twp. to minimize the physical and visual impact that access to the woods has on the natural environment.
  - 4' wide boardwalks more than accommodate access needs while minimizing physical impacts on the environment as well as visual effects *for all users*.
- 3. Cost:** The cost of ADA compliant board walking increases with width.
  - 4' wide boardwalk (net 41" clear path) costs \$26.96 per LF, **28% less** than 5' boardwalk (53" clear

path) at \$34.44 per LF.

- 4' wide boardwalks with passing areas every 200 feet cost ~ \$27.60 per linear foot.

- 5' wide boardwalks with passing areas every 200 feet cost ~ \$34.65 per linear foot.

4. **Long term maintenance & incident implications:**

- Maintenance of structural components in the Preserve requires long-term fiscal and personnel resources. Currently, most maintenance is performed by the Naturalist and the "Friends of Five Mile Woods." As Preserve infrastructure increases, maintenance needs will exceed these resource capacities.

- The occurrence of structural elements within the Preserve has historically increased the incidents of vandalism and noncompliant uses (drug & alcohol use, vandalism, inappropriate social activities). For these reasons, I presently cannot accommodate benches within the Preserve. Even something as innocuous as putting railings on bridges has consistently resulted in it becoming a gathering spot where inappropriate activities end up occurring.

5. If the P&RB seeks a *5' min clear space*, that would require all sections to be equivalent to the proposed 6' wide "passing sections." This is due to the curbing required on boardwalks which reduces total available width by 7". 6' wide board walking would cost \$37.33 per linear foot, approx. 40% more than 4' wide boardwalking.

As I noted, I am also considering using boardwalks only as required to pass wet areas. This could be done via quarry process (or equiv.) and would apparently be ADA compliant provided there was no drop-off adjacent to the ADA clear path. In fact, some resources would favor that over composite lumber decking (perceived as being more slippery). I have yet to spec this out re: cost, but as I noted it would be more wildlife-compatible, likely easier to maintain over time, and possibly less costly (though more labor-intensive to install?). I'll continue to research this option.

John H