

BRBW Proposed Design Options to Reduce Wetland/Floodplain Impacts

➤ BRBW Preferred Alternative

The Parsons team initially reviewed a number of alternate alignment segments to improve the previously proposed preferred alignment. These alternates were selected to more closely align the bikeway within the Blackstone River corridor and remove it from existing roadways wherever possible. Close coordination with DCR also resulted in narrowing the proposed bikeway x-section through the Heritage State Park to reduce temporary and permanent impacts. In addition, further coordination with NHESP required us to look at modifying the proposed bikeway alignment to avoid potential impact, principally to turtles.

At our presentation to regulatory agencies during our early coordination meeting, we identified the likely increase in wetland/floodplain impacts that would result in locating the bikeway alignment closer to the Blackstone River. In recognition of the need to demonstrate that wetland avoidance and minimization has been considered to the greatest extent practicable, we have identified a range of bikeway design options to further reduce impacts.

➤ Design Options to Reduce Wetland/Floodplain Impacts

The following range of design options have been considered and applied to various segments of the bikeway preferred alignment:

- Narrowing the proposed bikeway width from the standard x-sectional width of 10' pavement and 3' grassed shoulders.
- Locating the bikeway at grade in floodplain areas
- Elevating the bikeway on structures (concrete or boardwalk on piers)
- Steepening side slopes to 1:1
- Use of retaining walls
- Selective use of bridges instead of culverts

Other techniques were also considered such as minimized work zones (build as you go), minimizing offset from P&W RR (desired P&W offset is 25' from centerline of rail bed to required fence line), use of oversized culverts with natural bottoms, etc.

➤ Supporting Impact Tables

- Table 1 BRBW Summary of Proposed Design Options
- Table 2 Comparison of BRBW EENF and Single EIR Impact Estimates for BVW and BLSF
- Table 3 BRBW Significant Wetland Impact Areas and Proposed Design Options
- Table 4 BRBW Alignment Design Options: NHESP Area of Concern – Plummer's Landing