



**July 27, 2017**

**Ryan M. Whittington, E.I.T. Consultant Project Management (HNTB)  
PA Department of Transportation  
Engineering District 6-0  
7000 Geerdes Boulevard, King of Prussia, PA 19406**

**Re: Draft Categorical Exclusion Evaluation – S.R. 1012, Section BRC, Headquarters Road / Tinicum Creek**

Mr. Whittington:

The “Comment Response Document” (dated May 17, 2017) for the Draft Categorical Exclusion fails to address substantive comments on channel instability downstream of the proposed bridge rehabilitation / replacement. The Delaware Riverkeeper Network (“DRN”) seeks to highlight, in particular, one risk that the Pennsylvania Department of Transportation (“PennDOT”) fails to acknowledge or address in both this recent “Comment Response Document” as well as in the original Draft Categorical Exclusion evaluation.

PennDOT continues to indicate its intention to relocate the western bridge abutment further to the west to “catch” the migrating stream channel of Tinicum Creek. The DRN, along with many of the federal, state, and local agencies, the general public, and other organizations and professional firms who submitted comments on the Draft Categorical Exclusion, has highlighted the instability inherent in such a proposed action in this EV stream and to this Ridge Valley Rural Historic District. Not only has PennDOT failed to acknowledge and address the significant risks, but PennDOT has likewise failed to propose appropriate remedies for the significant risks introduced to this system.

The proposed project, particularly in the absence of an Environmental Assessment or Environmental Impact Statement to evaluate and mitigate risks, introduces a very real and appreciable risk that the stream channel below the bridge will cut westward beyond the existing riparian zone and establish an entirely new stream course through the pasture. This western downstream riparian zone, although mature and valuable, is relatively narrow, particularly in the vicinity of the bridge. The stream power released upon this downstream western stream-bank and its narrow riparian corridor because of a 15 foot movement of the western bridge abutment could likely lead to destabilization followed by migration of the channel. The pasture to the west of the bridge and the downstream riparian corridor, lacking permanent woody vegetation and

DELAWARE RIVERKEEPER NETWORK  
925 Canal Street, Suite 3701  
Bristol, PA 19007  
Office: (215) 369-1188  
fax: (215) 369-1181  
drm@delawareriverkeeper.org  
www.delawareriverkeeper.org

consisting of alluvial soils, would present relatively minor resistance to powerful floodwaters, allowing an initial cut westward beyond the forested riparian zone to continue cutting through and across this pasture over subsequent years. With the combination of bridge re-alignment to the west, a narrow riparian corridor, and pastureland on floodplain soils, an entirely new stream channel through the pasture is a likely outcome, including the possibility that the new stream channel continues cutting westward unabated until it reaches the southwestern hillslope.

Such channel migrations are well described and understood in the stream literature. For Tinicum Creek and in its historic, rural and agricultural setting, the risks of human-induced instability are even greater and thus increase the probability that bridge abutment relocation combined with inadequate efforts in addressing the fundamental instability will lead to the failure of the riparian zone in this destabilized stream system. Indeed, similar such channel migration and the bypassing of a mature riparian zone have been documented in the recent past by local residents on other nearby reaches of Tinicum Creek. The risks we are describing are not theoretical; the risks are very real and represent likely consequences of poorly informed actions that underestimate the channel dynamics in this system. The proposed project by PennDOT creates exactly such risks for the downstream channel, riparian zone, and floodplain below the Headquarters Road bridge.

Sincerely,



Maya van Rossum  
the Delaware Riverkeeper



Erik L. Silldorff, PhD  
Restoration Director

Delaware Riverkeeper Network  
925 Canal Street, Suite 3701  
Bristol, PA 19107  
Phone: 215.369.1188  
Fax: 215.369.1181