



# City of Havre de Grace

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Susquehanna River Rail Bridge Project  
Advisory Board  
of the  
Mayor and City Council of Havre de Grace  
for the  
Mayor and Town Commission of Perryville

Advisory Bulletin #9  
River Navigation  
December 9, 2014

## Background

The Advisory Board met on November 25, 2014 to develop recommendations for the accommodation of large vessel navigation and safe passage under the proposed new rail bridge system, at the main channel location. The principal concerns were vertical clearance, horizontal clearance, and a protective fender system. This advisory assumes removal of all existing piers that support the current Amtrak bridge and the adjacent abandoned piers from the long-ago demolished rail/highway bridge, as recommended in Advisory Bulletins #2 for the City of Havre de Grace and #7 for the Town of Perryville.

The Board relied heavily on advice and recommendations from representatives of Vulcan Materials Corporation, which operates a large stone quarry just upstream of the bridge site, from which stone is barged out on a near daily schedule. These concerns and recommendations were expressed by Vulcan's Marine Operations Manager and its local tugboat captain at the recent joint meeting between the Advisory Board and the SRRBP Project Team held on November 6, 2014. Advisory Bulletin #8, containing the same recommendations provided in this bulletin, was issued to the Mayor and City Council of Havre de Grace on December 4, 2014.

Design Recommendations

Vertical clearance at the main channel under-passage should reach sixty-five (65) feet if at all possible, to be consistent with inland waterway standards and sailing vessels that are now designed to those standards and berth at upstream marinas. The absolute minimum clearance should be no less than sixty (60) feet.

Horizontal clearance at the main channel under-passage should be no less than two hundred (200) feet net width between fenders, which may require a pier spacing of up to 240 feet center-to-center. Such a clearance will safely accommodate a single barge with opposing traffic and can safely accommodate a double-wide barge movement without opposing traffic.

Three types of fender systems were considered for protecting piers and large vessels at the main channel under-passage: Concrete, wood and composite plastic. Concrete fenders are the least resilient and can cause considerable damage to barges and other vessels. Wood pile and wale fenders are more resilient and less damaging to vessels, but are themselves easily damaged, more costly to maintain, and can become ragged eyesores long before replacement becomes necessary. The Board strongly recommends a composite plastic pile and wale fender installation as the most resilient, least damaging, longest lasting, easiest to maintain, and most attractive system for this unique and important gateway location.

Recommended Action

The Advisory Board proposes that the Mayor and Town Commission of Perryville, and surrounding communities, take necessary steps to consolidate these or similar recommendations into a formal communication to the SRRBP Project Team as soon as possible. The recommendations of this advisory, having been submitted previously as Advisory Bulletin #8 to the City of Havre de Grace, should require no additional action on its part at this time.

Respectfully submitted,



Volney H. Ford  
Chairman