PA Dirt Gravel and Low Volume Road Program—Stream Crossing Eligibility Determination Form 7/2022

Reviewer Information:

Date: _____

Reviewer(s): _____

_____

Existing Structure (circle):

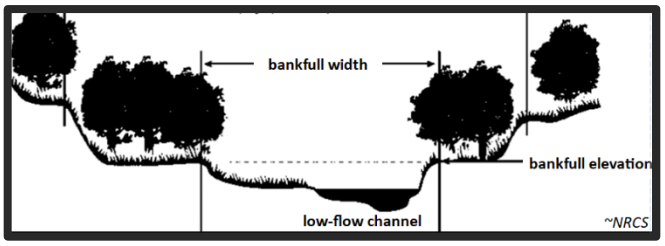
round oval arch Other (Draw)

box bridge multiple

Site Information:

County		Township	
Road Owning Entity			
Structure Owning Entity			
Road Name			
Stream Name			
Latitude	N	Longitude	W
Site Notes			

Measuring Bankfull Channel Width: Since stream conditions vary, these guidelines are flexible, and the goal is to determine bankfull width of an unaltered "reference reach" of the stream.



Where to take Measurements: Look upstream if possible, trying to find an undisturbed stretch of stream free from influences that may impact cross section (such as debris jams, floodplain obstructions, bedrock outcrops, etc.). Look downstream for measurements if prevented from going upstream. In order to get out of the "area of influence" from the structure, roughly estimate the bankfull channel width, then go at least 5 times that distance away from the structure before considering taking bankfull measurements. Additional bankfull widths should be measured so that three to five (more preferred) measurements are collected. Subsequent bankfull width measurement should be collected at least 1/2 bankfull width away from the first measurement. Note that it is important to measure bankfull where the best indicators and these locations may be much greater than ½ bankfull width apart. Avoid taking bankfull measurements at unique, unnatural, or temporary features such as log or debris jams, manmade obstructions, bedrock outcrops, hard meander bends, and braided channels. Bankfull measurements can be taken further from the structure if needed if there are no major splits in the channel. **Be flexible** when choosing where to take measurements in order to capture the most representative reaches of the stream.

Taking Bankfull Measurements: When taking a bankfull measurement, locate bankfull indicators (such as changes in bank slope, depositional features, vegetation changes, and scour features) and stretch a tape across the channel to determine the bankfull width at that elevation. Look for bankfull indicators that line up on both sides of the channel as the bankfull elevation should be level across the channel. Remember that bankfull flows typically occur every 1-2 years, so don't mistake higher benches far outside the channel for bankfull. Additional bankfull determination *guidance is available in the Stream Crossing Technical Manual and the Bankfull Width Determination Technical Bulletin.*

Bankfull Measurements Taken *3 minimum, more is better*			
1	ft	**6**	ft
2	ft	**7**	ft
3	ft	**8**	ft
4	ft	**9**	ft
5	ft	**10**	ft

A) Average Bankfull Channel Width= _____(ft)
average of measurements taken to left

B) Existing Opening Width= _____(ft)
Measure the most limiting width. For example: the narrowest pipe in a series of "necked-down" pipes, or the narrowest point between abutments of a skewed bridge perpendicular to the flow.

C) Opening to Bankfull Width Ratio= _____%
"B" divided by "A"

Structure Eligibility

Is the opening width of the existing structure 48" or less, or does the structure consist of multiple pipes? YES NO

For structures with a single opening over 48", is the opening to bankfull width ratio ("C" above) 75% or less? YES NO

If the answer to either question above is "YES," the structure is eligible for replacement with DGLVR funds. In all cases, new structures must follow the DGLVR Stream Crossing Design & Installation Standard unless it qualifies for an exemption from the DGLVR Stream Crossing Design & Installation Standard. Keep a copy of this form in project files.

Additional Notes: _____

_____

Optional: provide an aerial sketch of the existing conditions and the locations where bankfull measurements were taken.

Example Sketch: