



COMMONWEALTH OF PENNSYLVANIA
STATE CONSERVATION COMMISSION

April 8, 2022

RE: Clarification of Authorization of General Permit No. 11 (GP-11) for Bridge and Culvert Replacement Projects Receiving Dirt, Gravel & Low Volume Road (DGLVR) Program Funding

Design Engineers,

Many of the Stream crossing projects funded by the DGLVR program will require a PA Chapter 105 permit and can seek authorization under a GP-11. The Department of Environmental Protection is the agency with the authority to review and acknowledge these permits. After coordination with DEP Bureau of Waterways Engineering and Wetlands, it has been determined that DGLVR stream crossing replacement projects consistent with the DGLVR Stream Crossing Design and Installation Standard (Standard) are consistent with design techniques utilized under a GP-11 with specific consideration of design methodologies. The intent of this memo is to clear up some misunderstandings as to what design techniques may or may not be utilized under the GP-11. These clarifications are provided with specific consideration of the design methods utilized in the DGLVR Stream Crossing Standard.

Specifically, changes in the skew of bridges and culverts can be authorized under GP-11 in conjunction with associated stream realignments immediately upstream and downstream of the structure. The change in skew and associated incidental stream realignment associated with the change in skew, may be authorized in circumstances where:

1. The culvert or bridge skew changes maintain or re-establish stream flow patterns consistent with the natural regime upstream and downstream of the road or bridge/culvert.
2. The proposed structures maintain either the inlet or outlet at the same location as the existing structure, or the location of both the inlet and outlet change but the proposed structure rotates on a horizontal axis of the existing structure, or the proposed structure is immediately adjacent to the existing structure.
3. Stream realignments associated with the new structure are incidental and are generally limited to 50 feet upstream and downstream of the structure. DEP may consider realignments a limited distance beyond 50 feet in special circumstances, but any realignments must still be incidental and necessary to support the structure.

In accordance with the Standard and with DEP's design criteria, please note that the skew changes must maintain or re-establish stream flow patterns consistent with natural regime upstream and downstream of the bridge or culvert, and that the conditions of GP-11 must still be met.

Also, changes in roadway approach grades and overtopping characteristics can be authorized by

GP-11, provided that the changes do not result in significant risk to public safety, structural stability and/or the environment. In coordination with DEP Bureau of Waterway Engineering and Wetlands, no additional information will be required if it is obvious that the proposed change to the approach grades and overtopping characteristics do not result in significant risk (e.g. by observation, a substantial increase in the hydraulic conveyance of the structure may obviously compensate for an increase in the approach grade elevation needed to accommodate the larger structure). When the proposed changes to the approach grades and overtopping characteristics are not obviously insignificant, the Hydrology and Hydraulic analysis required by the design standard is acceptable documentation to show that the proposed changes do not result in a significant risk.

The following list depicts the minimum items specific to this design approach that should be included with most GP-11 registrations for the DGLVR Program utilizing the Standard. Additional site-specific requirements may also be required.

1. A description of the proposed work, existing structure, and purpose of proposed structure changes and any minor channel realignments.
2. A scaled plan showing the existing and proposed structures including any proposed channel realignments.
3. Scaled cross section(s) of the existing and proposed culvert structures depicting dimensions of the existing and proposed waterway opening, and the existing and proposed depth of fill and roadway elevations in the approaches and over the existing and proposed structures.
4. Scaled cross sections of streams in any areas of proposed minor stream realignments.
5. Photographs of proposed stream realignments depicting areas of proposed work, channel and geomorphic conditions, eroded banks, deposition, etc.
6. Scaled drawings for any proposed grade control structures in and/or upstream and downstream of the proposed structure, if applicable.
7. Scaled cross sections of any reference reach data (upstream or downstream of proposed work) collected to determine bankfull characteristics or reference reach information, if applicable.
8. Scaled profiles of the existing and proposed culvert structures and a stream channel section extending sufficiently up and down stream to show proposed minor channel realignments, if applicable. When possible, it is recommended the length of the realigned channel be comparable to the length of the existing channel. However, where the project is correcting a ninety-degree bend in the stream, the realigned channel will likely have a shorter length than the existing channel and is therefore still permissible.
9. Details on the proposed stream bed material.
10. If applicable, a hydraulic analysis demonstrating that the changes in the approach grades or overtopping characteristics will not increase the risk of flooding.
11. A P.E. Seal and certification provided on the hydrologic and hydraulic report and on plans and specifications for proposed structures on public roads.

It is important that the plans, profiles, cross sections, description, and other information contain sufficient details and plans depicting the existing and proposed conditions, stream bed,

stream banks, bankfull elevation, low flow channel and overall geomorphic conditions and other details as appropriate for DEP to review, consistent with the proposed activities. The coordination between the State Conservation Commission, DEP's Bureau of Waterways Engineering and Wetlands and regional DEP Waterways and Wetlands Programs has identified criteria for most projects to qualify for GP-11 authorization. Questions should be directed to the DEP regional offices for clarity.

While most projects designed under the Standard should qualify for a GP-11, every project will not fit into this category. The SCC has coordinated with DEP Central office staff and the DEP regional staff. If there are questions about a permit review, DEP regional staff should be contacted. The SCC and local conservation districts are also available to discuss or assist when needed.

Sincerely,

A handwritten signature in blue ink that reads "Roy Richardson". The signature is written in a cursive style with a large initial "R".

Roy Richardson
Program Manager
Dirt, Gravel, and Low Volume Roads Program