

## 10\_17 Determining Bridge Approach Slab Length

While discussing the standard length of approach slabs with the floor there seems to be some confusion on how this is determine based on the Roadway Design Manual.

### RDM Part I, 6-6A

#### BRIDGE APPROACH SLABS

6-6A

Bridge approach slabs are required at ends of all bridges.

For structures with sidewalks, approach slabs shall be full width from gutter line to gutter line plus width of sidewalk (5'- 6" minimum width) on each side for sidewalk.

Ends of approach slab shall be parallel to the end bent with constant length as specified below:

1. For structures with 60° thru 120° skew, use 12' length of approach slab measured along the centerline of bridge.
2. For structures with skew other than specified in paragraph (1) above, use 17' length of approach slab measured along the centerline of bridge.
3. For special situations (e.g., very deep superstructures, etc.), consideration shall be given to increasing the length of approach slab. Coordinate with the Structure Management Unit in these cases. For unpaved approach, see the Bridge Policy (6-1).

### RDM Part I, 6-1

#### APPROACH SLABS

Concrete approach slabs shall be constructed at the ends of all bridges. The approach slab shall be the same width as the bridge gutter to gutter width. Additional width (5'-6' minimum) is necessary to accommodate each sidewalk on a structure.

Bridges located on NHS routes and/or carrying a design year ADT greater than 5,000 shall have a 25'-0" approach slab. Otherwise specify a 15'-0" approach slab. The approach slab length shall be measured along the workline.

Flexible approach pavements require both ends of the approach slab to be parallel to the end bent fill face. The approach slab length shall be measured along the workline.

Rigid approach pavements require the roadway end of the approach slab to be perpendicular to the centerline of the roadway. The minimum length shall be measured along the shortest edge. On very wide bridges and/or bridges with a heavy skew, the long edge of the approach slab may become excessive. For such cases limit the length of the longer edge of the approach slab to 50'-0". This may be accomplished by stepping in the approach slab at approach pavement lines while maintaining the minimum dimension.

This was verified with the SMU in October, 2017. For the purpose of approving the project design criteria in the functional/preliminary phase, assume the following.

- 25' standard approach slabs for roads on the NHS and/or having 5,000 or greater ADT.
- 15' otherwise.
- 17' approach slabs are no longer used.
- 12' approach slabs are used only for box beam and core slab bridges.

If there are special circumstances, coordinate with SMU.