

# CoMBIS Structure Definition

## Definitions

### NBIS Structure

Any structure that meets the Federal criteria for inclusion in the NBIS inspection program.

### CoMBIS Structure

Any structure that meets the definition of a culvert as defined below, but does NOT qualify for inclusion in the NBIS inspection program (is not a NBIS Structure) is a CoMBIS Structure. There are structures that fit the criteria for both programs as the NBIS measure of length (Item 49) adjusts the length so as to be measured along the traveled way, and CoMBIS does not. If so, they are NBIS Structures and do NOT qualify for the CoMBIS program.

### Non-CoMBIS Structure

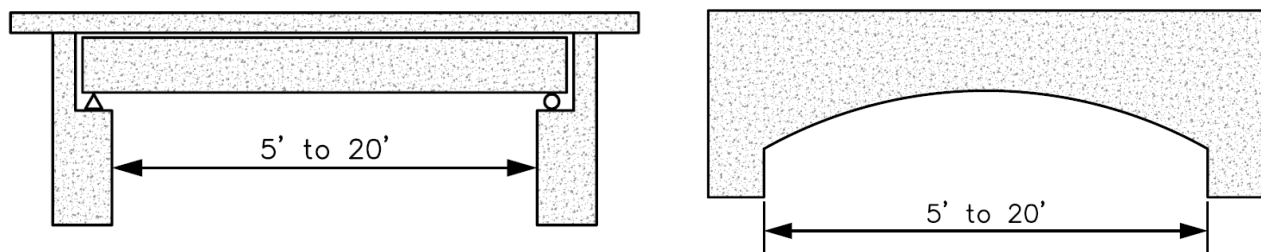
Any structure that does not meet the definition of a culvert as defined below.

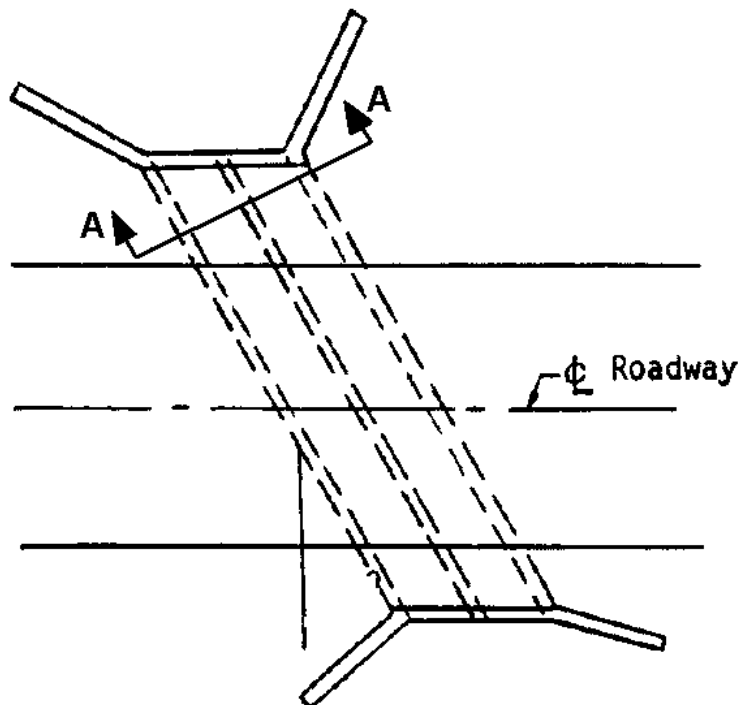
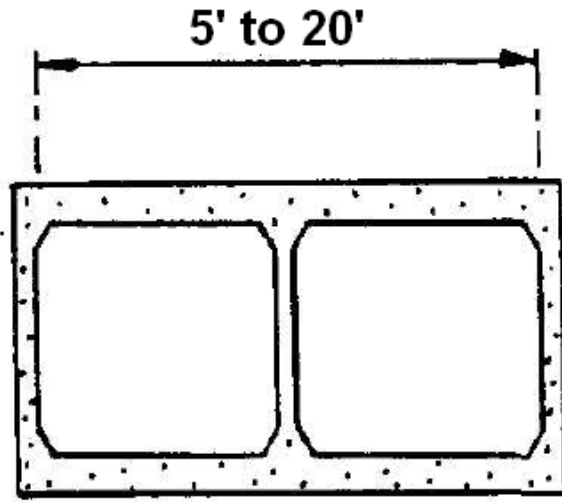
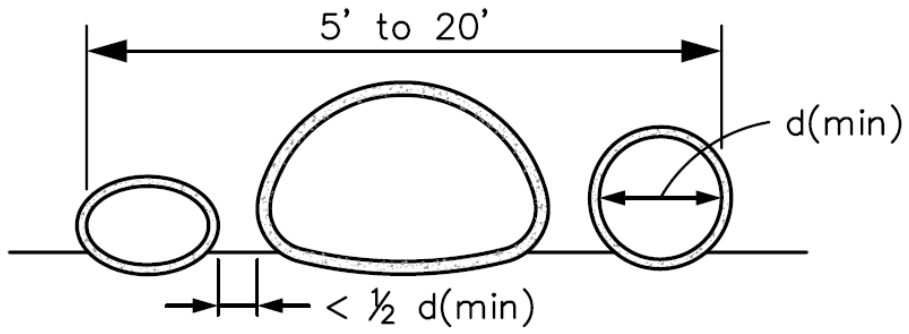
### Culvert

For the purposes of this program a “culvert” is defined as a structure including supports erected over a depression or an obstruction, such as water or a roadway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured PERPENDICULAR to the flow of water (or equivalent measure) of 5 feet to 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes. It may also include multiple pipes where the clear distance between openings is less than half of the smaller contiguous opening (see below).

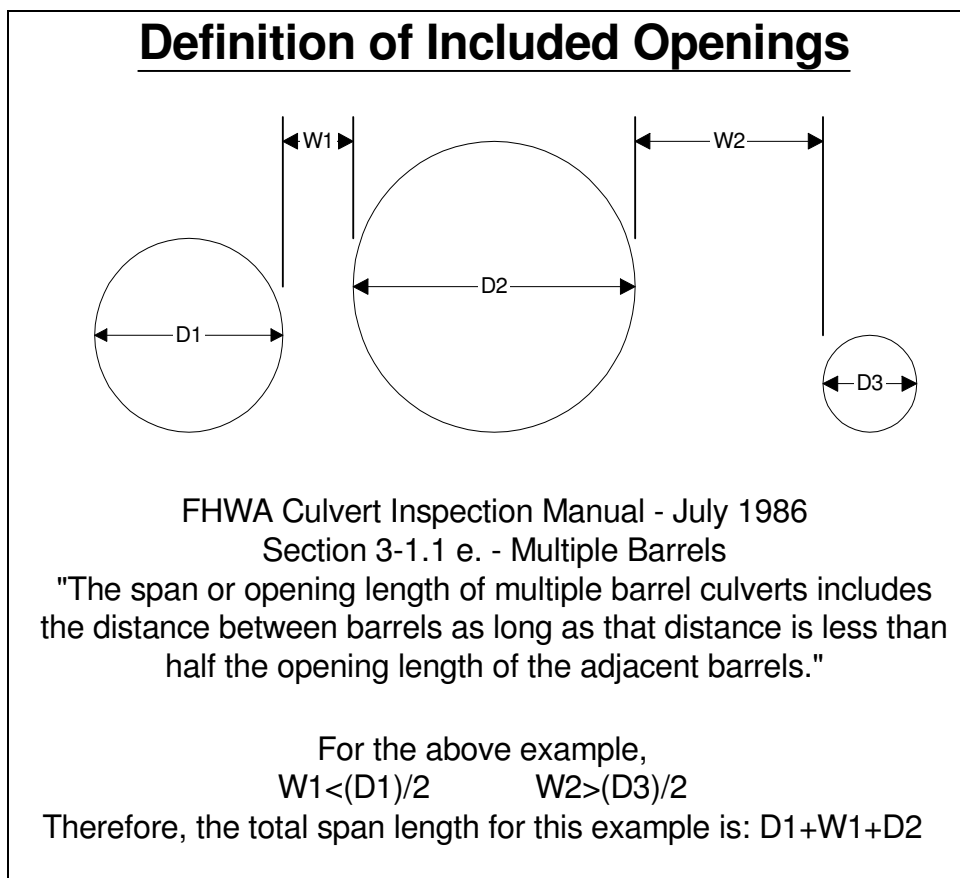
## Effective Culvert (CoMBIS) Width

Is the width of the structure, as described above and as illustrated below. This measure is the basis for determining whether a structure is included in the CoMBIS program or not (see the following examples).





## How to Determine if Multiple Pipes Are to be Included



For the above situation, dimensions are to be reported as follows:

$$\text{Effective CoMBIS Width} = D1 + W1 + D2$$

There is one unusual situation that may be encountered that requires special consideration. This is when there are 2 or more parallel pipes in one common headwall - each pipe (or pipe group) qualifying on its own to be in CoMBIS, but the pipes are too far apart to be measured as one length as described above. In this situation the pipes will be considered as one structure, and dimensions are to be reported as follows (using D1 & D2 above as examples):

$$\text{Effective CoMBIS Width} = D1 + \frac{1}{2}D1 + D2$$