

Question:

How are low vision pedestrians warned not to enter/use bike ramps? Are truncated domes required to be installed at bike ramp locations?

Response:

NCHRP 1043 Section 10.4.5 includes the guidance for protecting pedestrians with low vision using facilities adjacent to or shared with bicycles. Truncated dome detectable warning surfaces are no longer recommended on bike ramps per NCHRP 1043. Tactile Directional Indicators (strips of raised elongated bars) are recommended instead along the edge of the sidewalk at the top of the ramp to guide visually impaired pedestrians past the ramp.

Question:

Should we have an advisory speed panel on the Circular roundabout warning sign?

Response:

As indicated in the MUTCD Section 2C.59 “The advisory speed shall be determined by an engineering study that follows established engineering practices.” Since each location depends on roadway geometry, surface conditions, or sight distance the site would need to be evaluated. (guidance for engineering practices that are appropriate for determining recommend advisory speed is listed in Section 2C.59). Roundabouts are a type of intersection. We typically do not post an advisory speed plaque at every intersection, only those that warrant for example due to sight distance or other items as determined through an engineering study.

Question:

Does having a striped out paved shoulder as the outside turning apron affect the fastest path? I assume fastest path is still based on the lane paint striping. Example is the Hillsborough Street roundabout.

Response:

Not having a physical barrier to slow traffic does impact the intent, or effectiveness of the fastest path evaluation. You can use the pavement edge if no curbing is provided, but it is most often recommended that curb be included. For more information, see the discussion in Section 10.14.4 of NCHRP 1043.

Question:

Fun fact: I've often heard the traffic circle in Newton Grove was the 1st round-a-bout ever in NC. Is this true?

Response:

Could be. There were 'city center' traffic circles in many towns. Traffic circles are similar but not the same as the modern roundabout. Below is a picture from 1952 at Five Points in Raleigh. The intersection was transitioned to a signalized intersection sometime after that picture was taken, but Engineers are now looking at possibly converting it to a roundabout.



Question:

What criteria determine when the rural roundabout or the urban roundabout is used?

Response:

Discussion on context classification is included in Section 3.5.1 of the NCHRP Report 1043.

Urban roundabouts are often in lower speed locations with higher numbers of vulnerable users, therefore needing more attention to exit speeds, geometry and sight lines with pedestrians and other vulnerable users.

Rural roundabouts are often good solutions for rural intersections with geometric challenges or high serious injury or fatal crash rates. They often include geometry to physically slow traffic on higher speed approaches and on approaches to roundabouts with long uncontrolled approaches.

Question:

I miss the "dot" in the middle of the fishhook for roundabout signing. To me, it was a clear indicator that a roundabout was ahead. Any explanation why this was abandoned in NC signing?



Response:

The “dot” is an optional component of the sign (See Figure 2B-5) as well in the pavement markings. The pavement marking arrow type should match (supplement) the sign. Our typical for two lane roundabouts does show the R3-8 sign with a “dot”. The majority of roundabouts tend to be one lane where lane control signs are not required. In these cases, you will see destinations signs such as in Figure 2D-11 below:

Figure 2B-5. Intersection Lane Control Sign Arrow Options for Roundabouts

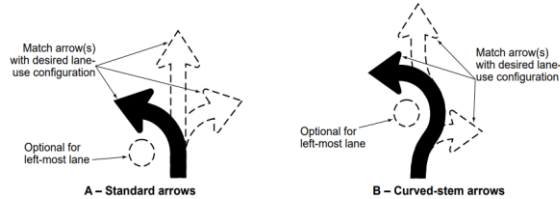
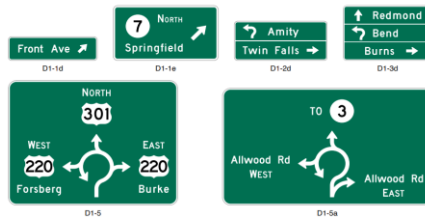


Figure 2D-11. Destination Signs for Circular Intersections



Question:

Does NCDOT plan to add roundabout ORD templates to the .itl file(s) that are available on ProjectWise? Specifically for use in modeling the circulatory roadway, mountable apron and center island?

Response:

Currently the recommended practice from Roadway Support Services is to utilize Surface and Linear templates. It is not just as simple as one template. A need to develop a module has been identified and is in the planning stages.