

ADA Review Information

During the course of plan review our ADA office (charged with making our pedestrian facilities comply with the American with Disabilities Act) noted a problem with the initial design with the skew in the median. Given the distance between the curbs, there was insufficient room for a workable solution that included the skew.

The ADA group has worked diligently to develop design standards that work well for citizens with varying disabilities. A difficulty is that what helps people with one issue may present a problem for people with another issue. An example is “truncated domes” or “detectable warning plates.” The raised knobs on the truncated domes assist people who are blind in detecting the edge of a roadway. The color difference of the metal plates also assists people with limited visibility to see where the boundary is as well. A problem arises in that the raised knobs can make it difficult for people in wheelchairs to cross over the plates. If they move across the truncated domes at a right angle, the wheels line up with the rows of the tactile knobs. If wheelchair users are required to move across the plates at an angle, this becomes very difficult and is a burden on the wheelchair users. As a result, our design requires the plates to be lined up in the direction of travel.

In addition, in circumstances where a wheelchair user is required to change direction, we need to provide a 4' x 4' area, with no steeper than 2% slopes, to allow for maneuvering.

I have drawn up two sketches to scale showing possible median cut-throughs. The medians at 8 feet from curb-face to curb-face. Given that the curb backs at 1' wide, the detectable plates are placed 2" away from the curb and that they are 2' wide, that leaves 1'-8" (1.67') between the two plates. That is not enough room for a wheelchair to maneuver while using the median crossing. Our ADA division has designed hundreds of pedestrian facilities across the state and have determined that for narrower medians, they need to be a straight cut-through.

I have attached two other files as well. One is the detail plate for the detectable warning plates. The other is a sheets from the plan in West St Paul on Robert Street. At that location they did make use of a skew in the median. This was possible because the median width was 15' face-to-face.

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