

Any pedestrian crossings of free-flow movements should be carefully reviewed to ensure adequate sight distance for drivers approaching the crosswalk. In the case of a DDI where the cross route passes underneath the major road, the structure may also impact sight distance.\*

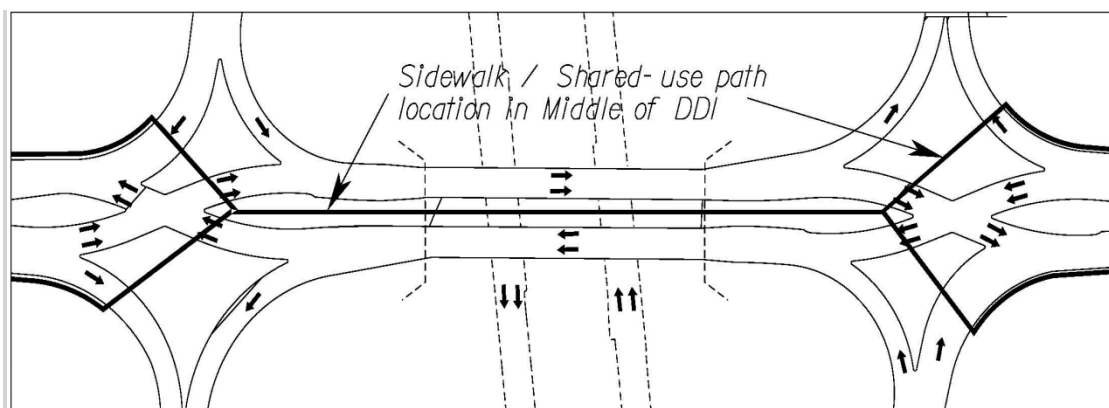
The DDI design involves multiple-stage crossings with islands acting as refuges. In addition, the design of crossovers at the nodes of the interchange typically results in flares and large central islands. Barriers help prevent pedestrians from attempting to cross at undesirable locations. Barriers should be rigid with appropriate end treatment. Alternatively, guardrail systems that pose a lesser hazard to motorists (i.e., spearing hazard) can be used to channelize pedestrians. Barrier separation from traffic should be used when pedestrians are placed down the center of the cross route. If bicycles will be present, a barrier height of 54 inches is required. Minimum standard sight distance shall be provided when barrier is present.

All sidewalks and crosswalks shall be in compliance with VDOT standards. (See [IIM-LD-55](#) and [RDM Appendix A](#))

Pedestrian facilities located along the outside of the interchange may also cause pedestrians to make more conflicting movements, walk a longer distance, and cross at an unsignalized left-turn. Most pedestrians are not accustomed to crossing at the unsignalized left-turn of a DDI.

When pedestrian facilities are present, the left or right turn to and from the ramps may require signalization and negatively influence the interchange's operation. The negative impact may be minimized depending upon geometrics and other design choices. Some at-grade pedestrian crossings can be located where oncoming traffic approaches from an unfamiliar direction. Since pedestrians are typically conditioned to look "left-right-left" before crossing the street, there is potential for pedestrian confusion at these locations.

When the crossroad passes under the limited access highway, structural obstacles may restrict sight distance at free left turns approaching pedestrian crossings.



**FIGURE 2-21 PEDESTRIANS LOCATED TO MIDDLE OF CROSSROAD BETWEEN CROSSOVER**

\* Added 7/14