

ATTACHMENT B: Typical Cross Sections for Options 1, 2 and 3

Three Options for the road typical cross section were generated as a result of the series of agency stakeholder meetings conducted with County staff and representatives from the City of Charlottesville, the University of Virginia, and the Virginia Department of Transportation. These options each sought to improve pedestrian and bicycle accessibility and safety, and have varying degrees of road widening. Each option has an effect on the scope, cost and impact to the adjacent properties and the existing railroad right-of-way on the north side of Ivy Road. The Option descriptions, benefits and disadvantages are briefly summarized below and are illustrated in Attachment C.

Option 1:

Widens both the north and south sides of Ivy Road. The south side (eastbound) would be widened to provide a 5' bike lane with curb, a variable width buffer strip (4' to 6') and a 5' wide sidewalk. The north side (westbound) would be widened to provide a 5' paved shoulder with a drainage ditch.

Benefits:

- a) Provides sidewalk for pedestrians and separate bike lanes.
- b) Matches bicycle provisions within the City of Charlottesville on Ivy Road.

Disadvantages:

- a) The new ditch along the north side impacts many public and franchise utilities driving higher cost estimates.
- b) Requires grading easements from CSX Transportation/Buckingham Branch Railroad.
- c) Requires a VDOT design exception for the non-standard shoulder width on the north side of Ivy Road.
- d) On the University of Virginia property it would require modification of the typical section to avoid demolition of approximately 100' of stone wall for ADA ramps, new curb and clear zone/lateral offset requirements at the Stillfried Lane right turn lane.
- e) Requires full reconstruction of the Ivy Road/Old Ivy Road traffic signal.

Option 2:

Widens only the south side of Ivy Road to provide for shared vehicle/bike lanes. On the south side (eastbound) there would be curb and gutter, a variable width buffer strip (4' to 6') and a 5' wide sidewalk. Sharrows (share the road symbols) would be painted along both sides of the road similar to those painted on Rte. 250 west of the Rte. 29/250 Bypass interchange. With a VDOT waiver to allow for 11' shared center-turn and eastbound through lanes, this option could be modified to provide a separate 4' bike lane with curb and gutter along the south side (eastbound).

Benefits:

- a) Lowest cost option.
- b) Provides a sidewalk for pedestrian access.
- c) Maintains or improves existing bicycle and vehicular accommodations within the road.
- d) Similar to the existing bicycle accommodations provided west of the Route 29/250 Bypass interchange.
- e) No grading easements are required from CSX Transportation/Buckingham Branch Railroad.

Disadvantages:

- a) Mixes cyclist and vehicular traffic on the roadway.
- b) Provides no improvements to roadway condition and drainage along the north side (westbound).
- c) On the University of Virginia property it would require modification of the typical section to avoid demolition of approximately 100' of stone wall for ADA ramps, new curb and clear zone/lateral offset requirements at the Stillfried Lane right turn lane.

Option 3:

Maintains the existing 11' lane widths on Ivy Road. On the south side (eastbound) it provides curb and gutter, a variable width (5' - 8') buffer strip, and a 10' wide shared use path. There would be no improvements to the north side (westbound).

Benefits:

- a) Provides a shared use path for pedestrian and bicyclist that's separated from the roadway.
- b) Requires no design exceptions.
- c) No grading easements are required from CSX Transportation/Buckingham Branch Railroad.
- d) Reduces the impacts to the stone wall on University of Virginia property.

Disadvantages:

- a) Requires the largest area of right-of-way and easement acquisitions.
- b) Creates awkward temporary and permanent transitions to existing conditions at the City of Charlottesville limits, at the Rte. 29/250 Bypass interchange, and between construction phases.
- c) Shared use path may not be used by all classifications of cyclists using the corridor.
- d) Provides no improvements to roadway condition and drainage along the north side (westbound).
- e) On the University of Virginia property it would require modification of the typical section to avoid demolition of approximately 25' of stone wall for ADA ramps and new curb.