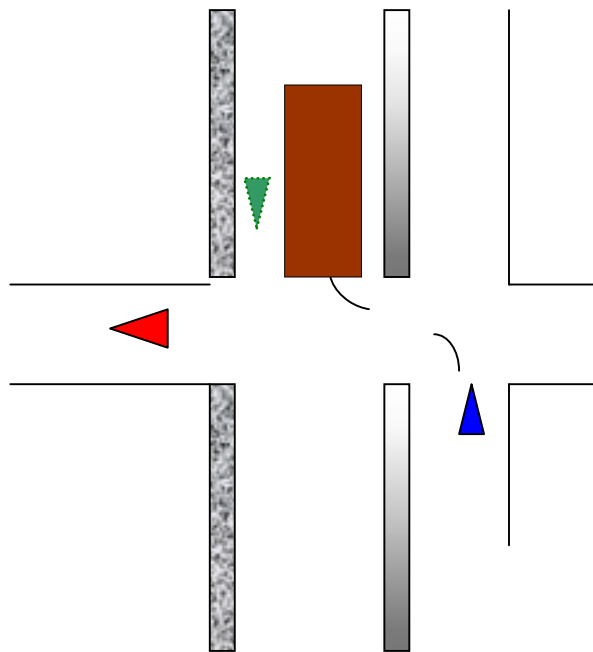


### ***BIKE IN BREAKDOWN LANE – NV:3A***

In this scenario, an attempt was made to determine whether a driver would predict that a truck in the opposing lane, stopped to make a left turn, could easily obscure from the driver a vehicle traveling beside (to the right of) it or a bike in the breakdown lane. This is a problem in the following situation. Specifically, in this scenario the driver (blue) has stopped to make a left turn ([Figure 1](#)). A lead vehicle (red) has already made this left turn. A truck (brown rectangle) in the opposing lane is also stopped to make a left turn. There is only one lane in both directions, much as many busy state routes (e.g., Route 9 in Hadley, Massachusetts), with Jersey barriers separating the two lanes. There is a breakdown lane on both sides of the road (textured gray rectangles). As the truck starts making a left turn, it is safe for the driver to make a left turn as well across the opposing lane. However, as the driver crosses over the breakdown lane, bicycles traveling in that lane or vehicles using that lane to pass around the truck (e.g., a motorcycle, green dotted outline) will not be visible. It is hypothesized that inexperienced drivers will not predict ahead of time the possibility that a vehicle might appear from behind the truck as the driver completes the left turn.

**[Figure 1: NV:3A](#)**



**Material Risks.** When the risk materializes, the bicyclist would be traveling in the breakdown lane. When the risk does not materialize, there would be no bicyclist.

**Dependent Variables.** Measures of the vehicle behavior will include the speed of the driver as he or she passes in front of the truck and the presence, or absence, of any braking. The analysis of eye movements will include summary measures of the length of time that a driver fixates the front right side of the truck as the driver turns in front of the truck.

