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## **Appendix A     Traffic Control Plans**

A traffic control plan outlines the changes to normal traffic flow and roadway conditions needed to accommodate a highway work zone. For commonly used work zone configurations, the Virginia Department of Transportation (VDOT) has published the Virginia Work Area Protection Manual , which provides drawings and descriptions for proper placement of traffic control devices for particular configurations (3). Traffic control plans are specially drafted for projects requiring unique work zones that do not follow standard configurations.

The work zones studied at sites 1A, 1B, and 3 are typical of those found on limited access highways and generally conform to standard traffic control plans. Figure A.1 is representative of the traffic control used at sites 1A and 3. The notes associated with the traffic control plan comprise Figure A.2. The traffic control layout at site 1B can be found as Figure A.3, and notes as Figure A.4. These figures are taken from VDOT's Work Area Protection Manual.

Due to the unique conditions at site 2, its traffic control cannot be found in the Work Area Protection Manual. This work zone consisted of a left shoulder closure using a temporary concrete barrier. Advance warning signs included those related to the speed limit reduction at this site and signs advising wideloads of narrow lanes ahead. To allow for the pavement widening in the median, the two-foot wide barrier had to be placed on the edge of the existing pavement. Lane widths were reduced from twelve to eleven feet adjacent to the barrier. The end of the barrier facing oncoming traffic was flared away from the roadway and protected with an impact attenuation device.