

## **CIVE-3520 Transportation 2**

### **ODOT Required Figures**

The following figures (taken from the Ohio Department of Transportation, Location and Design Manual Volume one) are required for you to understand the principles of highway design and aid you in homework, quiz and final exam problems. The figures can be downloaded from the ODOT website at:

<http://www.dot.state.oh.us/Divisions/ProdMgt/Roadway/roadwaystandards/Pages/locationanddesignmanuals.aspx>

#### Section 200 Horizontal & Vertical Design

Figure 104-1E Rural Construction & Reconstruction Design Speeds **NEW**

Figure 104-2E Urban Construction & Reconstruction Design Speeds **NEW**

#### Section 200 Horizontal & Vertical Design

Figure 201-1E Stopping Sight Distance

Figure 202-1E Max Centerline Deflections w/o Horizontal Curve

Figure 202-2E Max Degree of Curve

Figure 202-4E Superelevation Transitions

Figure 202-5aE Superelevation Development on 2 Lane Undivided Highways

Figure 202-7E Superelevation on Rural Highways

Figure 202-8E Superelevation on High Speed Urban Highways

Figure 202-9E Superelevation on Low Speed Urban Streets

Figure 203-2E Max Change in Vertical Alignment w/o Vertical Curve

Figure 203-3E Crest Vertical Curves

Figure 203-6E Sag Vertical Curves

#### Section 300 Cross Section Design

Figure 301-2E Rural Lane Widths

Figure 301-3E Rural Shoulder Criteria

Figure 301-4E Urban Roadway Criteria

Figure 301-5E a & b Pavement Widening on Highway Curves

Figure 301-8E Paved Shoulder Cross-slopes

Figure 307-1E Safety Grading Sections

Figure 307-2E Recoverable Ditch Sections

Figure 307-3E Clear Zone Grading Sections

Figure 307-4E Standard and Barrier Grading Sections

Figure 307-10E & 11E Preferred Cross Sections

#### Section 600 Roadside Design

Figure 600-1E Clear Zone Widths

Figure 601-1E Barrier Warrants for Embankments

Figure 602-1E Barrier Length of Need