**RURAL CONDITIONS**

**URBAN CONDITIONS**

<table>
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<th>Design Speed (mph)</th>
<th>Entry Speed</th>
<th>Clearance Distance L₁</th>
<th>Brake To Stop Distance L₂</th>
<th>Total Decel. Distance L₃</th>
<th>Brake To Stop Distance L₄</th>
<th>Total Decel. Distance L₅</th>
<th>Clearance Distance L₆</th>
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</table>

**DESIGN NOTES**

1. Basis for turn lane configurations:
   - Informed Driver
   - Stop Condition (With or Without Stop Control)
   - Wet Pavement
   - Reaction preceding entry point
   - Minimum braking distance for urban conditions
   - 75 min. for L₁
   - Comfortable deceleration rates for rural conditions
   (AASHTO 2001 threshold rate of 11.2 ft./s²).

2. Total deceleration distances must not be reduced except where lesser values are imposed by un relocatable control points.

3. Right turn lane tapers and distances identical to left turn lanes under stop control conditions. Right turn lane tapers and/or distances are site specific under free flow or yield conditions.

4. These left turn configurations apply to continuous left turn lanes only specifically called for in the plans.

5. For pavement markings see Index No. 17346.

**LIMITS OF 4', 6' OR 8'-6" TRAFFIC SEPARATOR JUNCTURE DETAILS**

**GENERAL NOTES**

1. The plan views shown are for turn lane taper shapes and dimensional purposes only, they do not prescribe the use of curbs, curb and gutter, shoulders nor separators specifically to either rural or urban conditions.

2. Right turn lane tapers and distances identical to left turn lanes under stop control conditions. Right turn lane tapers and/or distances are site specific under free flow or yield conditions.

3. These left turn configurations apply to continuous left turn lanes only specifically called for in the plans.

4. For pavement markings see Index No. 17346.

5. For curbed and curbed gutter types, see Index No. 300:

**REFERENCES**

- *Option I Separators Shown (Refer To Index No. 302)
- Concrete Curb Or Curb And Gutter (Refer To Index No. 300)
- Traffic Separator (Refer To Index No. 302)
- Concrete Curb Or Curb And Gutter (Refer To Index No. 300)
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**INDEX NO. 301**

**DESCRIPTION:**

**MEDIUM CURB AND TRAFFIC SEPARATOR JUNCTURE DETAILS**

**2016 DESIGN STANDARDS**

**TURN LANES**

**DESIGN STANDARDS**

**FLUSH AND/OR CURBED SEPARATION**

**RAISED SEPARATION**

**DOUBLE LEFT TURNS**

**SINGLE LEFT TURNS**

**The length of taper may be increased to L₁ for single left turns and L₄ for double left turns when:**

- Left turn queue vehicles are adequately provided for within the design queue length.
- Through vehicle queues will not block access to left turn lane.
- Approved by District Design Engineer.