1. Insert Spacing Chart Distances into Layouts and Remove Chart Whenever Practical.

2. Determine if "End Road Work" Signs are Needed.

3. Consider the Installation of a PCMS and/or G20-X1 or Special Sign if Concession is Expected. If Advance Signage to Direct Traffic is Needed, or Other Conditions Determined by the Engineer.

4. Consider the Installation of a PCMS and/or G20-X2 Sign on G20-X2 Sign for Seven Day Advance Warning of Restriction.

5. For any Excavation or Drop-off in Excess of 12 in., See the Minnesota Manual on Uniform Traffic Control Devices Section 8.85 "Temporary Traffic Barriers".

6. For Closures Greater than 1,000 ft., See Layouts to "Lane Closure Extension".

7. * - Required for speeds 45 mph and Greater.

8. Select Appropriate Material for Temporary Markings, See Stripping Key.


10. Contact Appropriate Road Authority for Signal Timing Modifications and Possible Turn Restrictions Before Beginning Work at Any Signalized Intersection.

11. Cover or Modify All Directional Signage Affected by Any Turn Restrictions, Include Sign Modifications, Covers or Removals in Traffic Control Plan.

12. Remove Conflicting Markings, Determine Quantity of Markings to be Removed or Covered for Pat Item Quantities.

13. The Flashing Arrow Board Shall Be Used When the Posted Speed Limit is 45 MPH or Greater, and Shall Be Placed Fully on the Shoulder. If There Is No Shoulder, or the Shoulder Is to Narrow, Place the Flashing Arrow Board at the End of the Taper in lieu of the Type III Barricade Assembly.

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**Table: Spacing Chart Distances**

<table>
<thead>
<tr>
<th>Posted Speed Limit</th>
<th>Spacing of Warning Sign(s): (A)</th>
<th>Decision Distance: (B)</th>
<th>Taper Length: (C)</th>
<th>Buffer Space: (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 30</td>
<td>25</td>
<td>100</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>35 - 40</td>
<td>25</td>
<td>100</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>45 - 50</td>
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<td>55</td>
<td>600</td>
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</tr>
<tr>
<td>60 - 65</td>
<td>750</td>
<td>750</td>
<td>750</td>
<td>500</td>
</tr>
<tr>
<td>70 - 80</td>
<td>1000</td>
<td>1000</td>
<td>800</td>
<td>650</td>
</tr>
<tr>
<td>90 - 100</td>
<td>1200</td>
<td>1200</td>
<td>900</td>
<td>620</td>
</tr>
</tbody>
</table>

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**Design Notes (Remove from Layout Before Inserting in Plan):**

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**Legend:**

- **4" Solid Yellow** - Removable Preformed Plastic Marking
- **4" Solid White** - Removable Preformed Plastic Marking
- **Drums, Type I or Type II** - Barricade or Vertical Panel
- **Solid Line Pavement Marking with Temporary Pavement Markers** at 30' Spacing