General Notes

1. No guardrail is proposed for signals; however, some form of impact attenuation device may be specified for certain locations.
2. Advance flasher to be installed when and if called for in plans or specifications.
3. Top of foundation shall be no higher than 4" above finished shoulder grade.
4. Type of traffic control device
   I. Flashing signals
   II. Flashing signals with cantilever
   III. Flashing signals with gate
   IV. Flashing signals with cantilever and gate
   V. Gate
5. Class of traffic control devices
   I. Flashing signals-one track
   II. Flashing signals-multiple tracks
   III. Flashing signals with gate
   IV. Flashing signals with cantilever and gate
   V. Gate

SIGNAL PLACEMENT AT RAILROAD CROSSING
(2 - LANE DESIGN)

- See Index No. 560 Crossing Shoulder Pavement
- See FIGURE 1

SIGNAL PLACEMENT AT RAILROAD CROSSING
(4 - LANE DESIGN)

- See Note 5 Sheet 3
- Note: Arrows denote direction of travel not pavement markings.

* When 10' is deemed impractical the control device can be located as close as 2' from the edge of a paved shoulder but not less than 6' from the edge of the near traffic lane.

**All dimensions are in feet and inches.

Types of Traffic Control Devices

- Type I: Flashing signals
- Type II: Flashing signals with cantilever
- Type III: Flashing signals with gate
- Type IV: Flashing signals with cantilever and gate
- Type V: Gate

**Note:**
- Two separate foundations may be required (one for signals, one for gate), depending on type of equipment used.
- When 10' is deemed impractical the control device can be located as close as 2' from the edge of a paved shoulder but not less than 6' from the edge of the near traffic lane.

**Additional Notes:**
- Advance flasher to be installed when and if called for in plans or specifications.
- Top of foundation shall be no higher than 4" above finished shoulder grade.
GENERAL NOTES

1. The location of flashing signals and stop lines shall be established based on future or present installation of gate with appropriate track clearances.

2. Where plans call for railroad traffic control devices to be installed in curbed medians, the minimum median width shall be 12'-6".

3. Location of railroad traffic control device is based on the distance available between face of curb & sidewalk. 0'-6" - Locate device outside sidewalk. Over 6'-0" - Locate device between face of curb and sidewalk.

4. Stop line to be perpendicular to edge of roadway, approx. 15' from nearest rail; or 8' from and parallel to gate when present.

5. When a cantilevered-arm flashing-light signal is used, the minimum vertical clearance shall be 17'-6" from above the Crown of Roadway to the lowest point of the Overhead Signal Unit.

SIGNAL PLACEMENT AT RAILROAD CROSSING

(2 LANES, CURB & GUTTER)

See FIGURE 1

As A Minimum, Position
One Flasher Unit Over
Lane Separation Lines
(More Than One Flasher
Unit If There Are More
Than 2 Approach Lanes).

Back-To-Back
Flasher Units

Locate device outside sidewalk. Over 6' - Locate device between
distance available between face of curb & sidewalk. 0' to 6' - Location of railroad traffic control device is based on the
appropriate track clearances.

The location of flashing signals and stop lines shall be
established based on future (or present) installation of gate with
suitable track clearances.

Where plans call for railroad traffic control devices to be
installed in curbed medians, the minimum median width shall be
12'-6".

When a cantilevered-arm flashing-light signal is used, the
minimum vertical clearance shall be 17'-6" from above the Crown
of Roadway to the lowest point of the Overhead Signal Unit.
**NOTES:**

1. When computing pavement message, quantities do not include traverse lines.

2. Placement of sign W10-1 in a residential or business district, where low speeds are prevalent, the W10-1 sign may be placed a minimum distance of 100' from the crossing. Where street intersections occur between the RR pavement message and the tracks an additional W10-1 sign and additional pavement message should be used.

3. A portion of the pavement markings symbol should be directly opposite the W10-1 sign.

4. Recommended location for FTP-61-06 or FTP-62-06 signs, 100' urban and 300' rural. See Index 17355 for sign details.

5. Gate Length Requirements:
   - For two-way undivided sections, the gate should extend to within 1' of the center line. On multiple approaches the maximum gate length may not reach to within 5' of the center line. For those cases the distance from the gate to the center line shall be a maximum of 4'.
   - For one-way or divided sections, the gate shall be of sufficient length such that the distance from the gate tip to the inside edge of pavement is a maximum of 4'.

<table>
<thead>
<tr>
<th>SPEED (mph)</th>
<th>A (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>400</td>
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<tr>
<td>55</td>
<td>325</td>
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<tr>
<td>50</td>
<td>250</td>
</tr>
<tr>
<td>45</td>
<td>175</td>
</tr>
<tr>
<td>40</td>
<td>125</td>
</tr>
<tr>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>URBAN</td>
<td>85 M.Y.</td>
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**RAILROAD GATE ARM LIGHT SPACING**

<table>
<thead>
<tr>
<th>Specified Length Of Gate Arm</th>
<th>Dimension &quot;A&quot;</th>
<th>Dimension &quot;B&quot;</th>
<th>Dimension &quot;C&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Ft.</td>
<td>6&quot;</td>
<td>36&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>15 Ft.</td>
<td>18&quot;</td>
<td>36&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>16-17 Ft.</td>
<td>24&quot;</td>
<td>36&quot;</td>
<td>3&quot;</td>
</tr>
<tr>
<td>18-19 Ft.</td>
<td>28&quot;</td>
<td>42&quot;</td>
<td>5&quot;</td>
</tr>
<tr>
<td>20-23 Ft.</td>
<td>32&quot;</td>
<td>48&quot;</td>
<td>7&quot;</td>
</tr>
<tr>
<td>24-28 Ft.</td>
<td>36&quot;</td>
<td>48&quot;</td>
<td>7&quot;</td>
</tr>
<tr>
<td>29-33 Ft.</td>
<td>36&quot;</td>
<td>51&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>33-38 Ft.</td>
<td>36&quot;</td>
<td>51&quot;</td>
<td>9&quot;</td>
</tr>
<tr>
<td>38 and Over</td>
<td>36&quot;</td>
<td>60&quot;</td>
<td>10&quot;</td>
</tr>
</tbody>
</table>

**NOTE:**

**MEDIAN SIGNAL GATES FOR**
**MULTILINE UNDIVIDED URBAN SECTIONS**
*(THREE OR MORE DRIVING LANES IN ONE DIRECTION, 45 MPH OR LESS)*

**PLAN**

**MEDIAN SECTION AT SIGNAL GATES**

**MEDIAN SIGNAL GATES**
*(THREE OR MORE DRIVING LANES IN ONE DIRECTION, 45 MPH OR LESS)*