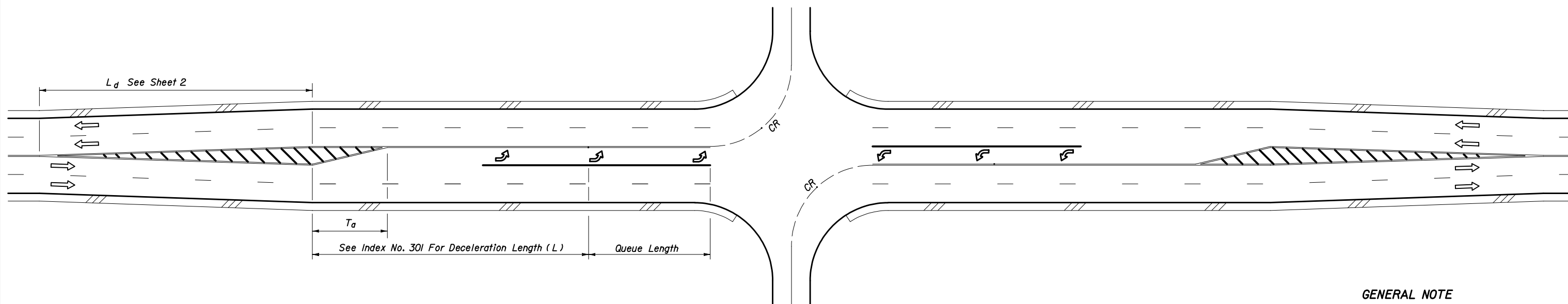


4-LANE WITH TWO-WAY LEFT-TURN LANES

| DESIGN SPEED (mph) | $T_a$ (FEET)  | $T_d$     |
|--------------------|---------------|-----------|
|                    | ADD LANE      | LANE DROP |
| < 30               | 50' (± 1 : 4) | 1 : 25    |
| 30-45              |               | 1 : 30    |
| > 45               |               | 1 : 40    |

Note: For locations with unrelocatable control points minimum taper rates for lane drop ( $T_d$ ) will be 1 : 20.



4-LANE UNDIVIDED FLARED - SYMMETRICAL

INTERSECTION TURNS AND STORAGE

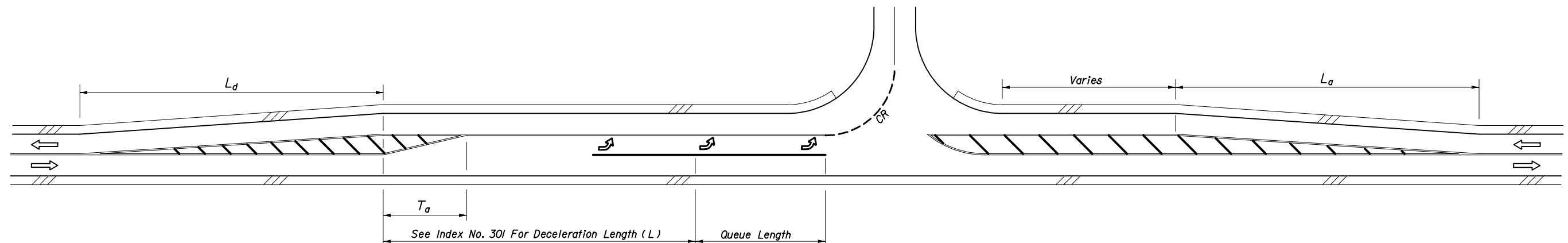
GENERAL NOTE

1. For pavement markings refer to Index No. 17346.

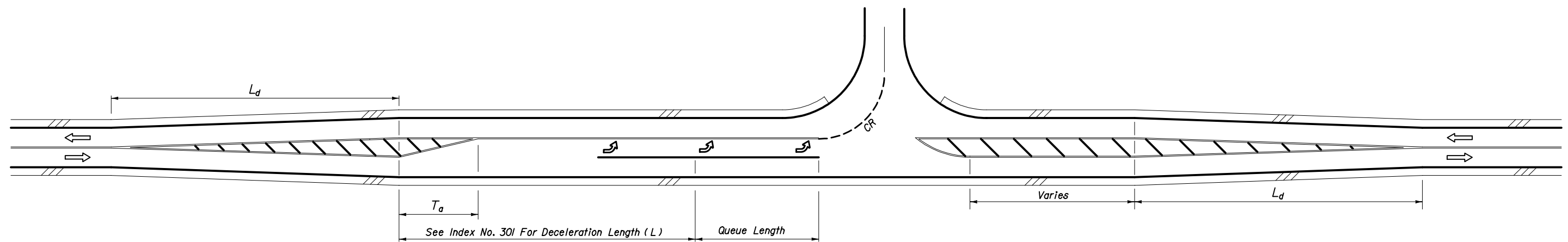
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ROADWAY TRANSITIONS

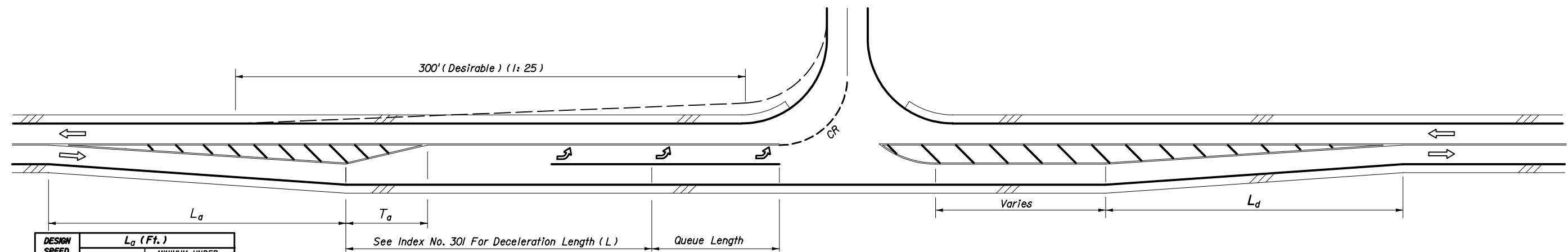
|             |         |      | Approved By                                      |        |     |
|-------------|---------|------|--|--------|-----|
| Names       | Dates   |      | <i>Samuel D. Mill</i><br>Roadway Design Engineer |        |     |
| Designed By | KNM     | 9/89 |  |        |     |
| Drawn By    | JBW     | 9/89 | 00   | 1 of 8 | 526 |
| Checked By  | KNM/JVG |      |  |        |     |



**LEFT SIDE WIDENING**



**CENTERED WIDENING**



**RIGHT SIDE WIDENING**


| DESIGN SPEED (mph) | L <sub>a</sub> (Ft.) |                          |
|--------------------|----------------------|--------------------------|
|                    | STANDARD             | MINIMUM UNDER RESTRAINTS |
| 30                 | 180                  | 120                      |
| 40                 | 320                  | 150                      |
| 50                 | 500                  | 180                      |
| 60                 | 720                  | 240                      |

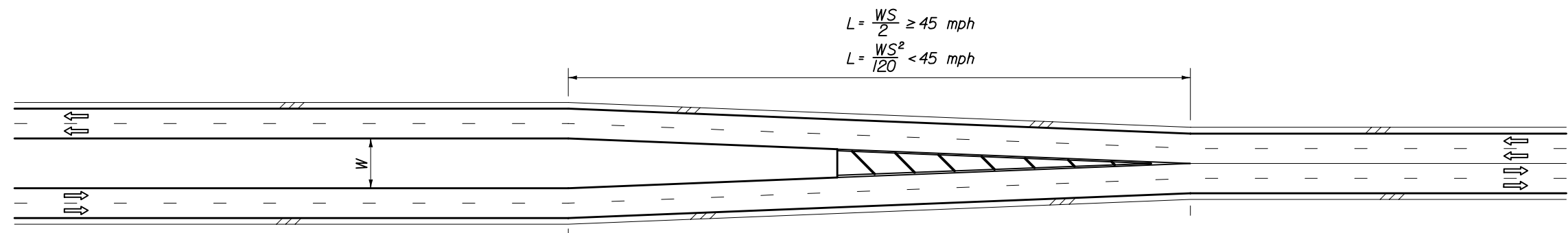
| (mph) | L <sub>d</sub> (Ft.) |     |
|-------|----------------------|-----|
| 30    | 180                  | 120 |
| 40    | 240                  | 150 |
| 50    | 360                  | 180 |
| 60    | 480                  | 240 |

**FLARED & PAINTED LEFT TURNS FOR 2-LANE 2-WAY ROADWAYS**

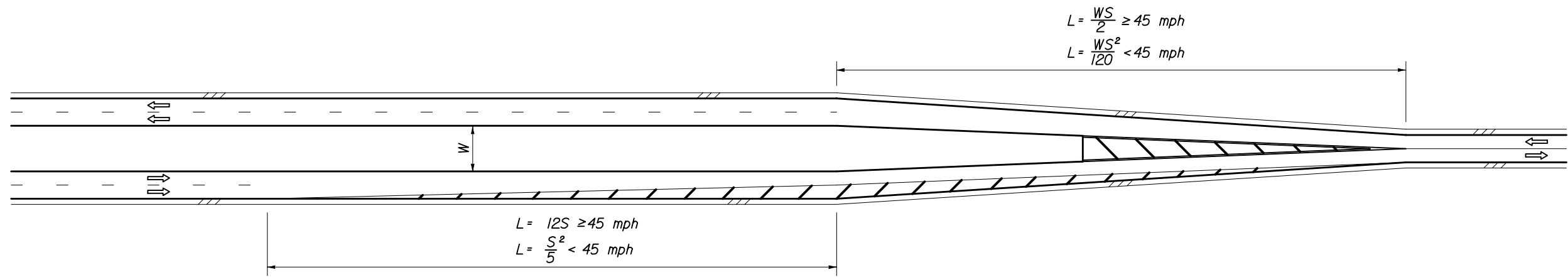
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**ROADWAY TRANSITIONS**

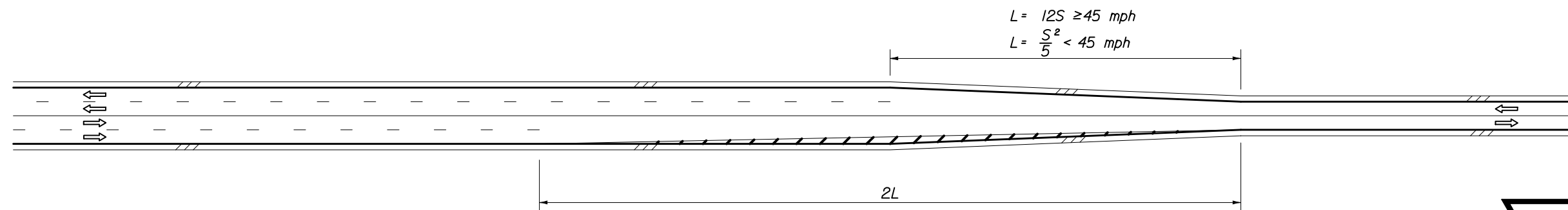
| Names       | Dates        | Approved By  |     |  |
|-------------|--------------|--|-----|--|
| Designed By | RER/JVG 9/98 | <br>Roadway Design Engineer |     |  |
| Drawn By    | JBW 9/98     |  |     |  |
| Checked By  | RER/JVG 9/98 |  |     |  |
| Revision    | 00           |  |     |  |
| Sheet No.   | 2 of 8       | Index No.  | 526 |  |



**4-LANE DIVIDED TO 4-LANE UNDIVIDED**



**4-LANE DIVIDED TO 2-LANE UNDIVIDED**

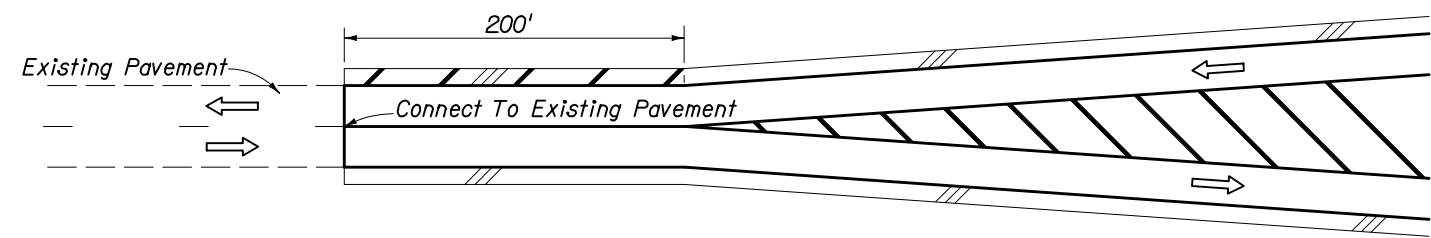


**4-LANE UNDIVIDED TO 2-LANE UNDIVIDED**

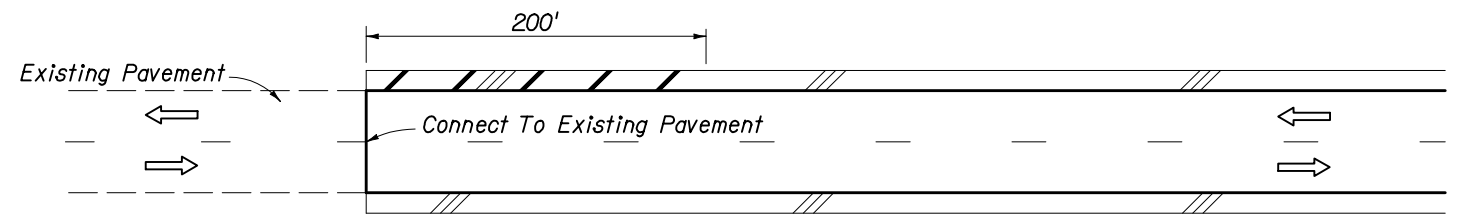
S = Design speed (mph).

**LANE DIVERGENCE AND CONVERGENCE FOR CENTERED ROADWAYS**

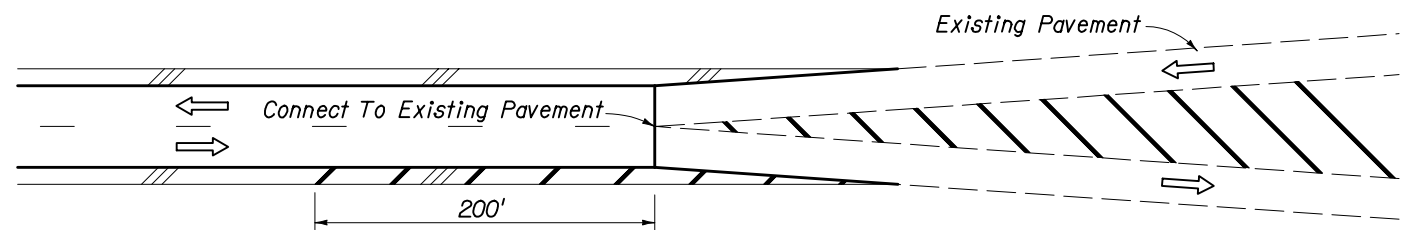
|   |         |      |   |                     |
|---|---------|------|---|---------------------|
| STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION |         |      |   |                     |
| <b>ROADWAY TRANSITIONS</b>                    |         |      |   |                     |
| Designed By                                   | KNM     | 9/89 | Approved By<br><i>Jamell D. Mill</i><br>Roadway Design Engineer |                     |
| Drawn By                                      | JBW     | 9/89 | Revision  | Sheet No. Index No. |
| Checked By                                    | KNM/JVG | 9/89 | 00  | 3 of 8 526          |



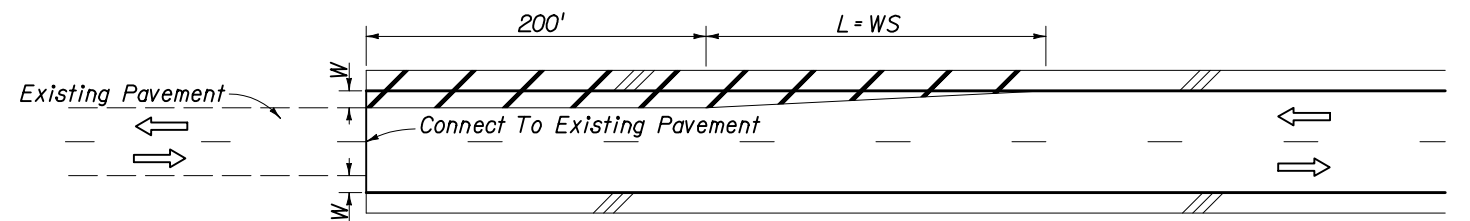
**CONNECTING FLARE WITH PAVED SHOULDERS TO EXISTING ROADWAY WITHOUT PAVED SHOULDERS**



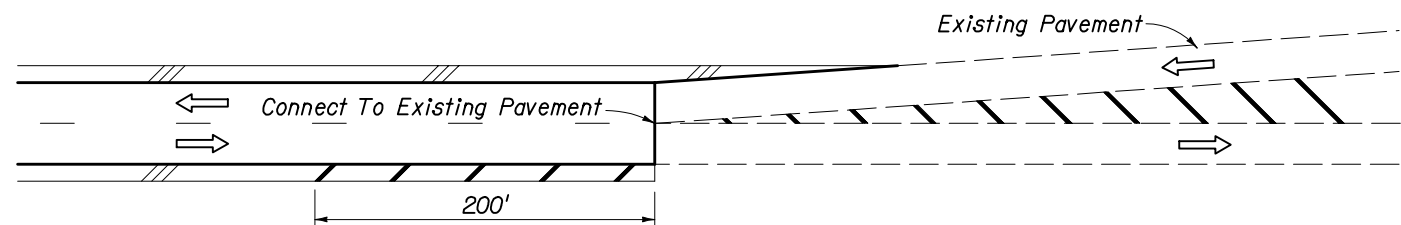
**CONNECTING SIMILAR WIDTH PAVEMENTS**



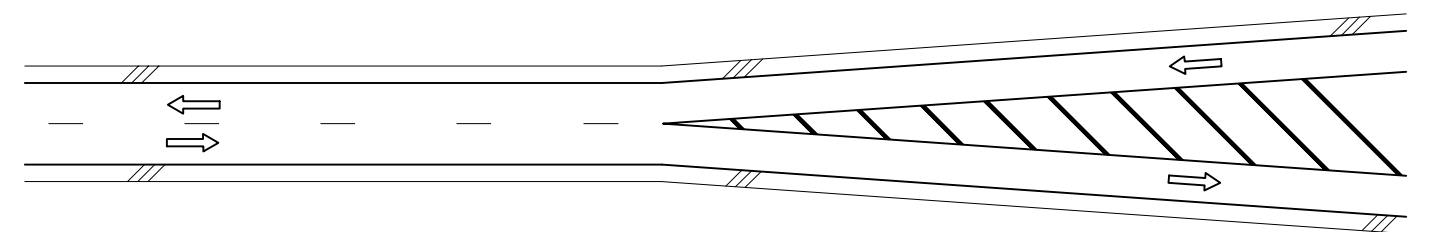
**CONNECTING ROADWAY WITH PAVED SHOULDERS TO EXISTING SYMMETRICAL FLARE WITHOUT PAVED SHOULDERS**



**CONNECTING DIFFERENT WIDTH PAVEMENTS**



**CONNECTING ROADWAY WITH PAVED SHOULDERS TO EXISTING ASYMMETRICAL FLARE WITHOUT PAVED SHOULDERS**




**FLARED - PAVED SHOULDERS**

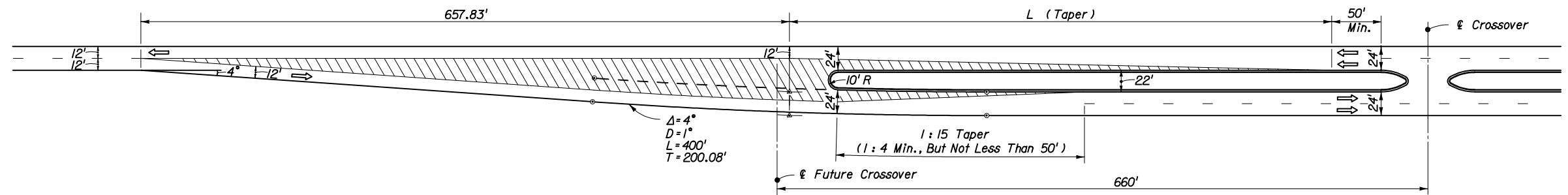
*S* = Design speed (mph).

**PAVED SHOULDER TREATMENT AT TRANSITIONS AND CONNECTIONS**

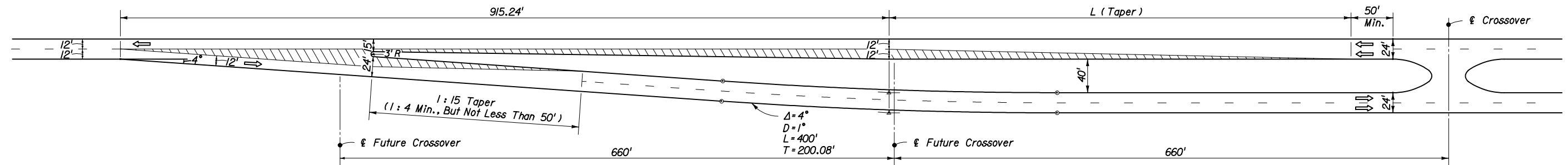
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**ROADWAY TRANSITIONS**

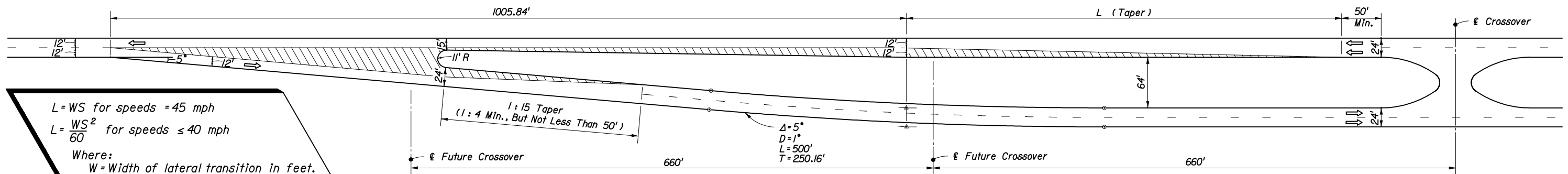
| Names       |         | Dates | Approved By   |           |           |
|-------------|---------|-------|---|-----------|-----------|
| Designed By | KNM     | 9/89  | <br>Raymond D. Milk<br>Roadway Design Engineer |           |           |
| Drawn By    | JBW     | 9/89  |   |           |           |
| Checked By  | KNM/JVG | 9/98  | Revision  | Sheet No. | Index No. |
|             |         |       | 00  | 4 of 8    | 526       |



22' MEDIAN



40' MEDIAN



64' MEDIAN

$L = WS$  for speeds = 45 mph  
 $L = \frac{WS^2}{60}$  for speeds  $\leq 40$  mph  
 Where:  
 W = Width of lateral transition in feet.  
 S = Design speed.

**NOTES FOR SHEETS 5 THRU 8**

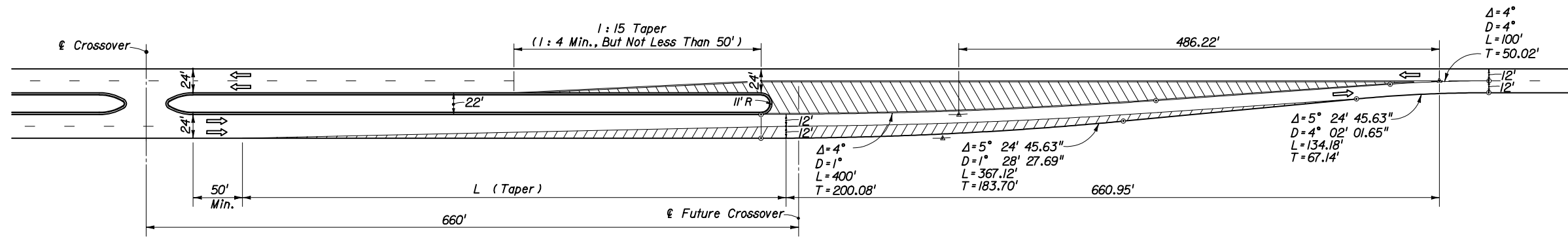
1. The transition details as represented on sheets 5 thru 8 are intended as guidelines only. The transition lengths, curve data, nose radii and offsets are valid only for tangent alignment, design speeds  $\leq 45$  mph, the median widths and lane widths shown.
2. Approach lane departures ( $\Delta = 5^\circ$ ) are suitable for design speeds up to 60 mph. Interior curves ( $D = 1^\circ$ ) are suitable for normal crown for design speeds up to 50 mph. Merging curves ( $D \geq 5^\circ$ ) will require superelevation.
3. The geometrics of these schemes are associated with the standard subsectional spacing for sideroads, but in any case will require modification to accommodate sideroad location, multilane and/or divided sideroads, oblique sideroads, crossover widths, storage and speed change lane requirements, and, other related features.

**LEFT ROADWAY CENTERED ON APPROACH ROADWAY  
TWO LANE TO FOUR LANE TRANSITION**

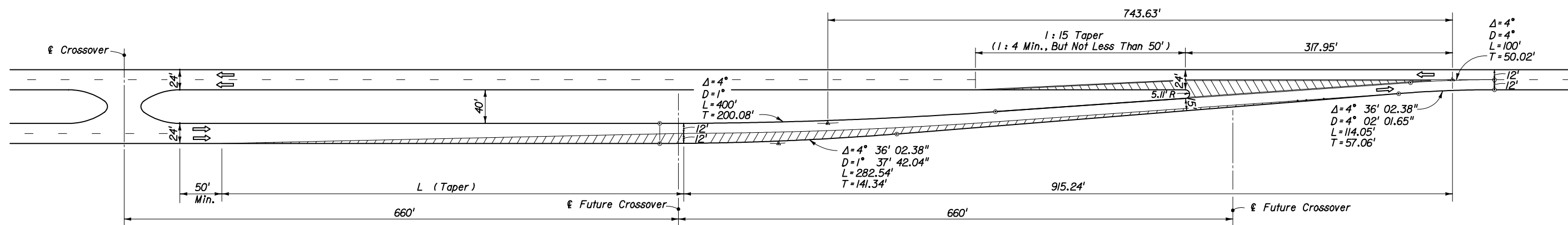
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**ROADWAY TRANSITIONS**

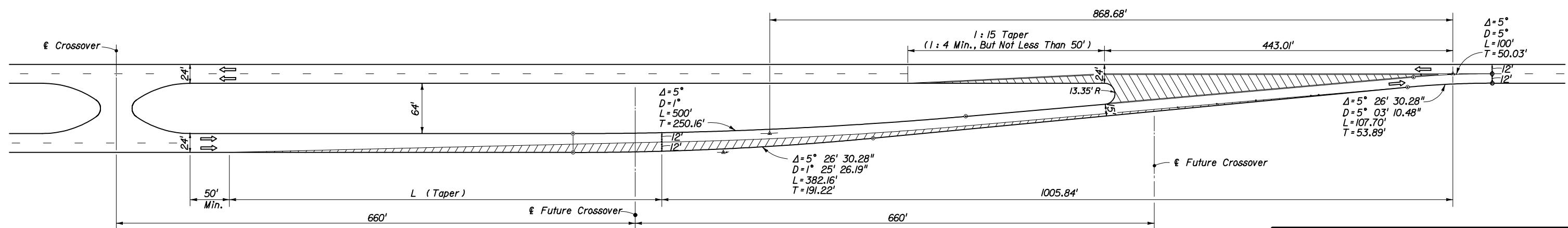
|             |     |           |      |                         |                       |     |
|-------------|-----|-----------|------|-------------------------|-----------------------|-----|
| Designed By | KNM | Dates     | 9/89 | Approved By             | <i>Samuel D. Milk</i> |     |
| Drawn By    | HKH | Revision  | 2/94 | Roadway Design Engineer |                       |     |
| Checked By  | JVG | Sheet No. | 00   | 5 of 8                  | Index No.             | 526 |



22' MEDIAN



40' MEDIAN



64' MEDIAN

$L = WS$  for speeds = 45 mph

$L = \frac{WS^2}{60}$  for speeds ≤ 40 mph


Where:

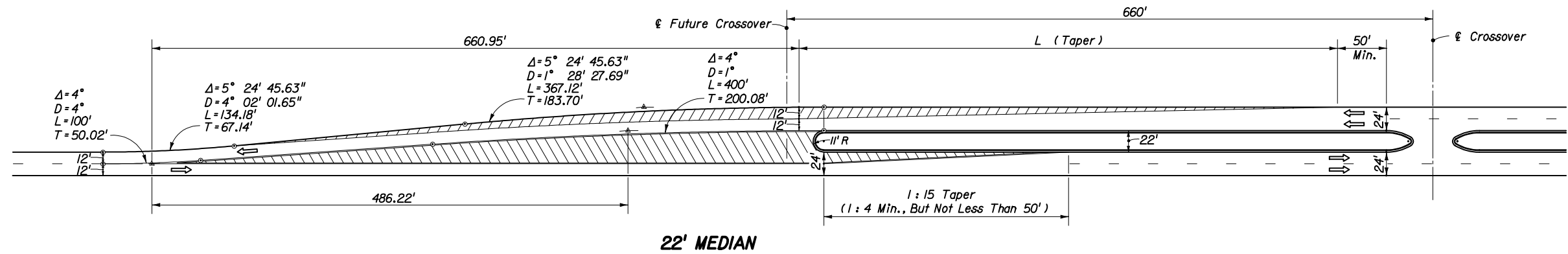
W = Width of lateral transition in feet.  
S = Design speed.

**LEFT ROADWAY CENTERED ON THRU ROADWAY  
FOUR LANE TO TWO LANE TRANSITION**

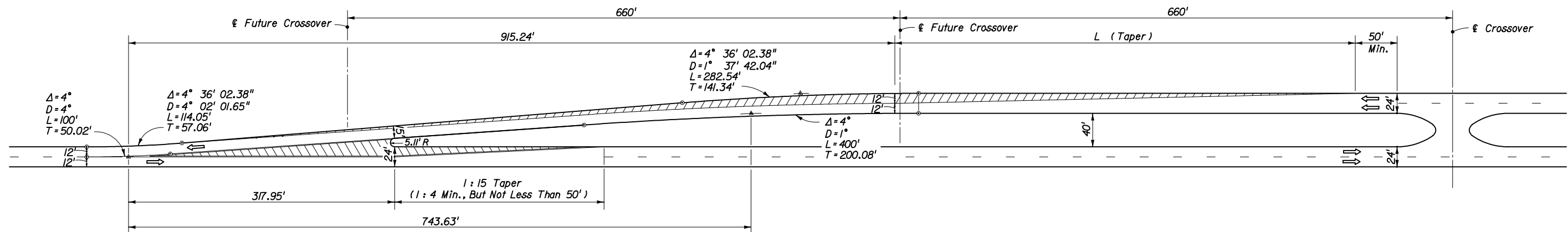
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

**ROADWAY TRANSITIONS**

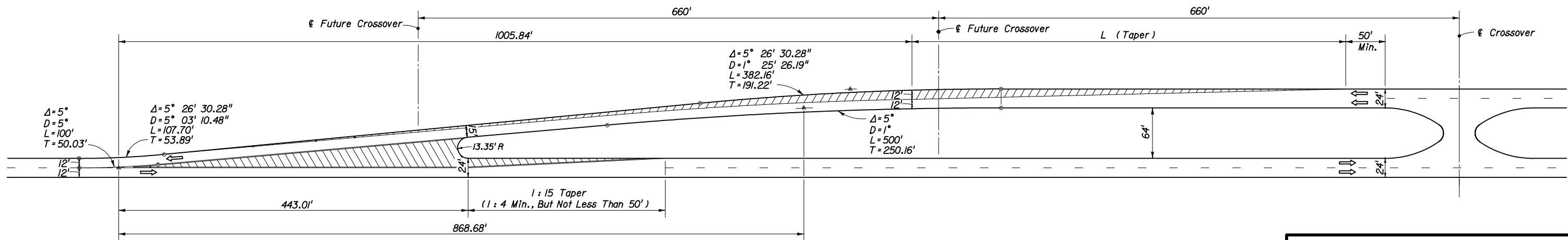
| Names            | Dates | Approved By  |               |
|------------------|-------|--|---------------|
| Designed By: KNM | 9/89  | <br>Roadway Design Engineer |               |
| Drawn By: HKH    | 2/94  |  |               |
| Checked By: JVG  | 2/94  |  |               |
| Revision         | 00    | Sheet No. 6 of 8   | Index No. 526 |



22' MEDIAN




40' MEDIAN

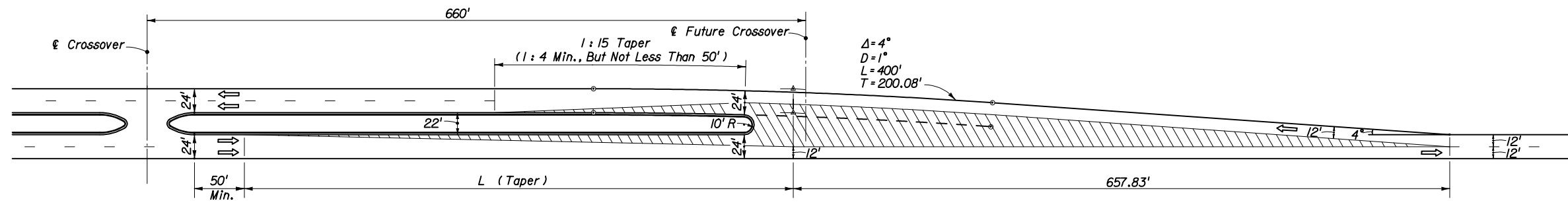


64' MEDIAN

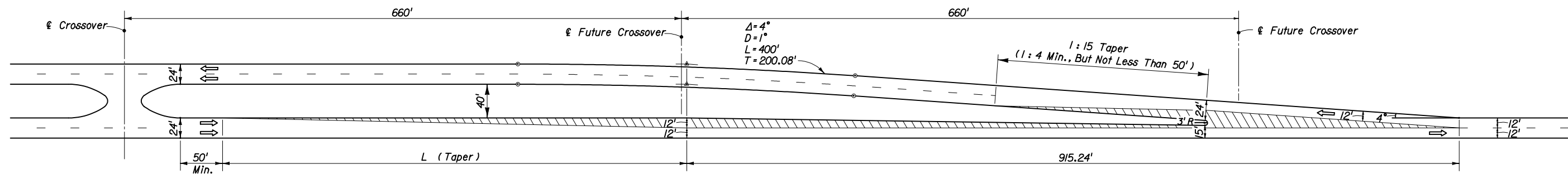
$L = WS$  for speeds = 45 mph  
 $L = \frac{WS^2}{60}$  for speeds  $\leq 40$  mph  
 Where:  
 W = Width of lateral transition in feet.  
 S = Design speed.

**RIGHT ROADWAY CENTERED ON APPROACH ROADWAY**  
**TWO LANE TO FOUR LANE TRANSITION**

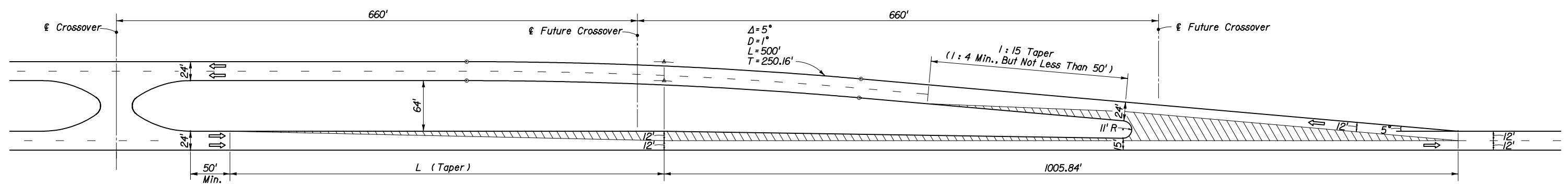
| STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION |       |             |  |           |
|---|-------|-------------|--|-----------|
| ROADWAY TRANSITIONS                           |       |             |  |           |
| Names   | Dates | Approved By |  |           |
| Designed By                                   | KNM   | 9/89        | <br>Roadway Design Engineer |           |
| Drawn By                                      | HKH   | 2/94        |  |           |
| Checked By                                    | JVG   | 2/94        |  |           |
| Revision                                      | 00    | 7 of 8      | Sheet No.  | Index No. |
|   |       |             |  | 526       |



22' MEDIAN



40' MEDIAN



64' MEDIAN

$L = WS$  for speeds = 45 mph  
 $L = \frac{WS^2}{60}$  for speeds  $\leq 40$  mph  
 Where:  
 W = Width of lateral transition in feet.  
 S = Design speed.

**RIGHT ROADWAY CENTERED ON THRU ROADWAY  
FOUR LANE TO TWO LANE TRANSITION**

|   |       |       |  |                  |
|---|-------|-------|--|------------------|
| STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION |       |       |  |                  |
| <b>ROADWAY TRANSITIONS</b>                    |       |       |  |                  |
| Designed By                                   | Names | Dates | Approved By                                      |                  |
| Drawn By                                      | HKH   | 2/94  | <i>Jamell D. Mill</i><br>Roadway Design Engineer |                  |
| Checked By                                    | JVG   | 2/94  | Revision   | Sheet No.        |
|   |       |       | 00   | 8 of 8           |
|   |       |       |  | Index No.<br>526 |