

 $L = 6ft \times 6ft$ Wired in series

L = 6ft X 40ftQuadrupole loop, wired separately

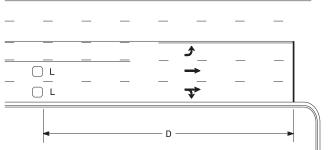
Right Turn Lane Detection

L1 = 6ft X 40ft Quadrupole loopL2 = 6ft X 6ft [Minimum] Presence loop

Wired separately

# High Speed Detection (≽40 mph)

OR



 $L = 6ft \times 6ft$ 

Wired separately

Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100

420

□L1 □ L1

> L2 = 6ft X 6ftWired in series

 $L1 = 6ft \times 6ft$ 

Wired in series

**▼** □ L2

– D2

# Volume Density Operation

ft

250

300

355

420

Speed Limit

mph

40

45

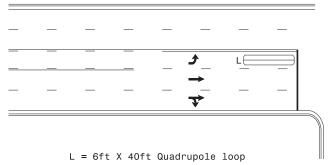
50

55

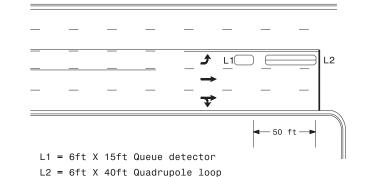
"Stretch" Operation

### Left Turn Lane Detection

OR



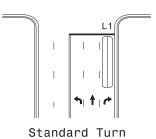
Presence Loop Detection

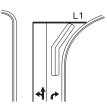


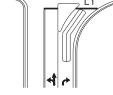
110

Queue Loop Detection

Shared Lane/ Wide Radius Turn



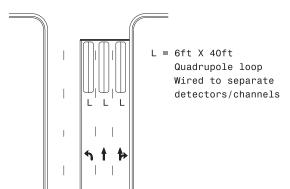




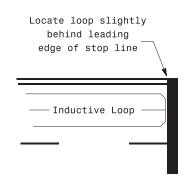
Wide Radius Turn

Channelized Turn

### **Side Street Detection**



## Presence Loop Placement at Stop Lines



of stop line under any of the

- 1) stop line is greater than 15' from edge of intersecting roadway
- 2) loop detects a permissive or protected/permissive left turn
- 3) for an exclusive right turn

### Recommended Number of Turns

Single 6' X 6' loop (when wired senarately)

men wired	Separately)
Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' Loops: Lead-in < 150', use 2 turns Lead-in > 150', use 3 turns



Typical Signal Loop Locations

PLAN DATE: September 2020 REVIEWED BY: REPARED BY: PIA REVISIONS SCALE N/A

Note:

Loop may be located in advance following conditions: