



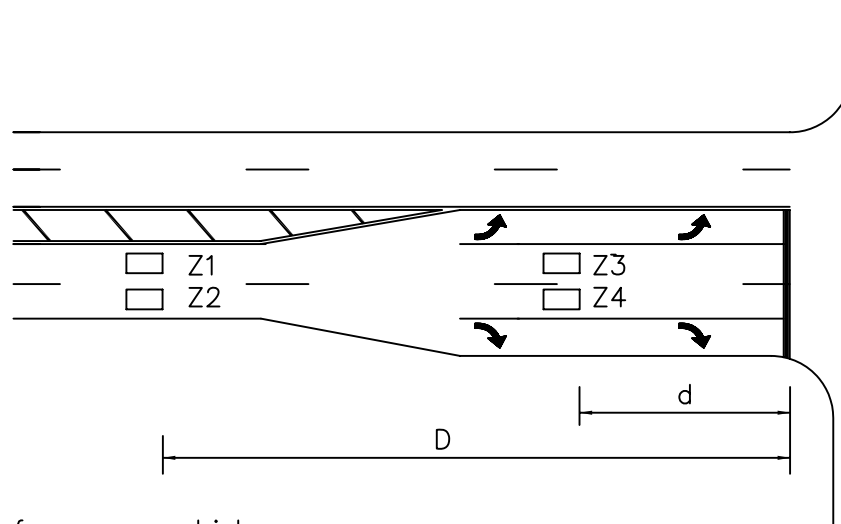
CITY OF CHARLOTTE  
DEPARTMENT OF TRANSPORTATION

# **VIDEO DETECTION GUIDELINES**

FEBRUARY 2004

REVISED: OCTOBER 2004

# MAIN STREET



Zones should be size of average vehicle.  
Front and back edges of zones should not fall on pavement markings.

## THRU LANES

Detector zones: Z1–Z4  
Connect to phase: Through  
Amp type: Normal

SPEED (mph)	d (ft)	D (ft)
25	N/A	75
30	N/A	100
35	N/A	130
40	75	165
45	95	200
50	110	240
55	130	280

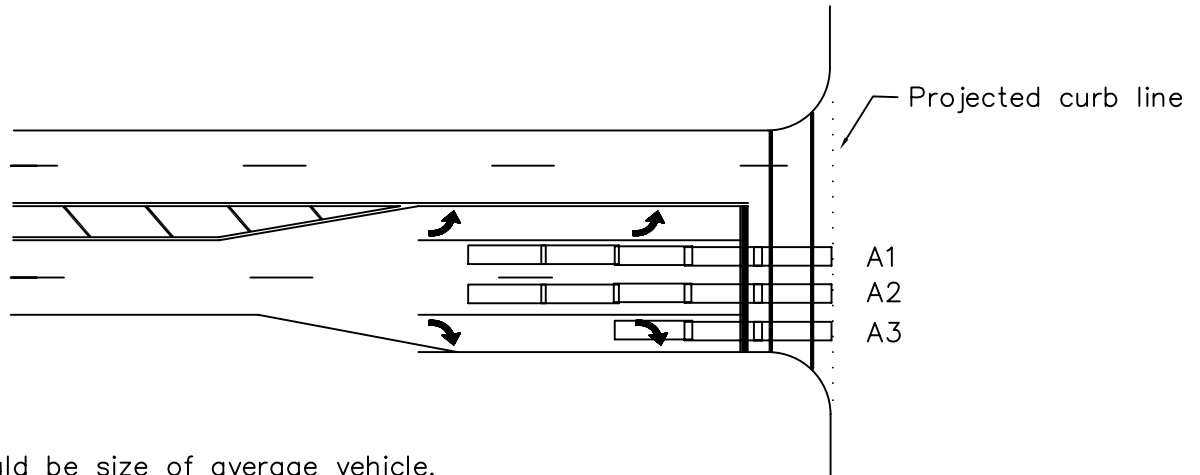
## LEFT TURN LANE

See separate sheet for left turn lane detection.

## RIGHT TURN LANE

Right turn detection is not normally necessary because the main street is in min. recall.

# SIDE STREET



Zones should be size of average vehicle.  
Front and back edges of zones should not fall on pavement markings.

## THRU LANES

Detector areas: A1 and A2

Limits: 80' (4 car lengths) from stop bar  
extend zones beyond stop bar to projected curb line

Connect to phase: Through

Amp type: Auxilliary — 3s delay and lock detect

## RIGHT TURN LANE

Detector area: A3

Limits: 40' (2 car lengths) from stop bar  
extend zones beyond stop bar to projected curb line

Connect to phase: Side street through or  
to main street left only if main street left is protected/prohibited

Amp type: Auxiliary — 10s delay and lock detect  
Disable delay during phase called

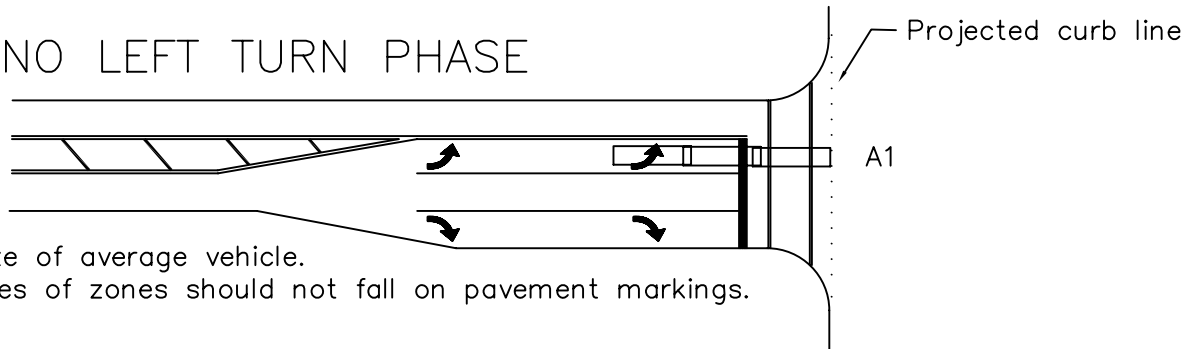
## LEFT TURN LANE

See separate sheet for left turn lane detection.

# LEFT TURN LANES



## NO LEFT TURN PHASE



Zones should be size of average vehicle.  
Front and back edges of zones should not fall on pavement markings.

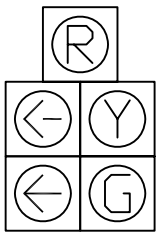
Detector area: A1

Limits: 40' (2 car lengths) from stop bar

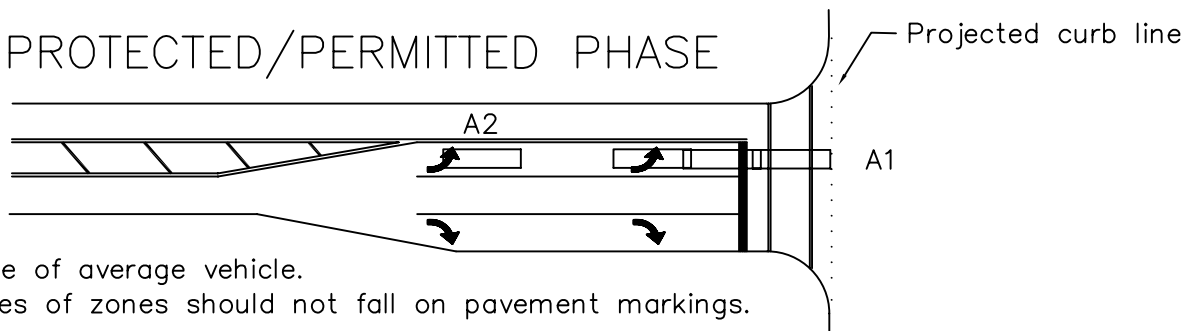
extend zone beyond stop bar to projected curb line

Connect to phase: Through

Amp type: Normal (main street) or Auxilliary – 3s delay and lock detect (side street)



## PROTECTED/PERMITTED PHASE



Zones should be size of average vehicle.  
Front and back edges of zones should not fall on pavement markings.

Detector area: A1

Limits: 40' (2 car lengths) from stop bar

extend zone beyond stop bar to projected curb line

Connect to phase: Through

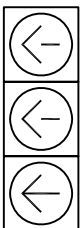
Amp type: Normal

Detector area: A2

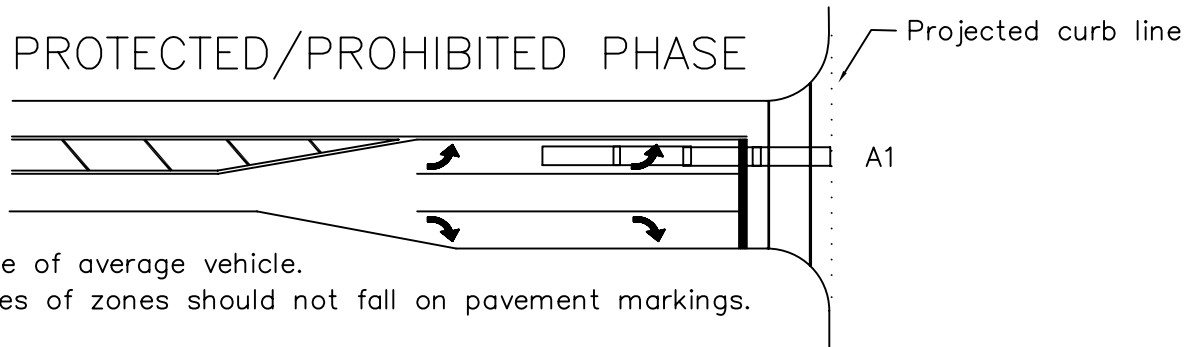
Limits: average vehicle, 75' from stop bar

Connect to phase: Left

Amp type: Auxiliary, 3s delay and lock detect



## PROTECTED/PROHIBITED PHASE



Zones should be size of average vehicle.  
Front and back edges of zones should not fall on pavement markings.

Detector area: A1

Limits: 60' (3 car lengths) from stop bar

extend zone beyond stop bar to projected curb line

Connect to phase: Left

Amp type: Auxilliary – 3s delay and lock detect