

Speed Indicator Device (SID)

Background

Following on from several Parish Council discussions, it was decided by the PC to purchase a Speed Indicator Device (SID), the costs being shared with Longparish Parish Council.

A total of six locations were agreed with Hampshire County Council. The criteria involved were quite stringent with regards to road safety, such that the support pole must be 1m from the edge of the highway. This eliminated some of the PC preferred locations, but suitable compromises were eventually reached. Two of the locations required pole sockets to be installed in the roadside verge, this work, and the extension of two existing poles, being carried out by HCC earlier this year.

The locations are shown on the attached map.

The PC delayed purchasing the SID until this work was completed in April 2019. The SID was subsequently delivered in May and first installed in June.

The SID

The device uses a radar based system to display the speed of and record a number of parameters of passing vehicles. In order to simplify the presentation, it was agreed that we would record and present the following:

1. Average speed, aggregated into half hour segments
2. Maximum speed, aggregated into half hour segments
3. Vehicle distribution for Velocity Range

The SID records both the incoming vehicle data (speed is displayed on the screen) and the outgoing vehicle data (speed not shown). The SID is battery powered and these last about 1-2 weeks before needing recharging. When the battery does go flat, then the device does not record any data. This accounts for the gaps in some of the graphs.

Location 1 – The Street, Outside Avoca, Southerly

The SID was installed here on 14th June, initially facing in a Southerly direction. Graphs 1-3 show the data noted above. It can be seen that when a driver sees their speed displayed they generally slow down as the average speed for the incoming vehicle is lower than that for the outgoing. The maximum speed graph also shows a similar trend. It should be noted that the reading of 78Mph is probably erroneous! The third graph shows that the vast majority of vehicles are keeping below the 30Mph speed limit. In fact, this is probably the most useful graph to compare incoming and outgoing speeds and shows clearly the effect that the SID has.

On 26th June the device was turned around to face North, thus displaying the speed of vehicles leaving the village.

Location 1 – The Street, Outside Avoca, Northerly

Data was recorded from 26th June to 8th July. It is worth noting that there are some significant speeds recorded (both maximum and average) for vehicles coming into the village from the South, probably as a result of the SID facing the other way, so it would not be displaying their speed. The distribution graph substantiates this, showing a higher percentage of drivers exceeding the speed limit.

Location 2 – The Street, Outside The Shop, Northerly

The SID was moved to location 2 outside the shop at the junction with Newton Lane on 8th July. This was not an ideal location, but it was the best that could be found, on existing street furniture. It was initially faced North to capture vehicles coming into the village.

Due to the location, the data was slightly distorted by vehicles entering and leaving Bullington Lane. However, the graphs continue to show the trend that vehicles travelling towards the SID tend to travel at slower speeds than those travelling away.

Location 2 – The Street, Outside The Shop, Southerly

The SID was turned to face South on 26th July. Again the results were as expected but, notably, the maximum speed graphs show a vehicle travelling in excess of 45Mph on The Street travelling North, just past the Church. The SID was removed from this location on 2nd August.

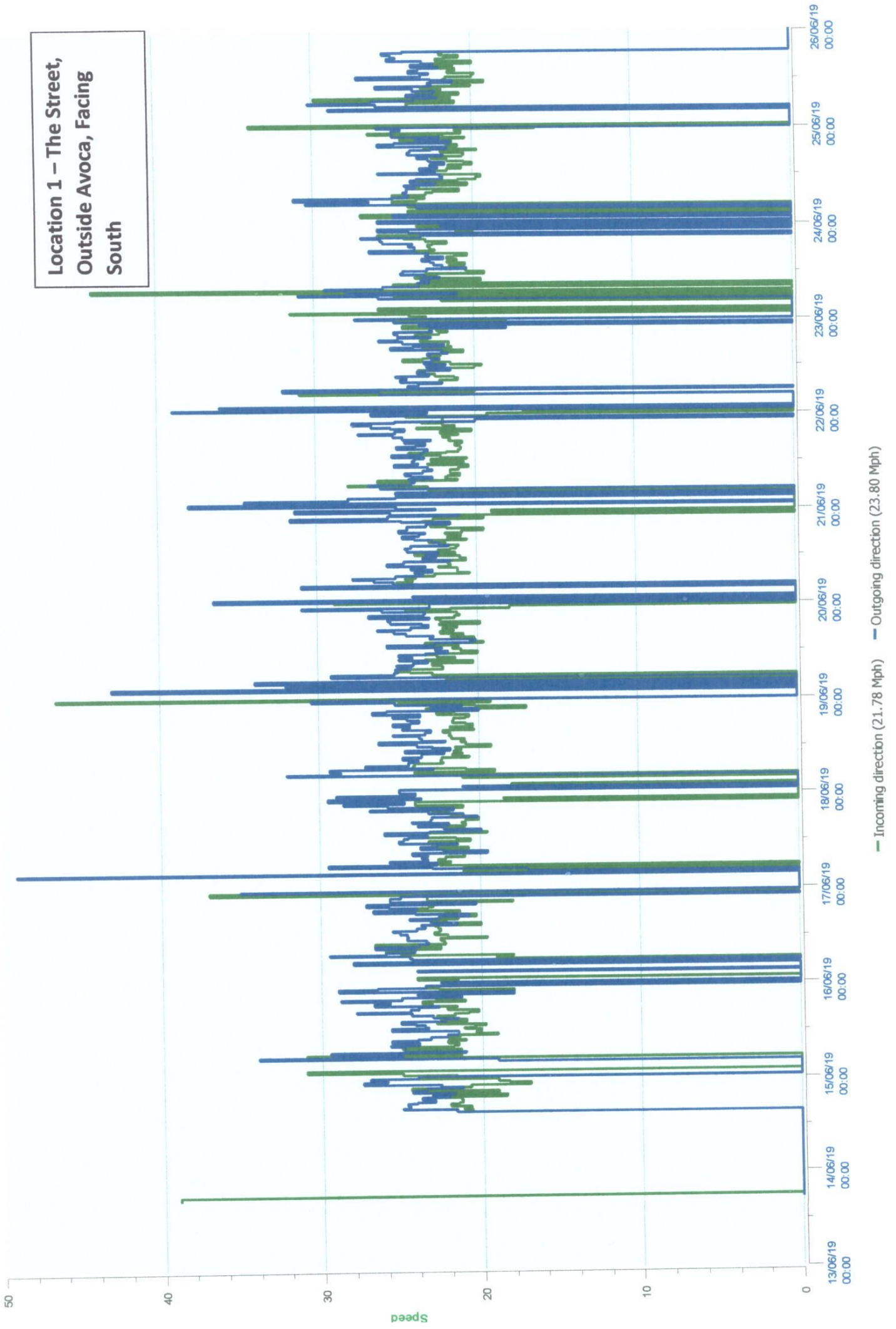
It is interesting to note that the average number of vehicles through the village each week is over 3000 in each direction.

Summary

There is no doubt that the device does have an effect on the speed of vehicles. However, whether this effect is just short term while the device is in position is hard to determine. It can be set not to display any speed, but just record the speed data. This could be something to try when it returns back to the village on 1st October.

When it does return, we will locate it in Roberts Road, by The Green, during term time.

Location 1 – The Street,
Outside Avoca, Facing
South



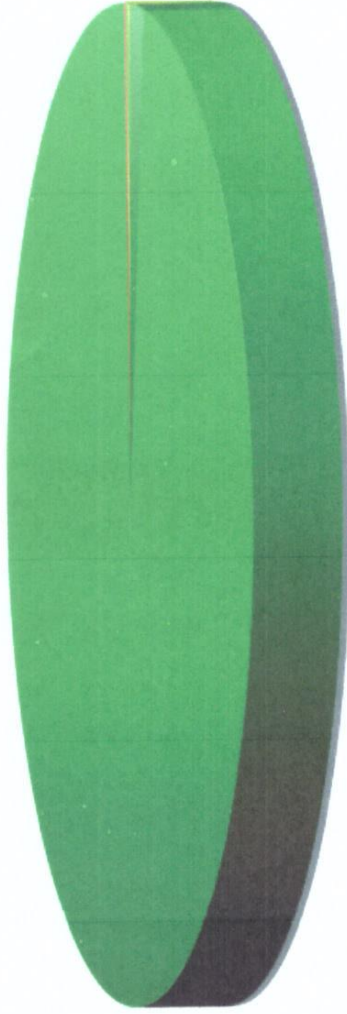
Location 1 – The Street,
Outside Avoca, Facing
South



— Incoming direction (78.00 Mph) — Outgoing direction (49.00 Mph)

Incoming vehicles

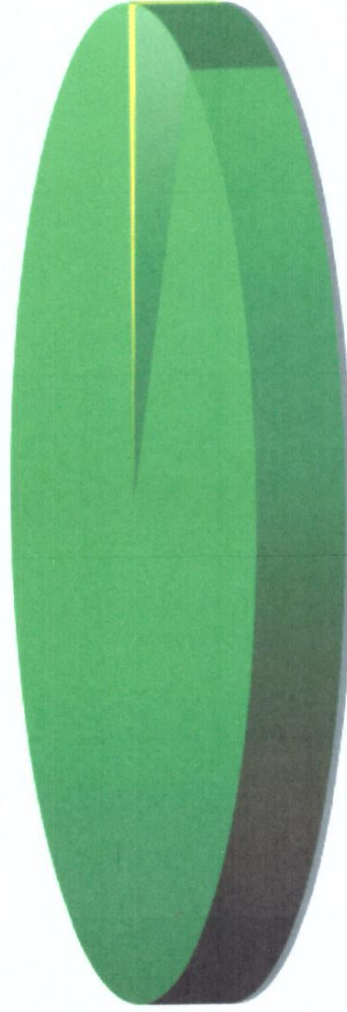
- <= 30 Mph : 4,371 - (97.37 %)
- 31 - 35 Mph : 87 - (1.94 %)
- 36 - 40 Mph : 14 - (0.31 %)
- 41 - 45 Mph : 7 - (0.16 %)
- 46 - 65 Mph (et +) : 10 - (0.22 %)



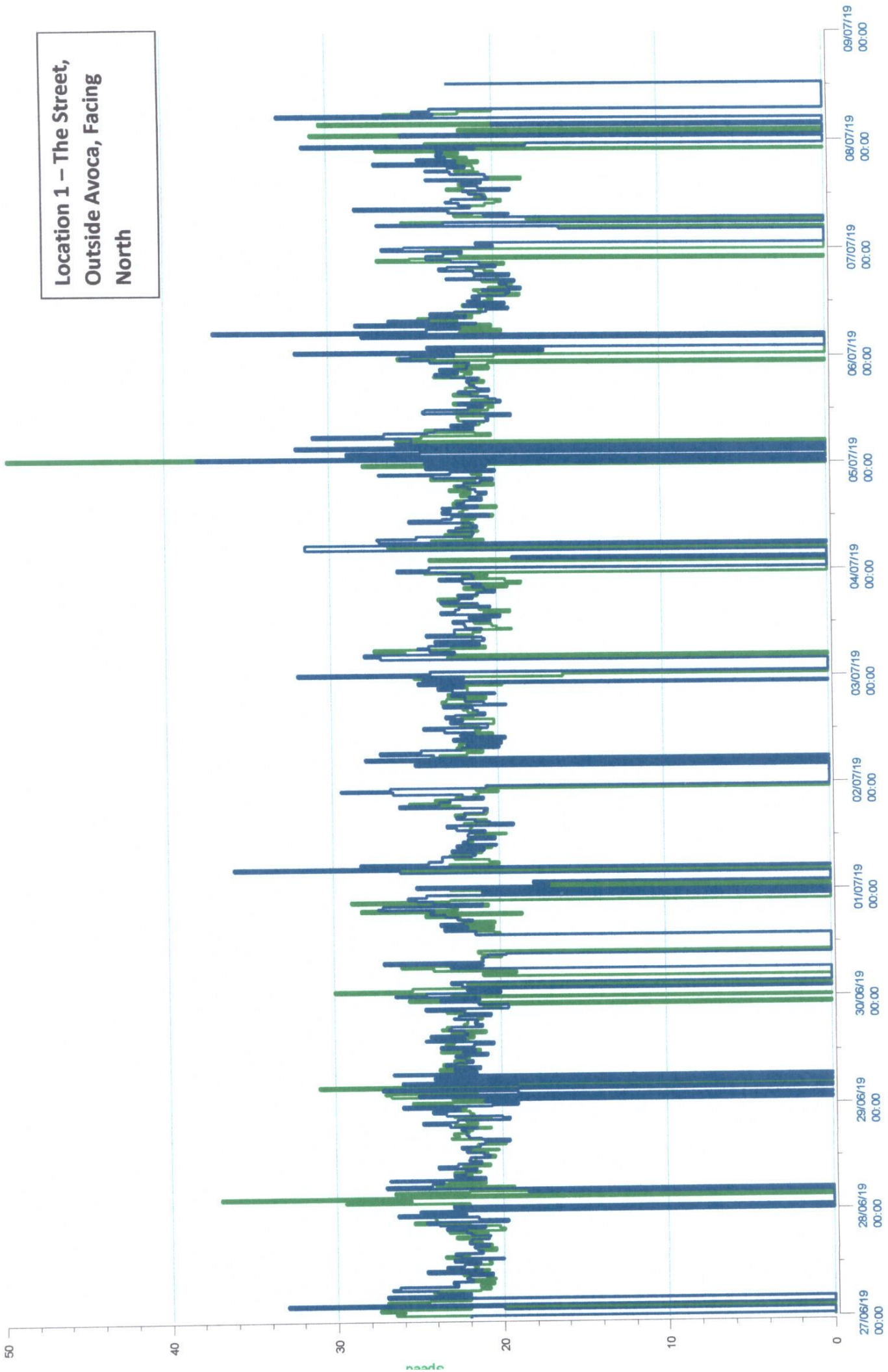
Location 1 – The Street,
Outside Avoca, Facing
South

Outgoing vehicles

- <= 30 Mph : 4,926 - (91.71 %)
- 31 - 35 Mph : 386 - (7.19 %)
- 36 - 40 Mph : 50 - (0.93 %)
- 41 - 45 Mph : 8 - (0.15 %)
- 46 - 65 Mph (et +) : 1 - (0.02 %)

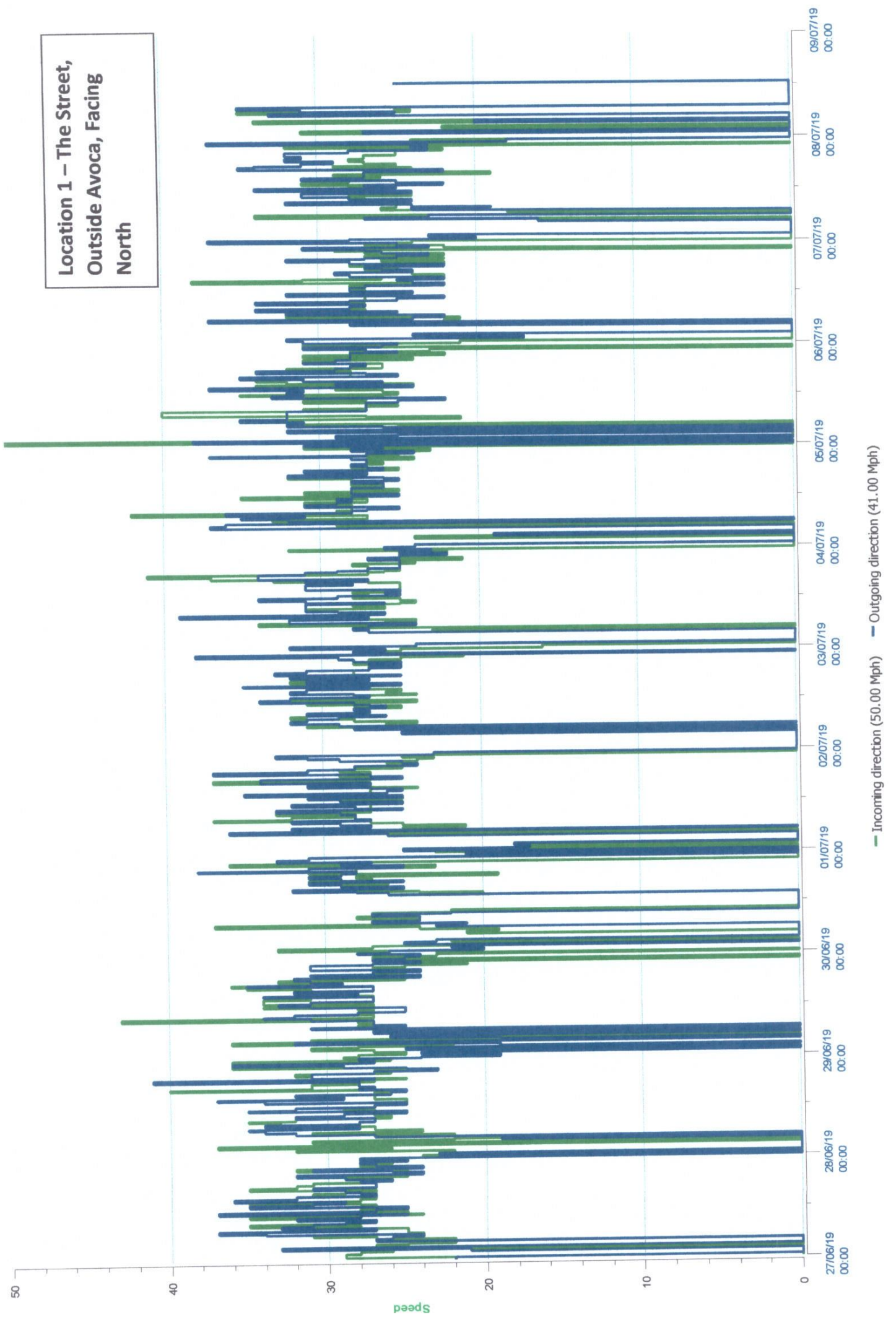


Location 1 – The Street,
Outside Avoca, Facing
North



— Incoming direction (21.68 Mph) — Outgoing direction (21.96 Mph)

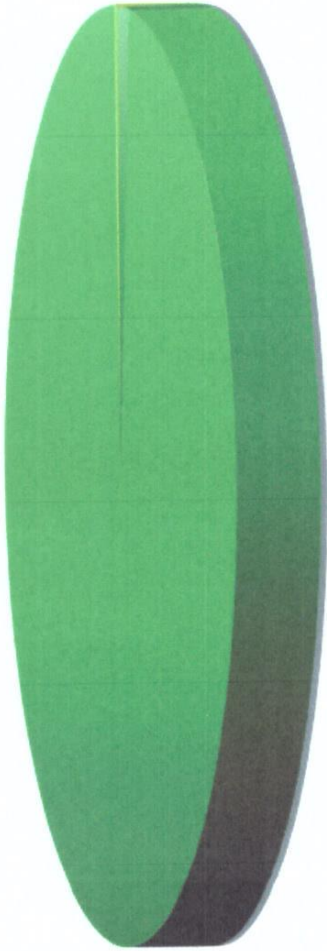
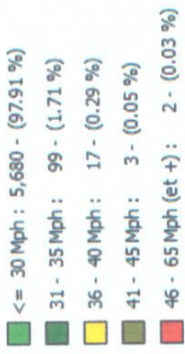
Location 1 – The Street,
Outside Avoca, Facing
North



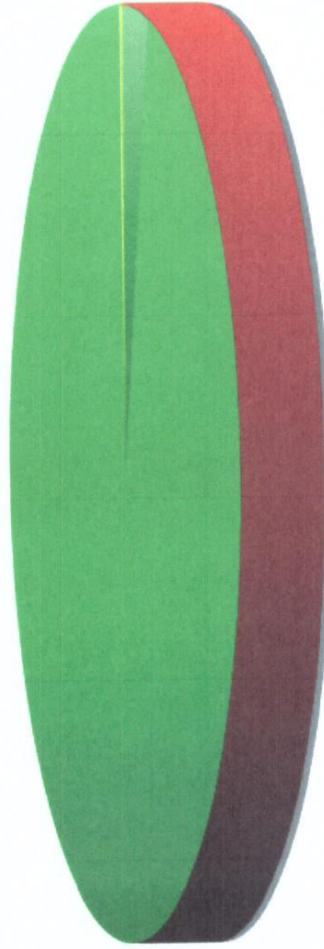
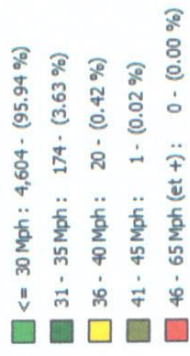
Vehicles distribution among velocity range

Location 1 – The Street,
Outside Avoca, Facing
North

Incoming vehicles



Outgoing vehicles



35

30

25

20

15

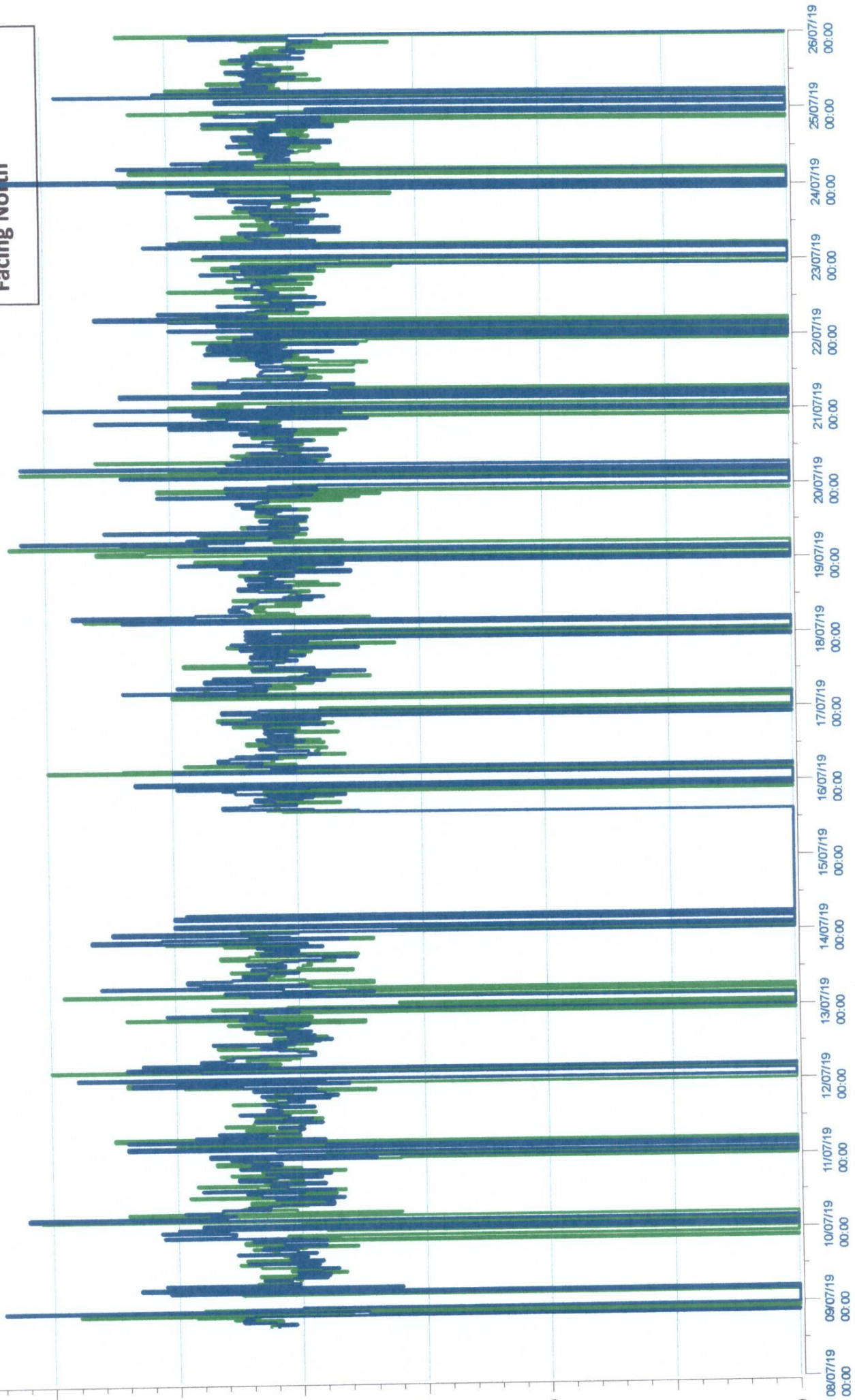
10

5

0

speed

Location 2 – The Street,
Outside The Shop,
Facing North



— Incoming direction (20.81 Mph) — Outgoing direction (21.07 Mph)

50

40

30

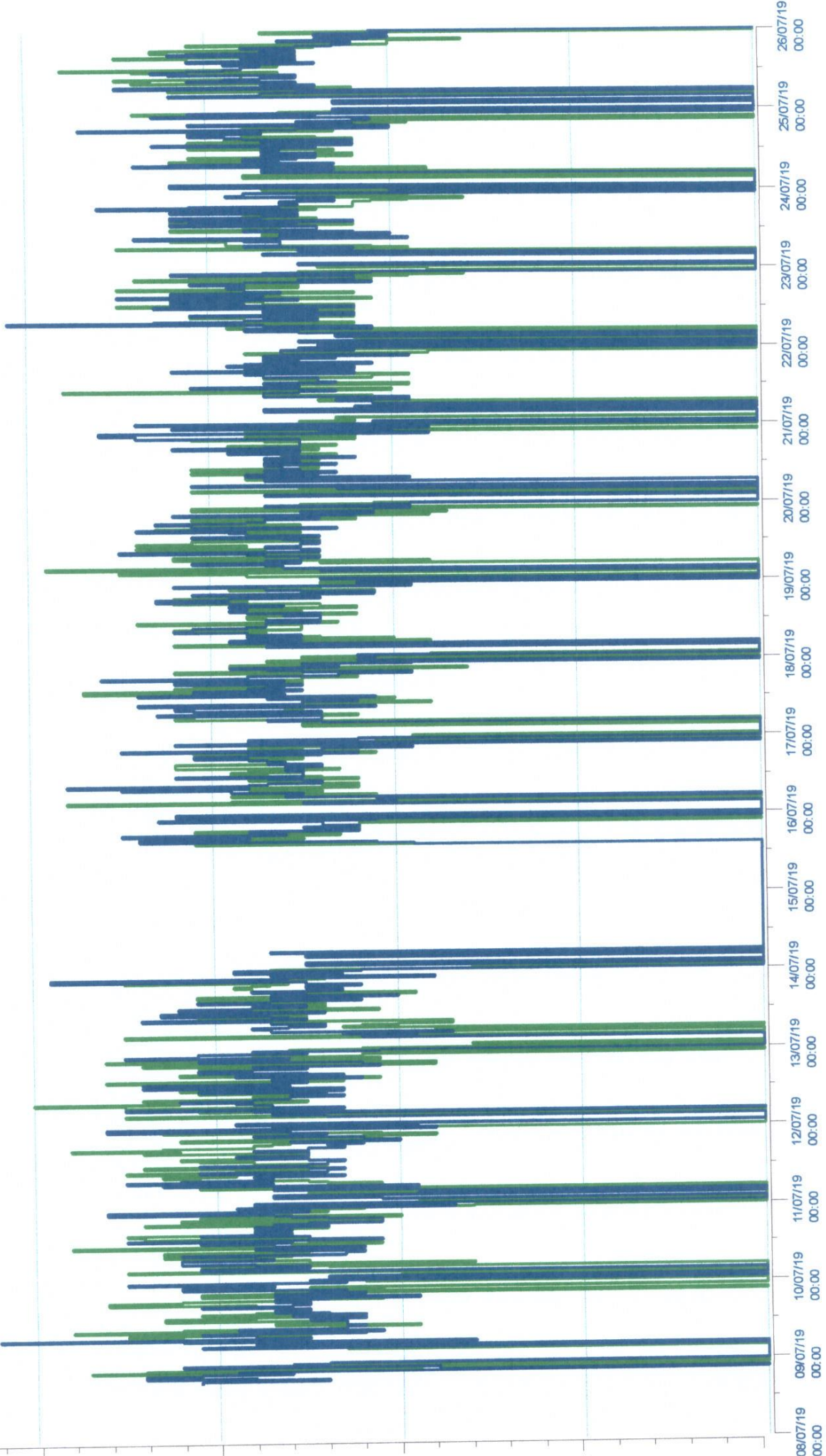
20

10

0

Speed

Location 2 – The Street,
Outside The Shop,
Facing North

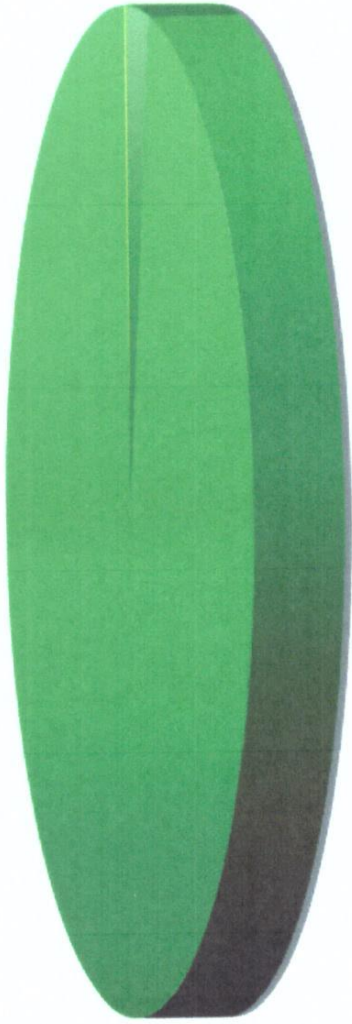
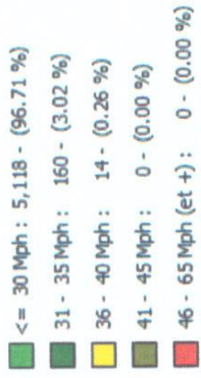


— Incoming direction (40.00 Mph) — Outgoing direction (42.00 Mph)

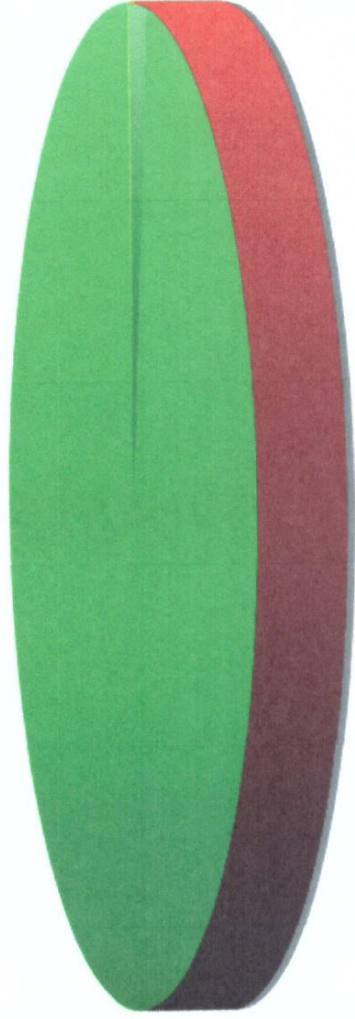
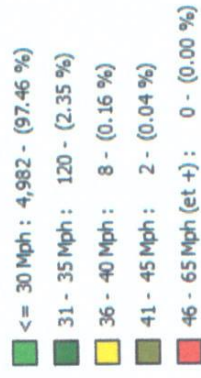
Vehicles distribution among velocity range

Location 1 - The Street,
Outside The Shop,
Facing North

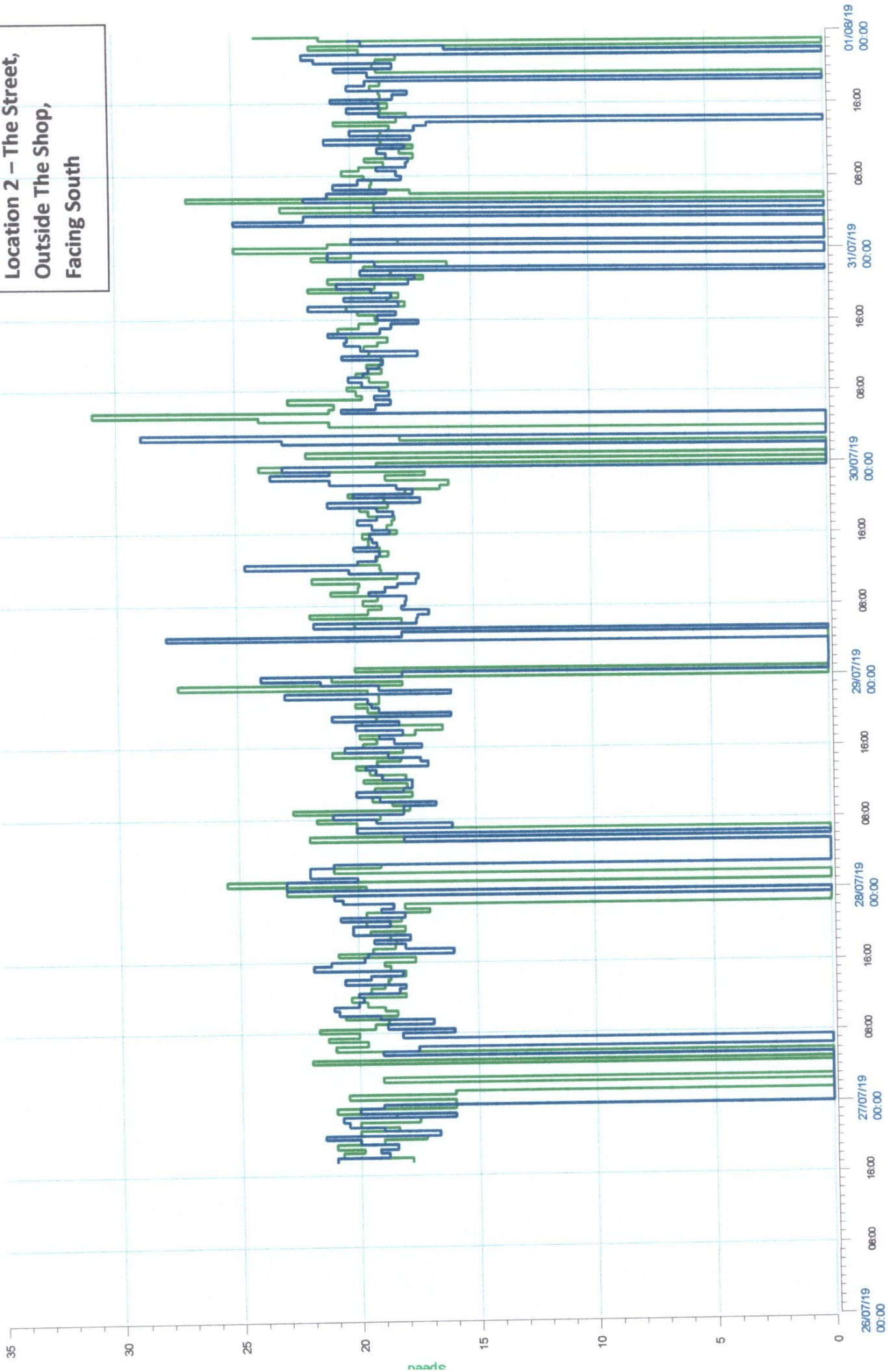
Incoming vehicles



Outgoing vehicles

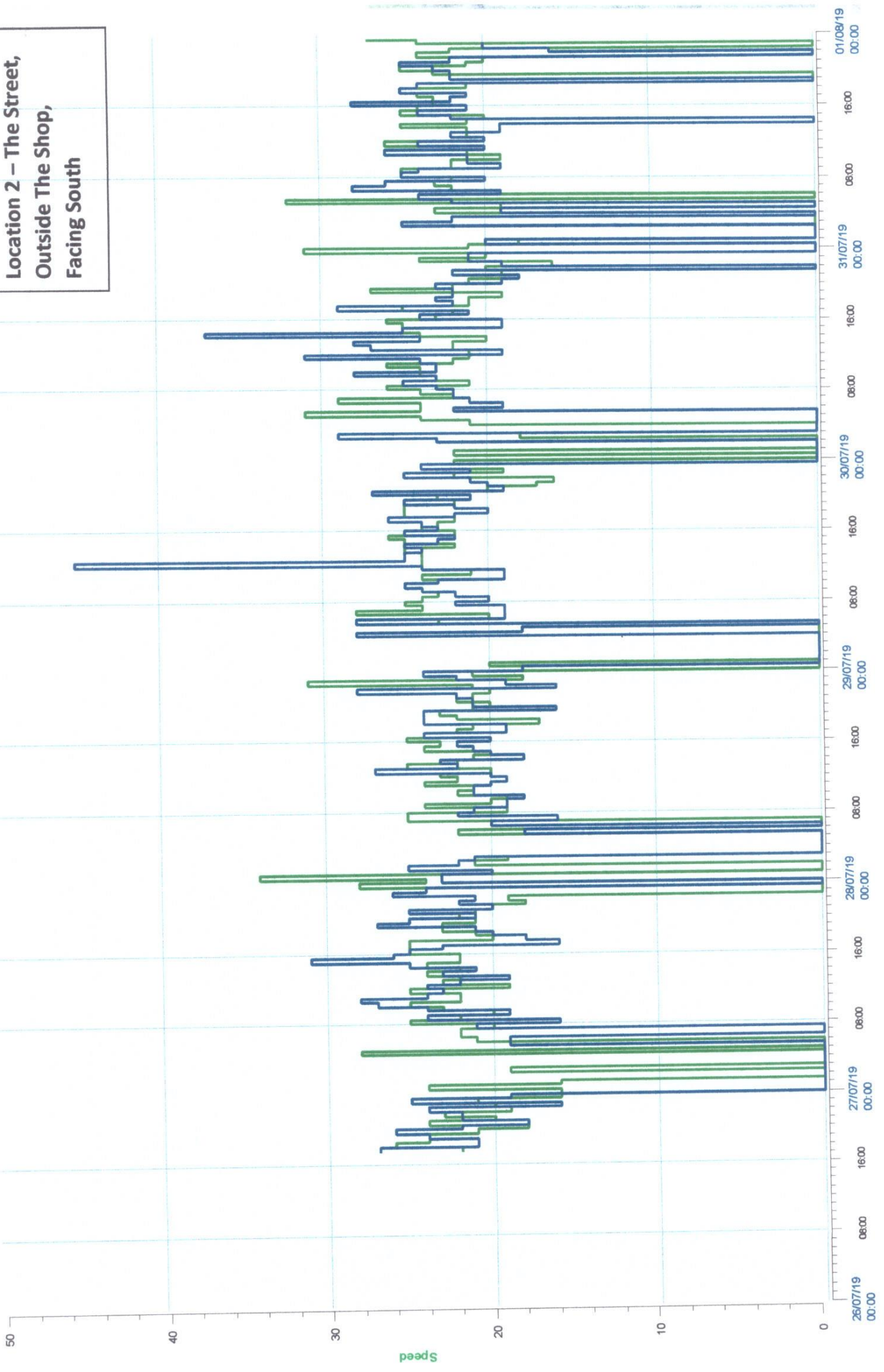


Location 2 – The Street,
Outside The Shop,
Facing South



— Incoming direction (19.20 Mph) — Outgoing direction (19.16 Mph)

Location 2 – The Street,
Outside The Shop,
Facing South

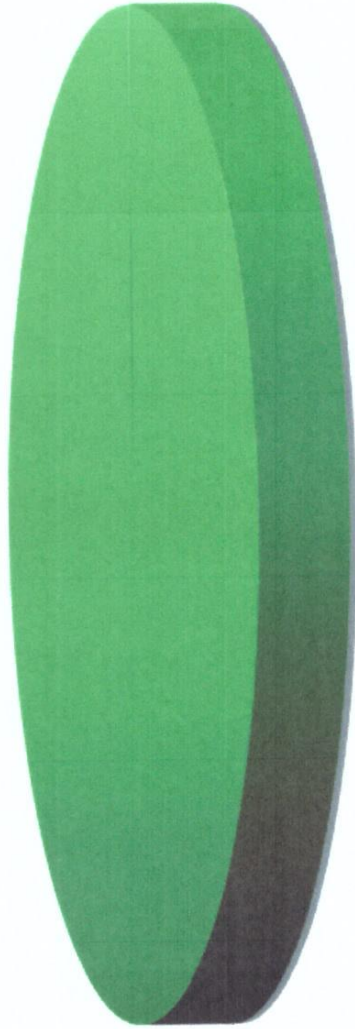
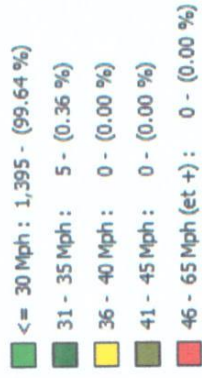


— Incoming direction (34.00 Mph) — Outgoing direction (45.00 Mph)

**Location 2 – The Street,
Outside The Shop,
Facing South**

Vehicles distribution among velocity range

Incoming vehicles



Outgoing vehicles

