

Report of the Strategic Director Place to the meeting of Shipley Area Committee to be held on 6th March 2024.

V

Subject:

Petition regarding traffic speed and volumes on Avondale Road, Shipley.

Summary statement:

A petition has been received regarding the speed and volume of traffic on Avondale Road, Shipley, with concerns being expressed regarding careless and dangerous driving. Petitioners' request restrictions on the volume and speed of traffic (particularly HGV access) with a view to improving the safety of residents and pedestrians and mitigating environmental pollution.

EQUALITY & DIVERSITY:

The Shipley Traffic Team provides a diverse range of road safety schemes and activities that engage with individuals across the Shipley constituency.

In formulating the options proposed in this report, due regard has been given to the Council's duty under s149 of the Equality Act 2010.

David Shepherd
Director (Place)

Portfolio:

Regeneration, Planning & Transport

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Overview & Scrutiny Area:

Regeneration & Environment

1. SUMMARY

- 1.1 This report relates to a petition regarding the concerns of signatories with the speed and volume of traffic travelling along Avondale Road, Shipley.
- 1.2 The petition's front page is shown within Appendix 1 of this report.

2. BACKGROUND

- 2.1 In September 2023, the Council received a 204-signature e-petition regarding concerns with the speed and volume of traffic using Avondale Road, Shipley.
- 2.2 Avondale Road is a 1 km long residential street adjoining A650 Bradford Road, and Moorhead Lane, and provides vehicular access to/from the southern end of Grosvenor Road and eastern end of Lindisfarne Road. A650 Bradford Road at the eastern end of Avondale Road is a main arterial route to Bingley (northwest-bound) and Bradford (southeast-bound). The northern end of Moorhead Lane has its signalised junction with A650 Bingley Road.
- 2.3 The carriageway width on Avondale Road is approximately 7.3 metres along its entire length, with the respective widths of the northern and southern footways (where existing) being between 1.65 and 1.8 metres, and 1.65 and 2.0 metres. The entire northern side of Avondale Road comprises residential properties. There is no footway and residential properties on the southern side of Avondale Road from a point 50 metres west of its junction with Grosvenor Road for a distance of 460 metres in an easterly direction (that particular length comprising grass verge).
- 2.4 Avondale Road is subject to a 20mph speed limit; the road being subject to a series of strategically placed round top road humps and painted 20mph carriageway roundels with a view to these measures helping to ensure driver compliance with the 20mph speed limit. The street has a system of street lighting.
- 2.5 A plan identifying the extents of Avondale Road is shown within Appendix 2 of this report.
- 2.6 Although most properties fronting Avondale Road have off-street parking provision, some residents choose to park on-street due to insufficient off-street parking availability to accommodate car ownership levels, or due to simple preference. As such, some parking occurs on sections of one or both sides of Avondale Road at all times.
- 2.7 On-street parking on the southern side of Avondale Road directly adjacent to the 460-metre-long grass verge was minimal at those times that site visits were undertaking in the course of drafting this report.
- 2.8 The on-street parking that does occur effectively reduces available carriageway width, helping to reduce traffic speeds.

3. OTHER CONSIDERATIONS

- 3.1 Excluding its junctions with A650 Bradford Road and Moorhead Lane, Council records show that no traffic collisions resulting in personal injury have occurred on Avondale Road during the five-year period ending 17th November 2023 (the latest five-year period for which Council records are available).
- 3.2 A manual classified survey of traffic volumes on Avondale Road was carried out on Wednesday 31st January 2024 between 07:00 and 19:00. The tabulated results of that survey are shown within Appendix 3 of this report, with elements of those tabulated results being shown in diagrammatic form within Appendix 4.
- 3.3 In compiling this report, speed data was obtained by installing four data loggers at various locations along Avondale Road. Details regarding the siting of the data loggers is given within Appendix 2. The data loggers recorded traffic speeds for both directions of travel, and speed survey details are shown within Appendix 5.
- 3.4 The petition requests restrictions on the volume of traffic (particularly HGV access) and states that*'Avondale Road is used as a short cut by cars, vans and HGVs'*. However, the manual classified survey results (Appendices 3 & 4 refer) show HGV volumes recorded on Avondale Road during the survey period to be minimal in relation to the overall volume of traffic monitored.
- 3.5 Highways officers consider that prohibiting HGVs from accessing Avondale Road would be inappropriate having regard to the very low volumes of HGV traffic identified during the manual classified survey. Nor is the road's width, gradient and alignment considered unsuitable as regards accommodating current HGV traffic volumes – the road characteristics and HGV volumes lending themselves to the officer belief that a HGV restriction on environmental grounds is not required.
- 3.6 Highways officers also consider the provision of an 'Access Only' Order on Avondale Road regarding non-HGV traffic inappropriate, due to Avondale Road helping to relieve the pressure on the signalised junction at the northern end of Moorhead Lane where it adjoins A650 Bingley Road. Restricting traffic from accessing Avondale Road would likely result in much of that traffic utilising the signalised junction. Accommodating that extra traffic could potentially have a detrimental effect on traffic management regarding through-flows on each arm of the signalised junction and their effect on overall junction capacity.
- 3.7 The request for additional vertical traffic calming measures on Avondale Road (at a cost of £10,000) has, since 2019/20, been included within that list of scheme candidates considered annually by this Committee for possible inclusion within its Safer Roads Programme. Avondale Road has also been included as a scheme candidate since 2022/23 regarding the provision of two vehicle activated signs (VAS) along its length (at a cost of £8,000).
- 3.8 To date, neither request has been included within the Safer Roads Programme, but the request for additional vertical traffic calming features and two VAS units will be reconsidered for possible inclusion (as Locally Determined Schemes) within this

- 3.9 Elected Members for Shipley have been advised of the petition and fully support the concerns of the residents of Avondale Road, trusting that this Committee will do all it can to implement measures that address the traffic issues raised by the petition.

4. FINANCIAL & RESOURCE APPRAISAL

- 4.1 The cost of measures to address vehicle speeds on Avondale Road would be in the region of £10,000 for traffic calming, and £8,000 for two Vehicle Activated Signs.
- 4.2 Prohibiting HGVs (except for access) on Avondale Road would require promoting a Traffic Regulation Order at a cost of £12,000.

5. RISK MANAGEMENT AND GOVERNANCE ISSUES

- 5.1 There are no significant risks arising out of this report's proposed recommendations.

6. LEGAL APPRAISAL

- 6.1 The proposals in this report are within the Council's powers as Highway Authority under the terms of the Road Traffic Regulation Act 1984.

7. OTHER IMPLICATIONS

7.1 SUSTAINABILITY IMPLICATIONS

None.

7.2 TACKLING THE CLIMATE EMERGENCY IMPLICATIONS

There are no impacts associated with this report.

7.3 COMMUNITY SAFETY IMPLICATIONS

This Committee's Safer Roads Programme delivers a wide range of projects including traffic calming schemes and traffic regulation Orders. Such measures, along with partnership activities, form part of improving safety in local communities.

7.4 HUMAN RIGHTS ACT

There are no implications for the Human Rights Act arising from this report.

7.5 TRADE UNION

There are no trade union implications.

7.6 WARD IMPLICATIONS

Avondale Road is located within the Shipley Ward. Respective Ward members would be involved in the development of any site-specific projects arising from this report.

7.7 AREA COMMITTEE ACTION PLAN IMPLICATIONS

None

7.8 IMPLICATIONS FOR CORPORATE PARENTING

None.

7.9 ISSUES ARISING FROM PRIVACY IMPACT ASSESSMENT

None.

8. NOT FOR PUBLICATION DOCUMENTS

None.

9. OPTIONS

9.1 Option 1 - That:

- This Committee notes the petitioners' concerns and recommends no further action other than:

- Avondale Road remaining on the list of scheme candidates to be considered annually by this Committee for possible inclusion within its future Safer Roads Programme.

- West Yorkshire Police be formally advised of the petitioners' concerns regarding speeding on Avondale Road.

- The lead petitioner be advised accordingly.

9.2 Option 2 – That:

- Members may prefer to take a course of action other than that indicated in the above options or the recommendations, in which case they will receive appropriate guidance from officers.

10 RECOMMENDATIONS

Recommended –

10.1 Option 1 - That:

- This Committee notes the petitioners' concerns and recommends no further action other than:
 - Avondale Road remaining on the list of scheme candidates to be considered annually by this Committee for possible inclusion within its future Safer Roads Programme.
 - West Yorkshire Police be formally advised of the petitioners' concerns regarding speeding on Avondale Road.
- The lead petitioner be advised accordingly.

11. APPENDICES

- Appendix 1 - The petition's front page
- Appendix 2 - Location plan identifying Avondale Road and the location of the data loggers used for the traffic speed survey.
- Appendix 3 – Manual classified data sheets
- Appendix 4 – Diagrammatic representation of some of the data shown within Appendix 3
- Appendix 5 – Data logger results

12. BACKGROUND DOCUMENTS

Report of the Strategic Director Place, to the meeting of Shipley Area Committee held on 2 August 2023 Safe Roads Programme 2023/24

We the undersigned petition the council to restrict and calm the road traffic on Avondale Road BD18 4QZ.

Avondale Road is used as a short cut by cars, vans and HGV. Drivers; speed above the 20MPH. restriction; drive carelessly and dangerously (a hit and run accident recently occurred and was recorded on webcam and forwarded to the police) have damaged residents parked vehicles. We would like the following to be considered restrictions to; the volume of traffic, the speed of vehicles, HGV access. With measures to protect the safety of residents and pedestrians and mitigate the environmental pollution, which is a risk to the health of residents.

This ePetition ran from 04/07/2023 to 28/08/2023 and has now finished.

204 people signed this ePetition.

Manual Classified Survey Results In Table Form.

CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL
Avondale Road Classified Junction Count

TRAFFIC UNIT
Date: Wednesday 31/01/2024

Weather: Dry/Cold

Onto Avondale from Bradford Road

| TIME | Pedal Cycles | M/C's Scooters Moped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------|-------------|
| 0700-0730 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 16 |
| 0730-0800 | 0 | 0 | 107 | 0 | 1 | 0 | 0 | 108 |
| 0800-0830 | 0 | 0 | 67 | 0 | 0 | 0 | 0 | 67 |
| 0830-0900 | 0 | 0 | 55 | 1 | 1 | 0 | 0 | 57 |
| 0900-0930 | 0 | 0 | 46 | 0 | 0 | 0 | 1 | 47 |
| 0930-1000 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 36 |
| 1000-1030 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 32 |
| 1030-1100 | 0 | 0 | 31 | 1 | 0 | 0 | 0 | 32 |
| 1100-1130 | 0 | 0 | 53 | 1 | 0 | 0 | 0 | 54 |
| 1130-1200 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 35 |
| 1200-1230 | 0 | 0 | 54 | 2 | 0 | 0 | 0 | 56 |
| 1230-1300 | 0 | 0 | 57 | 0 | 0 | 0 | 0 | 57 |
| 1300-1330 | 0 | 0 | 42 | 0 | 0 | 0 | 0 | 42 |
| 1330-1400 | 0 | 0 | 39 | 1 | 0 | 0 | 0 | 40 |
| 1400-1430 | 0 | 0 | 57 | 0 | 0 | 1 | 2 | 60 |
| 1430-1500 | 0 | 0 | 113 | 0 | 0 | 0 | 0 | 113 |
| 1500-1530 | 0 | 0 | 112 | 1 | 0 | 0 | 0 | 113 |
| 1530-1600 | 0 | 0 | 98 | 3 | 0 | 0 | 0 | 101 |
| 1600-1630 | 0 | 0 | 140 | 2 | 0 | 0 | 1 | 143 |
| 1630-1700 | 1 | 0 | 125 | 1 | 0 | 0 | 0 | 127 |
| 1700-1730 | 0 | 0 | 131 | 0 | 0 | 0 | 0 | 131 |
| 1730-1800 | 0 | 0 | 129 | 0 | 0 | 0 | 0 | 129 |
| 1800-1830 | 0 | 0 | 134 | 0 | 0 | 0 | 0 | 134 |
| 1830-1900 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 80 |
| TOTAL | 1 | 1 | 1789 | 13 | 2 | 1 | 4 | 1811 |

Onto Bradford Road from Avondale

| TIME | Pedal Cycles | M/C's Scooters Moped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------|-------------|
| 0700-0730 | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 37 |
| 0730-0800 | 0 | 0 | 91 | 0 | 0 | 0 | 0 | 91 |
| 0800-0830 | 0 | 0 | 111 | 1 | 0 | 0 | 0 | 112 |
| 0830-0900 | 0 | 0 | 98 | 0 | 0 | 0 | 0 | 98 |
| 0900-0930 | 0 | 0 | 86 | 0 | 0 | 0 | 0 | 86 |
| 0930-1000 | 0 | 0 | 56 | 0 | 0 | 0 | 2 | 58 |
| 1000-1030 | 0 | 0 | 41 | 0 | 0 | 0 | 0 | 41 |
| 1030-1100 | 0 | 0 | 42 | 1 | 0 | 0 | 0 | 43 |
| 1100-1130 | 0 | 0 | 31 | 1 | 0 | 0 | 0 | 32 |
| 1130-1200 | 0 | 0 | 38 | 0 | 1 | 0 | 0 | 39 |
| 1200-1230 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 39 |
| 1230-1300 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 38 |
| 1300-1330 | 0 | 0 | 35 | 1 | 0 | 0 | 0 | 36 |
| 1330-1400 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 33 |
| 1400-1430 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 27 |
| 1430-1500 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 37 |
| 1500-1530 | 0 | 0 | 71 | 1 | 0 | 0 | 0 | 72 |
| 1530-1600 | 0 | 0 | 85 | 0 | 0 | 0 | 2 | 87 |
| 1600-1630 | 1 | 0 | 77 | 1 | 0 | 0 | 0 | 79 |
| 1630-1700 | 0 | 1 | 78 | 0 | 0 | 0 | 0 | 79 |
| 1700-1730 | 0 | 0 | 59 | 0 | 0 | 0 | 0 | 59 |
| 1730-1800 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 38 |
| 1800-1830 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 49 |
| 1830-1900 | 0 | 0 | 41 | 0 | 0 | 0 | 0 | 41 |
| TOTAL | 2 | 1 | 1337 | 6 | 1 | 0 | 5 | 1352 |

onto Avondale Road from Marlborough

| TIME | Pedal Cycles | M/C's Scooters Mopped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|-----------------------|-------------------|-------------------|-------------------|--------------------|---------------|------------|
| 0700-0730 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| 0730-0800 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| 0800-0830 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 0830-0900 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 0900-0930 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 0930-1000 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 3 |
| 1000-1030 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1030-1100 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1100-1130 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1130-1200 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1200-1230 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1230-1300 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1300-1330 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1330-1400 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1400-1430 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1430-1500 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1500-1530 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1530-1600 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| 1600-1630 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1630-1700 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1700-1730 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1730-1800 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| 1800-1830 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 |
| 1830-1900 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| TOTAL | 0 | 0 | 83 | 1 | 0 | 0 | 0 | 84 |

onto Marlborough from Avondale Rd

| TIME | Pedal Cycles | M/C's Scooters Mopped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|-----------------------|-------------------|-------------------|-------------------|--------------------|---------------|------------|
| 0700-0730 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 0730-0800 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| 0800-0830 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 38 |
| 0830-0900 | 0 | 0 | 31 | 0 | 0 | 0 | 0 | 31 |
| 0900-0930 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 14 |
| 0930-1000 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 8 |
| 1000-1030 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1030-1100 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1100-1130 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1130-1200 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 |
| 1200-1230 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1230-1300 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 3 |
| 1300-1330 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 7 |
| 1330-1400 | 0 | 0 | 6 | 1 | 0 | 0 | 0 | 7 |
| 1400-1430 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1430-1500 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1500-1530 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| 1530-1600 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| 1600-1630 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 12 |
| 1630-1700 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| 1700-1730 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| 1730-1800 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1800-1830 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| 1830-1900 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| TOTAL | 2 | 0 | 203 | 1 | 0 | 0 | 1 | 207 |

Right onto Avondale Rd From Grosvnor Rd

| TIME | Pedal Cycles | M/C's Scooters Mopped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|-----------------------|-------------------|-------------------|-------------------|--------------------|---------------|------------|
| 0700-0730 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 |
| 0730-0800 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 |
| 0800-0830 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 11 |
| 0830-0900 | 1 | 0 | 18 | 0 | 0 | 0 | 0 | 19 |
| 0900-0930 | 0 | 0 | 15 | 0 | 0 | 0 | 1 | 15 |
| 0930-1000 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| 1000-1030 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 12 |
| 1030-1100 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1100-1130 | 0 | 0 | 5 | 1 | 0 | 0 | 0 | 6 |
| 1130-1200 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 16 |
| 1200-1230 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 17 |
| 1230-1300 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| 1300-1330 | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 10 |
| 1330-1400 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 4 |
| 1400-1430 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 11 |
| 1430-1500 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 16 |
| 1500-1530 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 27 |
| 1530-1600 | 0 | 0 | 19 | 0 | 0 | 1 | 0 | 20 |
| 1600-1630 | 1 | 0 | 32 | 0 | 0 | 0 | 0 | 33 |
| 1630-1700 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 28 |
| 1700-1730 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 27 |
| 1730-1800 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 17 |
| 1800-1830 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 |
| 1830-1900 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 13 |
| TOTAL | 2 | 0 | 359 | 2 | 0 | 1 | 2 | 364 |

Left onto Avondale from Grosvnor Rd

| TIME | Pedal Cycles | M/C's Scooters Mopped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|-----------------------|-------------------|-------------------|-------------------|--------------------|---------------|------------|
| 0700-0730 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 0730-0800 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 0800-0830 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 0830-0900 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 0900-0930 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 0930-1000 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1000-1030 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1030-1100 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 3 |
| 1100-1130 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1130-1200 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1200-1230 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1230-1300 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1300-1330 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1330-1400 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1400-1430 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1430-1500 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1500-1530 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1530-1600 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| 1600-1630 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| 1630-1700 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1700-1730 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1730-1800 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1800-1830 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1830-1900 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 64 | 0 | 0 | 1 | 0 | 65 |

Right onto Grosvenor Rd From Avondale Rd

| TIME | Pedal Cycles | M/C's Scooters Moped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------|------------|
| 0700-0730 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| 0730-0800 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 32 |
| 0800-0830 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 30 |
| 0830-0900 | 0 | 0 | 69 | 0 | 1 | 0 | 0 | 70 |
| 0900-0930 | 0 | 0 | 22 | 0 | 0 | 0 | 1 | 23 |
| 0930-1000 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 10 |
| 1000-1030 | 0 | 0 | 15 | 1 | 0 | 0 | 0 | 16 |
| 1030-1100 | 0 | 0 | 5 | 0 | 0 | 1 | 0 | 6 |
| 1100-1130 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| 1130-1200 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 |
| 1200-1230 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 9 |
| 1230-1300 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 |
| 1300-1330 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| 1330-1400 | 1 | 0 | 15 | 0 | 0 | 0 | 0 | 16 |
| 1400-1430 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 9 |
| 1430-1500 | 0 | 0 | 15 | 0 | 0 | 0 | 1 | 15 |
| 1500-1530 | 1 | 0 | 16 | 0 | 0 | 0 | 0 | 17 |
| 1530-1600 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 22 |
| 1600-1630 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 24 |
| 1630-1700 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 14 |
| 1700-1730 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 21 |
| 1730-1800 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 12 |
| 1800-1830 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 17 |
| 1830-1900 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| TOTAL | 2 | 0 | 400 | 3 | 1 | 1 | 2 | 408 |

Left onto Grosvenor Rd from Avondale Rd

| TIME | Pedal Cycles | M/C's Scooters Moped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------|------------|
| 0700-0730 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 0730-0800 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 0800-0830 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 0830-0900 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 |
| 0900-0930 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 0930-1000 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1000-1030 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1030-1100 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1100-1130 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1130-1200 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 1200-1230 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1230-1300 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1300-1330 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1330-1400 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1400-1430 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1430-1500 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 |
| 1500-1530 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 1530-1600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1600-1630 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1630-1700 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 9 |
| 1700-1730 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 |
| 1730-1800 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| 1800-1830 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 5 |
| 1830-1900 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| TOTAL | 0 | 0 | 78 | 0 | 0 | 0 | 0 | 78 |

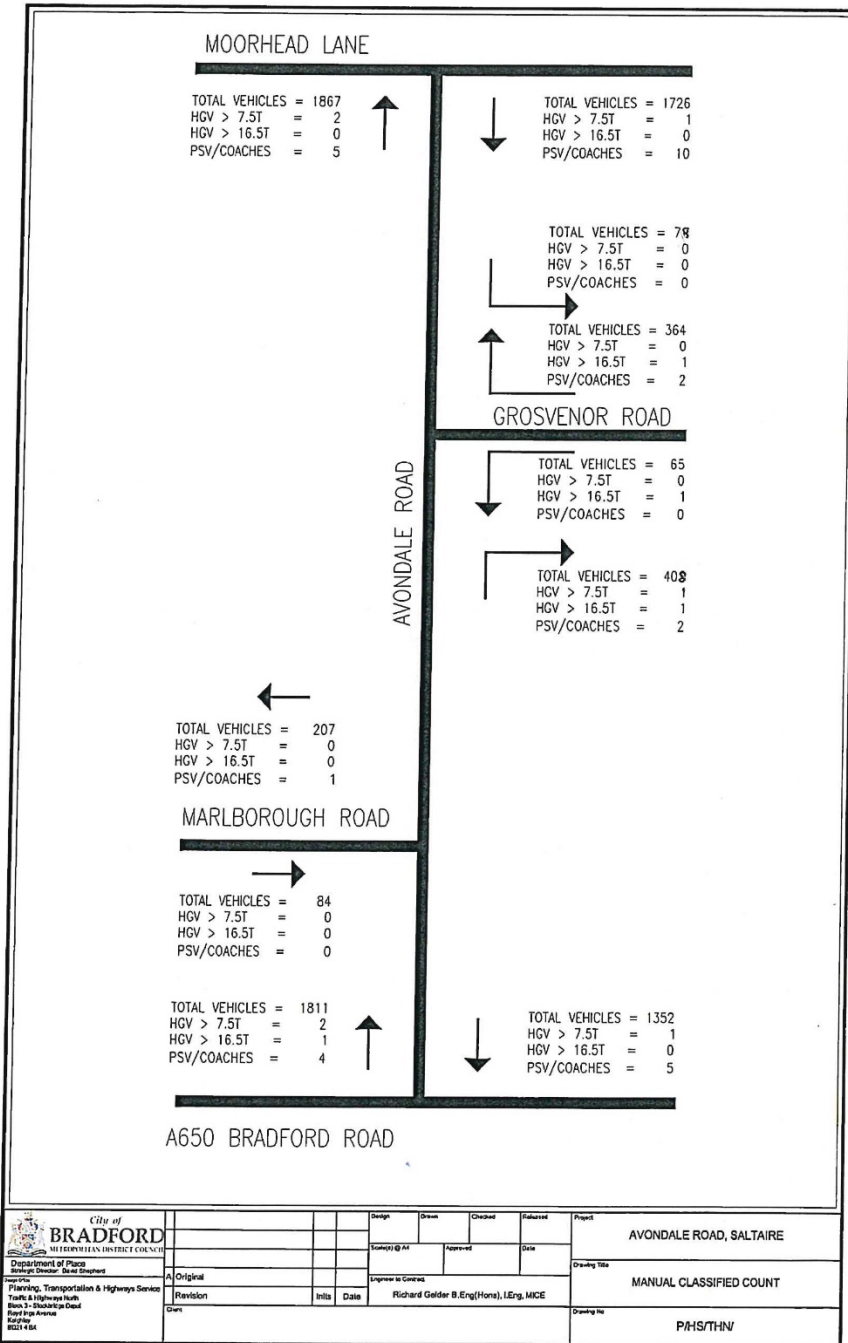
onto Moorhead Ln from Avondale Rd

| TIME | Pedal Cycles | M/C's Scooters Moped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------|-------------|
| 0700-0730 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 18 |
| 0730-0800 | 0 | 0 | 114 | 1 | 1 | 0 | 0 | 116 |
| 0800-0830 | 0 | 0 | 91 | 0 | 0 | 0 | 0 | 91 |
| 0830-0900 | 1 | 0 | 63 | 3 | 0 | 0 | 0 | 67 |
| 0900-0930 | 0 | 0 | 54 | 1 | 0 | 0 | 2 | 57 |
| 0930-1000 | 0 | 0 | 41 | 0 | 0 | 0 | 0 | 41 |
| 1000-1030 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 32 |
| 1030-1100 | 0 | 0 | 28 | 2 | 0 | 0 | 0 | 30 |
| 1100-1130 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 35 |
| 1130-1200 | 0 | 0 | 54 | 0 | 0 | 0 | 0 | 54 |
| 1200-1230 | 0 | 0 | 52 | 1 | 0 | 0 | 0 | 53 |
| 1230-1300 | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 48 |
| 1300-1330 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 39 |
| 1330-1400 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 33 |
| 1400-1430 | 0 | 0 | 44 | 0 | 0 | 0 | 0 | 44 |
| 1430-1500 | 0 | 0 | 102 | 1 | 0 | 0 | 0 | 103 |
| 1500-1530 | 0 | 0 | 125 | 2 | 0 | 0 | 0 | 127 |
| 1530-1600 | 0 | 0 | 98 | 1 | 1 | 0 | 0 | 100 |
| 1600-1630 | 1 | 0 | 150 | 0 | 0 | 0 | 1 | 151 |
| 1630-1700 | 0 | 1 | 131 | 2 | 0 | 0 | 2 | 134 |
| 1700-1730 | 0 | 0 | 154 | 0 | 0 | 0 | 0 | 154 |
| 1730-1800 | 0 | 0 | 145 | 2 | 0 | 0 | 0 | 147 |
| 1800-1830 | 0 | 0 | 110 | 1 | 0 | 0 | 0 | 111 |
| 1830-1900 | 0 | 0 | 82 | 0 | 0 | 0 | 0 | 82 |
| TOTAL | 2 | 1 | 1843 | 17 | 2 | 0 | 5 | 1867 |

onto Avondale from Moorhead Ln

| TIME | Pedal Cycles | M/C's Scooters Moped | Cars & Light Vans | GV Under 7.5 Tons | HGV Over 7.5 Tons | HGV Over 16.5 Tons | PSV & Coaches | Total Vehs |
|--------------|--------------|----------------------|-------------------|-------------------|-------------------|--------------------|---------------|-------------|
| 0700-0730 | 0 | 0 | 35 | 1 | 0 | 0 | 0 | 36 |
| 0730-0800 | 0 | 0 | 101 | 0 | 0 | 0 | 0 | 101 |
| 0800-0830 | 0 | 0 | 185 | 1 | 0 | 0 | 0 | 186 |
| 0830-0900 | 0 | 0 | 194 | 3 | 0 | 0 | 0 | 197 |
| 0900-0930 | 0 | 0 | 111 | 2 | 0 | 0 | 2 | 115 |
| 0930-1000 | 0 | 0 | 56 | 2 | 0 | 0 | 3 | 61 |
| 1000-1030 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 47 |
| 1030-1100 | 0 | 0 | 40 | 2 | 1 | 0 | 0 | 43 |
| 1100-1130 | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 48 |
| 1130-1200 | 0 | 0 | 41 | 0 | 0 | 0 | 0 | 41 |
| 1200-1230 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 43 |
| 1230-1300 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 35 |
| 1300-1330 | 0 | 0 | 43 | 1 | 0 | 0 | 0 | 44 |
| 1330-1400 | 1 | 0 | 36 | 0 | 0 | 0 | 0 | 37 |
| 1400-1430 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 26 |
| 1430-1500 | 0 | 0 | 49 | 0 | 0 | 0 | 2 | 51 |
| 1500-1530 | 1 | 0 | 82 | 1 | 0 | 0 | 0 | 84 |
| 1530-1600 | 0 | 0 | 105 | 1 | 0 | 0 | 3 | 109 |
| 1600-1630 | 1 | 0 | 100 | 1 | 0 | 0 | 0 | 102 |
| 1630-1700 | 1 | 0 | 92 | 1 | 0 | 0 | 0 | 94 |
| 1700-1730 | 0 | 0 | 87 | 0 | 0 | 0 | 0 | 87 |
| 1730-1800 | 1 | 1 | 39 | 0 | 0 | 0 | 0 | 41 |
| 1800-1830 | 2 | 0 | 59 | 0 | 0 | 0 | 0 | 61 |
| 1830-1900 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 37 |
| TOTAL | 7 | 1 | 1691 | 16 | 1 | 0 | 10 | 1726 |

Manual Classified Survey Results In Diagrammatic Form



Data Logger Speed Survey Results

| | Location | Direction data logger was facing | Duration that data logger was on-site recording data | Mean speed of east-bound traffic (ie vehicles travelling downhill) | Mean speed of west-bound traffic (ie vehicles travelling uphill) | 85th percentile speed* of east-bound traffic (ie vehicles travelling downhill) | 85th percentile speed* of west-bound traffic* (ie vehicles travelling uphill) |
|-----------------------|---|---|---|---|---|--|---|
| Data Logger #1 | On lighting column no.7 (outside no.63 Avondale Road) | Eastbound (ie. downhill) | 7 th Feb - 16 th Feb 2024 | 21mph | 20mph | 25mph | 24mph |
| Data Logger #2 | On lighting column no.12 (outside nos.42/44 Avondale Road) | Westbound (ie. uphill) | 7 th Feb - 15 th - Feb 2024 | 25mph | 24mph | 29mph | 28mph |
| Data Logger #3 | On lighting column no. 19 (opposite the junction with Grosvenor Road) | Eastbound (ie. downhill) | 16 th Feb - 22 nd Feb 2024 | 22mph | 24mph | 28mph | 29mph |
| Data Logger #4 | On BT pole outside no.102 Avondale Road | Westbound (ie. uphill) | 17 th Feb - 22 nd Feb 2024 | 21mph | 20mph | 25mph | 24mph |

*The 85th percentile speed is the speed at or below which 85 percent of all vehicles are observed to travel under free flow conditions