TGN Construction (Yorkshire) Ltd

155 Wakefield Road, Barnsley

Transport Statement

September 2019



Revision Schedule

155 Wakefield Road, Barnsley

Transport Statement

September 2019
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1 INTRODUCTION

1.1 Instructions

1.1.1 This report is prepared in accordance with instructions from TGN Construction (Yorkshire) Ltd to support an application to vary Conditions 2 and 9 of planning permission Ref. 2008/1700 by Barnsley Metropolitan Borough Council (BMBC) for access arrangements to a residential development on land at 155, Wakefield Road, Barnsley, S71 1NG.

1.1.2 The site was visited by a Chartered Highway and Transportation Engineer from Inspire Design & Development Ltd on Tuesday 2 July 2019.

1.2 Background

Planning History

1.2.1 Planning permission Ref. 2008/1700 was granted by Barnsley Metropolitan Borough Council on 9 July 2009, subject to conditions, those relevant to access arrangements being Conditions 2, 8 and 9, as follows:

2. The development hereby approved shall be carried out in strict accordance with the amended site plan received on the 9th Jan 2009 (Entitled: Proposed Residential Development for TGN Construction (Yorkshire) Ltd – Site Plan Rev A) …….. unless prior written consent has been given by the Local Planning Authority to any minor variation.

8. Development shall not commence until arrangements have been entered into to secure such works to mitigate the highway effects of the development, and such works shall be completed prior to the development being brought into use. Such works shall comprise:- Works in Quarry Street and its junction with Wakefield Road as shown on the approved plan.

9. The egress onto Wakefield Road, as shown on the approved plan (rev. A) shall be closed on or before 1st January 2011, unless otherwise agreed by the Local Planning Authority. Upon commencement of development details of the relocations of the barriers to allow egress onto Carlton Road via Old Road and to prevent egress from Quarry Street onto Wakefield Road shall be submitted to and approved in writing by the Local Planning Authority. The approved scheme shall be implemented immediately following the closure of the egress onto Wakefield Road.

Condition 8 was based on an agreement with the Council that a temporary one-way access arrangement from Carlton Road via Old Road and Quarry Street to Wakefield Road would be acceptable until the Old Road/Carlton Road junction was

modified to improve visibility to the east as required by the conditions of planning permission Ref. B/03/0674/BA relating to Nos 9, 11 and 15 Old Road.

Condition 9 required the replacement of the access arrangements implemented under Condition 8 after the Old Road/Carlton Road junction had been improved by others as required by the conditions of planning permission Ref. B/03/0674/BA and as approved via planning permission Ref. 2008/1333.

1.2.2 At the present time, i.e. 15 years after the grant of planning permission Ref B/03/0674/BA and 10 years after the approval of planning permission Ref. 2008/1333, no start has been made on the Old Road/Carlton Road junction works. Notwithstanding the recent permission Ref. 2019/0212 on 26 April 2019 (effectively for the same junction works as permission Ref. 2008/1333), there appears to be no prospect of these works being carried out in the foreseeable future.

1.2.3 The current situation was discussed at a meeting held on 9 July 2019 at the BMBC Westgate offices and attended by representatives of BMBC Highways, BMBC Planning and Inspire Design & Development Ltd on behalf of TGN Construction (Yorkshire) Ltd. Subsequent to the meeting, BMBC made the following statement:

From our review of the documentation and other nearby consents, our interpretation is the works for the Old Road/Carlton Road junction improvement cannot be implemented based upon the wording of the existing conditions (notably Conditions 8 & 9) and a permanent solution is necessary to access 155 Wakefield Road. Whilst there is a planning consent Ref: 2019/0212, this is not led by BMBC and there is no timescale for its completion. It is understood that land charges have been applied to Numbers 9-15 Old Road, but these cannot be recouped until the properties are sold. Accordingly, we believe that an application to vary the conditions is required, or an entirely fresh planning application with a new red line boundary that includes all the land necessary for access and egress purposes from Carlton Road to Wakefield Road along with an access strategy and supporting documentation, including a Transport Assessment and Stage 1 Road Safety Audit. Any application would be assessed under current standards and criteria.

1.2.4 This Transport Statement provides the necessary support to the application to vary the relevant conditions as suggested by the BMBC statement. It is based on the up-to-date topographical survey and traffic survey described below.

Topographical Survey

1.2.5 The topographical survey was carried by Inspire Design & Development Ltd on 3 August 2019, covering Wakefield Road from Carlton Road to Smithies Lane together with Quarry Street. The survey is attached as Drawing No TGN-1433-01-TS-001 *Topographical Survey*.

Traffic Survey

1.2.6 The traffic survey was carried out by Road Data Services Ltd, on behalf of Inspire Design & Development Ltd, as described below:

- Wakefield Road – 50m north of the Quarry Street junction. ATC measured 24 hour 2-way flows and speeds between Wednesday 14 August 2019 and Tuesday 20 August 2019, inclusive.

1.2.7 The results of the survey are attached at Appendix 1. Although the survey was carried out in the school holidays, the results are considered to be reasonably representative of the traffic situation on Wakefield Road for the purposes of this Transport Statement where only a qualitative assessment is needed and no precise capacity/delay analysis is involved.

1.3 Guidance Documentation

1.3.1 All highway related proposals in this Transport Statement are in line with the recommendations of the South Yorkshire Residential Design Guide published by Transform South Yorkshire in January 2011 and other similar guidance.

1.3.2 The urban nature of the site and the speed of the traffic lends itself to assessment using the Department for Transport publications *Manual for Streets* (MfS1) and *Manual for Streets 2* (MfS2), rather than the *Design Manual for Roads and Bridges* (DMRB).

1.4 Road Safety Audit

1.4.1 A Stage 1 Road Safety Audit, dated 23 September 2019, was carried out by JHB Consulting Ltd – see Appendix 3 - with only one problem identified, as quoted below.

1.4.2 *Problem 1 - Lack of NMU facilities can increase the risk of NMU/vehicle collisions. As part of the scheme no improvements in the form of dropped crossings or tactile paving are shown on the drawings. Where there is an opportunity for NMU/vehicle conflict at junctions suitable dropped crossings and tactile paving should be provided. In addition, a new section of footway is shown on the drawing leading along Quarry Street and no detail is provided where the footway terminates at the development access. A lack of suitable NMU facilities can increase the risk of NMU/vehicle collisions. Recommendation: At detailed design provide dropped crossings and tactile paving at the site access.*

1.4.3 The RSA recommendation is agreed. While considered unnecessary to be shown at the present stage, details of suitable non-motorised user (NMU) facilities will be incorporated as part of the detailed design.

2 EXISTING SITE AND TRANSPORT CONDITIONS

2.1 Site Location and Current Use

2.1.1 As shown on Drawing No TGN-1433-01-GA-001 *Location Plan*, 155 Wakefield Road is located on the east side of the A61, Wakefield Road some 2 km north of Barnsley town centre. Quarry Street forms the southern boundary, while Nos 9, 11, 15 and Karenza, Old Road lie to the east and No 165 Wakefield Road and Nos 7, 9 and 11 Carlton Road lie to the north.

2.1.2 The site is currently vacant and disused. It was previously partially occupied by a house and butchers shop with ancillary accommodation and stabling/paddock, all of which was cleared in preparation for the construction of the development approved under planning permission Ref. 2008/1700.

2.2 Existing Access Provision and Local Network

2.2.1 The main access to the site is from Quarry Street in the south. There is a secondary access point from Wakefield Road at the north-west corner of the site.

2.2.2 The existing highway network is shown on the attached Drawing No TGN-1433-01-HW-001 *Existing Highway Network*.

2.2.3 A61 Wakefield Road is a Principal Street connecting Barnsley town centre to the northern parts of the Borough. Quarry Street is situated on a short length of Wakefield Road, about 150m long, between B6132 Carlton Road to the north and Smithies Lane to the south. Both junctions are controlled by traffic signals. This section of Wakefield Road is 8m to 9m wide and consists of three traffic lanes, with the centre lane accommodating right-turning traffic at each junction. The road falls at a gradient of 1 in 60 towards the south. Wakefield Road is subject to the usual urban speed limit of 30 mph, although, owing to the restrictions imposed by the Smithies Lane traffic signals, the speeds of southbound traffic tend to be lower. There are pedestrian footways between 1.8m and 3m wide on both sides and street lighting, also on both sides. Bus stops are situated on both sides just south of Quarry Street with a bus bay on the northbound side only. A pole-mounted video surveillance camera is located on the west side opposite the Quarry Street junction.

2.2.4 Quarry Street and Old Road are adopted highways forming a single-track route around the southern and eastern sides of the site, connecting the A61 Wakefield Road in the west to the B6132 Carlton Road in the north. Quarry Street/Old Road is narrow and is not conducive to two-way traffic. Consequently, it has been closed to vehicles at the Wakefield Road end by the placement of large boulders on the carriageway. As a result, the route is used for local access only and is very lightly trafficked.

2.2.5 The western section of Quarry Street which borders the site is 4m wide at the eastern end, narrowing to 2.5m at the western end and falls at a gradient of 1 in 8 towards the west – see Drawing No TGN-1433-01-HW-003 *Section and Swept Paths*. At Wakefield Road, Quarry Street forms part of a dropped-kerb shared access with the pet food store which now occupies the site immediately to the south. This site was previously occupied by a public house with an access point at the southern end, i.e. about 35m from Quarry Street. When the site was redeveloped in 2012, i.e. after the access arrangements for 155 Wakefield Road had been designated via Conditions 8 and 9, it was intended to access the store from Quarry Street which would have been widened to about 8m at Wakefield Road. Subsequently, however, it was found that the existing levels did not suit this proposal and the present arrangement, a retail access 6m wide immediately adjacent to Quarry Street, was approved as an alternative via Ref. 2013/1038 on 7 November 2013.

2.3 Existing Network Traffic

Traffic Survey

2.3.1 Key data from the ATC traffic survey, described in para. 1.2.6 above, are summarised in the table below.

Wakefield Road Traffic Flows

Survey Site	**50m North of Quarry Street Junction**		
Direction	**N/B**	**S/B**	**2-way**
Average Weekday 1-way AM Peak Hour Flow (0800-0900) - veh/hr	488	906	1394
Average Weekday 1-way PM Peak Hour Flow (1700-1800) – veh/hr	877	764	1641
Average Weekday 1-way Flow - based on 5 day average 16 hour count (9893 N/B & 11184 S/B) – veh/hr	620	700	1320

2.3.2 As the above figures demonstrate, traffic flows on Wakefield Road are tidal with the peak hours being defined by the AM southbound flow (906 between 0800 and 0900) and the PM northbound flow (877 between 1700 and 1800). These flows are equivalent to an average of one vehicle every 4 seconds, an average distance apart of about 55m at 30mph.

2.3.3 The corresponding peak flows for these hours in the opposite direction are PM southbound flow (764 between 0800 and 0900) and the AM northbound flow (488 between 1700 and 1800). These flows are equivalent to an average of one vehicle every 4.5 seconds, an average distance apart of about 60m at 30mph.

2.3.4 The average weekday hourly 1-way flows, based on 5 day average 16 hour count (620 N/B and 700 S/B) are equivalent to an average of one vehicle every 5.5 seconds, an average distance apart of about 75m at 30mph.

Wakefield Road Vehicle Speeds

Survey Site	**50m North of Quarry Street Junction**	
Direction	**N/B**	**S/B**
Ave. Speed - mph	25.3	21.5
85th%ile Speed - mph	35.7	27.9

2.3.5 Except for the northbound 85th%ile speed, all average speeds are below the speed limit of 30 mph.

Wakefield Road Vehicle Classification

2.3.6 As there were very few class OGV2 vehicles recorded, vehicles were divided into two classes, Car/LGV and OGV1/Bus. The proportions of OGV1/Bus were 30% northbound and 9% southbound.

3 ACCIDENT HISTORY AND ROAD SAFETY

3.1.1 The *Crashmap* website shows five accidents during the past 5 years on Wakefield Road between the Quarry Street and Smithies Lane junctions, one causing serious injuries and four causing slight injuries. Details are attached at Appendix 2.

3.1.2 The serious injuries accident occurred on Wakefield Road at the Smithies Lane traffic signals at 12.30 AM on 14 September 2014 (Ref. 4314) when a mobility scooter travelling on the carriageway collided with the rear of a stationary taxi causing injury to the scooter rider. This appears to have been a very unusual event and cannot be regarded as being either related to the road layout or likely to be repeated as a result of the proposed development.

3.1.3 The slight injuries accidents occurred on Wakefield Road as follows:

- Close to Quarry Street at 11.05 AM on 13 June 2018 (Ref. 3138) when a bus moving off caused injury to a passenger. Such an accident could have happened anywhere and cannot be regarded as being either related to the road layout or likely to be repeated as a result of the proposed development.
- At the Smithies Lane traffic signals at 5.54 AM on 8 February 2017 (Ref. 4051) when a car left the carriageway and collided with the traffic signals causing injury to the car driver and a passenger. Such an accident could have happened at any traffic signals and cannot be regarded as being either related to the road layout or likely to be repeated as a result of the proposed development.
- At the Smithies Lane traffic signals at 5.30 PM on 15 May 2014 (Ref. 9214) when a moped collided with the offside of a car causing injury to the moped rider. The exact circumstances of this collision are unclear from the record, although it appears to be an unusual occurrence and unlikely to be repeated as a result of the proposed development.
- At the Smithies Lane traffic signals at 1.50 PM on 23 April 2018 (Ref. 0325) when a goods vehicle collided with a stationary car causing injury to the car driver and passenger. This appears to have been a shunt collision which can occur at traffic signals. However, only one such occurrence in five years is particularly infrequent and there is no reason to suppose that the proposed development would increase the likelihood of it being repeated.

3.1.4 In view of the surveyed traffic flow on Wakefield Road, which exceeds 20,000 vehicles per day, the accident rate of one per annum is regarded as low. Furthermore, the few accidents which did occur recently may be regarded in the main as unusual events which are unlikely to be repeated as a result of the proposed development.

4 PROPOSED DEVELOPMENT

4.1 Land Use

4.1.1 As approved via planning permission Ref. 2008/1700, it is proposed to develop the site to create 24 No 2-bedroom apartments in two blocks of 12 No each, together with a car park of 24 No spaces, 8 of them for disabled use.

4.2 Access Arrangement

Site Access

4.2.1 As shown on Drawing No TGN-1433-01-HW-002 *Access Arrangement*, access to the site from the public highway network will continue to be provided via the present access point on Quarry Street about 30m from Wakefield Road.

Connectivity to the Wider Network

4.2.2 There are two directions in which traffic on Quarry Street can connect to the wider public highway network, north via Old Road to Carlton Road and west to Wakefield Road.

Old Road/Carlton Road

4.2.3 Connectivity in this direction depends upon increasing highway safety at the Old Road/Carlton Road junction by moving the junction point to the west and consequently improving visibility towards the east.

4.2.4 The developer for 155 Wakefield Road has no land control on or adjacent to Old Road or any other means of implementing these works. Consequently. until action is taken by the owners of Nos 9, 11 and 15 Old Road under planning permission Ref. B/03/0674/BA and/or the by applicants for planning permission Ref. 2019/0212 and/or by BMBC as enforcement action or direct implementation, there is no prospect of these works being carried out and hence no possibility of connectivity in this direction.

Wakefield Road

4.2.5 Connectivity via Wakefield Road is therefore the only available option and this Transport Statement demonstrates the safe and efficient operation of an all-movements priority junction access in this direction.

4.2.6 In order to provide this connection it will be necessary to remove the boulders which are currently blocking vehicular access from Quarry Street to Wakefield Road. The status of this restriction to a public highway is unclear. If there is a traffic order in place, it will need to be rescinded and replaced by one which aligns with the proposed layout.

Quarry Street

Geometry

4.2.7 The existing adopted highway of Quarry Street, currently between 2.5m and 4m wide, will be widened on the north side by dedicating part of the site area as public highway. The existing timber post and rail and steel palisade fence which forms the boundary between the highway and the pet food store will not be affected. Quarry Street will then consist of a 0.5m wide clearance margin adjacent to the fence, a 4.8m wide 2-way carriageway and a 2m wide footway, leaving about 1m of clearance to the south-west corner of the proposed housing block.

Site Access/Turning Head

4.2.8 The site access will comprise 7.5m radii on both sides so as to provide a turning head for refuse collection and other large vehicles for deliveries/removals and emergency services, if necessary – see the swept-path analysis at Drawing No TGN-1433-01-HW-003 *Section and Swept Paths* for an 11m long 'worst-case' rigid vehicle. A line of bollards across Quarry Street along the extended line of the eastern site boundary will maintain the existing closure to through vehicular traffic. The necessary traffic orders for these changes will be made at the appropriate time.

Wakefield Road/Quarry Street Junction

Geometry

4.2.9 The existing dropped-kerb priority junction of Quarry Street with Wakefield Road will remain and be lengthened by 6m to the north from the existing 12m to 18m, with the existing gully at this point being relocated. This will provide an effective radius of 6m on the north side. On the south side, owing to the angle of the junction and the position of the boundary fence, the effective radius is reduced to 3m. As can be seen from the swept-path analysis at Drawing No TGN-1433-01-HW-003, this geometry is sufficient for an 11m long 'worst-case' rigid vehicle to safely manoeuvre.

Visibility

4.2.10 The horizontal alignment of Wakefield Road is straight and the vertical alignment a uniform gradient for 500m both north and south of Quarry Street. Consequently, visibility is very good in both directions.

4.2.11 For vehicles turning out of Quarry Street, visibility to the right along Wakefield Road is clear well beyond the Carlton Road junction (100m away) and a 'y' distance of 43m, as required for a 30 mph speed limit by Table 7.1 of Manual for Streets, is readily available from a 2.4m 'x' distance. Furthermore, in the southbound direction, the measured average 85th%ile speed is 27.9 mph, so the 'y' distance to the right

may be calculated using the Stopping Sight Distance formula from MfS2 para.10.1.5:

$SSD = vt + v^2/2(d+ 0.1a)$

where $v = 12.47$ m/s (surveyed 85th percentile speed of 27.9 mph)

$t = 1.5$ seconds (perception-reaction time – MfS1 para 7.5.7)

$d = 4.41$ m/s^2 (deceleration rate – MfS1 para 7.5.7)

$a = -1.7\%$ (-1 in 60 from the topographical survey)

4.2.12 This calculation produces a 'y' distance to the right of 43.3m, about the same as that based on the speed limit (43m). The proposed access arrangements will maintain this degree of visibility.

4.2.13 Although visibility to the left is partially obstructed by the bus stop shelter located about 20m away, this is not regarded as a significant deficiency. The normal reason for visibility to the left, namely to guard against the approach of overtaking traffic, is less important in this case as the signal-controlled junction at Smithies Lane with two southbound running lanes makes the approach of northbound vehicles on the righthand side of the road very unlikely. As can be seen from Drawing No TGN-1433-01-HW-002, visibility is available on both sides of the shelter and also through its glass panels well beyond the Smithies Lane junction (60m away) and northbound traffic approaching and passing through the junction can easily be seen.

4.2.14 In the northbound direction, the measured average 85th%ile speed is 35.7 mph, so the 'y' distance to the left may be calculated using the Stopping Sight Distance formula from MfS2 para.10.1.5:

$SSD = vt + v^2/2(d+ 0.1a)$

where $v = 15.96$ m/s (surveyed 85th percentile speed of 35.7 mph)

$t = 1.5$ seconds (perception-reaction time – MfS1 para 7.5.7)

$d = 4.41$ m/s^2 (deceleration rate – MfS1 para 7.5.7)

$a = 1.7\%$ (1 in 60 from the topographical survey)

4.2.15 This calculation produces a 'y' distance to the left of 59.4m, the same as the distance to the Smithies Lane junction (60m) and clearly visible. This is the existing situation for vehicles currently leaving the pet food store.

4.2.16 Overall, as major road speeds are low and generated traffic flows will be very light, coupled with the familiarity of the local road users, it is considered that the available

visibility will be more than adequate for the proposed use of Quarry Street as access to the development.

Signs and Road Markings

4.2.17 So as to prevent indiscriminate entry into Wakefield Road, the Quarry Street junction will be controlled by a 'STOP' sign and associated road markings.

4.2.18 So as to assist northbound arrivals and departures in crossing the southbound traffic queue for the Wakefield Road/Smithies Lane traffic signals, 'KEEP CLEAR' road markings will be applied to both southbound running lanes.

Footway Layout

4.2.19 As noted in the Stage 1 Road Safety Audit, a lack of suitable non-motorised user (NMU) facilities can increase the risk of NMU/vehicle collisions. This matter will be addressed at the detailed design stage when a comprehensive footway layout with adequate dropped crossings and tactile paving will be prepared.

5 TRAFFIC ASSESSMENT

5.1 Development Generated Traffic

Trip Generation

5.1.1 The predicted traffic from the development has been calculated from typical trip rates from the TRICS database and used to derive the overall trips to and from the site during the surveyed peak periods of 0800-0900 AM and 1700-1800 PM. The trips derived are shown in the table below.

Generated Traffic

Direction	Typical Trip Rates from TRICS	No. of Dwellings	Trips
Generated Traffic AM Peak Hour 0800-0900			
Arrivals	0.163	24	4
Departures	0.427	24	10
2-way trips	**0.590**	24	**14**
Generated Traffic PM Peak Hour 1700-1800			
Arrivals	0.406	24	10
Departures	0.249	24	6
2-way trips	**0.655**	24	**16**

5.1.2 These trip rates represent large dwellings with 3 or more bedrooms and storage for 2 or more cars. As this development will consist only of 2-bedroom apartments with 1 car parking space each, the actual trip rates will be lower. In addition, likely use of the frequent bus services along Wakefield Road will reduce the trip rates even further. The trip rates adopted therefore may be viewed as a possible worst-case scenario.

Trip Distribution

5.1.3 The distribution of trips on Wakefield Road will be similar to the existing flows, namely, 35% to the north and 65% to the south in the AM peak, showing a definite tidal flow towards Barnsley, and more evenly split at 55% to the north and 45% to the south in the PM peak.

5.2 Existing Network Traffic

Wakefield Road

5.2.1 Based on the data provided by the traffic survey – see paras. 2.3.1 – 2.3.4 above and Appendix 1 – a representative existing network 1-way flow for Wakefield Road may be taken as 660 vehicles per hour off-peak rising to 760 vehicles per hour in the peak periods, the equivalent to one vehicle every 4 to 5 seconds, an average distance apart of about 55m to 65m at 30mph.

5.2.2 For the purposes of this Transport Statement, where only a qualitative assessment is needed and no precise capacity/delay analysis is involved, it is not necessary to inflate these flows to allow for network growth, committed developments, vacant properties etc.

Quarry Street

5.2.3 Owing to the current closed status of Quarry Street, there is no existing vehicular traffic.

5.3 Traffic Impact

5.3.1 In the PM peak hour, the worst-case scenario, the predicted generated 2-way flow of 16 vehicles is less than 1% of the surveyed average 2-way flow on Wakefield Road of 1641 vehicles. This is not considered to constitute a material impact in terms of traffic flow.

5.3.2 During this period, there will be 16 turning movements in or out of Quarry Street, an average of one movement every 4 minutes. This is not considered to constitute a significant impact in terms of conflicting movements.

5.3.3 While the quoted surveyed figures are based on averages, they provide a representative indication of the traffic volumes on Wakefield Road with respect to entry to and exit from Quarry Street. Although the average gaps indicated are relatively small, bunching will occur which will provide opportunities for movements in and out. More particularly, the Smithies Lane traffic signals will cause traffic to queue and the 'Keep Clear' areas will provide space for vehicles to cross the southbound lanes of Wakefield Road.

5.3.4 Turning movements in and out of the adjacent pet food store were observed during the site visit to be infrequent. In addition, the peak periods for the respective residential and retail uses will be unlikely to coincide. Consequently, the shared access point is anticipated to operate satisfactorily.

5.3.5 With reference to the policy statement in paragraph 109 of the NPPF, any residual cumulative effect of the proposed development on the road network could in no

way be considered as ‘severe’, nor would there be any ‘unacceptable impact on highway safety’.

6 SUSTAINABLE TRAVEL

6.1 General

6.1.1 The proposed residential development is located on the A61 Wakefield Road, a distributor road and main bus route. This major road network ensures that access in general to the site is good.

6.1.2 The location is served by several bus services and there is potential for both walking and cycling trips.

6.2 Public Transport

Bus Services

6.2.1 Bus services serving the area are shown in Table 6.1 below.

Table 6.1 – Bus Services

No	Terminus	Days	Time	Local Stop
1	Barnsley – Staincross	Sunday to Saturday	0555 – 2336 Every 15 mins	Wakefield Road/ Smithies Lane
11/12	Barnsley – Athersley	Sunday to Saturday	0520 - 2334 Every 15 mins	Wakefield Road/ Smithies Lane
478	Kingstone – Smithies	Monday to Friday	School Service	Wakefield Road/ Smithies Lane
489	Barnsley – Darton Academy	Monday to Friday	School Service	Wakefield Road/ Smithies Lane

6.2.2 It is considered that these buses, which stop about 50m from the site, will provide a useful service to residents of the development.

Train Services

6.2.3 The nearest train station is Barnsley Interchange located in Barnsley town centre about 2 km to the south. Train services connect to Sheffield, Huddersfield, Leeds, Nottingham and Lincoln. Bus routes 1 and 11/12, listed above, may be used to get to the station, so it would be possible to use a combination of train and bus services to travel longer distances to and from the site. Trains therefore offer a practical service to residents of the proposed development.

6.3 Walking and Cycling

Walking

6.3.1 All residents will have easy walking access to all the local bus services, listed above, which will take them into Barnsley, some 2 km away, or to the ASDA superstore, about 1 km away. There are also limited facilities available in the vicinity, such as a KFC outlet about 100m to the south, which may be accessed on foot.

Cycling

6.3.2 The site is situated in the Barnsley urban area which all lies within less than 10 km of the site. Residents will therefore have easy cycling access to all locations in and around the town, including the town centre, about 2 km away.

6.4 Sustainable Transport Summary

6.4.1 As can be seen from the above, the site is well served by public transport, particularly buses, leading to potentially practical use as an alternative to the private car.

6.4.2 These sustainable transport measures will have the effect of depressing the vehicular trip rates referred to in Section 5 above. While it is not possible to precisely quantified such benefits, the presence of the measures will provide confidence that the adopted figures represent a worst case scenario.

7 CONCLUSIONS

7.1.1 It may be concluded from this Transport Statement that the A61 Wakefield Road/Quarry Street priority junction will operate satisfactorily in providing access to the proposed residential development. In particular:

- The effect on the capacity of the local highway network has been shown to be immaterial.
- The effect on the safety of the local highway network has been shown to be insignificant.
- The opportunities for travel by sustainable means to and from the site have been adequately demonstrated.

7.1.2 In view of the relatively low accident record on Wakefield Road and the demonstrated minimal traffic impact on the local network, it is considered that the proposed development will not be detrimental to highway safety. The Stage 1 Road Safety Audit has identified only one problem which will be satisfactorily addressed at the detailed design stage.

7.1.3 While visibility to the north of the Wakefield Road junction is more than adequate, that to the south, while otherwise good, is slightly restricted by the bus stop shelter. However, as major road speeds are low and generated traffic flows will be very light, coupled with the familiarity of the local road users, it is considered that the available visibility will be more than adequate for the proposed use of Quarry Street as access to the development.

7.1.4 Swept path analysis has shown that refuse collection and other large vehicles may access the development and turn around without difficulty.

7.1.5 With reference to the policy statement in paragraph 109 of the NPPF, any residual cumulative effect of the proposed development on the road network could in no way be considered as ‘severe’, nor would there be any ‘unacceptable impact on highway safety’.

7.1.6 Overall, the proposed development will be adequately served in terms of access and transport via Wakefield Road and Quarry Street without creating any perceptible impact on the existing local network in terms of traffic flow or road safety.

APPENDIX 1

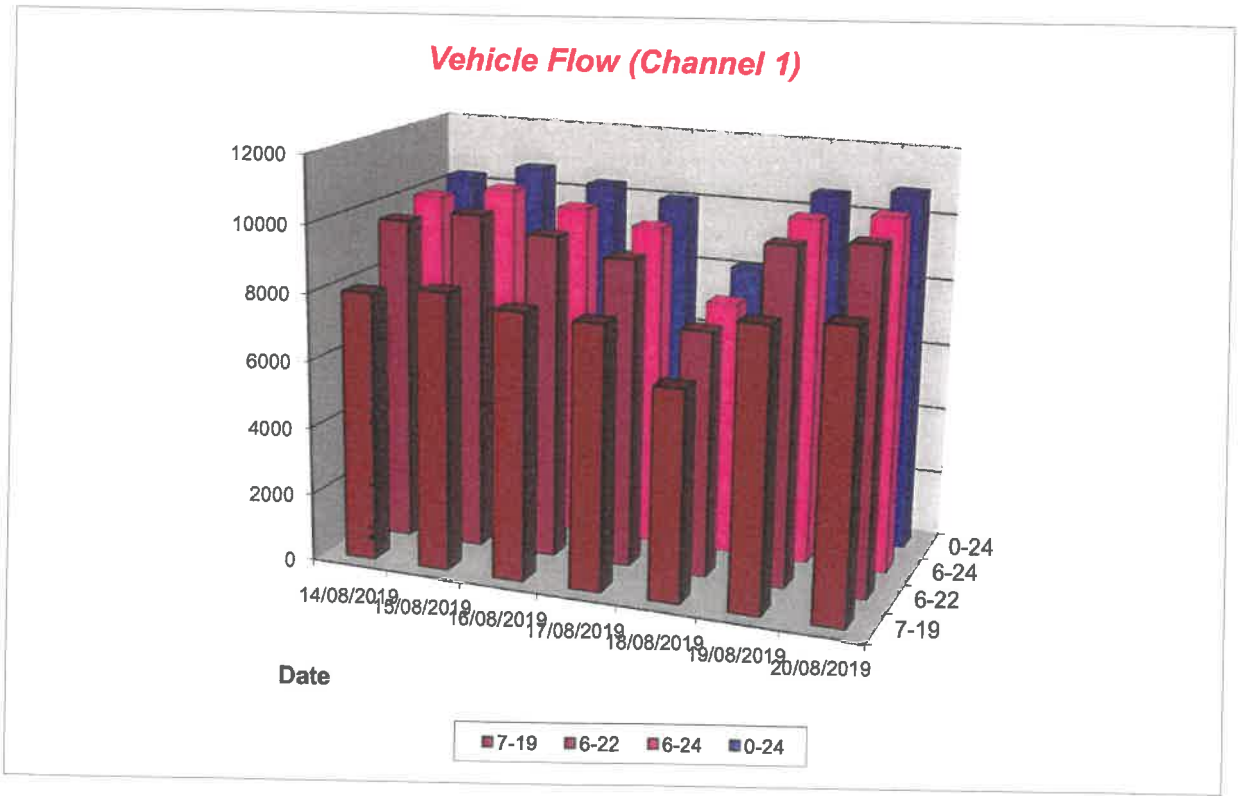
Traffic Survey Data

Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound **Vehicle Flow** **Week 1**

Hr Ending	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday	5 Day Ave	7 Day Ave
1	39	64	68	118	167	80	66	63	86
2	34	33	43	78	115	39	33	36	54
3	22	26	31	65	100	31	26	27	43
4	23	21	29	41	62	25	21	24	32
5	38	34	50	38	54	42	35	40	42
6	121	117	114	68	70	107	122	116	103
7	249	224	228	135	96	226	241	234	200
8	433	472	443	203	133	434	467	450	369
9	471	497	444	306	174	488	540	488	417
10	509	521	523	553	309	531	542	525	498
11	575	613	639	669	543	611	620	612	610
12	660	619	645	735	683	721	738	677	686
13	712	730	704	832	736	745	768	732	747
14	734	679	676	795	745	738	712	708	726
15	746	750	713	762	713	771	740	744	742
16	770	828	748	701	688	773	827	789	762
17	785	829	775	675	566	853	846	818	761
18	828	908	823	914	467	894	930	877	823
19	772	786	779	661	461	700	735	754	699
20	631	643	612	498	410	633	651	634	583
21	483	572	507	414	319	493	481	507	467
22	320	370	353	284	232	340	343	345	320
23	205	224	244	281	171	188	199	212	216
24	131	129	157	212	121	124	133	135	144
7-19	7995	8232	7912	7806	6218	8259	8465	8173	7841
6-22	9678	10041	9612	9137	7275	9951	10181	9893	9411
6-24	10014	10394	10013	9630	7567	10263	10513	10239	9771
0-24	10291	10689	10348	10038	8135	10587	10816	10546	10129



Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound **Average Speed** **Week 1**

Hr Ending	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday
1	27.4	28.1	28.3	37.4	37.9	41.9	41.3
2	29.5	28.7	27.7	38.5	41.1	40.0	39.3
3	28.8	27.9	27.5	41.7	39.8	42.9	38.5
4	29.5	29.4	30.3	39.9	41.0	42.0	39.1
5	31.7	26.6	26.7	42.8	44.8	42.0	39.9
6	24.1	26.0	25.1	35.9	43.7	38.9	33.7
7	22.8	24.4	24.9	35.3	42.2	34.7	33.8
8	21.8	21.8	22.0	34.7	38.1	30.7	30.1
9	21.0	21.7	21.3	26.6	36.0	28.5	29.3
10	20.9	21.4	19.3	25.9	34.0	29.9	29.5
11	19.7	20.6	18.7	24.2	31.2	27.4	24.0
12	19.6	20.1	18.5	23.3	30.5	26.1	23.6
13	18.6	19.4	18.6	19.2	26.0	25.2	24.9
14	19.8	18.9	17.3	21.7	27.8	24.4	24.8
15	19.2	19.1	18.2	28.0	29.1	25.2	24.0
16	18.6	20.0	19.8	29.2	30.1	26.6	23.5
17	19.2	19.7	19.5	30.7	31.5	25.2	23.4
18	19.3	18.4	20.3	29.3	33.7	24.5	23.6
19	21.0	20.7	20.8	32.9	31.1	28.6	28.3
20	22.9	22.6	22.2	34.7	33.1	32.7	30.1
21	23.2	23.0	22.4	34.9	33.5	33.6	32.3
22	23.5	23.4	26.7	34.4	35.6	33.6	33.3
23	24.9	25.1	35.8	35.2	37.0	37.6	34.1
24	26.9	26.8	35.6	36.4	39.9	37.7	38.9
10-12	19.7	20.3	18.6	23.7	30.8	26.7	23.8
14-16	18.9	19.6	19.0	28.6	29.6	25.9	23.7
0-24	20.7	20.9	21.0	28.6	31.9	28.4	27.1

Average	25.3

Channel 1 - Northbound **85th Percentile**

Hr Ending	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday
1	32.4	33.3	35.5	46.9	49.2	53.2	49.8
2	33.9	31.5	31.8	49.8	49.3	49.1	46.6
3	34.3	32.0	32.0	52.4	50.5	50.4	45.4
4	33.7	33.9	34.9	46.8	53.5	49.5	46.1
5	37.0	31.3	35.6	52.3	55.7	50.6	51.3
6	30.6	32.0	30.9	45.3	56.0	48.9	42.2
7	28.2	30.7	31.1	45.3	54.7	47.0	45.3
8	26.8	27.9	27.4	43.7	46.9	40.6	40.4
9	26.1	26.3	27.4	35.6	46.0	37.9	37.9
10	26.5	26.3	25.5	35.6	43.2	38.9	38.5
11	25.8	25.7	24.8	32.8	41.2	37.3	32.8
12	25.7	25.6	24.6	31.9	40.6	35.9	32.8
13	24.6	25.0	24.8	25.1	36.1	35.9	33.3
14	25.3	25.0	23.7	28.9	37.3	32.2	33.2
15	25.1	24.9	24.0	36.7	38.6	34.3	32.3
16	24.4	26.0	25.4	36.7	39.5	36.4	31.8
17	25.5	25.8	26.2	40.8	41.6	35.5	33.3
18	25.3	24.4	26.0	39.3	43.4	33.9	32.6
19	26.8	27.2	26.6	42.4	41.3	38.7	37.6
20	28.3	28.3	27.8	44.0	44.6	42.4	41.1
21	28.0	29.1	28.4	44.8	42.9	42.1	41.0
22	29.0	28.5	36.4	45.8	44.5	41.8	42.6
23	31.2	29.9	45.4	44.9	45.8	46.1	43.8
24	32.8	32.6	45.1	45.1	51.3	45.9	47.8
10-12	25.8	25.6	24.7	32.3	40.9	36.3	32.8
14-16	24.9	25.4	24.9	36.7	39.0	35.8	32.0
0-24	26.6	26.9	27.3	39.3	42.4	38.6	37.1

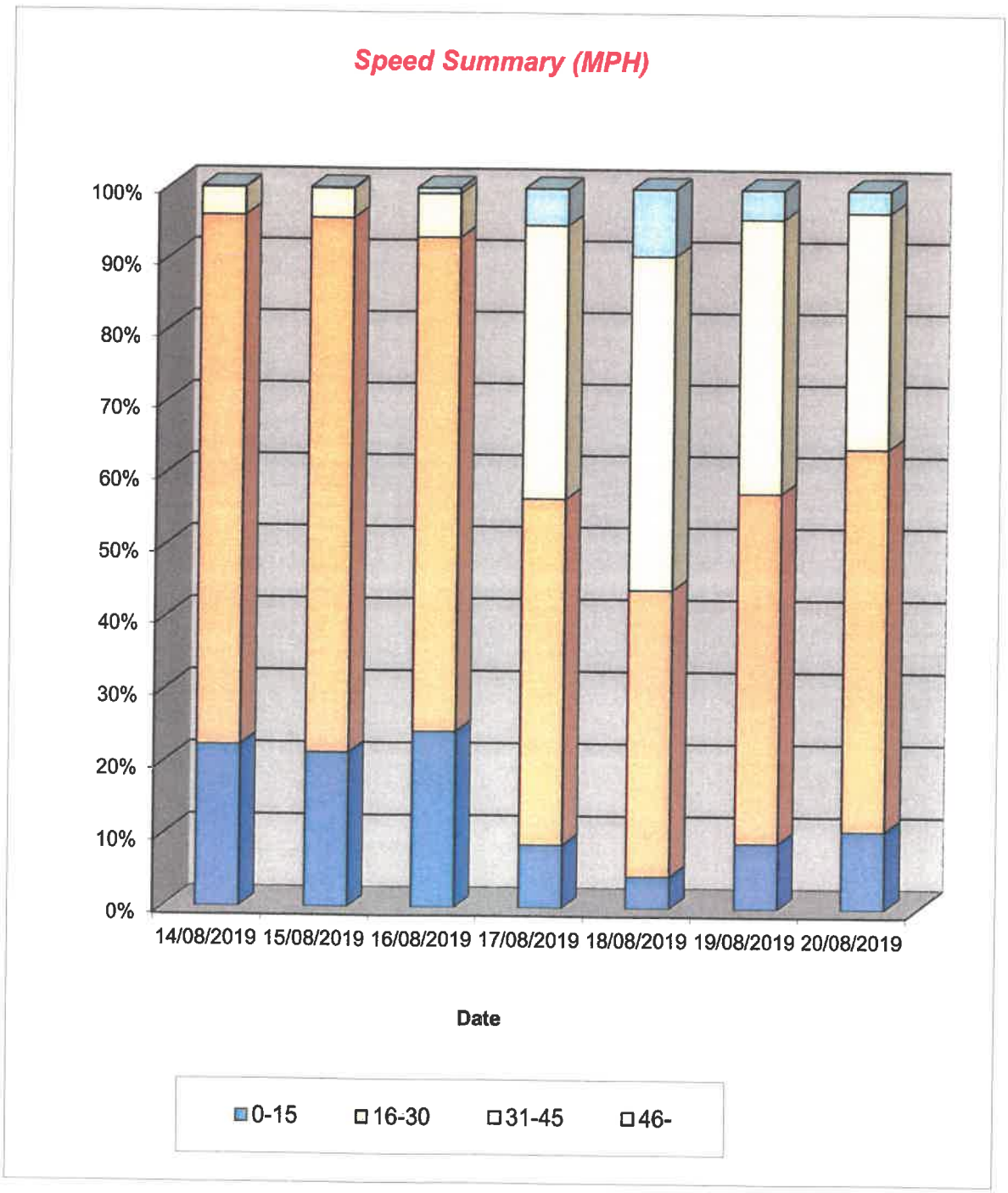
85th %ile	35.7

Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound **Speed Summary** **Week 1**

Speed (MPH)	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday
0-15	2296	2275	2511	871	357	956	1166
16-30	7585	7958	7120	4812	3224	5134	5737
31-45	401	442	637	3837	3790	4059	3574
46-	9	14	80	518	764	438	339
TOTAL	10291	10689	10348	10038	8135	10587	10816



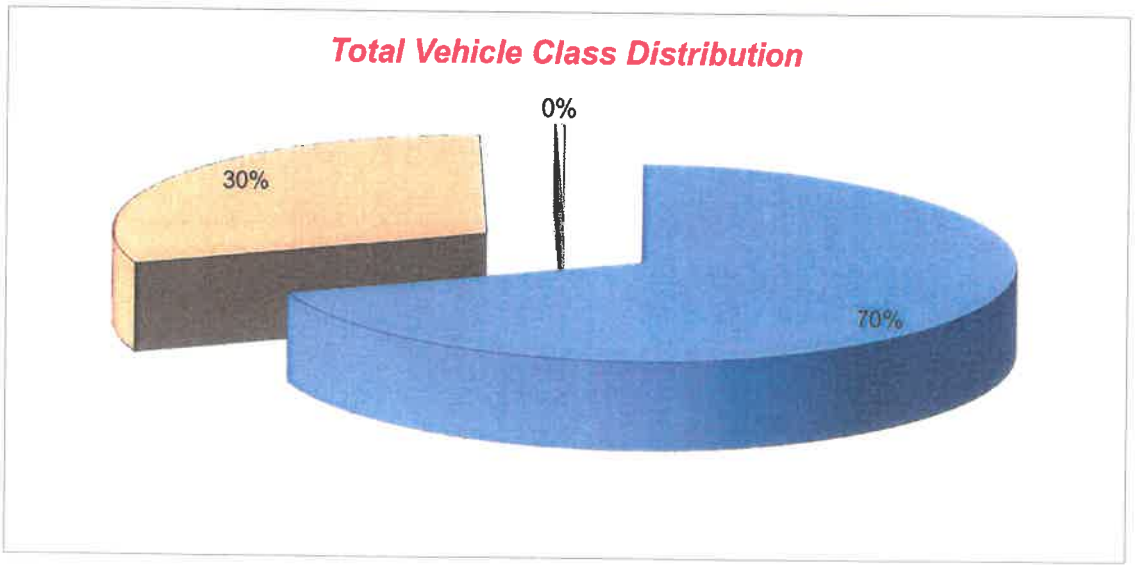
Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
14/08/2019				
7-19	7482	472	41	7995
6-22	9048	579	51	9678
6-24	9357	603	54	10014
0-24	9604	624	63	10291
15/08/2019				
7-19	7702	484	46	8232
6-22	9393	591	57	10041
6-24	9722	612	60	10394
0-24	9974	649	66	10689
16/08/2019				
7-19	7462	422	28	7912
6-22	8958	615	39	9612
6-24	9075	898	40	10013
0-24	9376	928	44	10348
17/08/2019				
7-19	4021	3768	17	7806
6-22	4587	4532	18	9137
6-24	4755	4856	19	9630
0-24	4829	5190	19	10038
18/08/2019				
7-19	2773	3433	12	6218
6-22	3193	4068	14	7275
6-24	3285	4268	14	7567
0-24	3412	4708	15	8135
19/08/2019				
7-19	4854	3386	19	8259
6-22	5561	4369	21	9951
6-24	5649	4593	21	10263
0-24	5742	4824	21	10587
20/08/2019				
7-19	5306	3129	30	8465
6-22	6126	4023	32	10181
6-24	6225	4256	32	10513
0-24	6327	4456	33	10816

Average				
7-19	5657	2156	28	7841
6-22	6695	2682	33	9411
6-24	6867	2869	34	9771
0-24	7038	3054	37	10129



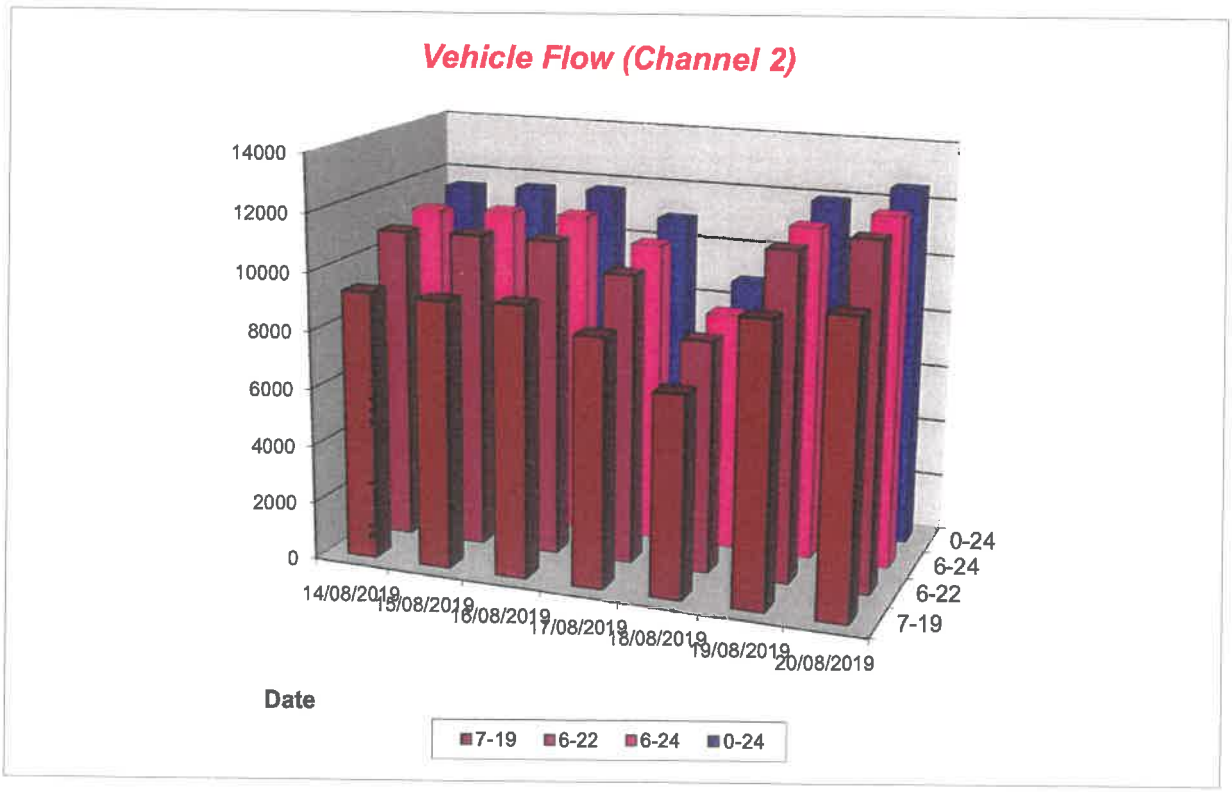
Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 2 - Southbound **Vehicle Flow** **Week 1**

Hr Ending	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday	5 Day Ave	7 Day Ave
1	46	57	60	113	174	58	71	58	83
2	27	29	41	57	105	33	31	32	46
3	27	19	31	59	90	31	31	28	41
4	28	21	23	45	49	32	28	26	32
5	44	49	51	51	48	54	54	50	50
6	221	194	214	87	81	194	217	208	173
7	435	437	405	195	135	436	464	435	358
8	749	741	709	381	195	766	748	743	613
9	902	886	852	686	261	923	965	906	782
10	764	796	823	782	603	812	792	797	767
11	788	758	825	851	770	811	857	808	809
12	810	808	818	857	785	838	916	838	833
13	792	749	831	877	799	818	821	802	812
14	748	766	808	875	792	819	867	802	811
15	805	796	818	805	660	803	856	816	792
16	741	665	704	617	585	780	842	746	705
17	782	781	755	648	515	799	808	785	727
18	731	744	726	582	448	810	807	764	693
19	691	751	697	604	528	687	748	715	672
20	515	530	492	536	415	513	620	534	517
21	362	423	407	385	309	397	435	405	388
22	236	307	280	343	231	298	327	290	289
23	177	206	212	256	156	146	165	181	188
24	101	125	151	223	109	85	95	111	127

7-19	9303	9241	9366	8565	6941	9666	10027	9521	9016
6-22	10851	10938	10950	10024	8031	11310	11873	11184	10568
6-24	11129	11269	11313	10503	8296	11541	12133	11477	10883
0-24	11522	11638	11733	10915	8843	11943	12565	11880	11308



Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 2 - Southbound **Average Speed** **Week 1**

Hr Ending	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday
1	25.3	27.4	26.9	28.3	28.8	30.7	29.3
2	27.4	28.1	27.8	31.4	30.5	29.3	30.6
3	26.7	27.2	25.4	30.2	30.3	31.8	27.6
4	27.3	29.1	25.8	29.5	31.9	30.9	31.8
5	27.2	25.1	25.9	29.3	31.8	28.1	28.3
6	23.8	24.9	25.1	28.7	30.8	27.2	27.1
7	22.8	23.7	24.6	27.5	30.4	26.6	26.0
8	20.3	21.1	21.6	25.9	28.7	23.7	23.0
9	18.6	19.4	20.4	22.4	27.8	21.7	21.0
10	19.1	19.6	18.5	20.6	25.0	21.6	22.4
11	18.7	19.3	17.4	18.1	23.7	20.3	18.4
12	18.2	18.8	16.5	16.3	23.5	20.7	19.8
13	18.3	19.0	16.0	16.4	21.6	20.4	20.5
14	17.7	18.0	14.4	18.7	22.2	18.8	17.9
15	16.9	17.4	15.6	19.9	24.7	19.2	18.5
16	17.9	20.0	19.8	24.3	25.6	20.0	19.9
17	18.4	19.0	18.4	24.0	26.6	21.3	21.0
18	18.7	20.1	20.4	24.9	26.9	20.8	20.1
19	21.5	20.4	20.9	26.0	26.3	24.0	23.3
20	23.1	23.5	22.7	27.5	27.6	26.5	24.8
21	24.1	24.0	24.1	27.8	26.8	26.1	25.3
22	24.7	24.2	25.4	27.4	28.2	26.8	26.8
23	25.7	25.0	28.1	28.0	27.7	29.1	28.2
24	25.8	25.6	27.9	29.0	30.1	28.0	29.3
10-12	18.4	19.1	17.0	17.2	23.6	20.5	19.1
14-16	17.4	18.6	17.5	21.8	25.1	19.6	19.2
0-24	19.7	20.4	19.6	22.4	25.4	22.2	21.6

Average	21.5

Channel 2 - Southbound **85th Percentile**

Hr Ending	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday
1	30.1	31.5	33.7	33.0	34.9	36.0	34.5
2	34.3	33.3	32.8	38.7	35.4	35.4	38.9
3	33.1	31.6	32.3	37.1	35.2	37.9	33.9
4	35.9	34.2	30.1	36.0	38.5	35.6	37.3
5	32.4	29.4	29.9	34.4	37.4	34.4	34.8
6	28.0	29.2	30.1	35.0	36.8	33.1	32.5
7	25.9	28.6	29.2	33.0	35.5	30.1	30.8
8	24.9	24.9	25.6	30.7	34.6	28.8	28.2
9	23.8	24.4	24.9	28.3	33.5	25.6	25.9
10	24.3	24.3	23.9	24.9	29.7	27.2	27.9
11	24.1	24.2	23.3	24.2	29.2	25.5	24.4
12	23.9	24.2	21.2	22.8	28.8	25.2	24.7
13	23.5	24.2	20.8	21.4	28.0	24.7	25.0
14	23.8	24.1	19.6	24.0	28.5	24.8	24.2
15	22.8	23.7	20.2	26.4	29.5	24.8	24.4
16	23.3	24.9	24.8	29.3	29.8	25.6	25.2
17	24.1	24.6	24.2	29.5	30.7	27.0	25.4
18	24.4	24.7	24.8	30.0	30.6	25.5	25.7
19	25.8	24.9	25.4	30.2	30.4	29.5	28.5
20	27.7	28.5	27.8	32.5	33.0	30.8	29.3
21	28.9	28.4	29.0	33.8	31.7	30.7	29.8
22	29.7	29.1	30.6	32.4	33.9	30.5	30.8
23	30.4	29.5	33.4	34.2	33.9	34.4	34.3
24	30.7	30.3	34.0	35.0	35.7	34.3	34.6
10-12	24.0	24.2	22.7	23.6	29.0	25.3	24.6
14-16	23.2	24.5	23.7	28.4	29.6	25.1	24.8
0-24	24.9	25.2	25.1	29.4	30.5	28.5	27.9

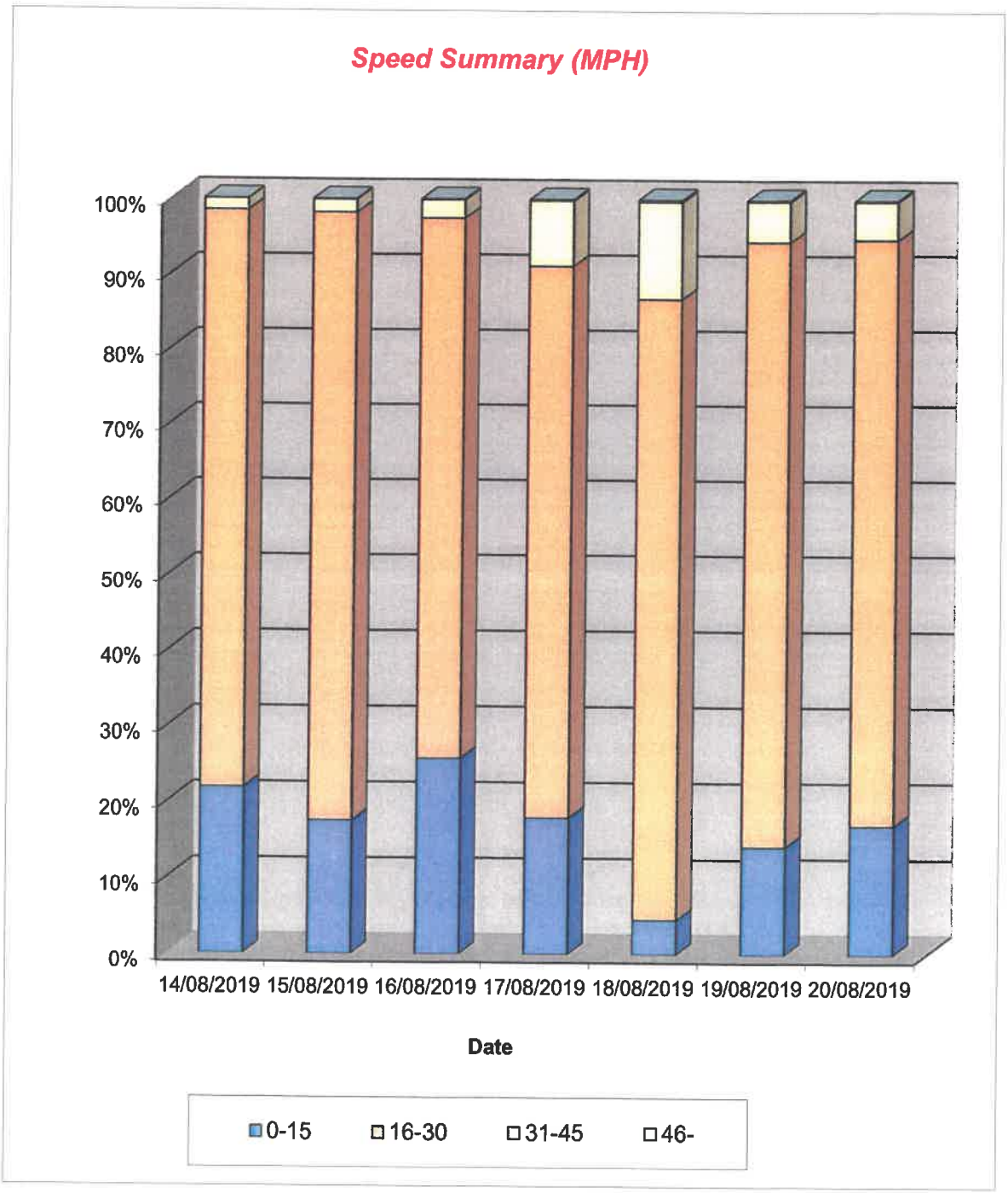
85th %ile	27.9

Barnsley ATC, A61 Wakefield Road

Produced by Road Data Services Ltd.

Channel 2 - Southbound — Speed Summary — Week 1

Speed (MPH)	14/08/2019 Wednesday	15/08/2019 Thursday	16/08/2019 Friday	17/08/2019 Saturday	18/08/2019 Sunday	19/08/2019 Monday	20/08/2019 Tuesday
0-15	2521	2041	3019	1958	399	1693	2136
16-30	8825	9386	8413	7986	7271	9584	9770
31-45	174	203	289	952	1150	648	640
46-	2	8	12	19	23	18	19
TOTAL	11522	11638	11733	10915	8843	11943	12565



Barnsley ATC, A61 Wakefield Road

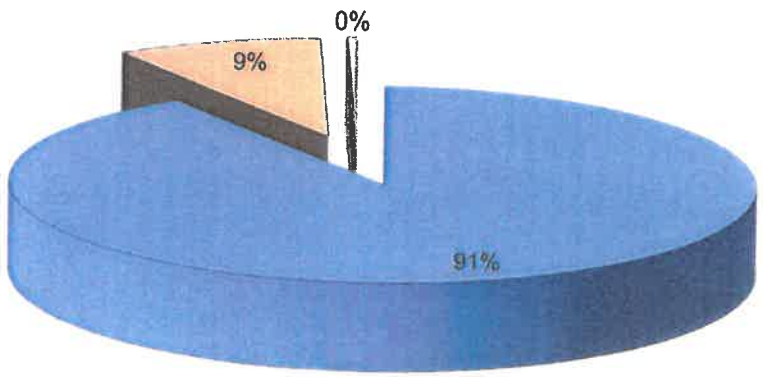
Produced by Road Data Services Ltd.

Channel 2 - Southbound | **Vehicle Class** | **Week 1**

Classes / Day / Time	Car / LGV / Caravan - 1	OGV1 / Bus - 2,3,5,6,7,12	OGV2 - 4,8,9,10,11,13	TOTAL - 1-13
14/08/2019				
7-19	8661	596	46	9303
6-22	10078	715	58	10851
6-24	10336	731	62	11129
0-24	10677	779	66	11522
15/08/2019				
7-19	8593	609	39	9241
6-22	10171	723	44	10938
6-24	10489	735	45	11269
0-24	10795	791	52	11638
16/08/2019				
7-19	8720	609	37	9366
6-22	10189	718	43	10950
6-24	10498	771	44	11313
0-24	10860	822	51	11733
17/08/2019				
7-19	7810	737	18	8565
6-22	9063	934	27	10024
6-24	9476	999	28	10503
0-24	9832	1053	30	10915
18/08/2019				
7-19	6149	773	19	6941
6-22	7124	881	26	8031
6-24	7363	906	27	8296
0-24	7799	1017	27	8843
19/08/2019				
7-19	8634	1005	27	9666
6-22	10063	1213	34	11310
6-24	10267	1238	36	11541
0-24	10580	1323	40	11943
20/08/2019				
7-19	8967	1023	37	10027
6-22	10602	1230	41	11873
6-24	10836	1255	42	12133
0-24	11205	1316	44	12565

Average				
7-19	8219	765	32	9016
6-22	9613	916	39	10568
6-24	9895	948	41	10883
0-24	10250	1014	44	11308

Total Vehicle Class Distribution



APPENDIX 2

Accident Records



CRASHMAP ACCIDENT LOCATIONS

crashmap.co.uk

2018 data is provisional and is subject to change

Crash Date:	Wednesday, June 13, 2018	**Time of Crash:**	11:05:00 AM	**Crash Reference:**	**2018140303138**

Highest Injury Severity:	Slight	**Road Number:**	A61	**Number of Casualties:**	1
Highway Authority:	Barnsley			**Number of Vehicles:**	1
Local Authority:	Barnsley Metropolitan Borough			**OS Grid Reference:**	435033 408137
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
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2018 data is provisional and is subject to change

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Bus or coach (17+ passenger seats)	-1	Male	25-34	Vehicle is moving off	Unknown	Journey as part of work	None	None

Casualties

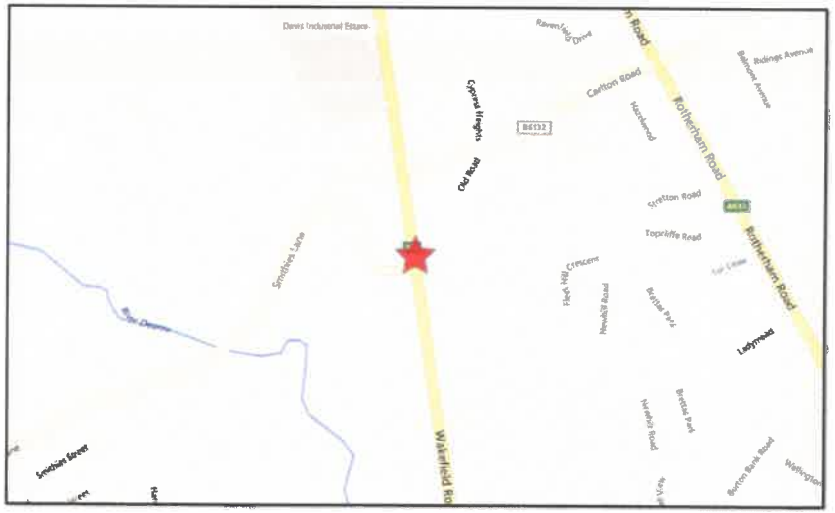
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Vehicle or pillion passenger	Female	35-44	Unknown or other	Unknown or other

crashmap.co.uk

2018 data is provisional and is subject to change

Crash Date:	Monday, April 23, 2018	**Time of Crash:**	1:50:00 PM	**Crash Reference:**	**2018140290325**

Highest Injury Severity:	Slight	**Road Number:**	A61	**Number of Casualties:**	2
Highway Authority:	Barnsley			**Number of Vehicles:**	2
Local Authority:	Barnsley Metropolitan Borough			**OS Grid Reference:**	435038 408092
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Unknown				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
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2018 data is provisional and is subject to change

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Good vehicles of unknown weight	-1	Male	NK	Vehicle proceeding normally along the carriageway, not on a bend	Unknown	Other	None	None
1	Car (excluding private hire)	-1	Male	35-44	Vehicle is waiting to proceed normally but is held up	Unknown	Other	None	None

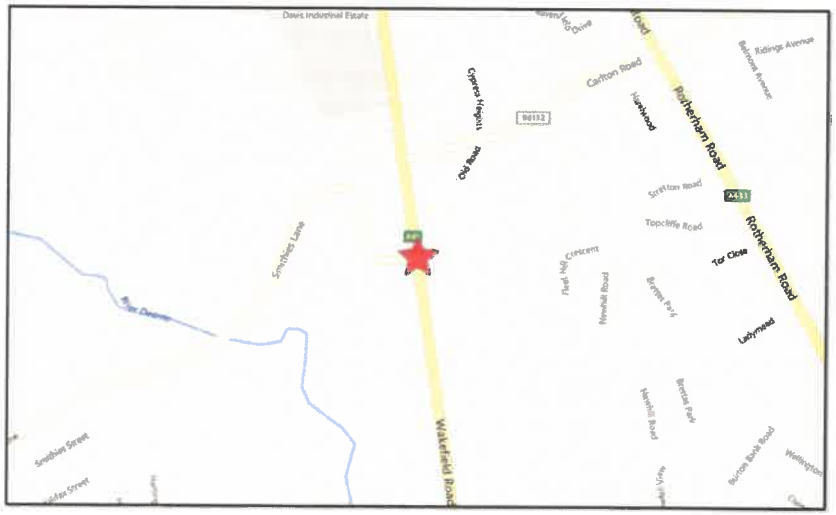
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	35-44	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Female	25-34	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Wednesday, February 08, 2017	**Time of Crash:**	5:54:00 AM	**Crash Reference:**	**2017140154051**

Highest Injury Severity:	Slight	**Road Number:**	A61	**Number of Casualties:**	2
Highway Authority:	Barnsley			**Number of Vehicles:**	1
Local Authority:	Barnsley Metropolitan Borough			**OS Grid Reference:**	435040 408074
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
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Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	7	Male	21 - 25	Vehicle proceeding normally along the carriageway, on a left hand bend	Front	Other	Bollard/Refuge	Road sign/Traffic signal

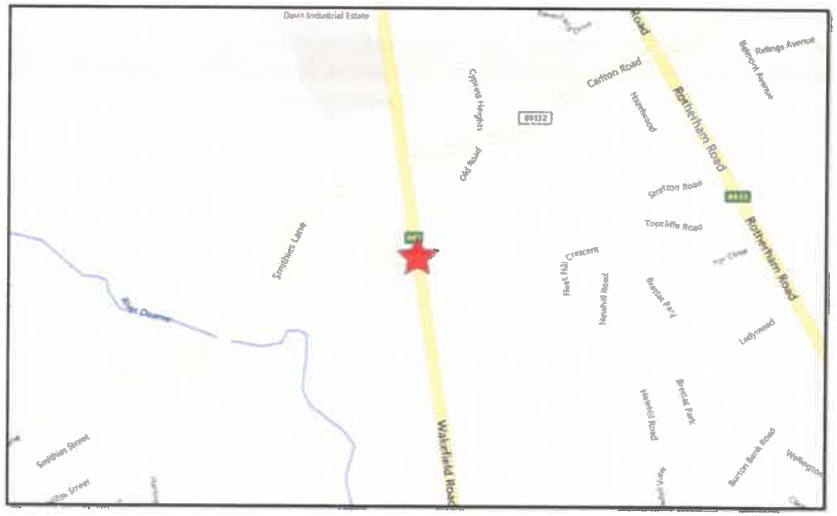
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Male	16 - 20	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Thursday, May 15, 2014	**Time of Crash:**	5:30:00 PM	**Crash Reference:**	**201414B059214**

Highest Injury Severity:	Slight	**Road Number:**	A61	**Number of Casualties:**	1
Highway Authority:	Barnsley			**Number of Vehicles:**	2
Local Authority:	Barnsley			**OS Grid Reference:**	435038 408076
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	Pedestrian phase at traffic signal junction				
Road Type:	Single carriageway				
Junction Control:	Auto traffic signal				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
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Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Motorcycle 50cc and under	-1	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
1	Car (excluding private hire)	19	Male	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Other	None	None

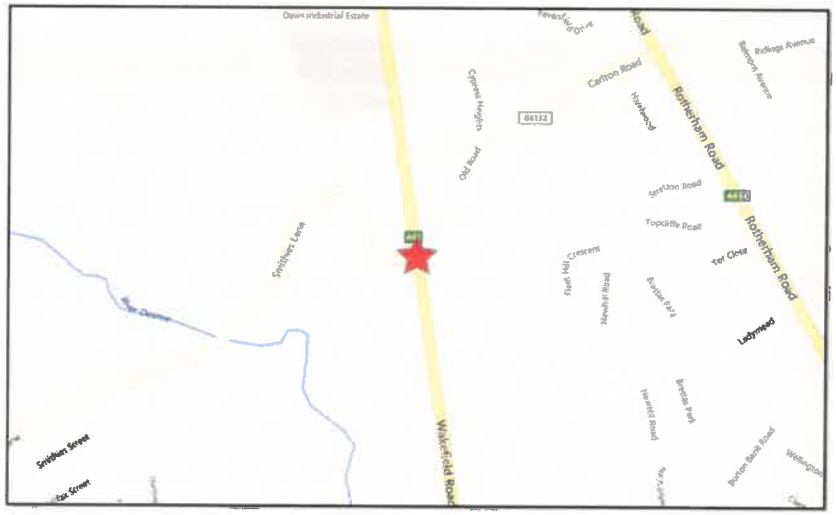
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Sunday, September 14, 2014	**Time of Crash:**	12:30:00 AM	**Crash Reference:**	**201414B084314**

Highest Injury Severity:	Serious	**Road Number:**	A61	**Number of Casualties:**	1
Highway Authority:	Barnsley			**Number of Vehicles:**	2
Local Authority:	Barnsley			**OS Grid Reference:**	435038 408075
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	Pelican, puffin, toucan or similar non-junction pedestrian light crossing				
Road Type:	Single carriageway				
Junction Control:	Auto traffic signal				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
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Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Taxi/Private hire car	2	Male	46 - 55	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None
1	Mobility Scooter	3	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other

APPENDIX 3

STAGE 1 ROAD SAFETY AUDIT

Road Safety Audit
Stage 1

Proposed Residential Development
155 Wakefield Road Barnsley

TGN Construction (Yorkshire) Ltd
Moor Valley
Mosborough
Sheffield
S20 5BB

Jonathan Birkett
JHB Consulting Ltd
10 Watkin Ave
Old Colwyn
Conwy
LL29 9NN
Tel + 44 (0)7966 296302

JHB CONSULTING

Road Safety Audit
Stage 1

Proposed Residential Development
155 wakefield Road Barnsley

Report Produced for; -	**TGN Construction (Yorkshire) Ltd**
Report Produced by; -	**Jonathan Birkett**
Report Dated; -	**30 August 2019**
Report Reference; -	**JHB/WRBRSA1Rev1**
Road Safety Audit Team Leader; -	**Jonathan Birkett**

Proposed Residential Development, 155 Wakefield Road, Barnsley. Road Safety Audit Stage 1

Contents Amendment Record

This report has been issued & amended as follows:

Issue	Revision	Description	Date	Signed
1	0	Draft Report	30.08.19	JB
1	0	FINAL REPORT	23.09.19	JB/GK

Report Circulation Record

This report has been circulated, as follows:

Person	Organisation	No. of Copies	Date
	TGN Construction (Yorkshire) Ltd	Electronic	23.09.19
S Riley	Inpsire	Electronic	23.09.19
G Kidd	JHB Consultancy Ltd	Electronic	23.09.19

Contents

		Page
1	Introduction	**1**
2	Problems Raised at this Stage 1 Road Safety Audit	**4**
3	Road Safety Audit Team Statement	**6**

Appendix A - Documents Forming the Brief

Appendix B – Problem(s) Location Plan(s)

1 Introduction

1.1 Commission and Terms of Reference

1.1.1 This report has been prepared in response to a request to undertake a Stage 1 Road Safety Audit (i.e. carried out prior to detailed design) by TGN Construction (Yorkshire) Ltd. The scheme submitted for Audit is the proposed residential development, 155 Wakefield Road, Barnsley. The development site access is located off the A61 which is subject to a 30mph speed limit and is street lit.

1.1.2 The audit comprised an examination of documents forming the Audit Brief and an examination of the site.

1.1.3 The documents were made available to the Road Safety Audit Team by S Riley (Inspire Design and Development) on the instructions of TGN Construction (Yorkshire) Ltd on behalf of the Highway Authority Barnsley Council. The total documents forming the Audit Brief are listed in **Appendix A**.

1.1.4 Generally, the Brief comprised:

- Brief.
- Drawings.
- ATC and Speed Data

1.1.5 Collision data was not available as part of the Brief. The Audit Team looked at the data held on the "Crashmap" website. Examination of the data shows that there has one collision close to the proposed access resulting in a slight casualty.

1.1.6 Traffic count data was provided.

1.1.7 Speed data was provided to the RSA Team and is summarised below.

- Northbound 85th%ile speed 35.7mph
- Southbound 85th%ile speed 27.9mph

1.1.8 It was considered that the information provided was sufficient for the purpose of carrying out the Road Safety Audit Stage 1 requested.

1.1.9 The Road Safety Audit Team membership approved by TGN Construction (Yorkshire) Ltd on behalf of the Highway Authority was:

JONATHAN BIRKETT IENG MICE MSORSA
Holder of Certificate of Competency
Road Safety Audit Team Leader

GILLIAN KIDD
Road Safety Audit Team Member

1.1.10 The Road Safety Audit comprised an examination of the documents and drawings supplied to the Road Safety Audit Team (referenced in **Appendix A** of this report). No member of the Road Safety Audit Team has had any previous input to the design of the scheme.

1.1.11 The site was visited on the morning of 28 August 2019. It was fine and the road surface was dry.

1.1.12 The Terms of Reference are as described in the Highways England Design Manual for Roads and Bridges document GG119 'Road Safety Audit '. The scheme has been examined and this report compiled only with regard to safety implications to road users of the scheme as presented. It has not been verified for compliance with any other Standards or criteria. However, in order to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. However, any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.

1.1.13 Furthermore, any recommendations included within this report should not be regarded as being prescriptive design solution to the problem raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, as stipulated in GG119, and in no way imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which should be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

1.1.14 It is the Project Sponsor's responsibility to ensure that all problems raised by the Road Safety Audit Team are given due consideration.

1.1.15 In the event of a collision and any resulting legal action, JHB Consulting Ltd would have to defend its actions on the basis that it took such care, as in all circumstances was reasonably required, to ensure that the highway was not dangerous to road users. It is important therefore that recommendations contained in the report are acted upon wherever possible.

1.2 Purpose of the scheme

1.2.1 Alterations to an existing access onto Wakefield Road to create an improved residential access.

1.3 Departures or Relaxations from Standards

1.3.1 No Departures or Relaxations from Standard were submitted to the Road Safety Audit Team.

2 Problems Raised at this Stage 1 Road Safety Audit

2.1 General

No safety related problems identified.

2.2 Junctions

No safety related problems identified.

2.3 Walking, Cycling and Horse Riding

2.3.1 **PROBLEM 1**

Location: New junction.

Summary: Lack of NMU facilities can increase the risk of NMU/vehicle collisions.

As part of the scheme no improvements in the form of dropped crossings or tactile paving are shown on the drawings. The Audit Team accept that in many locations close to the development there are several business accesses that do not provide tactile paving. However, where there is an opportunity for NMU/vehicle conflict at junctions suitable dropped crossings and tactile paving should be provided.

In addition, a new section of footway is shown on the drawing leading along Quarry Street and no detail is provided where the footway terminates at the development access.

A lack of suitable NMU facilities can increase the risk of NMU/vehicle collisions.

RECOMMENDATION: At detailed design provide dropped crossings and tactile paving at the site access.

2.4 Traffic Signing, Road Markings & Street-lighting

No safety related problems identified.

End of list of Problems identified and Recommendations offered in this Stage 1 Road Safety Audit

3 Road Safety Audit Team Statement

I certify that this Audit has been carried out in the spirit of GG119.

ROAD SAFETY AUDIT TEAM LEADER

JONATHAN BIRKETT

10 Watkin Avenue
Old Colwyn
Conwy, LL29 9NN

Signed: .....

Dated 23.09.19…

ROAD SAFETY AUDIT TEAM MEMBER

GILLIAN KIDD

Road Safety Auditor,

Appendix A

The following Drawings and Documents formed the Road Safety Audit Brief.

Documents

Drawing TGN-1433-01-GA-001

Drawing TGN-1433-01-HW-001

Drawing TGN-1433-01-HW-002

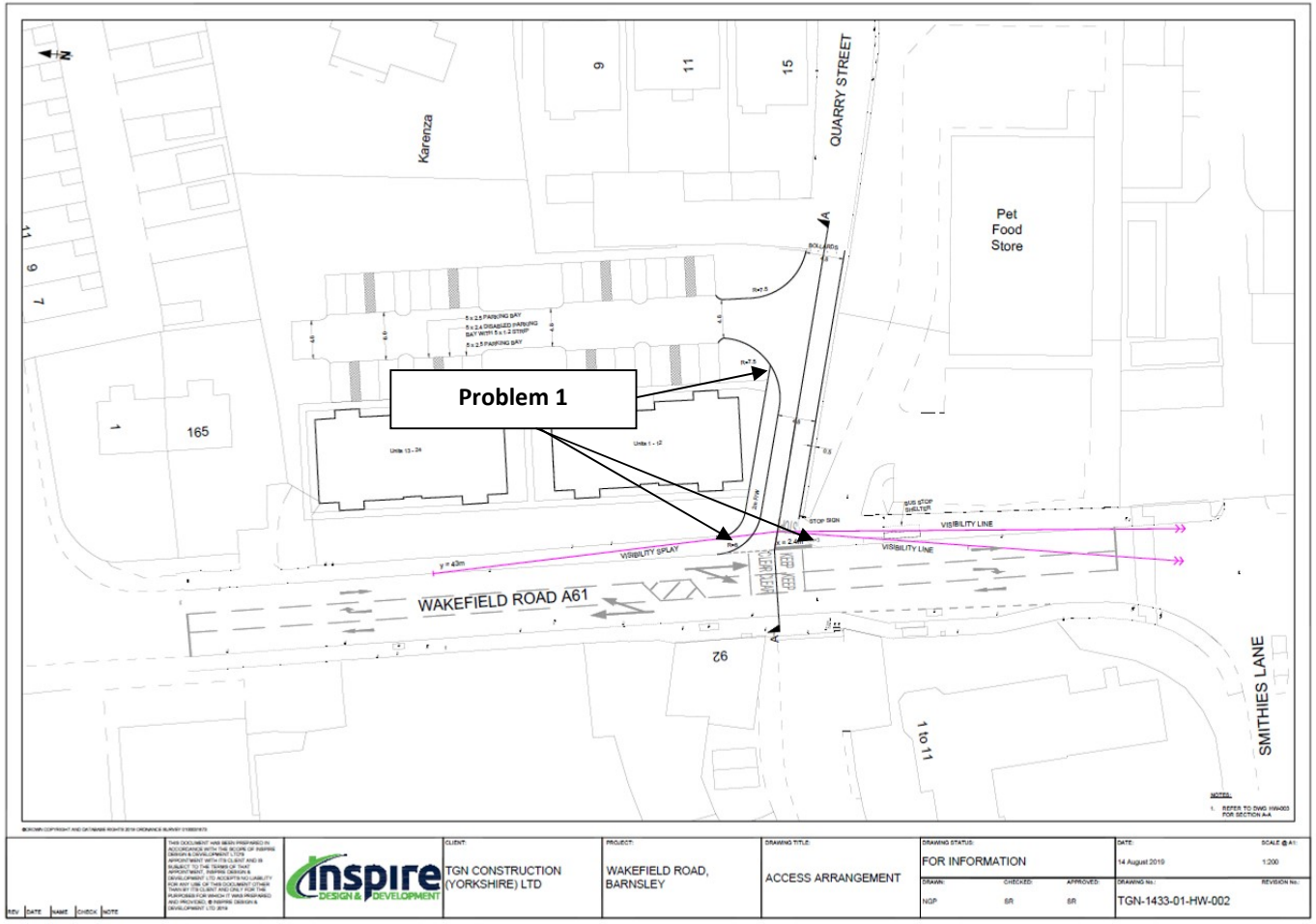
Drawing TGN-1433-01-HW-003

Drawing TGN-1433-01-TS-002

Detailed traffic count and speed data.

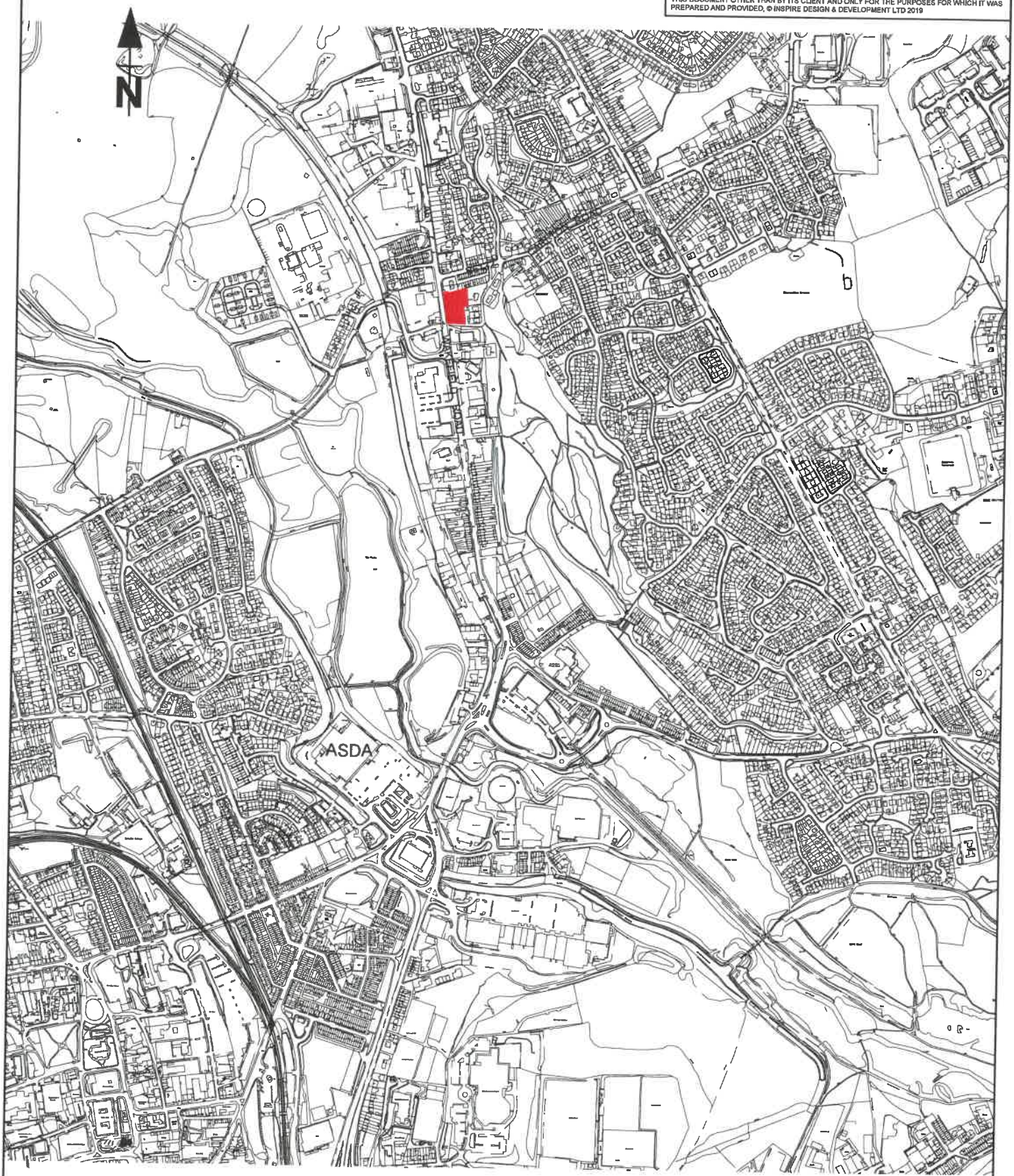
Appendix B

Drawings: Problem Location Plan



DRAWINGS

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DATE: 21/08/19	DRAWING TITLE: LOCATION PLAN	inspire DESIGN & DEVELOPMENT	REV	DATE	NAME	CHECK	NOTES
DRAWN: NGP			DRAWING STATUS: FOR INFORMATION				
CHECKED: SR	PROJECT: WAKEFIELD ROAD, BARNSLEY	CLIENT: TGN CONSTRUCTION (YORKSHIRE) LTD					
APPROVED: SR			DRAWING No: TGN-1433-01-GA-001			REVISION No:	
SCALE @ A4: 1:10000							



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PROJECT: WAKEFIELD ROAD, BARNSLEY

DRAWING TITLE: TOPOGRAPHICAL SURVEY

DRAWING STATUS: FOR INFORMATION

DATE: 21 August 2019

SCALE @ A1: 1:200

DRAWN:	CHECKED:	APPROVED:
NGP	SR	SR

DRAWING No.: TGN-1433-01-TS-001

REVISION No.:



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CLIENT: TGN CONSTRUCTION (YORKSHIRE) LTD

PROJECT: WAKEFIELD ROAD, BARNSLEY

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DRAWING STATUS: FOR INFORMATION

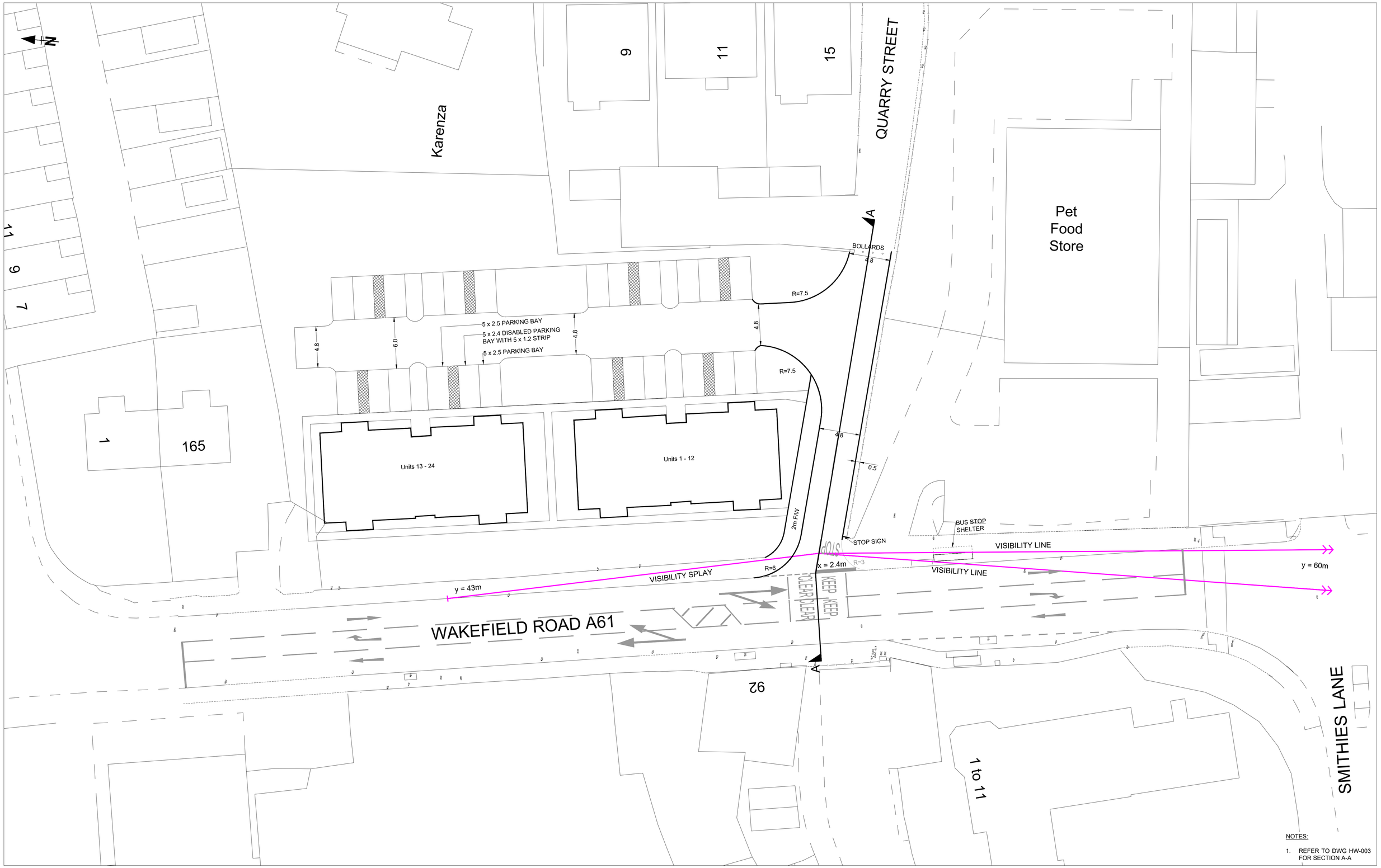
DATE: 20 August 2019

SCALE @ A1: 1:1000

DRAWN:	CHECKED:	APPROVED:
NGP	SR	SR

DRAWING No.: TGN-1433-01-HW-001

REVISION No.:



NOTES:

1. REFER TO DWG HW-003 FOR SECTION A-A

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PROJECT: WAKEFIELD ROAD, BARNSLEY

DRAWING TITLE: ACCESS ARRANGEMENT

DRAWING STATUS: FOR INFORMATION

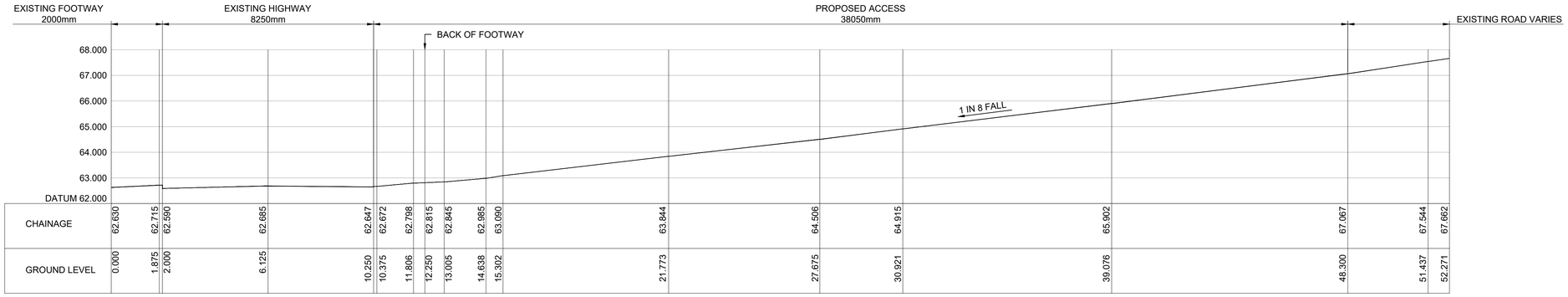
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NGP	SR	SR

DRAWING No.: TGN-1433-01-HW-002

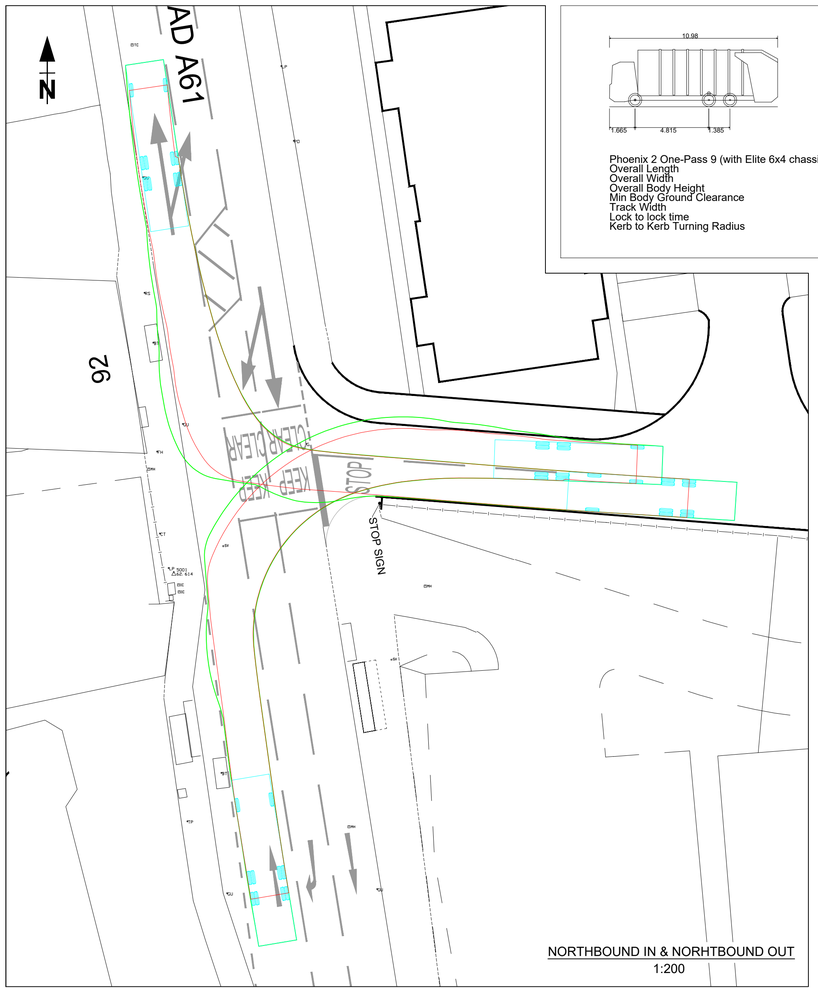
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SECTION A-A
1:100

NOTES:

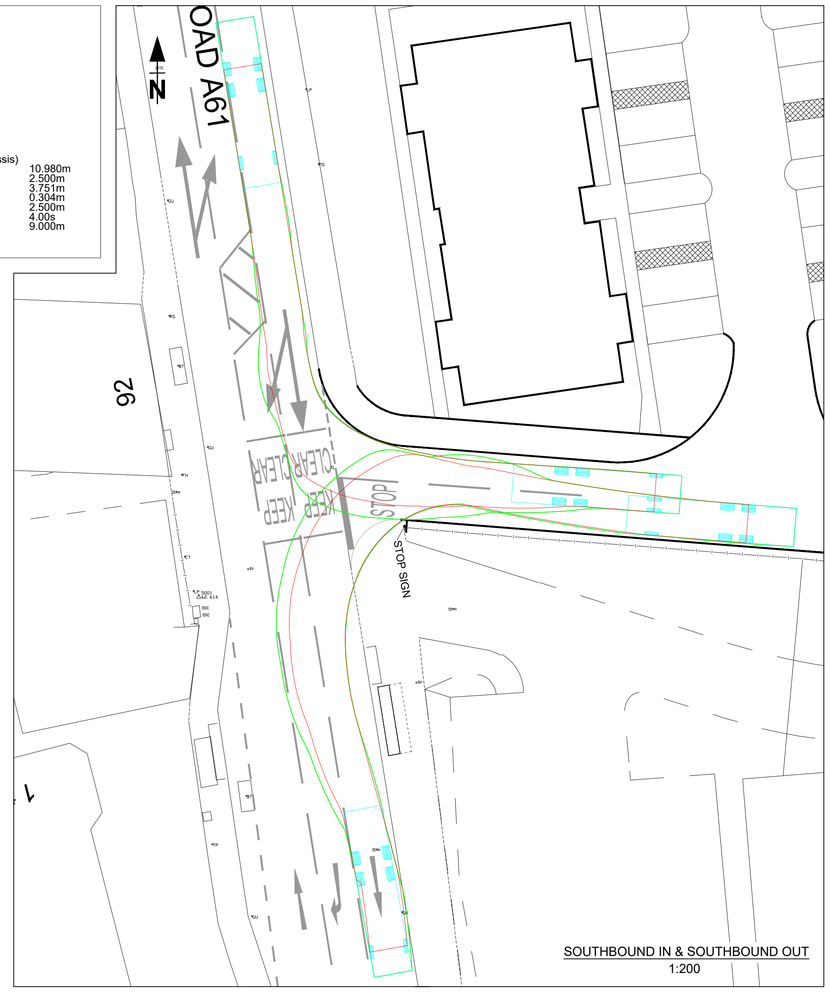
1. REFER TO DWG HW-002 FOR LOCATION OF SECTION A-A



NORTHBOUND IN & NORHTBOUND OUT
1:200

Phoenix 2 One-Pass 9 (with Elite 6x4 chassis)

Overall Length	10.980m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.000m



SOUTHBOUND IN & SOUTHBOUND OUT
1:200



TURNING HEAD
1:200

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PROJECT: WAKEFIELD ROAD, BARNSLEY

DRAWING TITLE: SECTION & SWEPT PATHS

DRAWING STATUS: FOR INFORMATION

DATE: 21 August 2019

SCALE @ A1: AS SHOWN

DRAWN:	CHECKED:	APPROVED:
NGP	SR	SR

DRAWING No.: TGN-1433-01-HW-003

REVISION No.: