

Jacktrees Road, Cleator Moor

A25082 - Technical Note 01

1. Introduction

1.1. Astute Transport Planning ("Astute") has been instructed by Gleeson Homes to provide transport planning advice in relation to proposals for residential development on land off Jacktrees Road in Cleator Moor.

2. Background

- 2.1. Planning application 4/23/2009/0F1 was submitted in January 2023. The detailed planning application proposed the development of 64 residential dwellings on land to the north of Jacktrees Road. This was detailed on site layout plan PL-02, dated 15th November 2022.
- 2.2. The planning application proposed vehicle access to the site via a new priority controlled junction with Jacktrees Road. In conjunction with the new junction it was proposed to extend the 30 mph speed limit change on the Jacktrees Road to the south of the proposed site access.

2022 Transport Statement

- 2.3. The planning application was supported by a December 2022 Transport Statement prepared by Vectos/ SLR. This report concluded that:
 - The site was located within convenient walking and cycling distance of a range of day-to-day amenities within Cleator Moor. The site also benefited from suitable access to regular public transport services. The site was therefore concluded to be accessible on foot, by cycle and by public transport;
 - There were no existing highway safety issues in the vicinity of the site;
 - The proposed site access junction, and internal road network had been designed in accordance with the Development Design Guide issued by Cumbria County Council;
 - The proposed development would generate a volume of traffic that would have no material impact upon
 the safe and efficient operation of the surrounding highway network, and could be suitably accommodated
 by the form of site access junction proposed;
 - An appropriate level of car parking was proposed, mindful of the County Council's adopted standards; and
 - The site could be safely serviced using an 11.2 metre refuse vehicle.



Highway Comments

- 2.4. Following submission of the planning application an initial consultation response, dated 6th February 2023, was received from the Council's highway officers. This response requested that the following points be addressed prior to highway officers making a formal response:
 - The proposed access for this development site is within a 40mph zone with visibility splays shown on the plan at 43m in either direction. Has a speed survey been carried out to determine the visibility splays distance? If so can evidence of the results be submitted for review. If no speed survey has been carried out and no 85th %ile speed identified then a distance of 120 metres in either direction is required as stated in the DMRB and Cumbria Development Design Guide.
 - No crossing points have been including in any plans submitted to the LPA for this development site. The LHA
 would welcome a plan showing all crossing points to identify safe passage for pedestrians/residents within
 the site.
 - The proposed site access from Jacktrees Road shown on planning layout drawing number PL-02 shows footways on either side of the proposed access, these footways do not connect to existing footways.
 Crossing points on Jacktrees Road need to be designed to allow safe passage for pedestrians/residents.
 - The LHA would welcome a plan showing which areas of the development site will be offered for adoption.
 - As the proposed development is to create over 50 units upon completion an emergency vehicle access
 (EVA) is to be created as stated in the Cumbria Development Design Guide. The EVA is to be shown on a
 detailed plan and submitted to the LPA for review.
 - Although the proposed parking spaces for this site are stated to be over the required amount needed for
 the amount and type of houses, on closer inspection garages within development units have been included
 in the total sum. Due to the size of the garages proposed within this development a car would not be able
 to open the doors comfortably whilst parked within the garage, therefore they cannot be included within
 the overall total.

3. Proposed Development

3.1. In addition to the aforementioned highways comments, consultation responses have also been received from other officers at Cumberland Council. These comments have resulted in an updated site layout been prepared. This layout, reference **TL-03d**, is included in **Appendix A**.



3.2. The revised layout now proposes a development of 62 residential dwellings. Vehicle access to the development is retained from Jacktrees Road.

4. Scope of Work

- 4.1. In addition to the aforementioned highway comments, the case officer for the application has requested that an updated transport report be submitted to support the revised proposals.
- 4.2. On this basis, this Technical Note provides a response to the highway officers comments, while also reviewing the information provided in the 2022 Transport Statement in the light of the revised proposals. This information is provided in the order it was presented in the Transport Statement report.

5. Planning Policy Overview

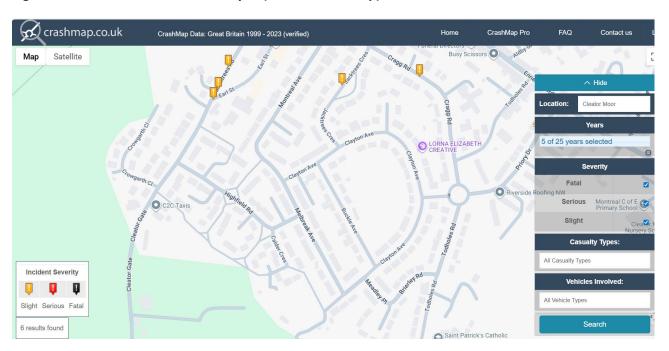
- 5.1. The current National Planning Policy Framework (NPPF) was published in December 2024. At the heart of the Framework remains a presumption in favour of sustainable development.
- 5.2. Paragraph 116 of the NPPF states that 'Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios'.
- 5.3. There conclusions drawn in this Technical Note will be considered in accordance with the latest version of the NPPF.
- 5.4. In terms of local planning policy it is noted that the land is identified in the Copeland Local Plan (2021-2039) as housing allocation reference HCM1 'Land at Jacktrees Road'. The Local Plan identifies the land for the development of 127 dwellings.
- 5.5. The Copeland Transport Improvement Study (TIS) has attributed an active travel infrastructure improvement scheme to site HCM1. This comprises traffic calming measures on Jacktrees Road from the site to the B5295 High Street, and a cost of £12,800 is attributed to these works. Notably these costs relate to a development of 127 dwellings.
- 5.6. The revised scheme proposes the development of 62 dwellings. Therefore, on the basis that the scale of development is lower than that considered in the Copeland TIS, the level of contribution should also be reduced proportionally.
- 5.7. On this basis the applicant confirms their willingness to provide contribution of £6,246 towards the measures identified in the TIS.



6. Baseline Conditions

- 6.1. In terms of the surrounding road network, the baseline highway conditions in the vicinity of the site have not materially altered since the 2022 Transport Statement was prepared.
- 6.2. However, to provide a robust analysis the Crashmap road safety analysis presented in Figure 3.2 of the Transport Statement has been updated to reflect the most recent 5 years of data that is available. This is now between 2019 and 2023 and is presented in **Figure 6.1**.

Figure 6.1: 2019 - 2023 Accident Analysis (Source: Crashmap)



- 6.3. The updated analysis shows that in the last five years there have only been three slight accidents across the Jacktrees Road priority controlled junctions which serve the surrounding residential areas. This confirms the previously drawn conclusion, which is that the nature of traffic on Jacktrees Road is not such that it creates any highway safety issues with any priority controlled junctions that are formed off it.
- 6.4. On this basis, it is again concluded that there are no accident blackspots in the vicinity of the site, and no evidence to suggest that the proposed site access junction would experience any highway safety issues.

7. Accessibility by Sustainable Travel Modes

7.1. The Transport Statement concluded that the site benefits from convenient access to key day-to-day services and amenities, which are accessible by active travel modes. The site also offers the opportunity for prospective residents to use public transport services.



7.2. The site was therefore considered to be accessible by sustainable modes, and this conclusion remains valid in the context of the updated development proposals.

8. Development Proposals

Proposed Development

- 8.1. The revised site layout plan proposes the development of 62 residential dwellings. These are to comprise:
 - 14 x 2 bedroom dwellings;
 - 31 x 3 bedroom dwellings; and
 - 17 x 4 bedroom dwellings.

Site Access and Internal Layout

- 8.2. An updated general arrangement drawing of the proposed site access is shown in **Drawing A25082-0010-001 P02**.

 This is provided in **Appendix B**. This drawing confirms that vehicle access to the site remains proposed from Jacktrees Road via a new priority controlled junction.
- 8.3. As outlined in the Transport Statement, in conjunction with the formation of this new access point it is proposed that the existing 30 mph/ 40 mph the speed limit change on Jacktrees Road be relocated. This will reflect the extension of the urban area occurring as a result of the development proposals. In this manner a 30 mph speed limit will cover the extent of the site frontage.
- 8.4. To determine the site access visibility splay requirements, and in recognition of the highway officers comments, a speed survey was undertaken on 25th April 2023. The survey was undertaken on Jacktrees Road just south of Crowgarth Close. This location is within the 30 mph zone, and it was therefore agreed with officers as being an appropriate survey location as it would confirm the speed that vehicles on Jacktrees Road that were subject to this speed limit would typically travel.
- 8.5. The speed survey recorded 85th percentile wet weather speeds of 34.5 mph in a northbound direction, and 33.5 mph in a southbound direction. Based upon the visibility splay calculation formula outlined in paragraph 7.5.3 of Manual for Streets this equates to a northbound visibility splay requirement of 53 metres, and a southbound visibility splay requirement of 50 metres. Both 'Y' distance measurements include an additional 2 metre bonnet length adjustment. The full speed survey results are presented in **Appendix C**.
- 8.6. **Drawing A25082-0010-001 P02** confirms that these visibility splay lengths are achievable from the proposed site access.



Pedestrian and Cycle Access

- 8.7. To support pedestrians 2 metre footways are proposed on either side of the new site access. The junction will also provide dropped kerbs and tactile paving on both sides of the bellmouth to support safe pedestrian movements across the access. Additional dropped kerbs are then provided on Jacktrees Road on both the northern and southern side of the proposed bellmouth. This infrastructure will safely connect the site to the existing pedestrian infrastructure which runs along the opposite side of Jacktrees Road. This infrastructure is shown on **Drawing**A25082-0010-001 P02.
- 8.8. On the eastern side of the site additional pedestrian connections are provided to the footways which extend from Calder Crescent and Highfield Road.
- 8.9. Cycle access to the site will be achieved from the Jacktrees Road access, although cyclists will also be able to enter the site via Highfield Road and Calder Crescent.

Internal Site Layout

- 8.10. The internal layout has been developed with reference to the Highway Design Guidance issued by Cumbria County Council as part of their Development Design Guide.
- 8.11. The initial internal carriageway will be constructed to a width of 5.5 metres, with 2 metre footways then provided on both sides of the road. This will then lead to three adopted shared surface areas which include service strips. The layout also includes a number of private drives, each of which will serve no more than 5 dwellings.
- 8.12. Within the site dropped kerbs and tactile paving will be provided at key junctions, while a raised zebra crossing type facility will be provided across the main estate road in the proximity of Plot 24. This will also act as a traffic calming feature.
- 8.13. The site layout plan provided in **Appendix A** illustrates the extent of the internal site layout which is to be offered for adoption.

Emergency Vehicle Access

- 8.14. In recognition of the Council's comments a 3.7 metre wide emergency vehicle access point onto Jacktrees Road has now been provided, which is located to the south of Plot 62. The site layout plan shows the indicative locations of bollards that can installed to limit the use of this access to emergency vehicles and active travel users.
- 8.15. The emergency vehicle access has been tracked using a 7.9 metre fire tender. A general arrangement plan of the emergency vehicle access, including AutoTRACK assessment is presented in **Drawing A25082-0100-004 P01** in **Appendix D**. This confirms that the access can suitably accommodate this vehicle.



Parking

- 8.16. Resident's parking is to be provided within the curtilage of each property.
- 8.17. The Council's adopted parking standards are provided in Appendix 1 of their Development Design Guide. The parking standards are not provided as 'maximum' or 'minimum' values, with the guidance stating that developments may prove acceptable without offering parking levels as indicated in the document. The stated parking standards are:
 - 2 bedroom houses 2 spaces/ dwelling
 - 3 bedroom houses 2.5 spaces/ dwelling
 - 4 bedroom houses 2.5 spaces/ dwelling.
- 8.18. In the context of the revised proposals this equates to a total parking level of 148 spaces. The proposed development will provide a total of 145 residents parking spaces, excluding any spaces provided in garages. This level of provision is therefore approximately in line with the Council's standards.
- 8.19. It is, however, noted that officers from Cumberland Council have advised that they are intending to revise their parking standards to 2 parking spaces/ 2 and 3 bedroom properties and 3 parking spaces/ 4 bedroom property. If these revised standards are applied then this equates to a total parking level of 141 spaces for the development. The proposed 146 spaces would accord with this standard.
- 8.20. In addition the Council require 1 visitor space/ 5 dwellings. The proposed development will provide a total of 12 visitor parking spaces which accords with the Council's standards.

Servicing

8.21. The proposed internal layout has been tracked using an 11.2 metre refuse vehicle. This assessment is presented in Drawings A25082-0100-002 P02 and A25082-0100-003 P02 in Appendix E, which demonstrates that all required vehicle movements can be safely undertaken. Where residential properties are located beyond the Council's recommended travel distances, bin store locations have been identified.

Traffic Generation

8.22. **Table 8.1** provides an updated traffic generation analysis, based upon the revised quantum of the development. The analysis adopts the TRICS derived trip rates presented in Table 5.1 of the Transport Statement.



Time		Trip Rate		Trip Generation - (62 dwellings)			
	Arr	Dep	Two Way	Arr	Dep	Two Way	
AM Peak	0.158	0.342	0.500	10	21	31	
PM Peak	0.323	0.169	0.492	20	10	30	

- 8.23. Based upon the trip rate assessment the proposed development is forecast to generate 31 two-way vehicle trips in the AM peak hour and 30 two-way vehicle trips during the PM peak hour. In the AM peak hour this equates to an additional inbound trip every 6 minutes, and an additional outbound trip approximately every 3 minutes. Meanwhile in the PM peak hour it equates to an additional inbound trip every 3 minutes, and an additional outbound trip every 6 minutes.
- 8.24. Such changes in traffic would be less than those expected to occur on the highway network surrounding the site as a result of daily fluctuations. As such the introduction of development related traffic will have an indiscernible impact, and on this basis it is concluded that the development will have no material impact upon the safe and efficient operation of the surrounding highway network.
- 8.25. It is also concluded that the proposed volume of traffic generated by the site can be suitably accommodate by the form of site access junction that is proposed.

9. Conclusions

- 9.1. Astute has been appointed by Gleeson Homes to provide highways and transport advice in support of a proposed residential development on land to the east of Jacktrees Road, Cleator Moor.
- 9.2. The revised scheme proposes a residential development comprising 62 dwellings. Vehicle and pedestrian access is to be taken from a priority-controlled access from Jacktrees Road, with an additional pedestrian accesses also provided from the eastern side of the site which connect to the surrounding footpath network.
- 9.3. This Technical Note has been prepared to address comments received from the Council's highway officer, and to reflect revisions to the site layout plan which have been made during the consultation process. The report provides the following information and key conclusions.
 - In accordance with the conclusions drawn in the 2022 Transport Statement, the site accords with planning
 policy guidance by being accessible on foot and bicycle, and with convenient access to regular public
 transport services. The site is also within walking and cycling distance of a range of day-to-day amenities
 within Cleator Moor.



- An updated review of historical collision data has demonstrated that there are no existing highway safety issues in the vicinity of the site.
- Pedestrian and vehicle access to the site is to be taken from Jacktrees Road via a new priority-controlled junction. The junction provides visibility splay lengths in accordance with the results of a speed survey undertaken on Jacktrees Road. Pedestrian facilities, in the form of dropped kerbs and tactile paving, are provided on both sides of the access and across Jacktrees Road. These allow connections between the site and the wider pedestrian network.
- The internal road network has been designed in accordance with the Development Design Guide issued by Cumbria County Council. Pedestrian facilities within the site have been identified, as has the extent of the internal network which will be offered for adoption.
- The applicant has confirmed their willingness to provide a financial contribution towards the traffic calming measures identified in the Copeland TIS.
- In accordance with the Council's comments, the revised layout includes an emergency vehicle access to the site from Jacktrees Road. This provides a minimum width of 3.7 metres in accordance with design standards, and can also operate as an active travel access point.
- The development provides a level of car parking, including visitor spaces, which accords with the Council's existing and emerging car parking standards.
- The revised quantum of development is forecast to generate 31 and 30 two-way vehicle trips in the AM and PM peak hours, respectively. In accordance with the conclusions drawn in the Transport Statement, such changes in traffic flows will have no material impact upon the safe and efficient operation of the surrounding highway network, and can be suitably accommodate by the form of site access junction that is proposed.
- The site can be safely serviced using an 11.2 metre refuse vehicle.
- 9.4. The latest version of the National Planning Policy Framework states that "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.'
- 9.5. This Technical Note has demonstrated that the proposed development would have no impact upon highway safety and that the residual cumulative impacts of the proposed development, taking account of all reasonable future scenarios, would not be severe.



9.6. Therefore, in accordance with the NPPF the planning application should not be refused on highways grounds.



Appendix A

Proposed Site Layout Plan

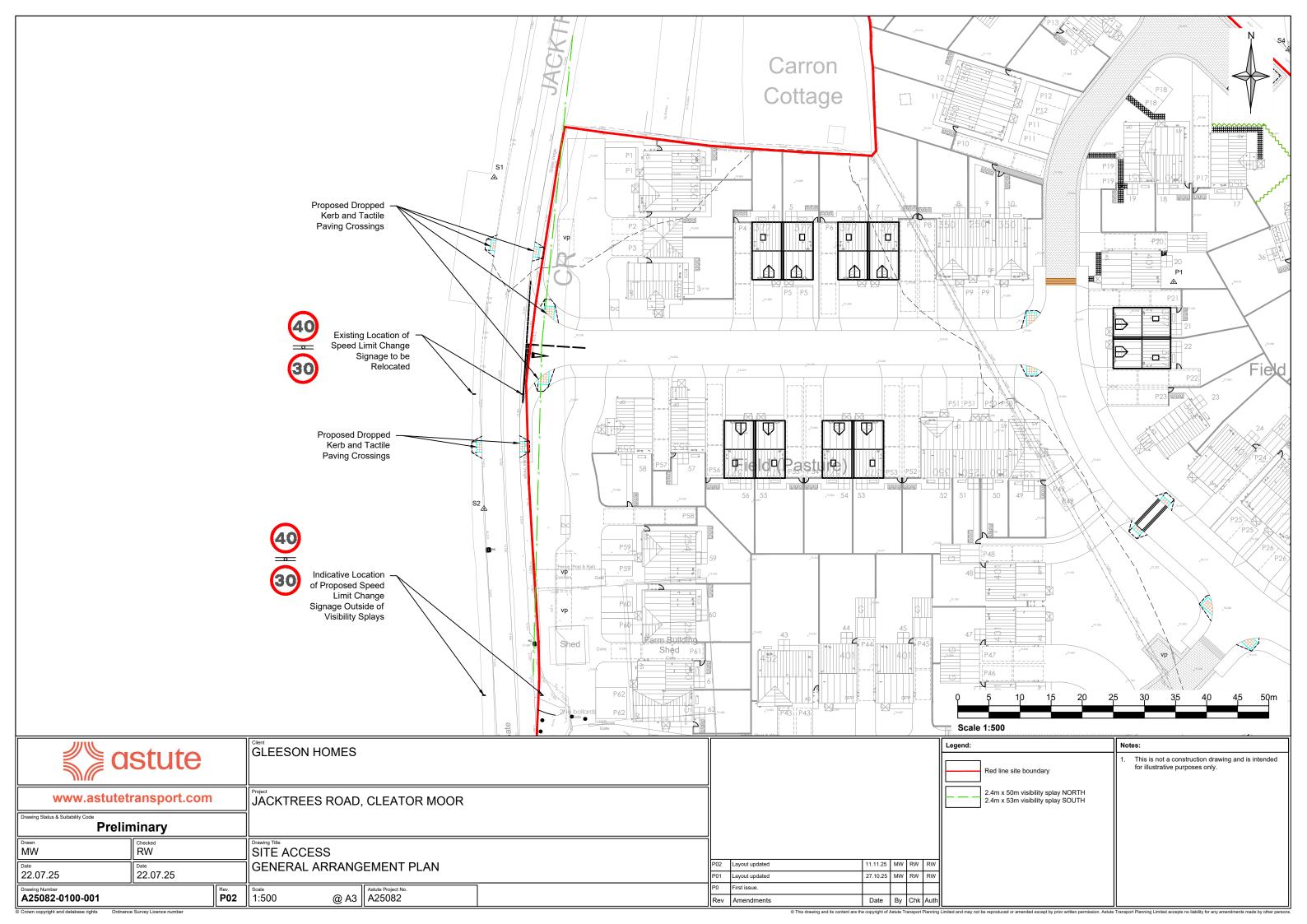






Appendix B

Proposed Site Access General Arrangement Plan





Appendix C

Speed Survey Data

SURVEY CONTROL

Client: Gleeson Homes

Client Contact: Rich Whiting

Survey Location: Cleator Moor

Date(s) of Survey: Tuesday 25th April 2023

Notes: Dry weather conditions

On Site Supervisor(s): Rachel Wong

Data Checking: David Cheng

Survey Reference: 23.009 Cleator Speed

Status: Final

Date of Issue: 26th April 2023



SPEED SURVEY MAP REFERENCE JOB TITLE 23.009 CLEATOR SPEED SCALE DRAWN BY FIGURE 1 NTS APRIL 2023 DC

Transport Data

Specialists Ltd

W: www.transportds.co.uk
E: enquiries@transportds.co.uk
T: 0777 625 2475 T: 0794 007 1260

signal surveys

Cleator Gate - Tuesday 25th April 2023									
Northbound Readings (mph)									
1-25	26-50	51-75	76-100	101-125	136-150	151-175	176-200		
31	27	34	29	32	31	29	37		
30	35	30	32	33	32	34	30		
37	38	31	34	31	37	31	32		
36	27	27	33	33	42	29	33		
27	38	30	42	34	40	29	32		
30	29	31	26	25	42	37	30		
31	33	36	24	31	31	29	32		
26	30	34	27	29	34	32	35		
34	35	34	33	34	35	37	30		
45	36	32	32	32	37	30	29		
35	26	28	34	36	32	33	31		
29	27	29	31	37	34	34	36		
30	26	30	32	37	36	34	34		
35	28	39	31	34	31	37	39		
34	37	39	28	38	36	38	33		
36	29	33	28	34	27	33	30		
28	31	40	27	32	26	35	33		
35	31	30	39	26	33	39	30		
28	32	32	36	33	35	32	35		
32	28	27	32	34	30	38	32		
37	41	30	30	30	33	32	24		
38	43	32	31	32	34	32	34		
34	34	33	28	34	31	30	30		
36	28	32	29	38	28	33	31		
32	30	29	31	35	35	28	32		

Cleator Gate - Tuesday 25th April 2023									
Southbound Readings (mph)									
1-25	26-50	51-75	76-100	101-125	136-150	151-175	176-200		
30	28	31	33	34	27	40	31		
32	31	30	30	37	28	31	26		
34	34	35	31	30	31	28	38		
39	32	35	33	32	33	31	30		
35	32	33	32	28	34	39	45		
33	39	27	35	29	35	30	28		
33	29	33	28	36	31	35	41		
39	37	34	29	30	31	35	27		
33	35	29	32	39	26	33	28		
36	34	28	27	39	27	34	38		
28	35	35	29	30	35	35	30		
27	33	29	36	28	33	46	38		
27	33	31	28	29	33	36	38		
35	30	41	33	34	31	31	30		
38	28	40	35	29	31	35	29		
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32	33	34	36	44	29	34	31		
28	31	30	26	27	33	27	33		
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26	27	29	30	30	35	40	32		
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25	35	30	30	30	36	33	34		
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28	29	33	29	26	33	33	38		

signal surveys

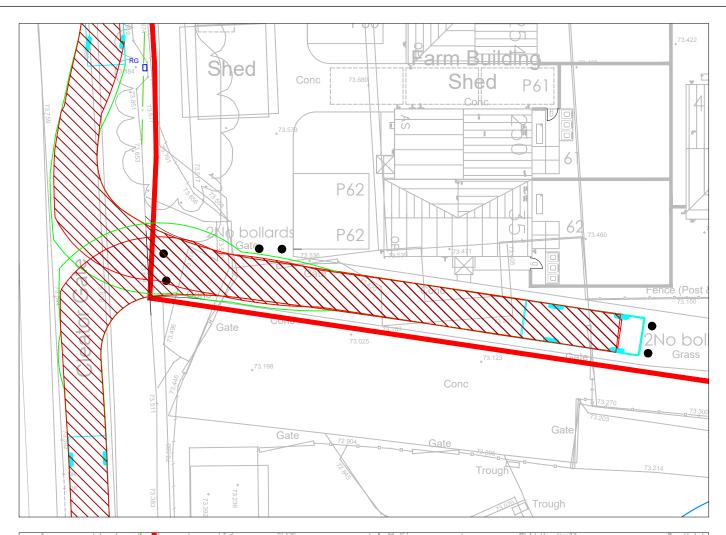
85th Percentile			85th Percentile	85th Percentile					
Dry Weather Spe	eed			Dry Weather Spee	d				
	=	37	mph		=	36	mph		
	=	59.53	kph		=	57.92	kph		
Deduction for Sir	ngle Carriag	jeway		Deduction for Sing	le Carria	geway			
	4	kph			4	kph			
Wet Weather Sp	eed			Wet Weather Spee	ed				
	=	34.5	mph		=	33.5	mph		
	=	55.5	kph		=	53.9	kph		
Top Speed				Top Speed					
	=	45	mph		=	46	mph		
Average Speed				Average Speed					
go opoou	=	32.505	mph	Attending opposit	=	32.255	mph		

MFS 1 Visibility Calcs					MFS 1 Visibility Calcs				
SSD = vt + v2/2d			;	SSD = vt + v2/2d					
٧	15.43	speed (m/s)	34.5	,	V	14.98	speed (m/s)	33.5	
T	1.5	Driver perception		•	T	1.5	Driver perception		
D	4.41	deceleration		I	D	4.41	deceleration		
	50	Visibility splay				48	Visibility splay		
	53	Splay plus bonnet length adjustment				50	Splay plus bonnet length adjustment		

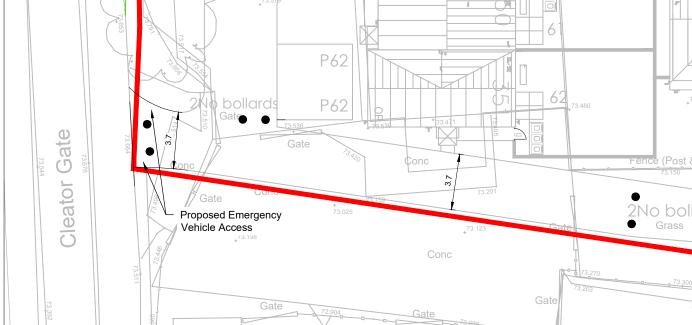


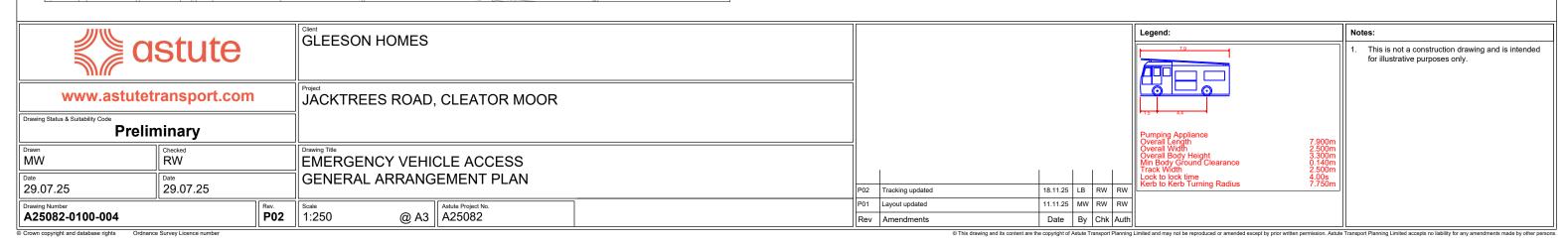
Appendix D

Emergency Vehicle Access General Arrangement Plan and Vehicle Tracking Assessment











Appendix E

Refuse Vehicle AutoTRACK Assessment

