
Land south of Smugglers Lane, Barns Green: Access Design Review

Ref: NM/HC/ITL200844-006B TN
Date: 29 May 2026

SECTION 1 Introduction

1.1 Overview

1.1.1 This Technical Note (TN) has been prepared on behalf of the Applicant, Miller Homes and Miller Developments, in relation to the proposed 68 dwellings (the development) at Land south of Smugglers Lane, Barns Green (the site) (Horsham District Council planning application reference: DC/25/20570).

1.1.2 This TN should be read in conjunction with:

- The Transport Statement prepared to support the application (report reference: ITL200844-003).
- The subsequent TN prepared to review the existing on-street car parking experienced on Chapel Road (report reference: ITL200844-007 TN), as summary of which is provided at **Section 2**.

1.1.3 This TN presents a *layman's review* of the proposed access design, clarification of the road widening and why alternative designs were discounted. Commentary is provided for the following access designs:

Access Arrangement Proposed at Application Submission

- **ITL200844-GA-006D** (Site Access Arrangements – Option 2 Plus Chapel Road Narrowing)

Updated Access Arrangement

- **ITL200844-GA-011B** (Site Access Arrangements – Option 2 Plus Chapel Road Narrowing and Onsite Car Park)

Discounted Access Designs

- **ITL200844-GA-002** (Site Access Arrangements – Option 1)
- **ITL200844-GA-003** (Site Access Arrangements – Option 1 Plus Onsite Parking (Parallel Bays))
- **ITL200844-GA-004** (Site Access Arrangements – Option 1 Plus Onsite Parking (Car Park))
- **ITL200844-GA-005** (Site Access Arrangements – Option 2)

1.1.4 All access drawings referenced in this TN are attached at the end.

SECTION 2 Existing Car Parking on Chapel Road

2.1 Car Parking Survey

2.1.1 A car parking stress survey was undertaken between Saturday 21 – Friday 27 March 2026 to review the existing levels of on-street car parking experienced on the eastern side of Chapel Road, between The Queen's Head pub car park in the north and The Hordens junction in the south. Full analysis of the survey results is presented in ITL200844-007 TN.

2.1.2 A summary of the results is also presented at **Table 2.1**, which demonstrates that generally, there is existing car parking capacity.

Table 2.1: Daily Average Parking Stress

Day of Week	Average Parking Space Availability ¹	Average Parking Stress
Monday	8/13	30%
Tuesday	9/13	30%
Wednesday	9/13	24%
Thursday	8/13	31%
Friday	8/13	35%
Saturday	9/13	27%
Sunday	9/13	28%

Source: Charge Surveys and consultants calculations

¹ Rounded down to whole number (complete parking space).

SECTION 3 Access Design Review

3.1 Access Arrangement Proposed at Application Submission

3.1.1 Access to the site is proposed via a new priority junction from the western side of Chapel Road, leading to a 5.5m wide access road entering into the proposed development. The proposed access arrangements are shown on drawing no. **ITL200844-GA-006D**. The proposed access arrangements also show:

- 2m wide footways on both sides of the access road for its initial section, continuing on the northern side only.
- A new 2m wide footway to be introduced on the western side of Chapel Road north and south of the access, which ties into Smugglers Lane (Bridleway no.1600) to the north.
- Widening of Chapel Road to 7.5m wide carriageway for two-way free-flowing traffic (5.5m) and on-street informal parking (2.0m), with space for c.10no. cars to park on-street.
- Introduction of two points of localised narrowing (4.8m), either side of the on-street parking area, providing two formalised uncontrolled pedestrian crossings to the footway on the eastern side of Chapel Road, with dropped kerbs and tactile paving. These ensure that pedestrians can safely cross the road, with clear visibility around parking cars on Chapel Road, and also enabling a safe direct connection to Smugglers Lane to the benefit of the existing community and future site occupiers.
- Appropriate vehicular and pedestrian visibility splays, in accordance with recorded speeds².

3.1.2 This access location is required to ensure:

- Sufficient junction spacing (30m) between the proposed access and The Hordens.
- Appropriate visibility splays are achievable without third party land conflict (i.e., land within the Applicant's or WSCC's control to ensure visibility splays are not compromised). Moving the access further north would compromise this at Smugglers Lane (Bridleway no.1600).

3.1.3 Hedge loss is required on the western side of Chapel Road to provide the access road, Chapel Road widening and new western footway. The scale of hedge loss required to provide safe and suitable access for all does not vary greatly between the proposed, updated and discounted access designs.

² Average 85th percentile speeds recorded during the weekday interpeak periods (10:00-12:00 and 14:00-16:00), as per DMRB CD123 guidance.

- 3.1.4 The access arrangements have been subject to an independent Stage 1 Road Safety Audit (RSA) by Fenley Road Safety Limited. The full RSA report and RSA Response Note (report reference: ITL200844-005) is provided at **Appendix A**. Within the RSA Response Note, West Sussex County Council (WSCC) confirm that in each case the Designers Response is accepted, such that there are no residual safety issues with the access proposal.

3.2 Updated Internal Access Road Arrangement

- 3.2.1 Following discussion with local stakeholders and the design team (post planning submission) an updated internal access road arrangement plan has been prepared to include 4no. visitor parking spaces to the north of the access road and is shown on drawing no. **ITL200844-GA-011B**. No revisions have been made to the access design in relation with its layout and location where it meets the public highway on Chapel Road.
- 3.2.2 The car parking occupancy survey results demonstrate that the eastern side of Chapel Road currently allows for up to 13no. cars (14no. cars including dropped kerb) to park between The Queen's Head pub car park in the north and The Hordens junction in the south. The proposed access arrangement allows for c.10no. cars to continue to park in this location (c.12no. including the H-bar markings, which are not legally enforced and only acts as a deterrent). It is therefore clear that the retained on-street provision is suitable to accommodate demand.
- 3.2.3 However, the 4no. additional spaces are proposed to provide an overall net gain in parking spaces in the vicinity of The Queen's Head pub and The Barns Green Village Store and Post Office, which could be readily used by the pub and village shop customers alike. This would prohibit any adverse highway safety impacts that could arise from an unusually high period of on-street demand.

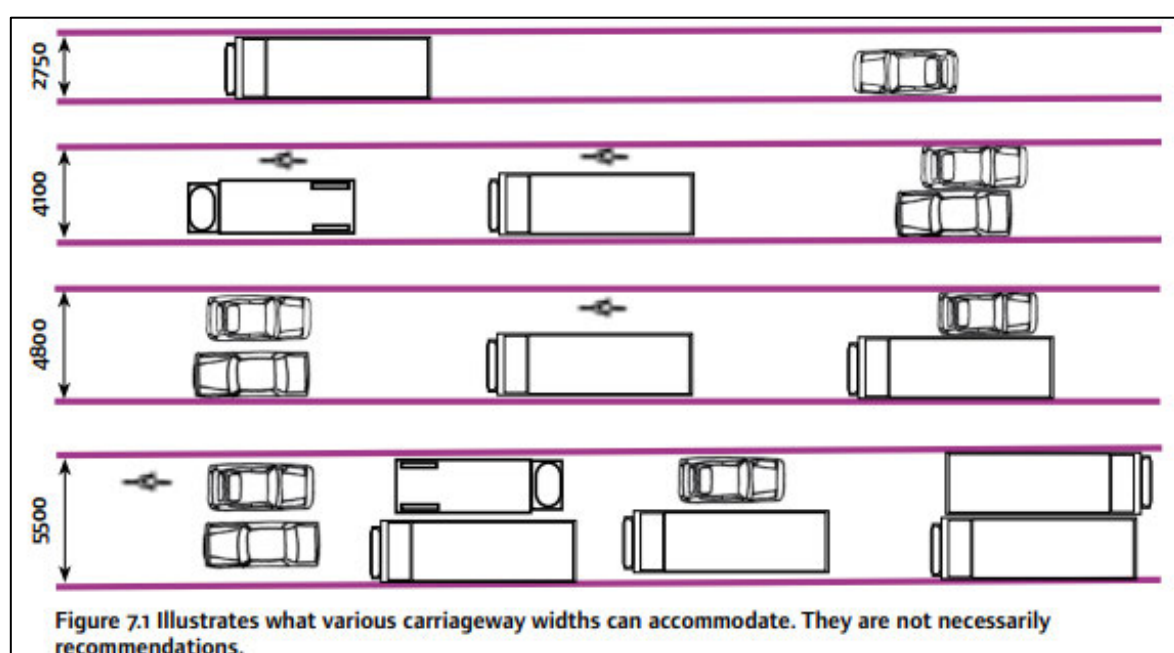
3.3 Discounted Access Designs

- 3.3.1 When working up the proposed access design (**ITL200844-GA-006D**), 'Option 1' and 'Option 2' access designs were prepared, with three and two variations for each, respectively. Therefore, a total of five access arrangement options were prepared. Ultimately one of the variations for Option 2 was put forward in support of the application. Set out below is a short summary of why the four other options were ultimately discounted.

ITL200844-GA-002 (Site Access Arrangements – Option 1)

3.3.2 In the first instance, it was acknowledged that on-street car parking occurs on the eastern side of Chapel Road opposite the site frontage, which results in one-way shuttle-working in the northbound direction. Secondly, the existing Chapel Road carriageway is c.5.5m wide, including the on-street parking area. Therefore, any larger vehicles trying to access / egress the site would conflict with any parked cars on the eastern side of Chapel Road as the effective clear two-way road width when on-street car parking occurs is c. 3.5m (the very minimum road width for a car to pass a lorry is 4.8m – Manual for Streets (MfS), Figure 7.1, Department for Transport) as extracted at **Image 3.1** below.

Image 3.1: Extract of MfS Figure 7.1



Source: Manual for Streets, Department for Transport

- 3.3.3 Restricting on-street parking on Chapel Road in this area would remove the need for one-way shuttle-working and accommodate larger vehicles trying to access / egress the site. However, it is appreciated that vehicles frequently use this area to park up and access The Barns Green Village Store and Post Office.
- 3.3.4 Therefore, drawing no. **ITL200844-GA-002** demonstrates double yellow line parking restrictions at the areas only necessary to ensure larger vehicles, including refuse lorries could access / egress the site without conflicting with parked cars. This results in 4no. on-street parking spaces being retained, which would lead to 2 points of one-way shuttle-working either side of the access. This would result in a net loss of 9no. on-street parking spaces. Build-outs are also shown at the ends of the on-street parking bays to provide uncontrolled crossing points for pedestrians.

- 3.3.5 This access option was ultimately discounted as a parking restriction approach results in a net loss of 9no. parking spaces, may lead to unlawful parking behaviours, which may have a knock on effect to safe site access operation and may have a detrimental impact on the shop's operation.

ITL200844-GA-003 (Site Access Arrangements – Option 1 Plus Onsite Parking (Parallel Bays))

- 3.3.6 The access option shown at drawing no. **ITL200844-GA-003** demonstrates the same arrangement for Chapel Road, but highlights areas either side of the access road which could be used for parallel bay parking spaces to supplement the visitor parking that would be lost on Chapel Road.
- 3.3.7 This access option was ultimately discounted as a parking restriction approach may still lead to unlawful parking behaviours and providing parallel bays may result in frequent and potentially unsafe vehicle turning / reversing on the development's roads.

ITL200844-GA-004 (Site Access Arrangements – Option 1 Plus Onsite Parking (Car Park))

- 3.3.8 The access option shown at drawing no. **ITL200844-GA-004** demonstrates the same arrangement for Chapel Road, but highlights areas either side of the access road which could be used for small car parks to supplement the visitor parking that would be lost on Chapel Road.
- 3.3.9 This access option was ultimately discounted as a parking restriction approach may still lead to unlawful parking behaviours.

ITL200844-GA-005 (Site Access Arrangements – Option 2)

- 3.3.10 The Chapel Road improvement and site access strategy for Option 2, shown at drawing no. **ITL200844-GA-005** includes widening of the Chapel Road carriageway, towards the site, to a total width of 7.5m. This comprises a 5.5m wide carriageway for two-way free flowing traffic (as shown in Image 3.1) and to accommodate larger vehicles trying to access / egress the site and a 2.0m on-street parking bay width. 10 on-street parking bays are shown remaining and marked, with buildouts at the ends of the on-street parking bays to provide uncontrolled crossing points for pedestrians (linking to the site and PRoW), therefore resulting in a net loss of 3no. parking spaces.

ITL200844-GA-006 (Site Access Arrangements – Option 2)

- 3.3.11 Option 2 was progressed further, which led to the design submitted with the application and determined to be safe by the independent RSA. This is provided at drawing no. **ITL200844-GA-006D**), which demonstrates :
- Wider buildouts, resulting in two points of localised narrowing points (4.8m) to prioritise pedestrian crossing safety.
 - No on-street bay markings.

- H-bar markings in front of gated accesses to also maintain a clear space for vehicular turning movements.
- Hatched markings before southbound build-out to guide drivers around the build-out.

3.3.12 Ultimately this option was taken forward as it provides the greatest benefit to pedestrians, allows for the safe movement of vehicles, and safeguards the ability for informal short-term parking outside the local shop and pub.

SECTION 4 Summary

4.1 A total of five access options were prepared prior to application submission, which led to the submission of drawing no. **ITL200844-GA-006D** as the proposed access arrangement. The other four options were ultimately discounted due to the following reasons:

- The introduction of double yellow line parking restrictions would result in a net loss of 9no. parking spaces, which may lead to unlawful parking behaviours, may have a knock on effect to safe site access operation and may have a detrimental impact on the shop's operation.
- Providing parallel parking bays along the access road may result in frequent vehicle turning on the development's roads.

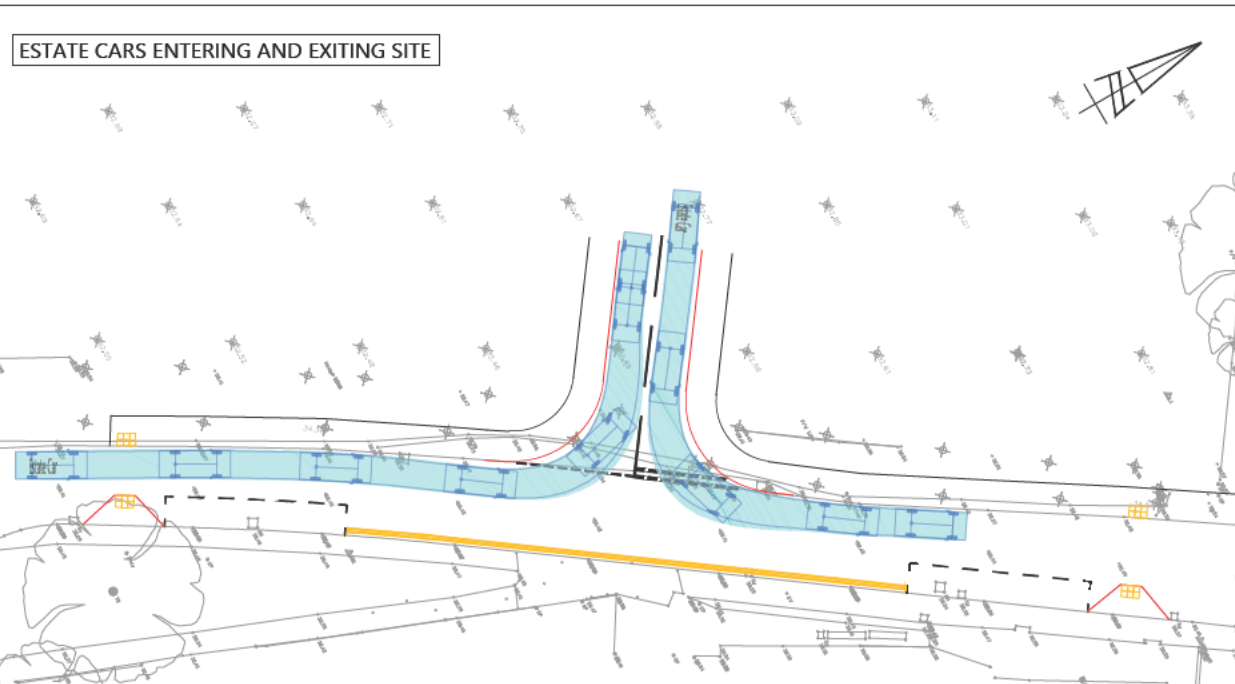
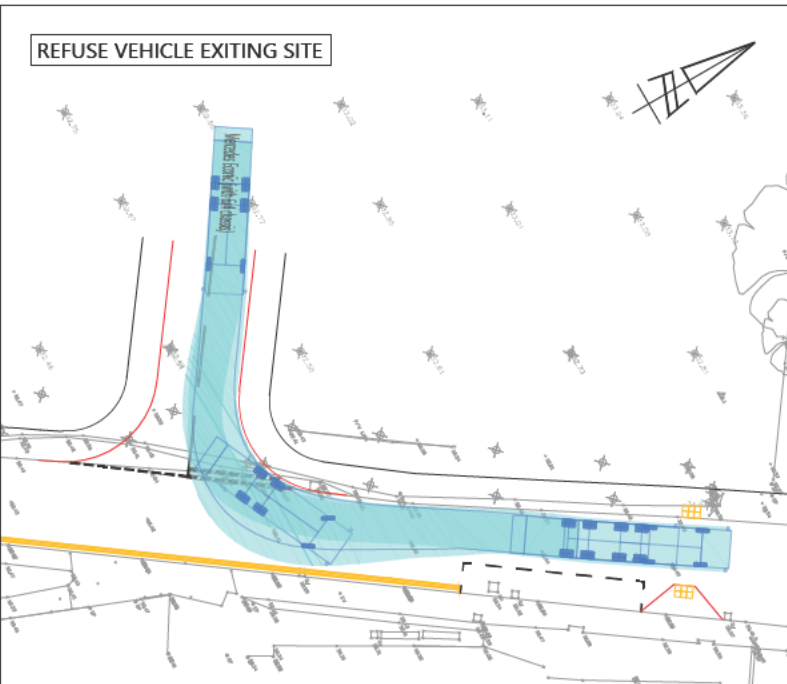
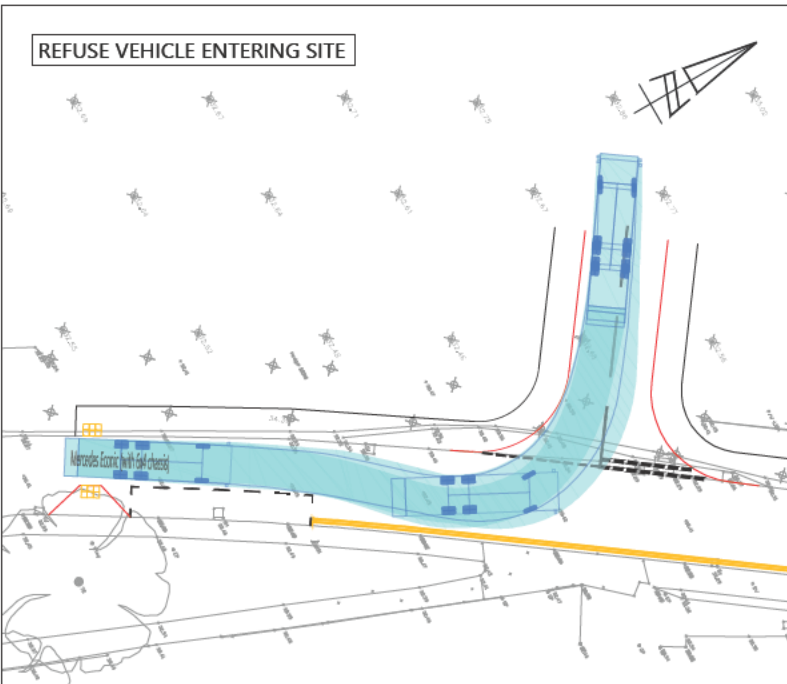
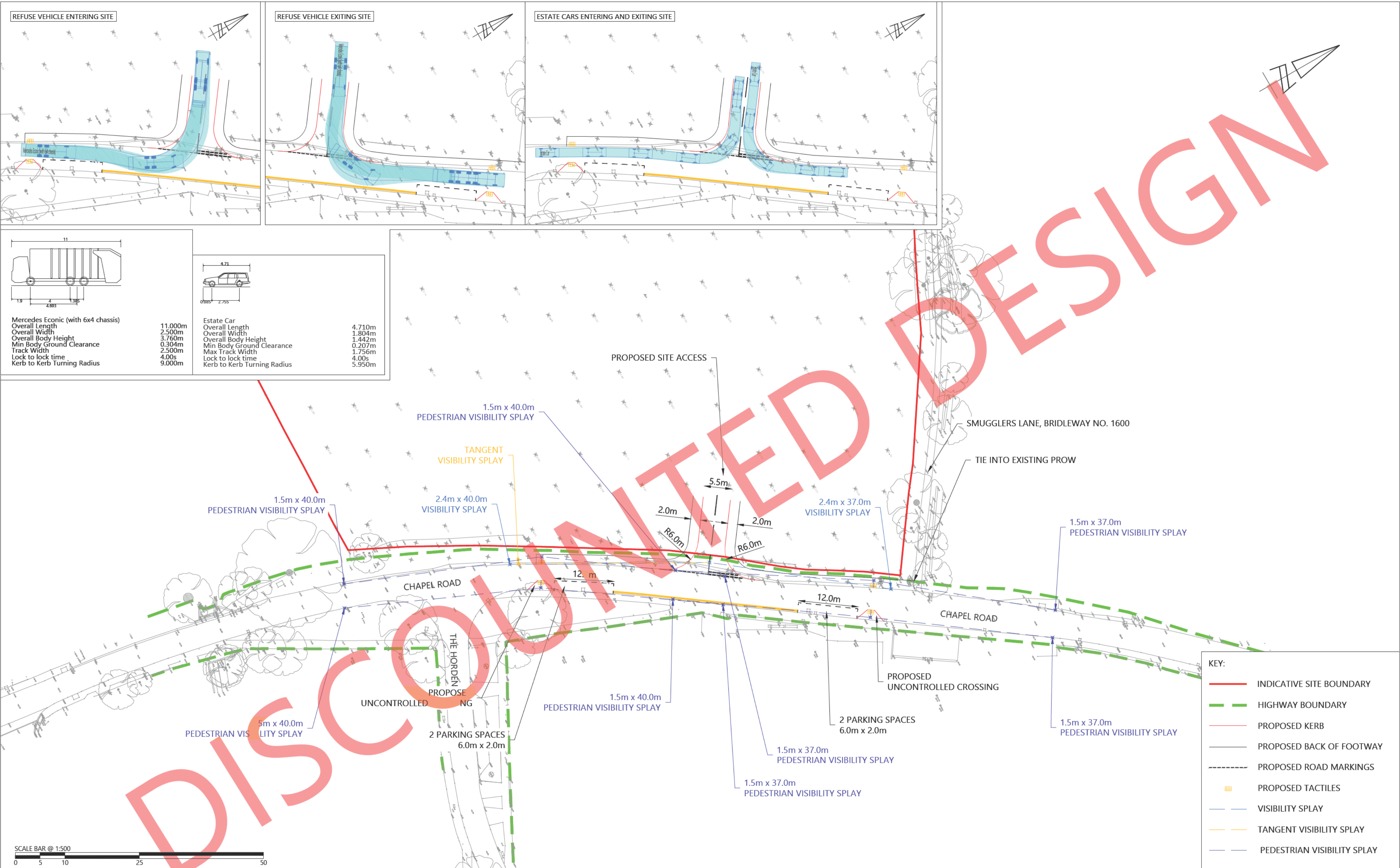
4.2 The access arrangements (drawing no. **ITL200844-GA-006D**) have been subject to an independent Stage 1 Road Safety Audit (RSA). Within the RSA Response Note, West Sussex County Council (WSCC) confirm that in each case the Designers Response is accepted, such that there are no residual safety issues with the access proposals.

4.3 The access location shown is required to ensure there is sufficient junction spacing (30m) between the proposed access, and The Hordens and appropriate visibility splays are achievable without third party land conflict (i.e., land within the Applicant's or WSCC's control to ensure visibility splays are not compromised).

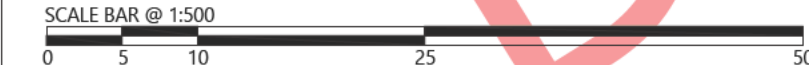
4.4 Since the application submission (planning reference: DC/25/2057), an updated access arrangement plan has been prepared to include 4no. visitor parking spaces to the north of the access road and is shown on drawing no. **ITL200844-GA-011B**. No other revisions have been made to the access design.

- 4.5 Car parking stress surveys suggest there is existing on-street car parking capacity on the eastern side of Chapel Road. The 4no. spaces are proposed to provide an overall net gain in parking spaces in the vicinity of The Queen's Head pub and The Barns Green Village Store and Post Office, which could be readily used by the pub and village shop customers alike. However, the access proposal operation and safety are not dependent on providing this additional parking.

DISCOUNTED DRAWINGS

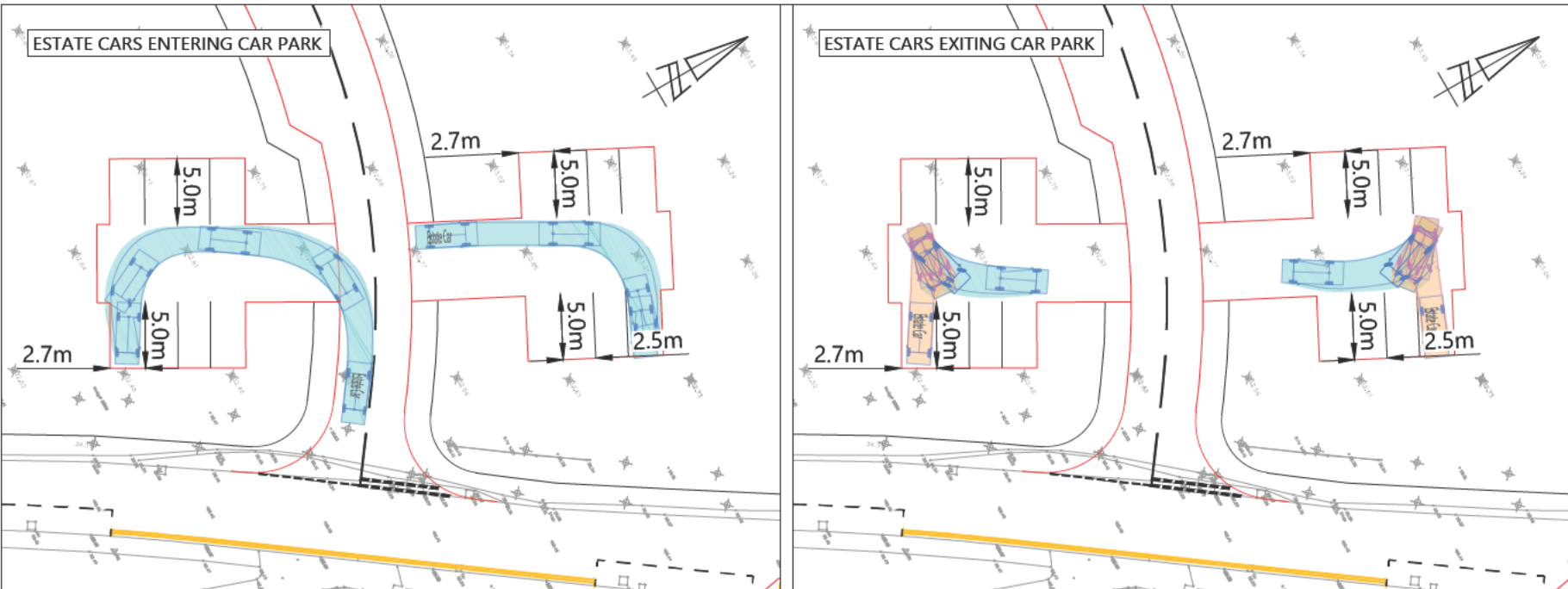
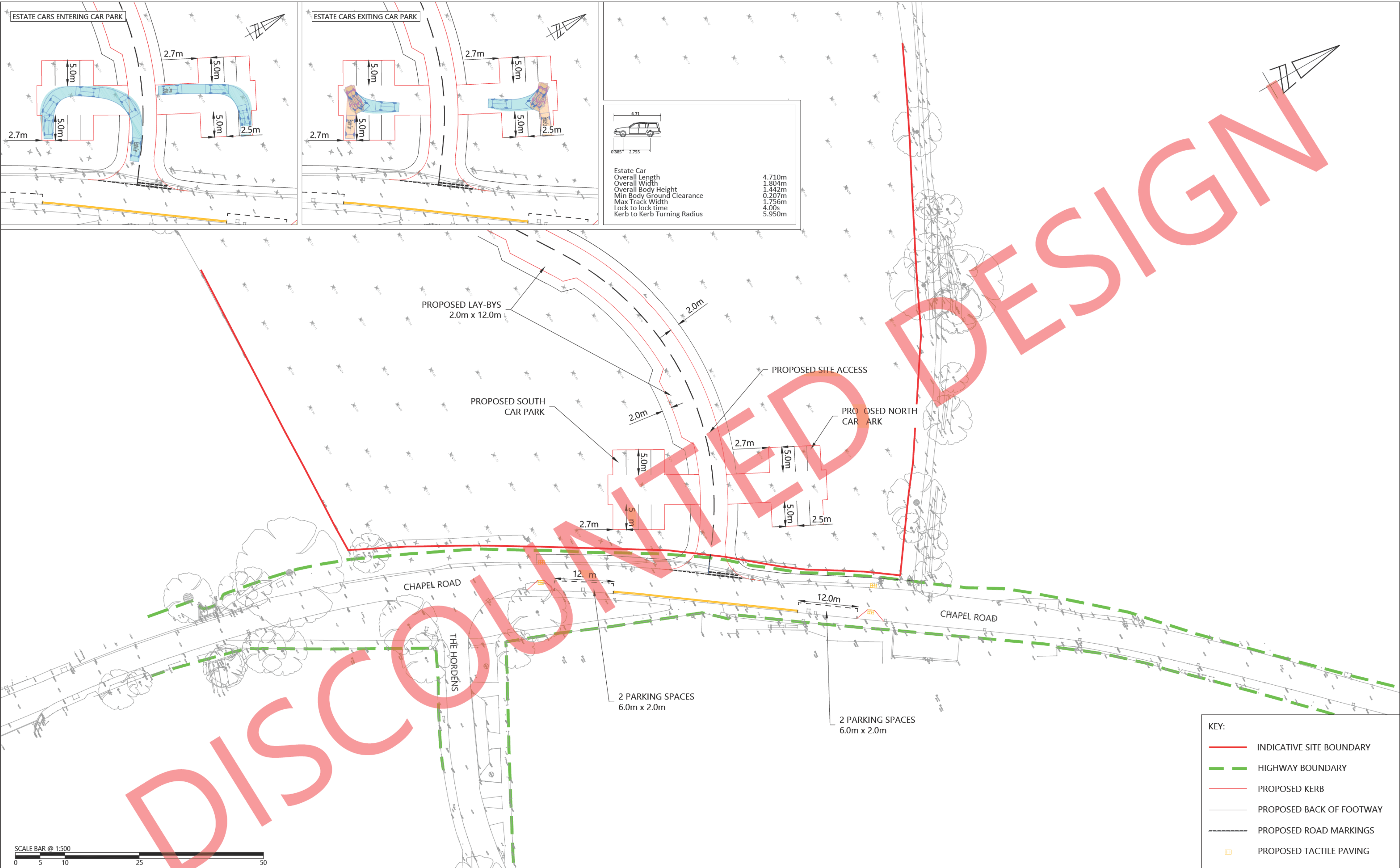


Mercedes Econic (with 6x4 chassis)	Estate Car
Overall Length	Overall Length
Overall Width	Overall Width
Overall Body Height	Overall Body Height
Min Body Ground Clearance	Min Body Ground Clearance
Track Width	Max Track Width
Lock to lock time	Lock to lock time
Kerb to Kerb Turning Radius	Kerb to Kerb Turning Radius

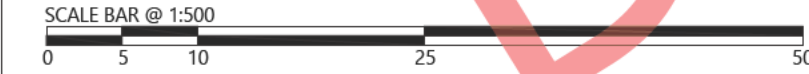


KEY:		
	INDICATIVE SITE BOUNDARY	
	HIGHWAY BOUNDARY	
	PROPOSED KERB	
	PROPOSED BACK OF FOOTWAY	
	PROPOSED ROAD MARKINGS	
	PROPOSED TACTILES	
	VISIBILITY SPLAY	
	TANGENT VISIBILITY SPLAY	
	PEDESTRIAN VISIBILITY SPLAY	

				TITLE: SITE ACCESS ARRANGEMENTS - OPTION 1				DRAWN: TA	CHECKED: HC	APPROVED: NM
33 Queen Street, London, EC4R 1AP Tel: 0204 531 3660 www.i-transport.co.uk				PROJECT: SMUGGLERS LANE, BARNS GREEN				PROJECT No: ITL200844	SCALE @ A2: 1:500	DATE: 19.06.25
STATUS: FOR INFORMATION				CLIENT: MILLER HOMES				DRAWING No: ITL200844-GA-002		
REV: A 27.04.26 TA DISCOUNTED DESIGN				HC NM				REV: A		



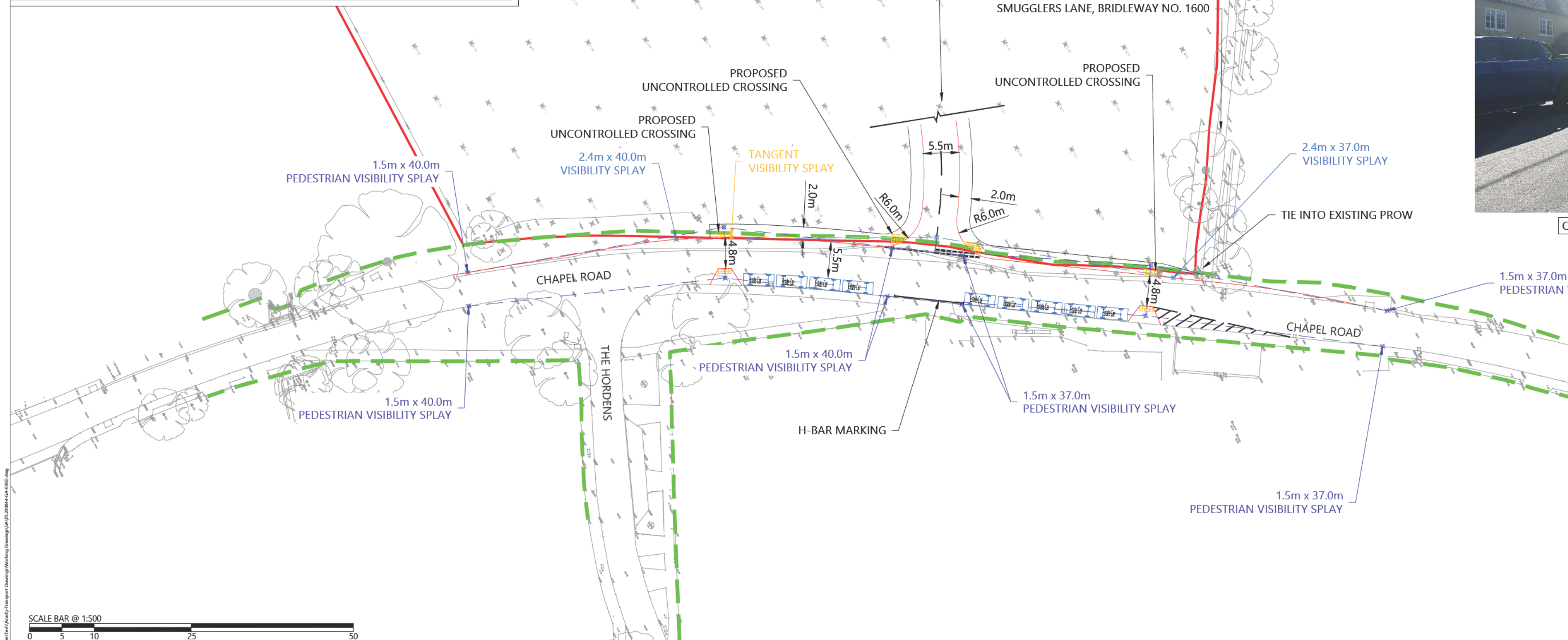
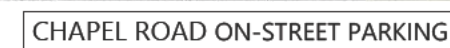
Estate Car	4.710m
Overall Length	1.804m
Overall Width	1.442m
Overall Body Height	0.207m
Min Body Ground Clearance	1.756m
Max Track Width	4.00s
Lock to lock time	5.950m
Kerb to Kerb Turning Radius	



KEY:		
	INDICATIVE SITE BOUNDARY	
	HIGHWAY BOUNDARY	
	PROPOSED KERB	
	PROPOSED BACK OF FOOTWAY	
	PROPOSED ROAD MARKINGS	
	PROPOSED TACTILE PAVING	

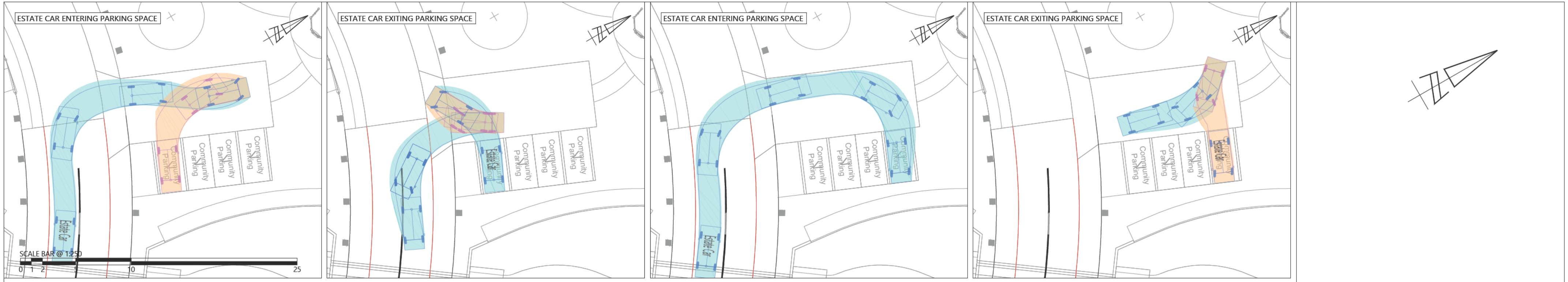
 33 Queen Street, London, EC4R 1AP Tel: 0204 531 3660 www.i-transport.co.uk				TITLE: SITE ACCESS ARRANGEMENTS - OPTION 1 PLUS ONSITE PARKING (CAR PARK)				DRAWN: TA		CHECKED: HC		APPROVED: NM	
REV: A				DATE: 27.04.26				PROJECT No: ITL200844		SCALE @ A2: 1:500		DATE: 19.06.25	
STATUS: FOR INFORMATION				PROJECT: SMUGGLERS LANE, BARNS GREEN				CLIENT: MILLER HOMES		DRAWING No: ITL200844-GA-004		REV: A	

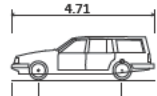
PROPOSED DRAWINGS

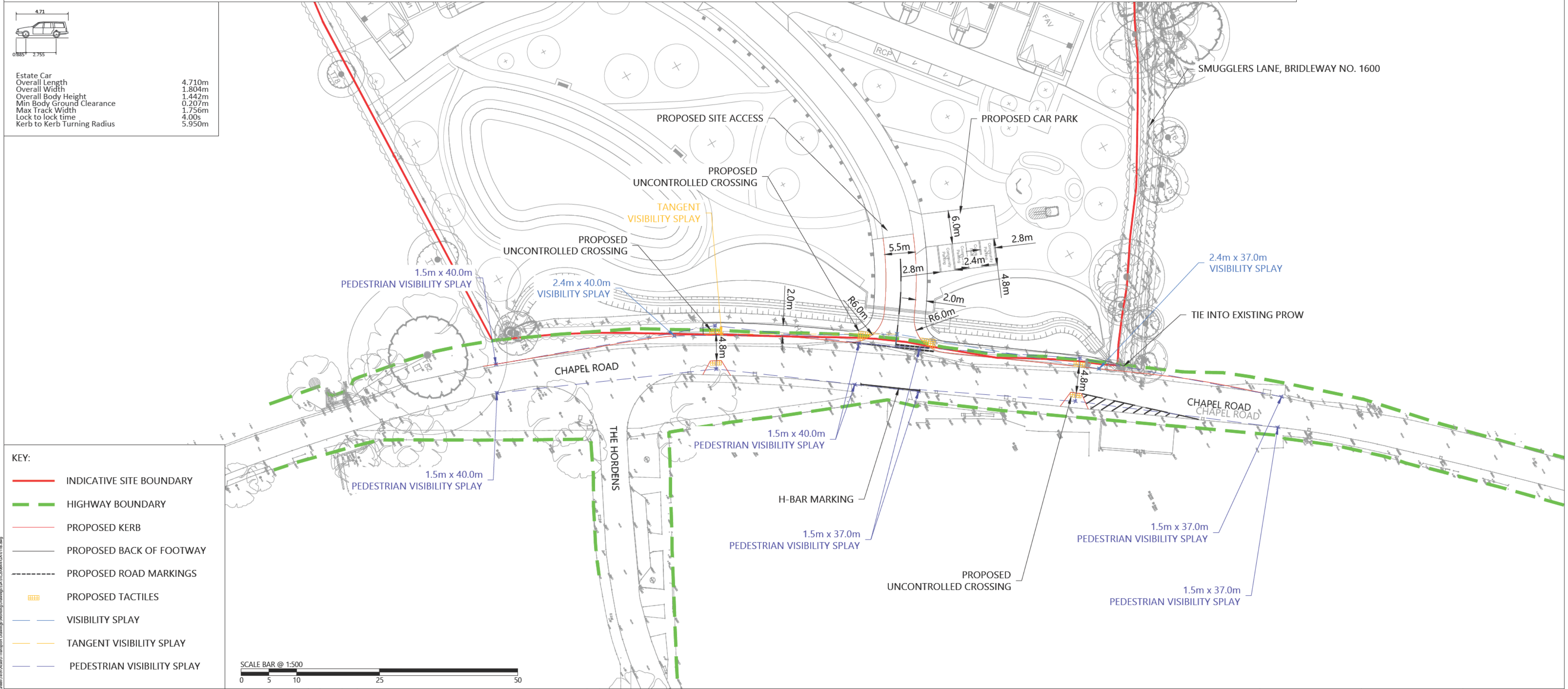


KEY:

-  INDICATIVE SITE BOUNDARY
-  HIGHWAY BOUNDARY
-  PROPOSED KERB
-  PROPOSED BACK OF FOOTWAY
-  PROPOSED ROAD MARKINGS
-  PROPOSED TACTILES
-  VISIBILITY SPLAY
-  TANGENT VISIBILITY SPLAY
-  PEDESTRIAN VISIBILITY SPLAY



	
Overall Length	4.710m
Overall Width	1.804m
Overall Body Height	1.442m
Min Body Ground Clearance	0.207m
Max Track Width	1.756m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.950m



KEY:	
	INDICATIVE SITE BOUNDARY
	HIGHWAY BOUNDARY
	PROPOSED KERB
	PROPOSED BACK OF FOOTWAY
	PROPOSED ROAD MARKINGS
	PROPOSED TACTILES
	VISIBILITY SPLAY
	TANGENT VISIBILITY SPLAY
	PEDESTRIAN VISIBILITY SPLAY

 33 Queen Street, London, EC4R 1AP Tel: 0204 531 3660 www.i-transport.co.uk				TITLE: SITE ACCESS ARRANGEMENTS - OPTION 2 PLUS CHAPEL ROAD NARROWING AND ONSITE CAR PARK				DRAWN: TA		CHECKED: HC		APPROVED: NM	
REV: B A				DATE: 28.05.26 01.04.26				PROJECT No: ITL200844		SCALE @ A2: AS SHOWN		DATE: 17.03.26	
STATUS: FOR INFORMATION				PROJECT: SMUGGLERS LANE, BARNS GREEN				CLIENT: MILLER HOMES		DRAWING No: ITL200844-GA-011		REV: B	

APPENDIX A. RSA REPORT AND RSA RESPONSE NOTE

Technical Note: RSA1 GG119 Response – Smugglers Lane

Project No: ITL200844
Project Title: Land South of Smugglers Lane, Barns Green
Title: Stage 1 Road Safety Audit – GG119 Response
Ref: HC/ITL200844-005
Date: 22 August 2025

SECTION 1 Summary

- 1.1 Millers Homes and Miller Developments (the Applicant) are proposing 68 dwellings (the development) at Land South of Smugglers Lane, Barns Green (the site).
- 1.2 Access to the site is proposed via a new priority junction from the western side of Chapel Road, leading to a 5.5m wide access road entering into the proposed development. The proposed access arrangements are shown on drawing no. **ITL200844-GA-006C**. The proposed access arrangements also show:
- 2m wide footway on the northern side of the access road.
 - A new 2m wide footway to be introduced on the western side of Chapel Road north and south of the access, that ties into Smugglers Lane (Bridleway no.1600) to the north.
 - Widening of Chapel Road to 7.5m wide carriageway for two-way free-flowing traffic (5.5m) and on-street informal parking (2.0m), with space for cars to park on-street.
 - Introduction of two points of localised narrowing (4.8m), either side of the on-street parking area, providing two formalised uncontrolled pedestrian crossings, with dropped kerbs and tactile paving.
 - Appropriate vehicular and pedestrian visibility splays, in accordance with recorded speeds.
- 1.3 In the consultation response dated 17th July 2025, WSCC requested that a final Stage 1 Road Safety Audit (RSA) of the site access and proposed highway works will be commissioned. Therefore, the opportunity has been taken for an audit to be undertaken.
- 1.4 This Stage 1 RSA has been undertaken in accordance with the adopted WSCC Road Safety Audit Policy by an independent Auditor. The audit is summarised within this Technical Note in accordance with Appendix F of GG 119 Revision 2, as required by WSCC.

SECTION 2 Road Safety Audit Response

2.1 Project Details

Table F.1: Project Details

Report Title:	Stage 1 Road Safety Audit
Date:	22 August 2025
Document Reference and Revision:	RSA-25-075-1
Prepared by:	Fenley Road Safety Ltd
On behalf of:	West Sussex County Council

2.2 Authorisation Sheet

Table F.2: Authorisation Sheet

Project:	Land South of Smugglers Lane, Barns Green
Report Title:	RSA Response Summary
Prepared by (Design Organisation)	
Name:	Harry Cherrill
Position:	Senior Consultant
Signed:	
Organisation:	i-Transport LLP
Date:	22 August 2025
Approved by (Overseeing Organisation)	
Name:	Jamie Brown
Position:	Senior Planner
Signed:	
Organisation:	West Sussex County Council
Date:	01/09/2025

2.3 Key Personnel

Table F.3: Key Personnel

Overseeing Organisation:	West Sussex County Council (WSCC)
RSA Team:	Fenley Road Safety Ltd
Design Organisation:	i-Transport LLP

Road Safety Audit Decision Log

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
1. Traffic is likely to follow the desire line and encroach the opposing lane - Chapel Road is a two-way single carriageway road that does not benefit from a road centreline. The proposals include the realignment of the western channel line in order to widen the carriageway in proximity of a proposed simple priority junction and formalise existing on-street parking. Measurements from the scheme drawing identify that the realignment is formed with 77, 85 and 163 metre radii. The Audit Team have concerns that northbound road users may not follow the edge of carriageway but continue straight along their desire line encroaching the opposing lane. Road users encroaching the opposing lane may lead to sideswipe type collisions.	It is recommended that the realignment is formed with appropriate radii that will encourage road users to proceed appropriately.	Accepted – the carriageway has been realigned with appropriate radii and is shown on drawing no. ITL200844-GA-006C.	Auditor's recommendation accepted by the Designer and shown on the stated drawing number	Accepted by LHA

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
2. Traffic is not guided around the proposed build-outs - Chapel Road accommodates a footway along the eastern side of the carriageway. The proposals include the provision of two build-outs along the eastern side of the carriageway that are to form a lay-by to allow for on-street parking. At this stage, the scheme drawing does not illustrate that measures such as reflective bollards are to be provided on the physical islands. It is noted the Audit Brief identifies that such features will be developed through the detail design of the scheme which is acceptable. The Audit have concerns, however, that southbound road users are not warned of the features in advance or guided around the build-outs which could result in a road user continuing into the feature or swerving last minute leading to loss of control or sideswipe type collisions.	It is recommended that an edge of carriageway road marking is provided to guide traffic appropriately.	Accepted – revised drawing no. ITL200844-GA-006C demonstrates appropriate carriageway road markings.	Auditor's recommendation accepted by the Designer and shown on the stated drawing number	Accepted by LHA

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
3. Surface water may accumulate at a low point besides the proposed build-outs - Chapel Road appears to fall from north to south and be set with a camber with a network of road gullies both sides of the carriageway. The proposals include the provision of a simple priority junction along the western side of the carriageway and two build-outs along the eastern side of the carriageway that are to form a lay-by to allow for on-street parking. The Audit Brief identifies that surface water drainage will be assessed through the detail design stage of the scheme and therefore it can be assumed that the existing gullies in proximity of the proposed junction, are to be relocated. It is noted, however, that the proposed build-outs will prevent a proportion of surface water from flowing along the channel line to the existing road gullies downstream which could result in surface water ponding and lead to loss of control type collisions.	It is recommended that surface water is drained adequately.	Accepted – will be addressed at detailed design stage.	Designer's response accepted, we consider this can be addressed at Stage 2 (Detailed Design) stage of the proposals.	Accepted by LHA

RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
4. Intervisibility between pedestrians and road users exiting may be limited - The proposals include the provision of a simple priority access off and a section of footway along the western side of the Chapel Road. The scheme drawing illustrates that an uncontrolled crossing is to be provided across the junction which facilitates access between the proposed footways to the north and south. The proposed junction is to allow access to a development of just 65 dwellings which is expected to generate a total maximum of up to 33 vehicular movements per hour and therefore the uncontrolled crossing is unlikely to be blocked by a vehicle and the position of the uncontrolled crossing is acceptable. It is noted, however, that intervisibility between a pedestrian and road user approaching the give-way, extends outside the carriageway / footway and may become restricted which may lead to a vehicle to pedestrian or cyclist to pedestrian type collision.	It is recommended that adequate intervisibility is achievable at all times.	Accepted – Planting will be kept to maximum of 600mm in these locations.	Designer's response accepted. 600 mm of pedestrian visibility is considered acceptable in the street context.	Accepted by LHA

2.4 Design Organisation and Overseeing Organisation Statements

Table F.5: Design Organisation Statement

On behalf of the design organisation, I certify that: 1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.	
Name:	Harry Cherrill
Signed:	
Position:	Senior Consultant
Organisation:	i-Transport LLP
Date:	22 August 2025

Table F.6: Overseeing Organisation Statement

On behalf of the Overseeing Organisation, I certify that: 1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and 2) The agreed RSA actions will be progressed.	
Name:	Jamie Brown
Signed:	
Position:	Senior Planner
Organisation:	West Sussex County Council
Date:	01/09/2025