

Technical Note

Project:	P23-133 1017 Oxford Road, Reading		
Subject:	Technical Note – Visibility Splays and Vehicle Swept Paths		
Prepared by:	Jake Blay – Graduate Transport Planner	Date:	22/08/2023
Authorised by:	Andrew Miles – Principal Transport Planner	Status:	S2 - Information
Document Ref:	23133-RLL-23-XX-TN-D-5002	Revision:	P01

1.1 Introduction

This Technical Note (TN) has been produced by Rodgers Leask on behalf of Duckquiff Ltd to support a planning application for a change of use at 1017 Oxford Road, Reading from a C1 land use (Hotel) to a C2 (Residential Institution) to provide a respite care home.

This technical note presents the visibility splay drawing for the centralised access and the swept path analysis plots for vehicles parking on site.

1.2 Visibility Splays

It is proposed that the existing driveway to 1017 Oxford Road is centralised to accommodate the parking arrangements on-site. This centralisation will move the driveway approximately 6m to the south-east. The visibility splays for the centralised access, have been provided in accordance with the guidance set out in the Reading Borough Council [‘Geometric Design Guidance for Residential Accesses on to Classified Roads And Commercial Accesses on to Adopted Roads’](#) (Version 2, January 2011) document.

As stated in Appendix B of the document, Oxford Road (between Chatham Street and the Borough Boundary) is classified as a main transport corridor. For accesses onto main transport corridors, RBC require visibility splays to be provided which adhere to the requirements in the Design Manual for Roads and Bridges (DMRB). This includes main transport corridors with posted speed limits of 30mph.

As specified in *Table 3 “X” Distances for Residential Developments* and *Table 4 “X” Distances for Residential Developments* of the RBC design guidance, for a main transport corridor visibility splays should be provided with a 2.4m X distance and 90m Y distance. This results in a visibility splay of 2.4m x 90m.

A drawing showing the visibility splay at the centralised access has been attached to this technical note as **Appendix A**.

It is noted that there is an existing tree located on the north eastern corner of the site boundary of 1017 Oxford Road as well as an existing lighting column. There is also a telegraph pole to the north west of the access. As stated in DMRB CD109:

The stopping sight visibility envelope shall be free of obstructions by fixed objects with the exception of:

- 1) a fixed object with a width / length less than or equal to 550mm;*
- 2) a group of fixed objects with a combined width / length of 550mm or less*
- 3) those obstructions covered by the relaxations below.*

NOTE 1 Isolated slim objects less than or equal to 550mm in width / length, such as lighting columns, sign supports, or slim footbridge supports, only result in intermittent obstructions to sight lines.

On this basis the lighting column and telegraph pole can be considered an intermittent obstruction to the visibility splay with neither obstructing a vehicle travelling along Oxford Road from view for a vehicle waiting to egress the centralised access.

The tree trunk sits at the back edge of the visibility splay and, if required, the vegetation around the tree trunk can be cut back and maintained to ensure that the southeast visibility splay is unobstructed by vegetation growth.

1.3 Swept Path Analysis Drawings

Swept Path Analysis drawings showing vehicles maneuvering into the access and parking in the car park are provided in **Appendix B**.

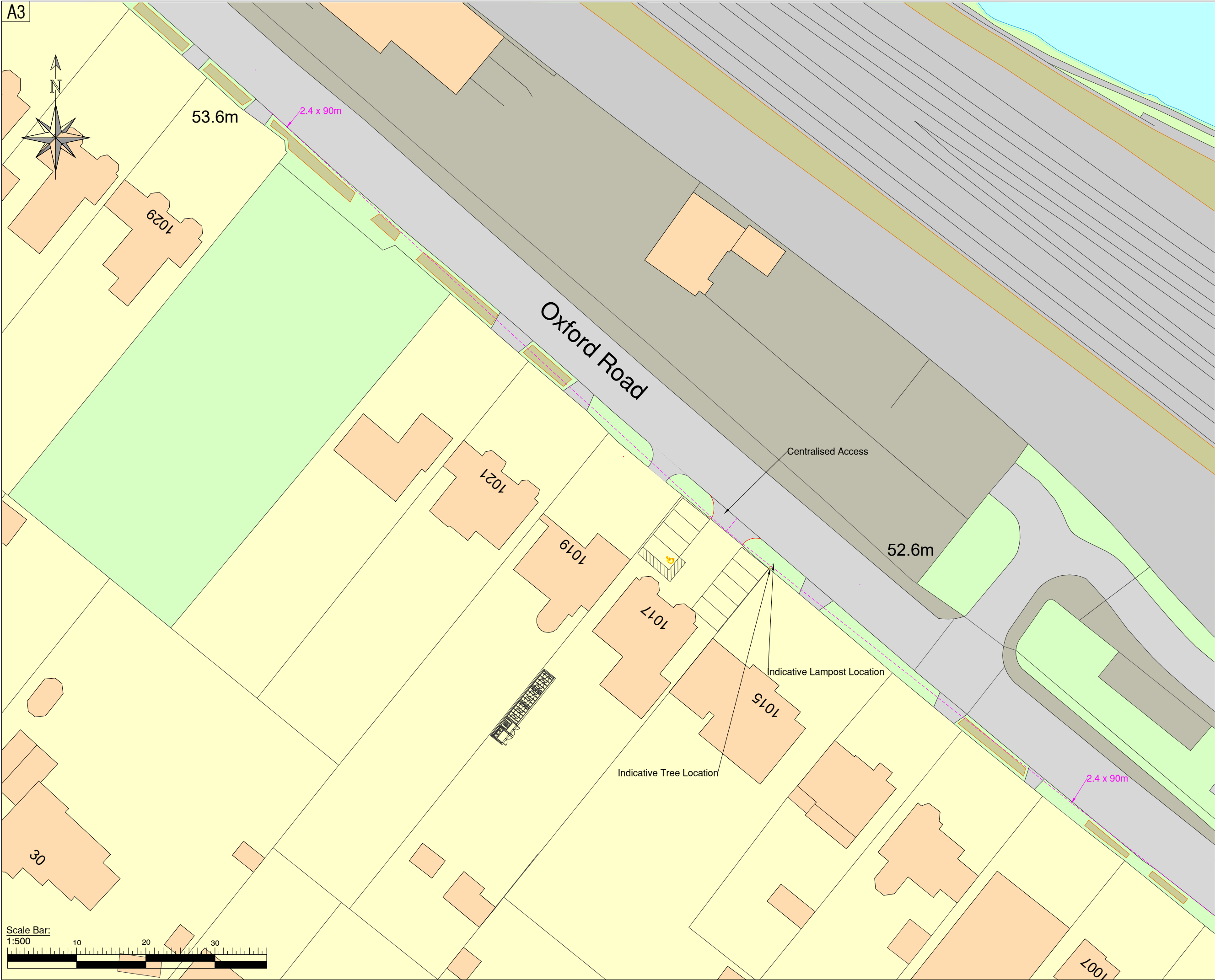
Swept Path Analysis drawings have been provided for the following vehicles:

- medium sized cars and small car manoeuvring into/out of car parking spaces
- light goods vehicle entering and turning in the site.

Swept path analysis plots have been provided to demonstrate that all car parking spaces can be accessible. Given that the parking will be used by employees of the site, swept path analysis plots of a medium sized and smaller vehicle are considered appropriate to represent the types of vehicles employees are likely to use to travel to work.

It is acknowledged that a delivery vehicle will overrun some of the car parking spaces when turning within the site. Deliveries will be arranged to arrive and unload during periods when the car park will not be at full occupation, this will be managed on site by the applicant.

Appendix A: Visibility Splay Drawing



Junction
Visibility
Splay

NOTE
Preliminary scheme only for comment & review. Based upon information provided / available at the time.

Detailed design subject to further review and amendment if required via S278 / technical approval process, to be secured via condition.

Do not scale from this drawing.

Rev	Date	Amendments	By	Chk



Client
Duckquiff Ltd

Project
1017 Oxford Road, Reading

Drawing Title
Site Access Visibility Splays

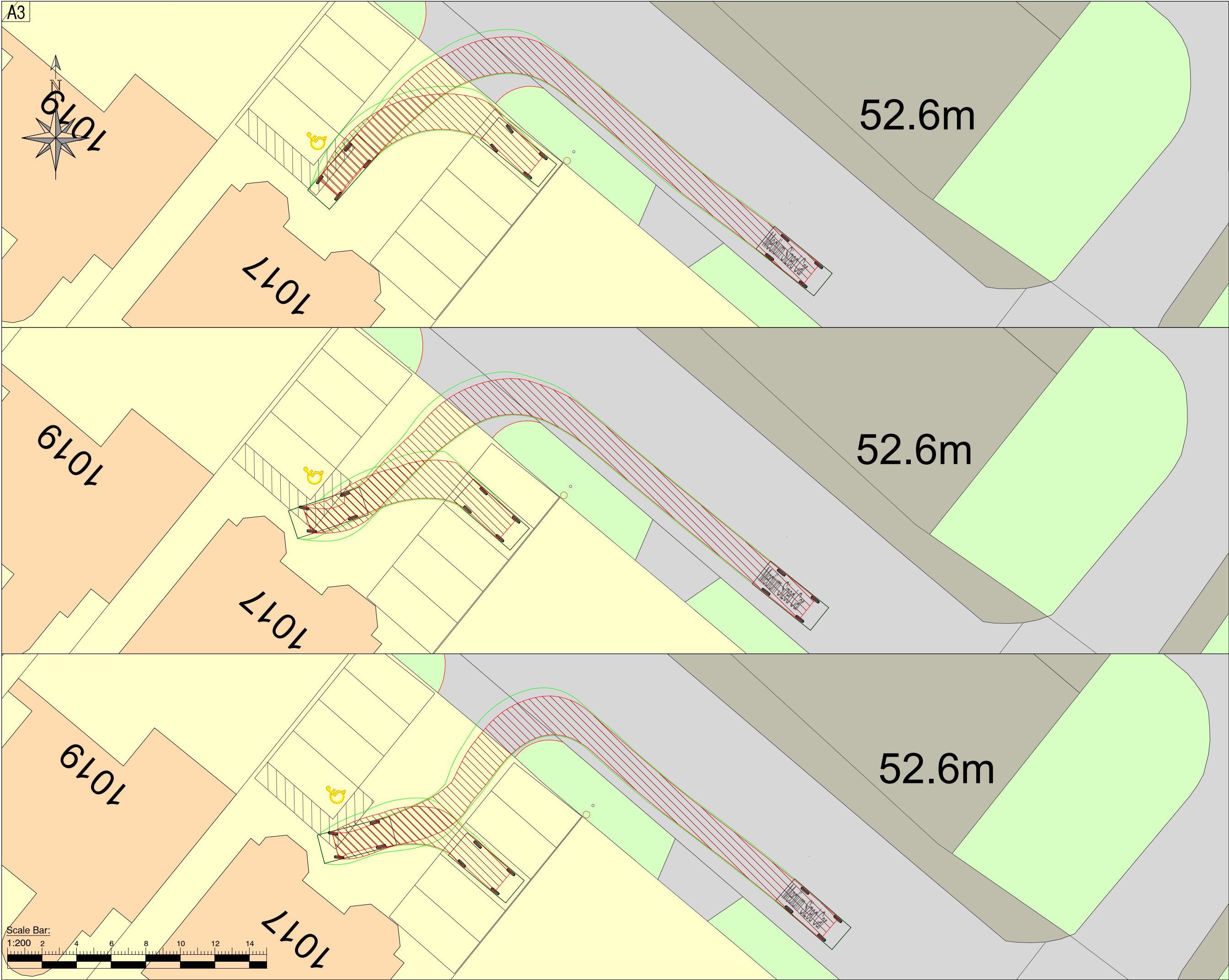
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A3@ 1:500	JWB	ADM	22/08/23

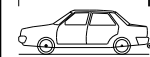
Drawing No.	Rev.
23133-RLL-23-XX-DR-D-5001	#

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Appendix B: Swept Path Analysis Drawings



4.3120.007



0.9062.503

Medium Sized Car

Overall Length4.319m

Overall Width1.686m

Overall Body Height1.466m

Min Body Ground Clearance0.228m

Max Track Width1.591m

Lock to lock time4.00s

Kerb to Kerb Turning Radius5.042m



Vehicle Wheelbase



Vehicle Overhang

NOTE

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Consulting Engineers

Client

Duckquiff Ltd

Project

1017 Oxford Road, Reading

Drawing Title

Cars Sweep Path Analysis 1

Status

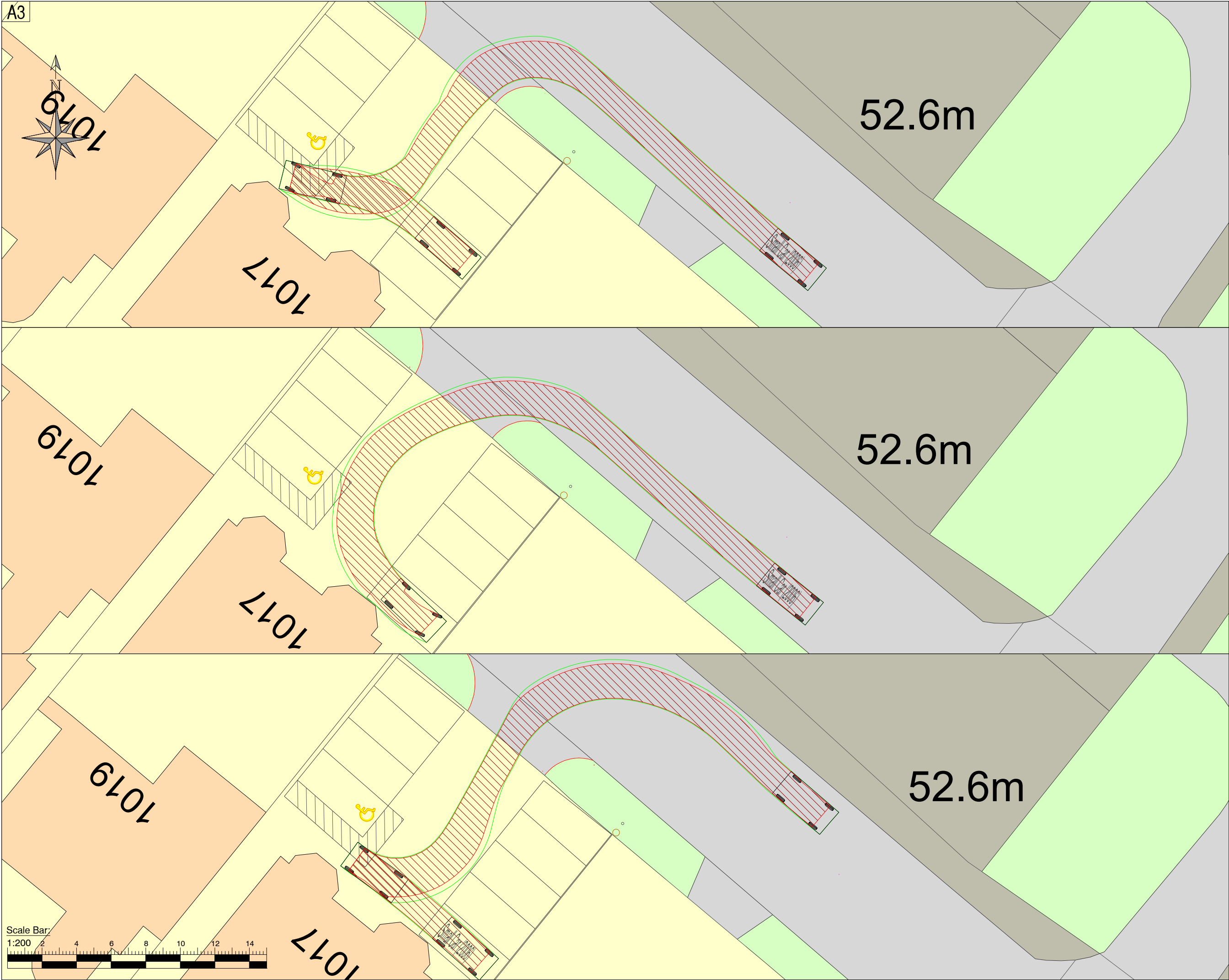
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Drawing No.	Rev.
23133-RLL-23-XX-DR-D-5002	#

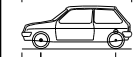
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3.626

0.622 2.467



Small Car (2006)

Overall Length

Overall Width

Overall Body Height

Min Body Ground Clearance

Max Track Width

Lock to lock time

Kerb to Kerb Turning Radius

3.626m

1.688m

1.414m

0.233m

1.621m

4.00s

5.330m

Vehicle Wheelbase

Vehicle Overhang

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RLRE

Consulting Engineers

Client

Duckquiff Ltd

Drawing Title

Car Swept Path Analysis 2

Status

For Information

Scale

A3@ 1: 200

Drawn

JWB

Checked

ADM

Date

22/08/23

Drawing No.

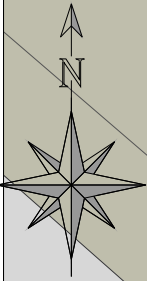
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Rev.

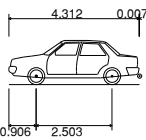
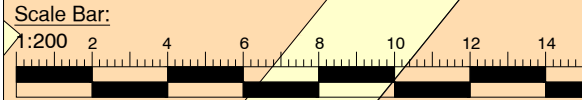
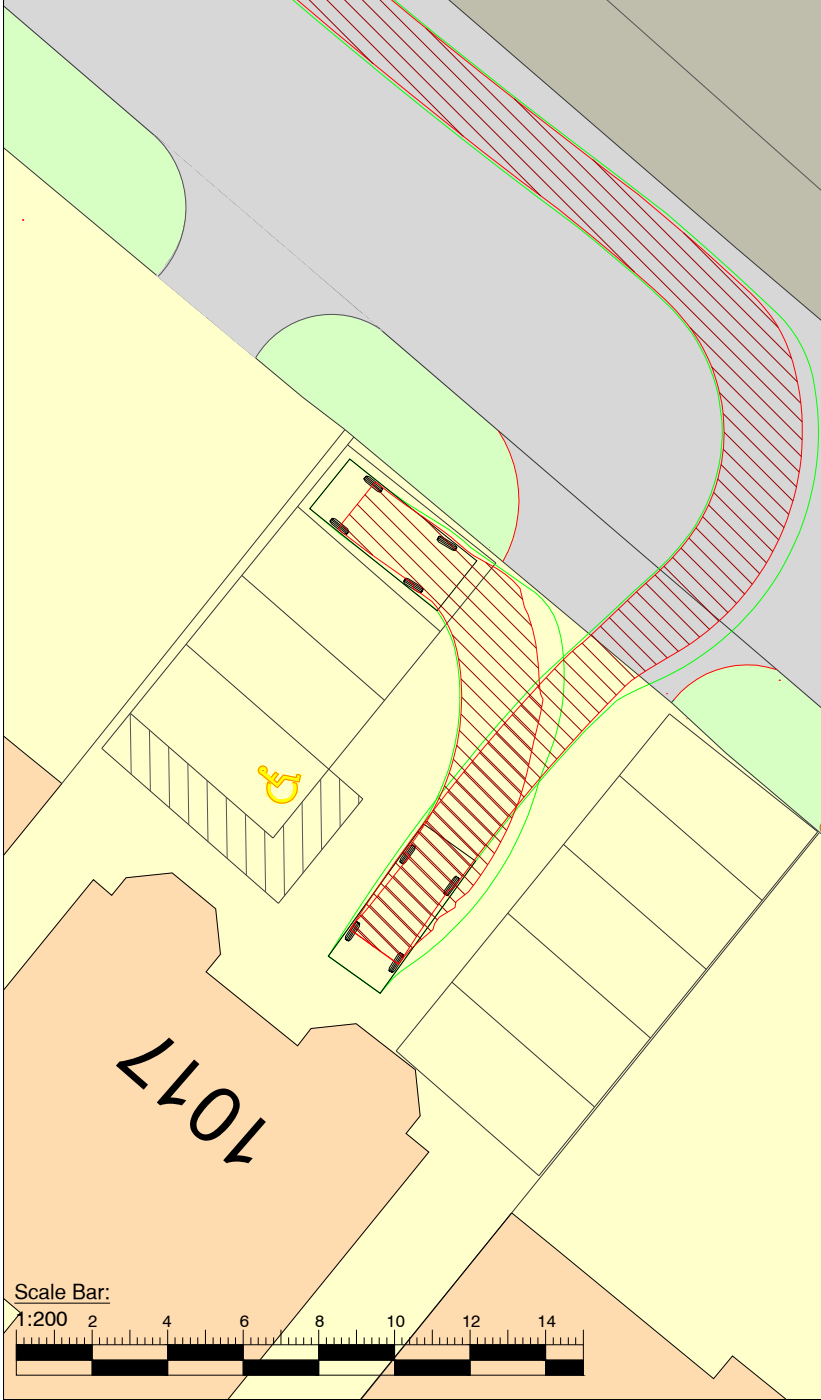
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Medium Sized Car
Overall Length 4.319m
Overall Width 1.686m
Overall Body Height 1.466m
Min Body Ground Clearance 0.228m
Max Track Width 1.591m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 5.042m

 Vehicle Wheelbase

 Vehicle Overhang

NOTE
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Do not scale from this drawing.

Rev	Date	Amendments	By	Chk



Client

Duckquiff Ltd

Project

1017 Oxford Road, Reading

Drawing Title

Car Swept Path Analysis 3

Status

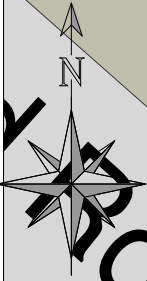
For Information

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Drawing No.	Rev.
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Medium Sized Car	4.319m
Overall Length	1.686m
Overall Width	1.466m
Overall Body Height	0.228m
Min Body Ground Clearance	1.591m
Max Track Width	4.00s
Lock to lock time	5.042m
Kerb to Kerb Turning Radius	

 Vehicle Wheelbase

 Vehicle Overhang

NOTE
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Rev	Date	Amendments	By	Chk



Consulting Engineers

Client

Duckquiff Ltd

Project

1017 Oxford Road, Reading

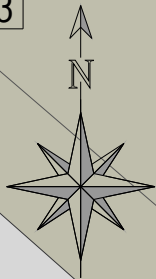
Drawing Title

Car Swept Path Analysis 4

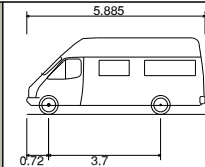
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A3



Road



4.6t Light Van
Overall Length 5.885m
Overall Width 2.000m
Overall Body Height 2.526m
Min Body Ground Clearance 0.299m
Track Width 1.765m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 6.000m



Vehicle
Wheelbase



Vehicle
Overhang

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Client

Duckquiff Ltd

Project

1017 Oxford Road, Reading

Drawing Title

Light Van Swept Path Analysis

Status

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