26019-01b Transport Assessment PART 2

Appendix C

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Saturday 27/01/2018 Time 0656 Serious at B4030 VENDEE DRIVE AT PEDESTRIAN REFUGE APPROX 100M NW OF RBT J/W A41 BICETSER
E: 457126 N: 221261 Junction Detail: 0 Control
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Vehicle Reference 1 Car Moving from N to SE Going ahead other
Vehicle Reference 2 Pedal Cycle Moving from NE to S Going ahead other
Casualty Reference: 1 Age: 83 Male Driver/rider Severity: Serious Injured by vehicle: 2

Saturday 28/07/2018 Time 0802 Slight at A41 RBT J/W LINK ROAD FROM WENDLEBURY VILLAGE & VENDEE DRIVE BICESTER
E: 457260 N: 221172 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from SE to N Going ahead other
Vehicle Reference 2 Car Moving from NE to S Going ahead other
Casualty Reference: 1 Age: 27 Female Driver/rider Severity: Slight Injured by vehicle: 2

Wednesday 24/04/2019 Time 2224 Slight at A41 RBT AT J/W B4030 VENDEE DRIVE CHESTERTON
E: 457223 N: 221168 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Darkness: street lights present and lit
Vehicle Reference 1 Car Moving from S to N Going ahead other
Casualty Reference: 1 Age: 48 Male Driver/rider Severity: Slight Injured by vehicle: 1

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Monday 13/05/2019 Time 1628 Slight at WENDLEBURY ROAD J/W EXIT FROM GARDEN CENTRE / BICESTER AVENUE CHESTERTON
E: 457464 N: 221335 Junction Detail: 3 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from SE to N Going ahead other
Vehicle Reference 2 Car Moving from NE to S Going ahead other
Casualty Reference: 1 Age: 33 Female Driver/rider Severity: Slight Injured by vehicle: 2

Monday 10/06/2019 Time 0830 Slight at A41 BETWEEN M40 J9 & RBT J/W B4030 VENDEE DRIVE CHESTERTON - CONSIDERABLE UNCERTAINT
E: 456966 N: 220847 Junction Detail: 0 Control
Raining without high winds Road surface Wet/Damp Daylight
Vehicle Reference 1 Car Moving from N to E Going ahead other
Vehicle Reference 2 Goods 3.5 tonnes mgw and under Moving from N to E Going ahead other
Casualty Reference: 1 Age: 38 Male Driver/rider Severity: Slight Injured by vehicle: 2

Wednesday 12/06/2019 Time 2013 Fatal at A41 AT RBT J/W B4030 VENDEE DRIVE & BICESTER PARK AND RIDE ACCESS CHESTERTON
E: 457221 N: 221163 Junction Detail: 1 Control 4
Raining without high winds Road surface Wet/Damp Daylight
Vehicle Reference 1 Car Moving from S to NE Going ahead other
Vehicle Reference 2 Goods 3.5 tonnes mgw and under Moving from SE to N Going ahead other
Casualty Reference: 1 Age: 77 Male Driver/rider Severity: Fatal Injured by vehicle: 2
Casualty Reference: 2 Age: 80 Female Passenger Severity: Fatal Injured by vehicle: 2

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Monday 19/08/2019 Time 1428 Slight at A41 AT RBT J/W B4030 VENDEE DRIVE & BICESTER PARK AND RIDE ACCESS CHESTERTON
E: 457206 N: 221190 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight

Vehicle Reference 1 Car Moving from S to N Going ahead other

Vehicle Reference 2 Car Moving from S to N Going ahead other

Casualty Reference: 1 Age: 32 Female Driver/rider Severity: Slight Injured by vehicle: 2

Vehicle Reference 3 Car Moving from S to N Going ahead other

Casualty Reference: 2 Age: 45 Female Driver/rider Severity: Slight Injured by vehicle: 3

Casualty Reference: 3 Age: 10 Male Passenger Severity: Slight Injured by vehicle: 3

Casualty Reference: 4 Age: 12 Female Passenger Severity: Slight Injured by vehicle: 3

Sunday 22/09/2019 Time 0150 Slight at A41 RBT WITH VENDEE DRIVE BICESTER
E: 457221 N: 221149 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Darkness: street lights present and lit

Vehicle Reference 1 Motorcycle over 500cc Moving from S to N Stopping

Casualty Reference: 1 Age: 34 Male Driver/rider Severity: Slight Injured by vehicle: 1

Casualty Reference: 2 Age: 31 Female Passenger Severity: Slight Injured by vehicle: 1

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Wednesday 23/10/2019 Time 0734 Serious at A41 RBT J/W VENDEE DRIVE BICESTER
E: 457223 N: 221157 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Motorcycle over 500cc Moving from S to N Going ahead left bend
Casualty Reference: 1 Age: 53 Male Driver/rider Severity: Serious Injured by vehicle: 1

Sunday 03/11/2019 Time 1110 Slight at A41 OXFORD ROAD RBT J/W B4030 VENDEE DRIVE BICESTER
E: 457205 N: 221195 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from S to N Turning left
Vehicle Reference 2 Car Moving from S to NE Going ahead other
Casualty Reference: 1 Age: Male Driver/rider Severity: Slight Injured by vehicle: 2

Tuesday 11/02/2020 Time 1200 Slight at A41 NBOUND AT RBT J/W B4030 VENDEE DRIVE BICESTER
E: 457219 N: 221143 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Goods 3.5 tonnes mgw and under Moving from S to NE Going ahead other
Vehicle Reference 2 Car Moving from S to NE Going ahead other
Casualty Reference: 1 Age: 49 Male Driver/rider Severity: Slight Injured by vehicle: 2

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Monday 06/04/2020 Time 0950 Serious at A41 RBT J/W VENDEE DRIVE BICESTER
E: 457215 N: 221172 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Agricultural vehicle Moving from S to N Turning right
Casualty Reference: 1 Age: 20 Male Driver/rider Severity: Serious Injured by vehicle: 1

Thursday 16/07/2020 Time 2208 Fatal at A41 J/W B4030 VENDEE DRIVE BICESTER
E: 457220 N: 221171 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Darkness: street lights present and lit
Vehicle Reference 1 Car Moving from S to N Going ahead other
Casualty Reference: 1 Age: 60 Male Driver/rider Severity: Fatal Injured by vehicle: 1
Casualty Reference: 2 Age: 47 Male Passenger Severity: Serious Injured by vehicle: 1

Sunday 15/08/2021 Time 0606 Slight at A41 RBT J/W B4030 VENDEE DRIVE BICESTER
E: 457217 N: 221170 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from S to NE Going ahead other
Casualty Reference: 1 Age: 21 Male Driver/rider Severity: Slight Injured by vehicle: 1

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Tuesday 08/02/2022 Time 0810 Slight at A41 OXFORD RD RBT J/W B4030 VENDEE DRIVE BICESTER
E: 457193 N: 221213 Junction Detail: 1 Control 4
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from S to N Going ahead other
Vehicle Reference 2 Car Moving from S to N Going ahead other
Casualty Reference: 1 Age: 64 Female Driver/rider Severity: Slight Injured by vehicle: 2

Monday 08/08/2022 Time 1920 Serious at CHESTERTON ROAD APPROX 100M W OF J/W WENDLEBURY - BICESTER ROAD WENDLEBURY
E: 457162 N: 220887 Junction Detail: 0 Control
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Pedal Cycle Moving from W to E Going ahead other
Casualty Reference: 1 Age: 53 Male Driver/rider Severity: Serious Injured by vehicle: 1

Accidents between dates **01/01/2018** **and** **31/12/2023** (72) months

Selection:
Selected using Manual Selection

Notes:
DTA RTC data Bicester 2018-2022+provisional 2023 NON CONFIDENTIAL

Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	2	1	9	12
2-wheeled motor vehicles	0	1	1	2
Pedal cycles	0	2	0	2
Horses & other	0	0	0	0
Total	2	4	10	16

Casualties:

	Fatal	Serious	Slight	Total
Vehicle driver	2	1	10	13
Passenger	1	1	3	5
Motorcycle rider	0	1	1	2
Cyclist	0	2	0	2
Pedestrian	0	0	0	0
Other	0	0	0	0
Total	3	5	14	22

Number of casualties meeting the criteria: **22**

Appendix D

A1

NOTES

1. This drawing is to be read in conjunction with all relevant Architects and Bailey Johnson Hayes drawings and specifications.
2. Do not scale. Work only to figured dimensions.
3. All dimensions to be confirmed on site prior to commencement of work.
4. Topographical Survey by MK Surveys: Drawing Ref: 33239 Rev 1
5. All works subject to agreement by Oxfordshire County Council (OCC) Road Agreements department.
6. This document contains OS data © Crown copyright 2017.

SCALE

10m 5m 0 10m 20m 30m

Scale 1:500 @A1

KEY

- OCC Highway Boundary - Purple
- Application Boundary - Red
- Vision Splays - Magenta
- Proposed Carriageway - Light Grey
- Proposed Shared Use - Mid Grey
- Proposed Footway - Dark Grey
- Proposed Tactile Paving - Buff
- Proposed Grassed Verge - Green
- Proposed Planting - Dark Green
- Vegetation Clearance - Red

Existing Post & Rail fence to be re-located outside of vision splay

Existing Tactile Paving Uncontrolled crossing

Existing 30/40mph back to back speed sign

3.0m

2.4m x 43m Vision Splay

Existing Verge to Remain

Proposed 3.0m wide shared use track +1.0m (min) verge each side Vegetation cut back as required.

All planting & vegetation to be removed to clear visibility splay + Land dedication required.

Highway Boundary to be confirmed by OCC

Existing Verge to Remain

3.0m

Relocate tactile paving to new crossing position

Existing Verge to Remain

Removal of existing cycle path tactile paving

Proposed 3.0m wide shared use track +1.0m (min) verge each side Vegetation cut back as required.

Existing carriageway widened to allow for satisfactory road width for HGV's

Proposed 3.0m wide footway connection for diverted PRoW

Existing cycle path to remain with relocated cycle path tactile in tramline pattern

Existing Verge to Remain

3.5m

Relocate Road signs and lighting columns as necessary

7.3m

Cycle path dropped kerb, signage and road markings to be relocated to new kerb alignment

Minor alteration to existing refuge island to provide widened 3.5m roundabout exit

1.5m (min) wide verge re-landscaped and seeded

3.0m

2.5m

Relocate start of 30mph to before new proposed site access. Traffic Regulation Order (TRO) required post planning approval

60m Post+Rail fence relocated to give minimum 1.0m clearance from forward visability splay. Land dedication required.

7.3m

Note:- LTN/20 Table 6.1 Minimum Horizontal separation for cyclists based on 60 mph speeds - 2.5m desirable and 2.0m minimum. Distances measured from edge of carriageway white line to edge of proposed shared use track. No VRS barrier required between A41 and proposed track.

3.0m

Start of Road widening / re-alignment of kerb on the south bound lane

Existing vegetation & planting removed or trimmed back as necessary to maintain forward visibility

2.5m

Approximately 60m of HB2 upstand kerb reinstatement +1.0m of Highway Tie-in detail up to solid white line+1.5m (min) verge created to disused slip way.

7.3m

Re-aligned Post+Rail fence to terminate here

3.0m

Re-Aligned Ditch to allow for widened 3m footway. Land Dedication required.

Proposed 2.0m wide footpath tapering to existing 0.75m wide +1.5m (min) verge

Corduroy Paving to termination of footpath

7.3m

1.5m Wide Grass Verge

Approx. 15m Long Splay here to allow HGV's to exit the site

4.5m x 59m Vision Splay

2.5m

2.0m

Land dedication required here to facilitate new bellmouth access into the development

R10000

12.1m

15.0m

7.3m

7.3m widened road to start tapering back at centreline of new bellmouth. Taper to be 1/25 along new eastern kerbline for approximately 55m.

0.75m

Removal of existing disused slipway. Potential for return to soft landscaping and/or planting. Existing Tree retained.

3.0m

R10000

4.5m x 59m Vision Splay

6.3m

Existing Ditch

Removal of existing verge & footpath and return to 2.0m wide verge (min)

Proposed 3.0m wide shared use track utilising existing lane of the disused slipway. Remove existing HB2 Kerb and replace with conc. path edging. Surface course replaced only.

Removal of redundant field access and return to grass verge

Proposed 2.0m wide Footpath connection to diverted PRoW. Tactile Buff Paving provided.

Proposed 2.0m wide footpath tapering to existing 1.0m wide on both sides of path. Tactile paving provided at track crossing.

6m

1.0m

3.0m

Reloctaed 30mph / NSL Speed Signs to OCC Standard details

Removal of redundant chicken farm bellmouth access and return to verge

2.0m

Proposed 5No. 200x200mm hardwood bollards 1.0m high with reflectorised band & integrated shared use sign.

Tie in to existing unkerbed Wendlebury Road camber

Hedgerow / Post+Rail fence to prevent cyclists cutting around bollards both sides.

1.0m

2.0m

1.0m

5.3m

Vegetation clearance to be included for 50m beyond works as necessary

Approximately 35m of HB2 upstand kerb reinstatement +0.6m of Highway Tie-in detail+1.0m (min) verge +2.0m wide footpath proposed in redundant bellmouth of disused A41 slip way.

1.0m

5.8m

Road widens to 5.8m at passing place

Proposed flush kerb and giveway marking at termination of shared use track to allow cyclists onto/off of unnamed road.

4.3m

Existing road narrows at culvert to 4.3m

Pond

Lakeside I

65.3m

General Arrangement Plan 1:500

TOWN PLANNING

Rev	Date	Revision Description
H	09.05.24	Issued for Planning Submission
G	26.04.24	Vegetation retained + Ditches updated
F	19.04.24	Fence + Red Line Boundary updated
E	18.04.24	Issued for Planning Approval
D	20.03.24	Updated to RSA1 comments
C	06.03.24	Vision Splays added
B	01.03.24	Issued for co-ordination
A	01.03.24	Scheme updated following DTA input

Revision Schedule

Project Title

Catalyst Bicester Phase 4, Wendlebury Road, Bicester

Client

ALBION LAND

Drawing Title

S278 WORKS
General Arrangement Plan

BAILEY JOHNSON HAYES
Consulting Engineers
ST.ALBANS: Suite 4, Phoenix House, 63 Campfield Rd, ST.ALBANS, Herts AL1 5FL

Scale	1:500 @A1
Date	21.02.24
Drawn	JNG

Drawing Number

S1502-S278-01 H

Appendix E

Designer's Response – Site Access

RSA Decision Log				
Item No.	**RSA Recommendation**	**Design Organisation Response**	**Overseeing Organisation Response**	**Agreed RSA Action**
1.01	That footway is provided along the western side of Wendlebury Road between the PROW and the existing shared use footway / cycleway to the north of the proposed access.	Agree. A footway has been provided linking the PROW to the shared footway / cycleway.		
1.02	It is recommended that the 30mph speed limit terminals are located to an appropriate position south of the proposed access.	Agree. Proposed 30mph speed limit signage is indicated – to be agreed with OCC.		

Designer's Response – Site Access

Design Organisation Statement:

On behalf of the design organisation, I certify that:
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: Simon Parfitt

Organisation: DTA Transport Planning

Position: Director

Date: 21st March 2024

Overseeing Organisation Statement:

On behalf of the overseeing organisation, I certify that:
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.
The agreed RSA actions will be progressed.

.....

Name:

Organisation: Oxfordshire County Council

Position:

Date:

MOTT MACDONALD

Wendlebury Road, Bicester Wendlebury Road Improvements

Road Safety Audit
Stage 1

March 2024

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B95 5AW

Wendlebury Road, Bicester Wendlebury Road Improvements

Road Safety Audit
Stage 1

March 2024

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	14/03/2024	T J Blaney	R J Collins	S Gosden	First Issue
		[redacted]	[redacted]	[redacted]	

Document reference: 100117794 | MMD | REP | 002 | 001 | A |

Information class: Standard

Contents

Tables

No table of figures entries found.

Figures

Tables – Appendices

Figures – Appendices

No table of figures entries found.

1 Introduction

This report describes a Stage 1 Road Safety Audit carried out on the development access arrangements and localised highway improvements to Wendlebury Road, Bicester.

The audit was carried out at the request of David Tucker Associates.

The audit took place at the Bristol and Croydon offices of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

It is confirmed that this is a Stage 1 Road Safety Audit and that the audit was undertaken upon completion of the preliminary design work.

The Road Safety Audit Team consisted of:

Tim Blaney	BSc (Hons), CMILT, MCIHT, MSoRSA (Certificate of Competency in Road Safety Audit, July 2012) Audit Team Leader, Mott MacDonald
Jeff Man	MEng, MCIHT (Certificate of Competency in Road Safety Audit, November 2019) Audit Team Member, Mott MacDonald

A visit to the site was completed on Thursday 7th March 2024 at 09:45 hrs. During this visit the weather was overcast and the road surface was generally dry. Traffic conditions were low and free flowing. No pedestrian or cyclist activity was observed.

This Road Safety Audit was carried out in accordance with National Highways' Departmental Standard GG119. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme. Consequently, the auditors accept no responsibility for the design or construction of the scheme.

All the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and, as such, the design engineer will need to consider carefully how to respond to each of the issues. The Audit Response Report should be completed by the Design Team and kept on file for future reference.

A Key Plan indicating the location of the identified safety related issues is provided in **Appendix B**.

Scheme Description

The scheme includes the access arrangements for Phase 4 of the Catalyst development on land to the west of Wendlebury Road, Bicester. The vehicular access will consist of a 12.0m wide access road with a 15.0m splay to the north to accommodate HGV movements. Wendlebury Road will be widened to 7.3m between the existing roundabout to the north and the proposed access with the highway gradually reducing back to the existing 5.3m wide carriageway on the southern side of the access.

Modifications to the southern arm of the Wendlebury Road roundabout will also be undertaken to accommodate HGV movements.

2 Items Raised at this Stage 1 Safety Audit

This section describes road safety related issues identified by the Audit Team during this Stage 1 Road Safety Audit.

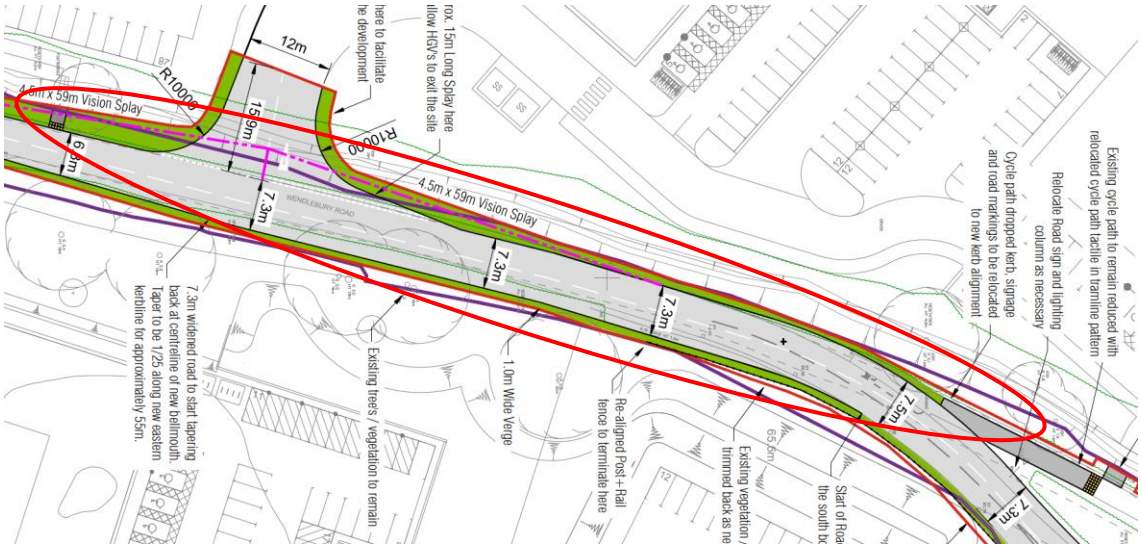
2.1 Problem 1.01

Location: Western side of Wendlebury Road in vicinity of proposed access.

Summary: Lack of footway may result in pedestrians walking within the carriageway.

An existing Public Right of Way (PRoW) is present south of the proposed access. Currently, pedestrians accessing this are required to walk within Wendlebury Road carriageway and a short section of hardstanding and associated dropped kerb is proposed to enable this to continue to happen. Given the increase in traffic, particularly HGV movements along Wendlebury Road north of this point, the Audit Team is concerned that pedestrians within the carriageway will be vulnerable to being struck by passing vehicles.

Figure 2.1: Lack of footway linking PRoW and existing shared use footway / cycleway.



Source: David Tucker Associates

Recommendation

It is recommended that a footway is provided along the western side of Wendlebury Road between the PRoW and the existing shared use footway / cycleway to the north of the proposed access.

2.2 Problem 1.02

Location: Wendlebury Road.

Summary: Proposed access is situated within section of national speed limit highway.

The proposed access is situated within a section of highway subject to the national speed limit with a 30mph speed limit commencing immediately north of the access. This may result in inappropriate vehicle speeds past the site access increasing the risk of collisions with turning vehicles. This may be exacerbated by southbound motorists accelerating out of the 30mph speed limit.

Figure 2.2: Existing 30mph speed limit north of proposed access.

Source: Mott MacDonald

Recommendation

It is recommended that the 30mph speed limit terminals are relocated to an appropriate position south of the proposed access.

3 Audit Team Statement

We certify that this audit has been carried out in accordance with National Highways' Departmental Standard GG119.

Road Safety Audit Team Leader

T J Blaney BSc (Hons), CMILT, MCIHT, MSoRSA
(Certificate of Competency in Road Safety Audit, July 2012)

Signed: [redacted]

Date: 14th March 2024

Principal Road Safety Engineer
Mott MacDonald
10 Temple Back
Bristol
BS1 6FL

Road Safety Audit Team Member

J Man MEng, MCIHT
(Certificate of Competency in Road Safety Audit, November 2019)

Signed: [redacted]

Date: 14th March 2024

Senior Traffic Engineer
Traffic Engineering (Road Safety)
Mott MacDonald House
8-10 Sydenham Road
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CR0 2EE

Appendices

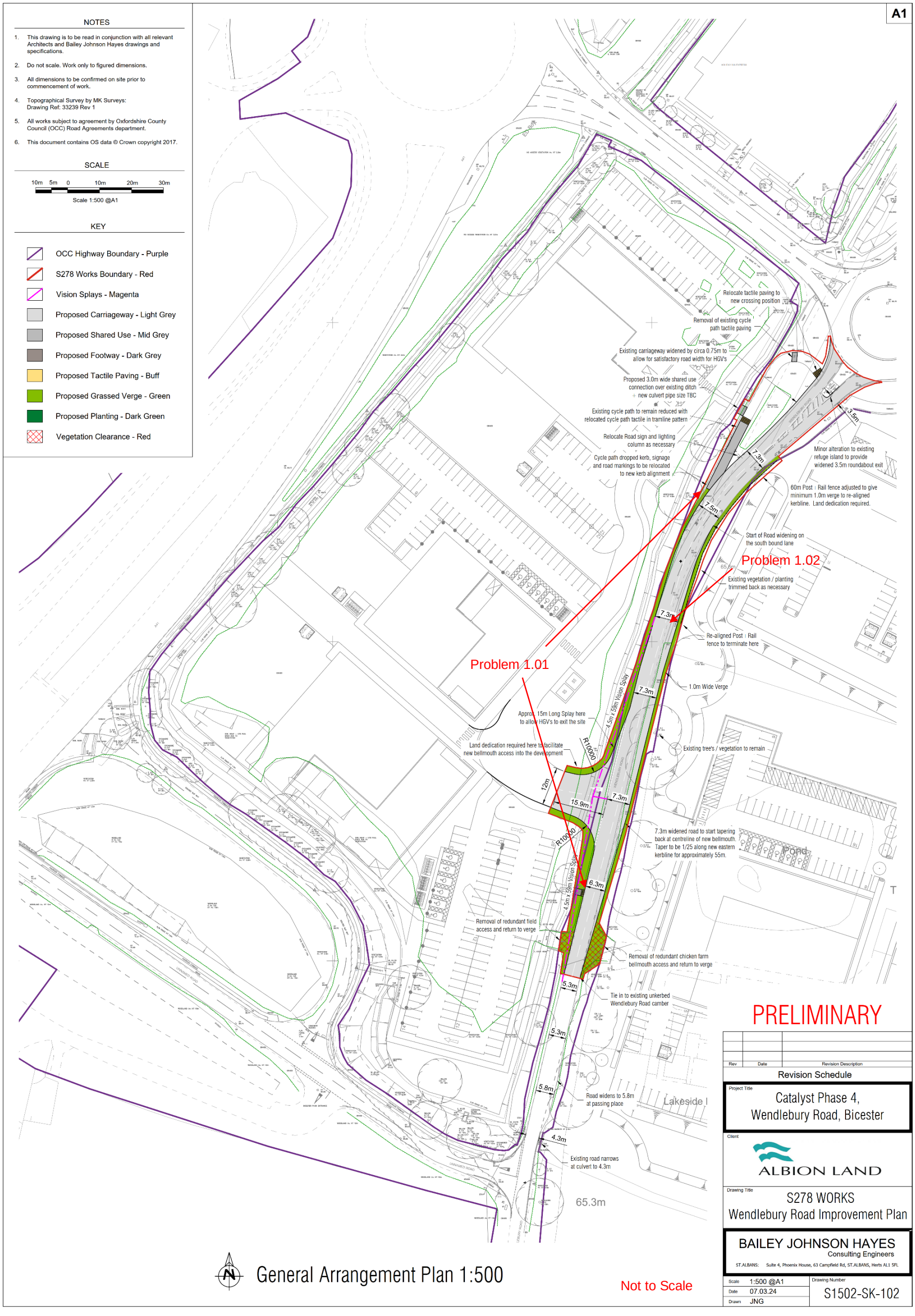
A. List of Documents & Drawings Examined

Table A.1: Drawings

Drawing Number	Rev	Drawing Title
S1502-SK-102	-	Wendlebury Road Improvement Plan

Source: David Tucker Associates

B. Location Plan – Wendlebury Road Improvements



Designer's Response – Footway / Cycleway

RSA Decision Log				
Item No.	**RSA Recommendation**	**Design Organisation Response**	**Overseeing Organisation Response**	**Agreed RSA Action**
1.01	It is recommended that sufficient separation between the VRS and the shared use footway / cycleway is provided to avoid the footway / cycleway being positioned within the working width of the VRS.	Agree. The footway / cycleway has been subject to localised realignment, meaning that it is no longer appropriate to propose a VRS barrier.		

Designer's Response – Footway / Cycleway

Design Organisation Statement:

On behalf of the design organisation, I certify that:
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: Simon Parfitt

Organisation: DTA Transport Planning

Position: Director

Date: 21st March 2024

Overseeing Organisation Statement:

On behalf of the overseeing organisation, I certify that:
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.
The agreed RSA actions will be progressed.

.....

Name:

Organisation: Oxfordshire County Council

Position:

Date:

MOTT MACDONALD

Footpath Improvements

Road Safety Audit
Stage 1

March 2024

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Footpath Improvements

Road Safety Audit
Stage 1

March 2024

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	14/03/2024	T J Blaney	R J Collins	S Gosden	First Issue
		[redacted]	[redacted]	[redacted]	

Document reference: 100117794 | MMD | REP | 002 | 002 | A |

Information class: Standard

Contents

Tables

No table of figures entries found.

Figures

Tables – Appendices

Figures – Appendices

No table of figures entries found.

1 Introduction

This report describes a Stage 1 Road Safety Audit carried out on proposed footpath improvements associated with a new development on the land on the western side of Wendlebury Road, Bicester.

The audit was carried out at the request of David Tucker Associates.

The audit took place at the Bristol and Croydon offices of Mott MacDonald and consisted of a detailed examination of the submitted documentation and drawings listed in **Appendix A**.

It is confirmed that this is a Stage 1 Road Safety Audit and that the audit was undertaken upon completion of the preliminary design work.

The Road Safety Audit Team consisted of:

Tim Blaney	BSc (Hons), CMILT, MCIHT, MSoRSA (Certificate of Competency in Road Safety Audit, July 2012) Audit Team Leader, Mott MacDonald
Jeff Man	MEng, MCIHT (Certificate of Competency in Road Safety Audit, November 2019) Audit Team Member, Mott MacDonald

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This Road Safety Audit was carried out in accordance with National Highways' Departmental Standard GG119. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

The comments and suggestions for road safety improvements made in this report seek to address matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme. Consequently, the auditors accept no responsibility for the design or construction of the scheme.

All the issues raised in this report are considered to be required for action. The comments contained in the report are based on safety related concerns and, as such, the design engineer will need to consider carefully how to respond to each of the issues. The Audit Response Report should be completed by the Design Team and kept on file for future reference.

A Key Plan indicating the location of any identified safety related issues is provided in **Appendix B**.

Scheme Description

The scheme improvements to an existing shared use footway / cycleway to provide a 3.0m wide surface adjacent to the A41 on the western side of a proposed development on land to the west of Wendlebury Road, Bicester. The improved surface will follow the existing alignment with widening and vegetation clearance proposed.

2 Items Raised at this Stage 1 Safety Audit

This section describes road safety related issues identified by the Audit Team during this Stage 1 Road Safety Audit.

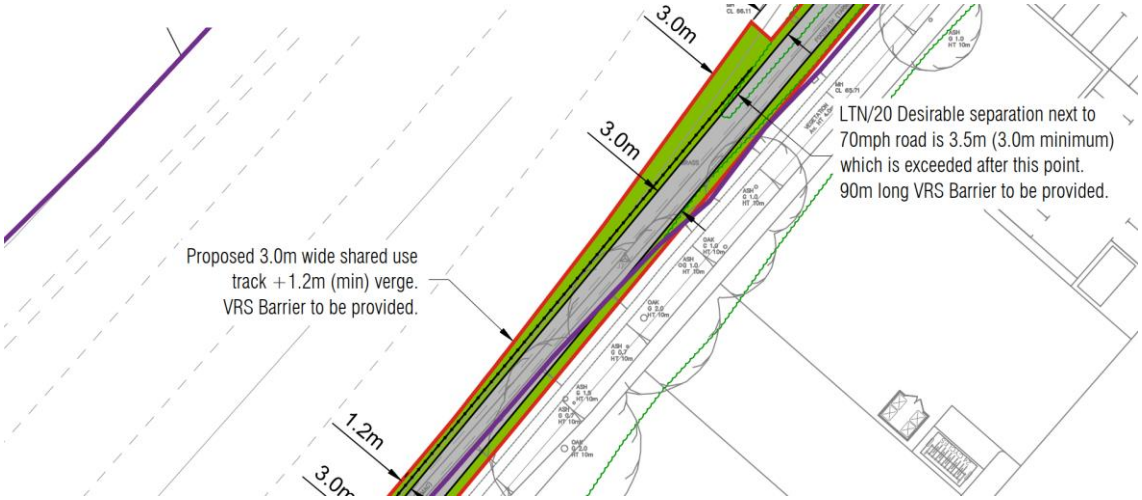
2.1 Problem 1.01

Location: A41 / shared used footway / cycleway.

Summary: Footway / cycleway may be positioned withing VRS working width.

An existing shared use footway / cycleway is located on the western side of the development site; this is significantly narrower than current desirable minimum surface widths and it is proposed to widen this facility to 3.0m. The footway / cycleway is located adjacent to the 70mph A41. LTN 1/20 states a desirable separation in such situations of 3.5m (3.0m minimum) however in some locations, a separation of only 1.2m is achieved. To address this, VRS is proposed between the A41 and the footway / cycleway. It is unclear how this will be installed or what the working width of the VRS will be. The Audit Team is concerned that if the VRS to sited too close to the footway / cycleway, users may strike the VRS supports leading to personal injury. Furthermore, if the footway / cycleway is within the working width of the VRS, pedestrians / cyclists may be vulnerable to being struck should the VRS be struck by an errant vehicle leading to personal injury.

Figure 2.1: Example of proposed VRS.



Source: Mott MacDonald

Recommendation

It is recommended that sufficient separation between the VRS and the shared use footway / cycleway is provided to avoid the footway / cycleway being positioned within the working width of the VRS.

3 Audit Team Statement

We certify that this audit has been carried out in accordance with National Highways' Departmental Standard GG119.

Road Safety Audit Team Leader

T J Blaney BSc (Hons), CMILT, MCIHT, MSoRSA
(Certificate of Competency in Road Safety Audit, July 2012)

Signed: 

Date: 14th March 2024

Principal Road Safety Engineer
Mott MacDonald
10 Temple Back
Bristol
BS1 6FL

Road Safety Audit Team Member

J Man MEng, MCIHT
(Certificate of Competency in Road Safety Audit, November 2019)

Signed: 

Date: 14th March 2024

Senior Traffic Engineer
Traffic Engineering (Road Safety)
Mott MacDonald House
8-10 Sydenham Road
Croydon
CR0 2EE

Appendices

A. List of Documents & Drawings Examined

Table A.1: Drawings

Drawing Number	Rev	Drawing Title
S1502-SK-101	-	Wendlebury Road Footpath Improvement Plan

Source: David Tucker Associates

B. Location Plan – Wendlebury Road Footpath Improvements

A1

NOTES

1. This drawing is to be read in conjunction with all relevant Architects and Bailey Johnson Hayes drawings and specifications.
2. Do not scale. Work only to figured dimensions.
3. All dimensions to be confirmed on site prior to commencement of work.
4. Topographical Survey by MK Surveys: Drawing Ref: 33239 Rev 1
5. All works subject to agreement by Oxfordshire County Council (OCC) Road Agreements department.
6. This document contains OS data © Crown copyright 2017.

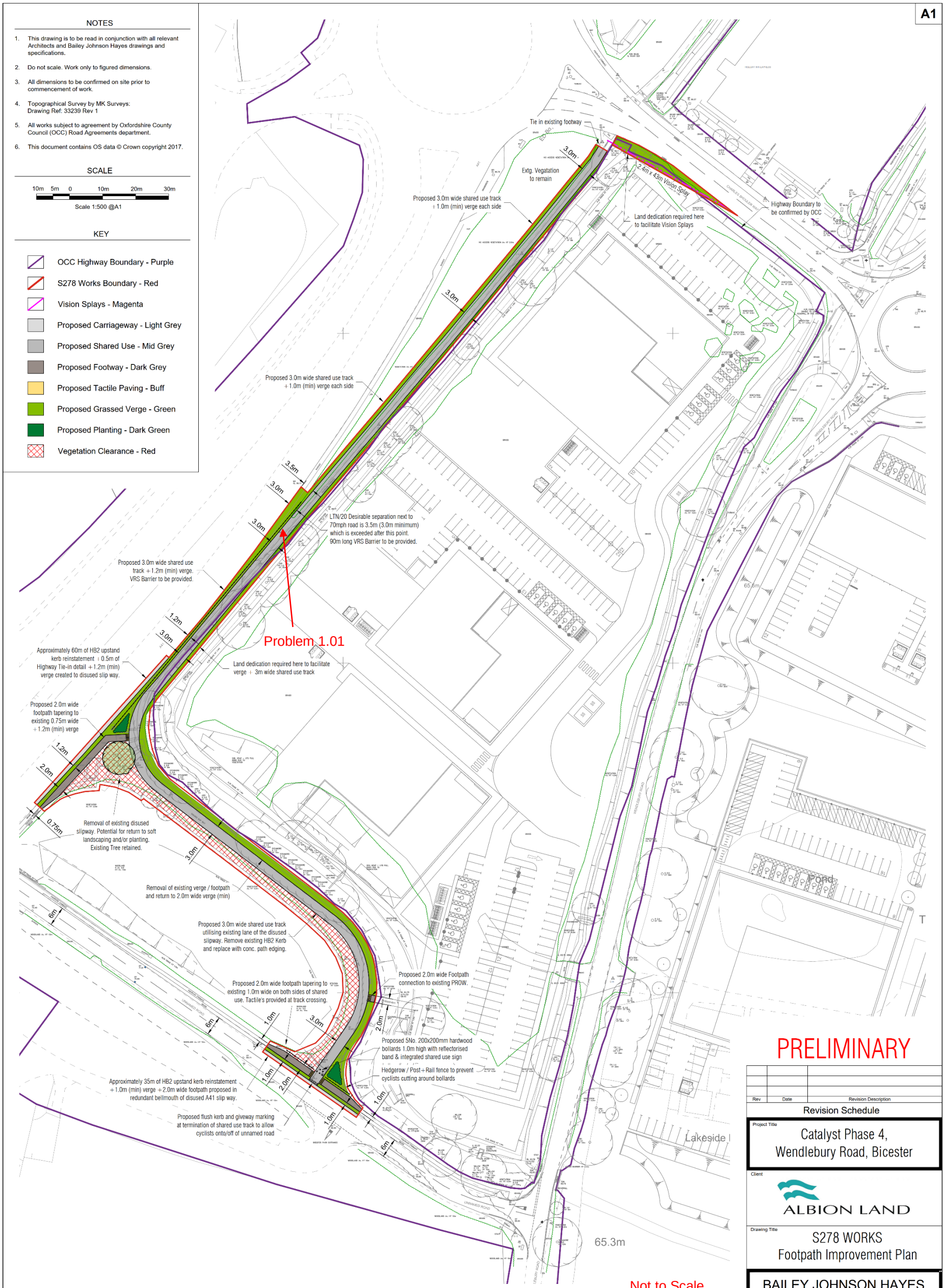
SCALE

10m 5m 0 10m 20m 30m

Scale 1:500 @A1

KEY

- OCC Highway Boundary - Purple
- S278 Works Boundary - Red
- Vision Splays - Magenta
- Proposed Carriageway - Light Grey
- Proposed Shared Use - Mid Grey
- Proposed Footway - Dark Grey
- Proposed Tactile Paving - Buff
- Proposed Grassed Verge - Green
- Proposed Planting - Dark Green
- Vegetation Clearance - Red



Not to Scale

General Arrangement Plan 1:500

PRELIMINARY

Rev	Date	Revision Description

Revision Schedule

Project Title: Catalyst Phase 4, Wendlebury Road, Bicester

Client: ALBION LAND

Drawing Title: S278 WORKS Footpath Improvement Plan

BAILEY JOHNSON HAYES
Consulting Engineers
ST.ALBANS: Suite 4, Phoenix House, 63 Campfield Rd, ST.ALBANS, Herts AL1 5FL

Scale	1:500 @A1
Date	07.03.24
Drawn	JNG

Drawing Number: S1502-SK-101

Appendix F

Catalyst Phase 4, Bicester

Parking and Servicing Note

DTA

Transport Planning Consultants

1.0 INTRODUCTION

1.1 This Parking Note is prepared on behalf of Albion Land to accompany an application for employment floorspace at Catalyst Phase 4, Bicester. The proposals are for 11,929sqm of E class employment including up to 50% office floor area. The proposals comprise 3 units (numbered 13, 14, 15) representing Phase 4 of the wider Catalyst employment site.

1.2 This Note considers car parking provision for each of the units together with details of the servicing arrangements.

2.0 PARKING PROVISION

Car Parking

2.1 Car parking standards are set out in Oxfordshire County Council's (OCC) Parking Standards for New Developments. For land use E Commercial, Business and Services – office, research and development and light industrial process, the car parking standards are 1 space per 45sqm. The standards are expressed as an upper limit of car parking provision.

2.2 The car parking provision for each unit is set out in **Table 1** below.

Table 1 – Car Parking Provision

Unit	Floorspace (sqm)	B2 Parking Standard (as a proxy for E(g)(iii)	Proposed Car Parking Provision
13	4,573	102	99
14	3,122	69	70
15	4,234	94	95
Totals	11,929	264	264

2.3 The number of car parking spaces proposed across the site is wholly consistent with the standards and has been informed by market advice from CBRE on behalf of the applicant which has confirmed minimum occupier expectations for the type of development which is proposed in this location.

2.4 The OCC guidance sets out standards for Blue Badge parking levels and electric vehicle charging spaces. OCC guidance required that 6% of the total parking

provision is for Blue Badge parking, and 25% of all parking for electric vehicle charging.

2.5 The site will provide 17 Blue Badge parking spaces and 25% electric vehicle charging spaces spread across the proposed units.

Cycle Parking

2.6 Cycle parking standards are also set out in OCC's guidance. For land use E Commercial, Business and Services – office, research and development and light industrial process, the cycle standards are 1 space per 100sqm for staff and 1 space per 250sqm for visitors.

Table 2 – Cycle Parking Provision

Unit	Floorspace (sqm)	B2 Parking Standard (as a proxy for E(g)(iii)	Proposed Cycle Parking Provision
13	4,573	46+18 (64)	64
14	3,122	31+12 (43)	44
15	4,234	42+17 (59)	60
Totals	11,929	119+47 (166)	168

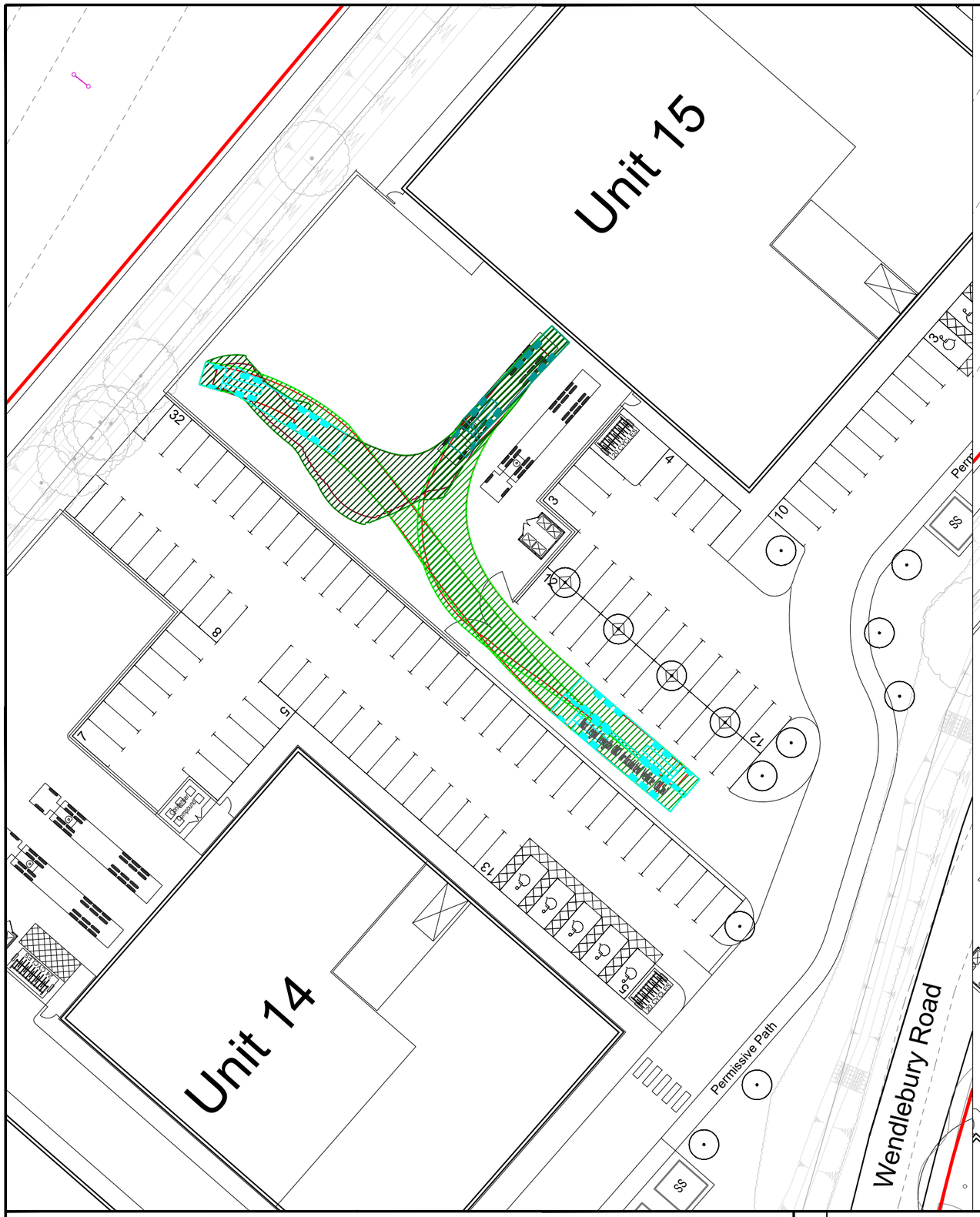
2.7 The number of cycle parking spaces proposed across the site is wholly consistent with the standards. Cycle parking will be provided as covered Sheffield stands.

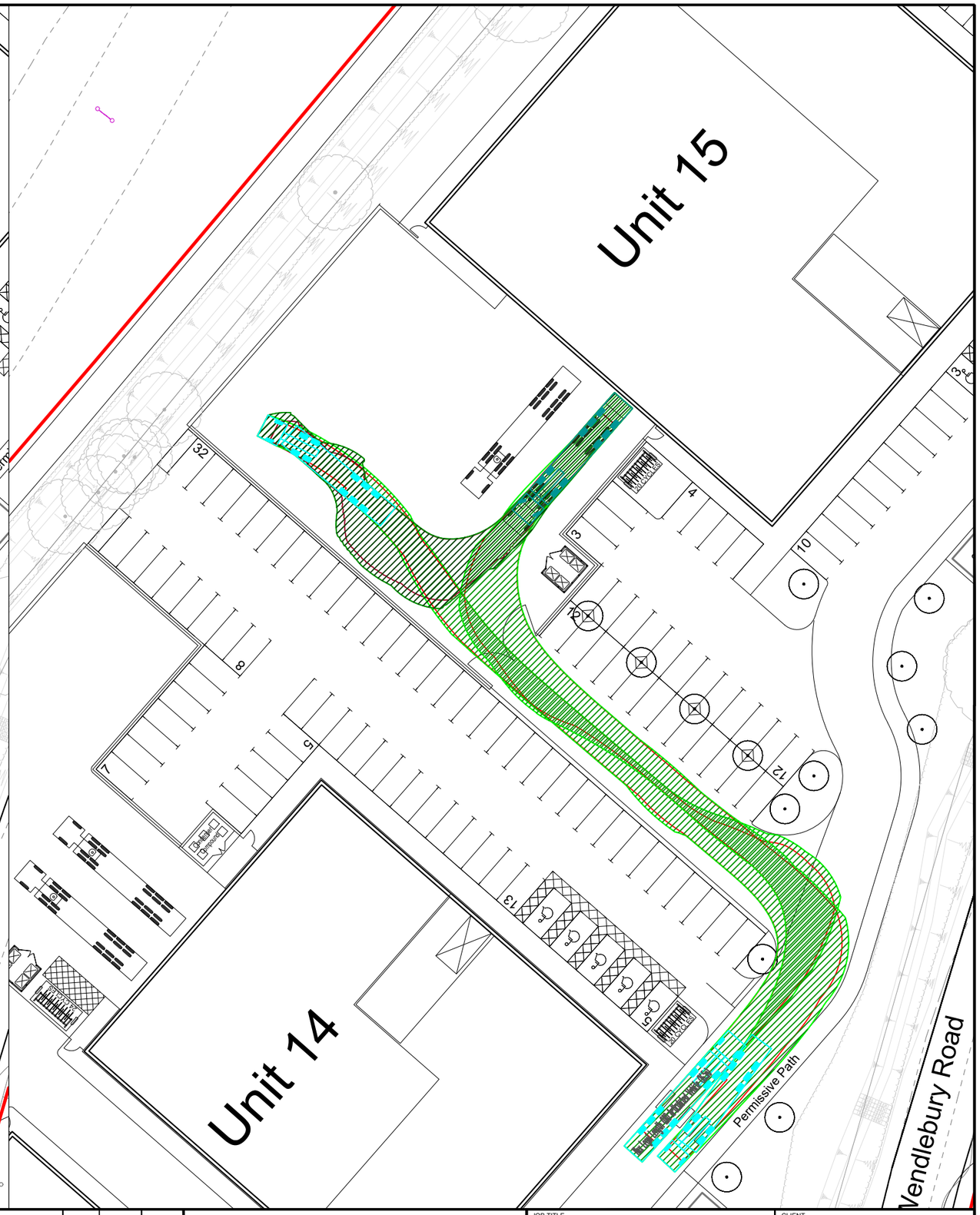
3.0 SERVICING ARRANGEMENTS

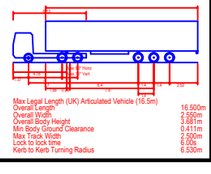
3.1 The internal layout has been tracked with a 16.5 m articulated vehicle to demonstrate the vehicle can enter, turn and leave within the curtilage of each of the units. The swept path analysis is shown on **DTA Drawings 26019-01b** and **26019-01b-2**.

3.2 The plans demonstrate the site has adequate access, turning and parking areas for servicing.

Drawings







REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
Transport Planning Consultants

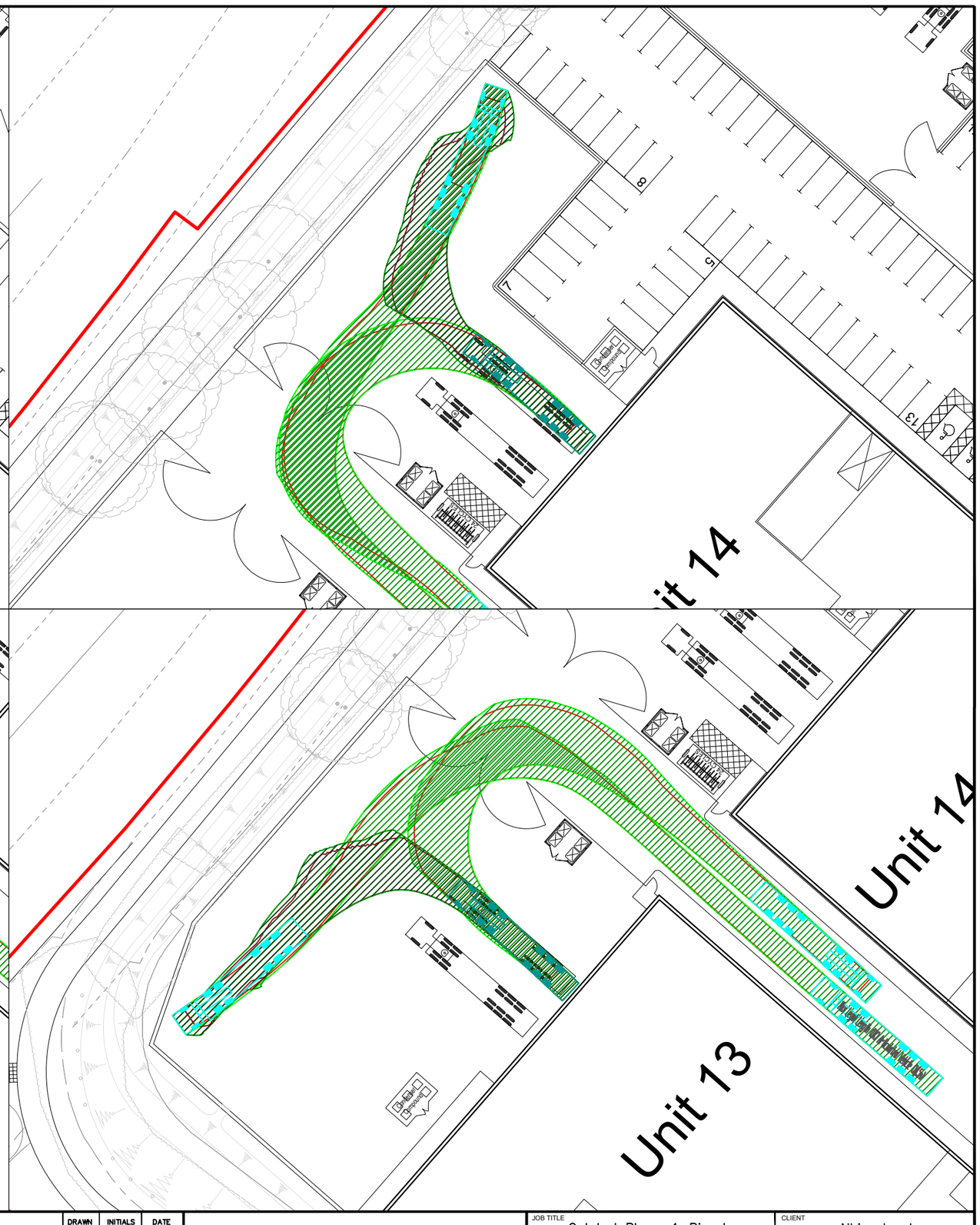
Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

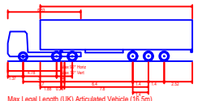
JOB TITLE: Catalyst Bicester, Phase 4

CLIENT: Albion Land

DRAWING TITLE: Max Legal Tracking Plan

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/500 @ A3	NS	09-05-2024	26019-01	B





Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.681m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

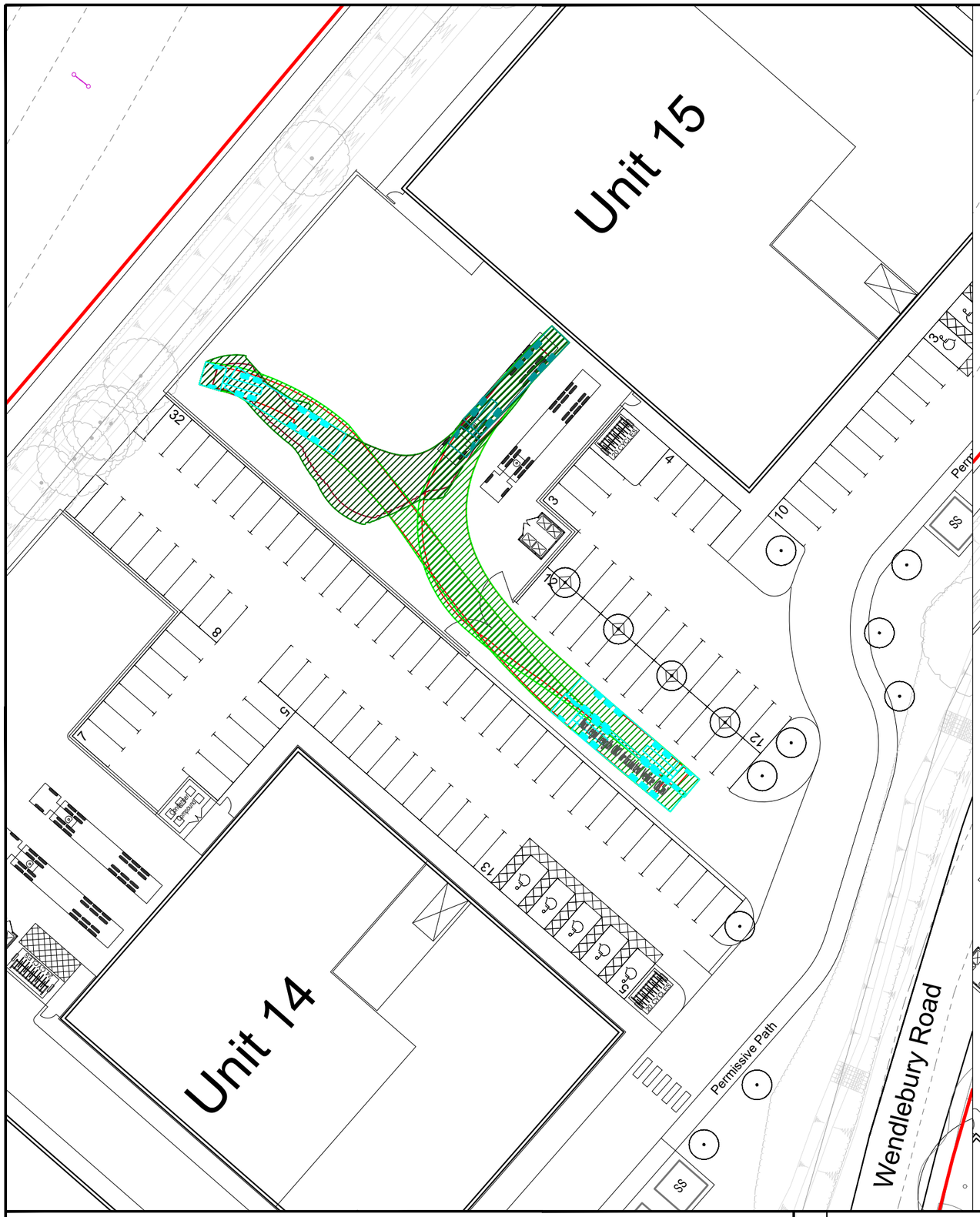
REV	DESCRIPTION	DRAWN	INITIALS	DATE

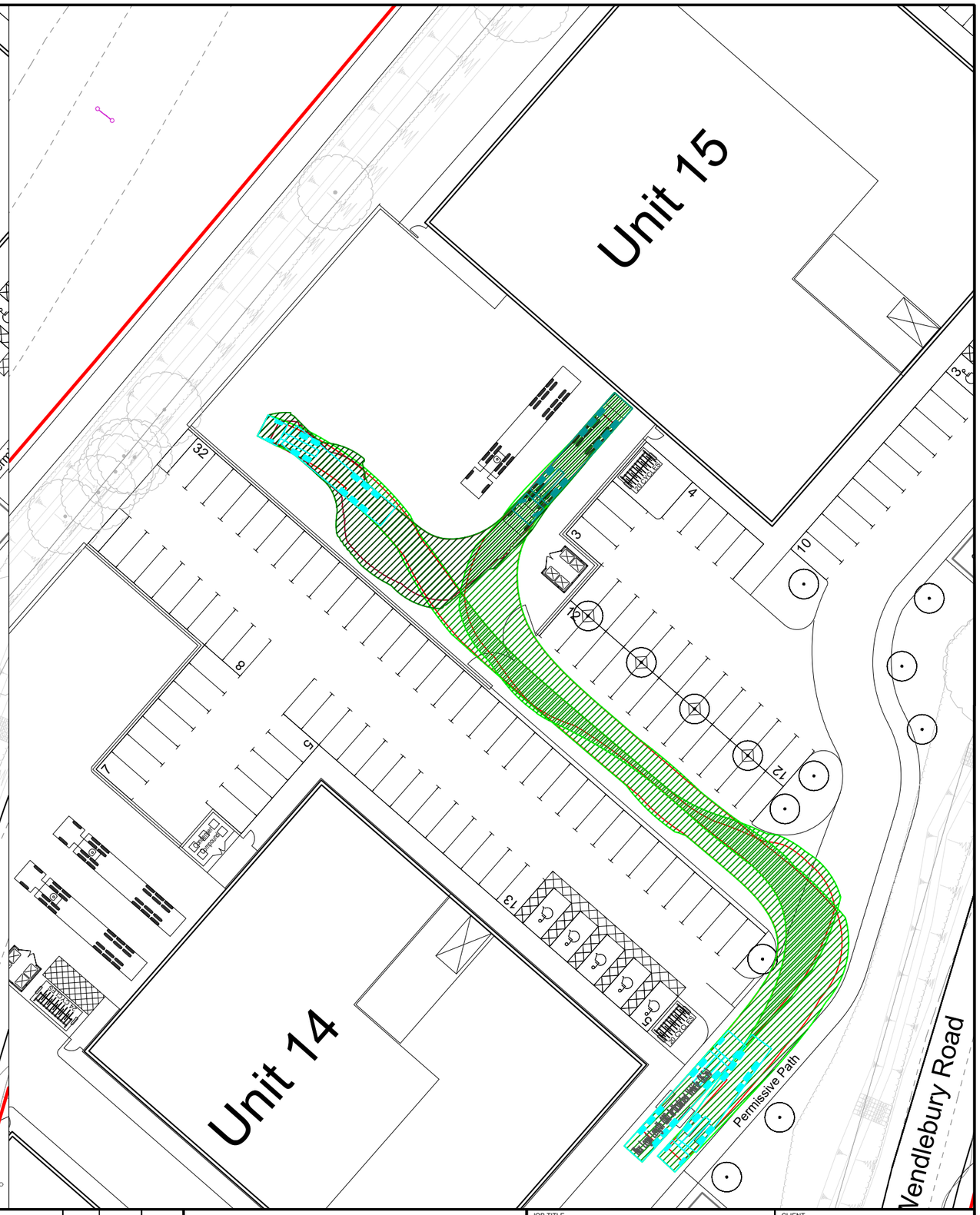
DTA
Transport Planning Consultants

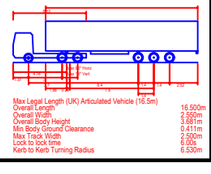
Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE	Catalyst Phase 4, Bicester
CLIENT	Albion Land
DRAWING TITLE	Max Legal Tracking Plan
SCALE	1/500 @ A3
DRAWN BY	NS
DATE	09-05-2024
DRAWING No	26019-01-2
REVISION	B

Drawings







REV	DESCRIPTION	DRAWN	INITIALS	DATE

DTA
Transport Planning Consultants

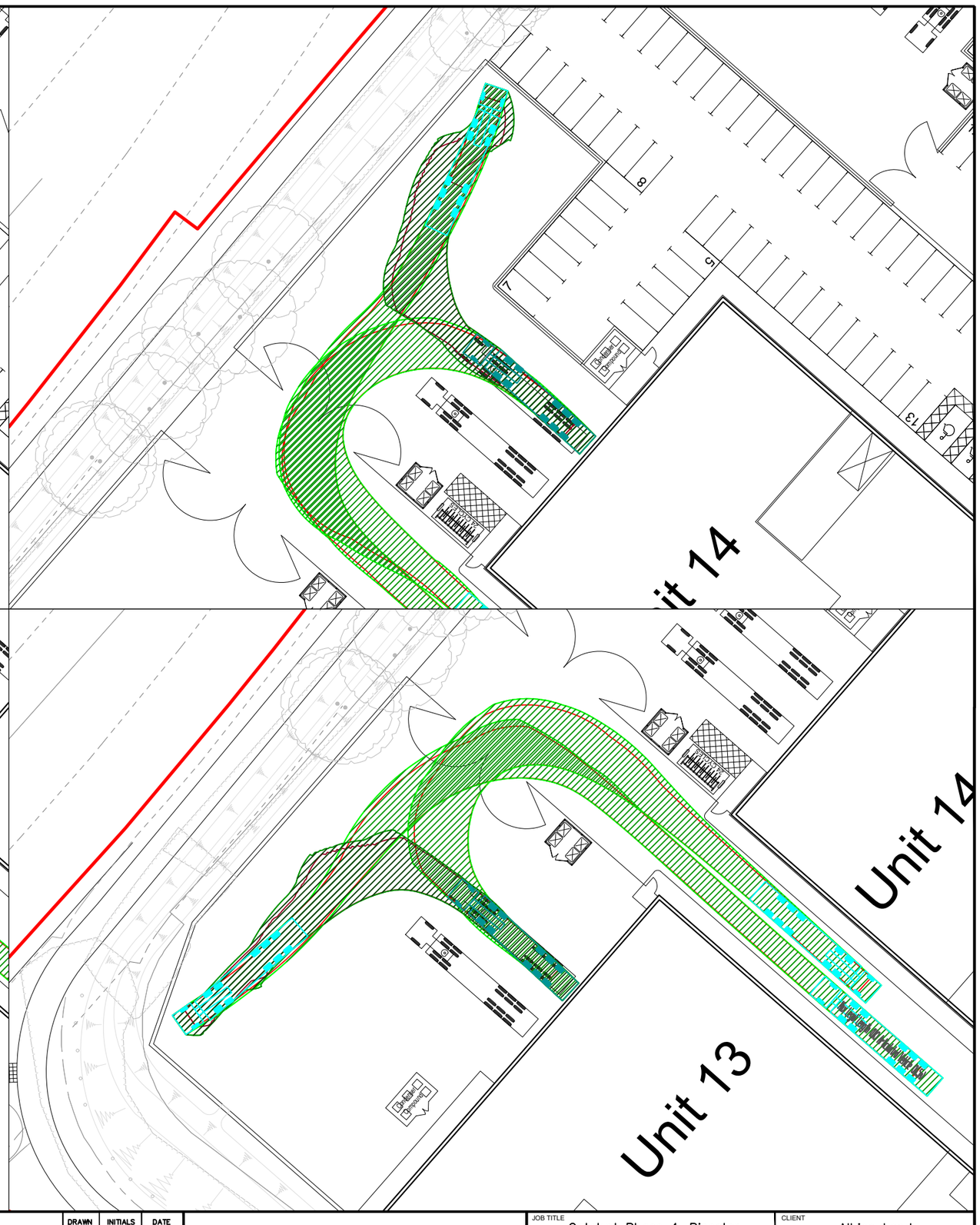
Forester House, Doctors Lane,
Henley in Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

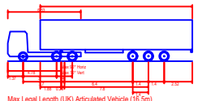
JOB TITLE: Catalyst Bicester, Phase 4

CLIENT: Albion Land

DRAWING TITLE: Max Legal Tracking Plan

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/500 @ A3	NS	09-05-2024	26019-01	B





Max Legal Length (UK) Articulated Vehicle (16.5m)

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REV	DESCRIPTION	DRAWN	INITIALS	DATE

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www.dtatransportation.co.uk

JOB TITLE	Catalyst Phase 4, Bicester
CLIENT	Albion Land
DRAWING TITLE	Max Legal Tracking Plan
SCALE	1/500 @ A3
DRAWN BY	NS
DATE	09-05-2024
DRAWING No	26019-01-2
REVISION	B

Appendix G

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: Proposed Site Access.j10
Path: P:\26000's\26019
Report generation date: 14/03/2024 10:23:30

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2026 Base + Development					
Stream B-AC	0.0	4.80	0.02	0.2	5.37	0.13
Stream C-AB	0.4	7.15	0.25	0.0	5.53	0.03
	2031 Base + Development					
Stream B-AC	0.0	4.81	0.02	0.2	5.93	0.13
Stream C-AB	0.4	7.14	0.25	0.0	6.07	0.03

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Proposed Site Access
Location	Bicester
Site number	
Date	14/03/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	26019
Enumerator	DTA\nicholasanderson
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base + Development	AM	ONE HOUR	07:45	09:15	15
D2	2026 Base + Development	PM	ONE HOUR	16:45	18:15	15
D3	2031 Base + Development	AM	ONE HOUR	07:45	09:15	15
D4	2031 Base + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Base + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.90	A

Arms

Arms

Arm	Name	Description	Arm type
A	Wendlebury Raod (S)		Major
B	Site Access		Minor
C	Wendlebury Road (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Wendlebury Road (N)	6.30			95.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	5.00	83	90

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	660	0.119	0.300	0.189	0.428
B-C	817	0.124	0.312	-	-
C-B	629	0.241	0.241	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base + Development	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Am	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wendlebury Raod (S)		✓	142	100.000
B - Site Access		✓	16	100.000
C - Wendlebury Road (N)		✓	238	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	142
	B - Site Access	0	0	16
	C - Wendlebury Road (N)	112	126	0

Vehicle Mix

Heavy Vehicle %

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	0
	B - Site Access	0	0	0
	C - Wendlebury Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	4.80	0.0	A
C-AB	0.25	7.15	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	783	0.015	12	0.0	4.666	A
C-AB	109	659	0.165	108	0.2	6.520	A
C-A	70			70			
A-B	0			0			
A-C	107			107			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	777	0.019	14	0.0	4.720	A
C-AB	134	666	0.201	133	0.3	6.763	A
C-A	80			80			
A-B	0			0			
A-C	128			128			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	768	0.023	18	0.0	4.796	A
C-AB	170	674	0.252	170	0.4	7.130	A
C-A	92			92			
A-B	0			0			
A-C	156			156			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	768	0.023	18	0.0	4.796	A
C-AB	170	674	0.252	170	0.4	7.146	A
C-A	92			92			
A-B	0			0			
A-C	156			156			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	777	0.019	14	0.0	4.720	A
C-AB	134	666	0.201	134	0.3	6.783	A
C-A	80			80			
A-B	0			0			
A-C	128			128			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	783	0.015	12	0.0	4.666	A
C-AB	109	659	0.165	109	0.2	6.547	A
C-A	70			70			
A-B	0			0			
A-C	107			107			

2026 Base + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.67	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.67	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026 Base + Development	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wendlebury Raod (S)		✓	130	100.000
B - Site Access		✓	93	100.000
C - Wendlebury Road (N)		✓	127	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	130
	B - Site Access	0	0	93
	C - Wendlebury Road (N)	114	13	0

Vehicle Mix

Heavy Vehicle %

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	0
	B - Site Access	0	0	0
	C - Wendlebury Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	5.37	0.2	A
C-AB	0.03	5.53	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	786	0.089	70	0.1	5.021	A
C-AB	11	662	0.017	11	0.0	5.528	A
C-A	84			84			
A-B	0			0			
A-C	98			98			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	780	0.107	84	0.1	5.166	A
C-AB	14	669	0.021	14	0.0	5.492	A
C-A	100			100			
A-B	0			0			
A-C	117			117			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	772	0.133	102	0.2	5.372	A
C-AB	18	679	0.026	18	0.0	5.445	A
C-A	122			122			
A-B	0			0			
A-C	143			143			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	772	0.133	102	0.2	5.374	A
C-AB	18	679	0.026	18	0.0	5.445	A
C-A	122			122			
A-B	0			0			
A-C	143			143			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	780	0.107	84	0.1	5.168	A
C-AB	14	669	0.021	14	0.0	5.493	A
C-A	100			100			
A-B	0			0			
A-C	117			117			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	786	0.089	70	0.1	5.028	A
C-AB	11	662	0.017	11	0.0	5.530	A
C-A	84			84			
A-B	0			0			
A-C	98			98			

2031 Base + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.84	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.84	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2031 Base + Development	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wendlebury Raod (S)		✓	148	100.000
B - Site Access		✓	16	100.000
C - Wendlebury Road (N)		✓	243	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	148
	B - Site Access	0	0	16
	C - Wendlebury Road (N)	117	126	0

Vehicle Mix

Heavy Vehicle %

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	0
	B - Site Access	0	0	0
	C - Wendlebury Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	4.81	0.0	A
C-AB	0.25	7.14	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	782	0.015	12	0.0	4.674	A
C-AB	109	661	0.166	109	0.2	6.510	A
C-A	73			73			
A-B	0			0			
A-C	111			111			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	775	0.019	14	0.0	4.730	A
C-AB	135	667	0.202	134	0.3	6.754	A
C-A	84			84			
A-B	0			0			
A-C	133			133			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	766	0.023	18	0.0	4.810	A
C-AB	172	677	0.254	171	0.4	7.127	A
C-A	96			96			
A-B	0			0			
A-C	163			163			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	766	0.023	18	0.0	4.810	A
C-AB	172	677	0.254	172	0.4	7.137	A
C-A	96			96			
A-B	0			0			
A-C	163			163			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	775	0.019	14	0.0	4.730	A
C-AB	135	667	0.202	135	0.3	6.770	A
C-A	84			84			
A-B	0			0			
A-C	133			133			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	782	0.015	12	0.0	4.674	A
C-AB	110	661	0.166	110	0.2	6.540	A
C-A	73			73			
A-B	0			0			
A-C	111			111			

2031 Base + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.79	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2031 Base + Development	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wendlebury Raod (S)		✓	136	100.000
B - Site Access		✓	93	100.000
C - Wendlebury Road (N)		✓	132	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	0	0	136
	B - Site Access	0	0	93
	C - Wendlebury Road (N)	119	13	0

Vehicle Mix

Heavy Vehicle %

		To		
		A - Wendlebury Raod (S)	B - Site Access	C - Wendlebury Road (N)
From	A - Wendlebury Raod (S)	10	10	10
	B - Site Access	10	10	10
	C - Wendlebury Road (N)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	5.93	0.2	A
C-AB	0.03	6.07	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	785	0.089	70	0.1	5.532	A
C-AB	11	664	0.017	11	0.0	6.067	A
C-A	88			88			
A-B	0			0			
A-C	102			102			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	779	0.107	84	0.1	5.696	A
C-AB	14	671	0.021	14	0.0	6.026	A
C-A	105			105			
A-B	0			0			
A-C	122			122			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	770	0.133	102	0.2	5.927	A
C-AB	18	681	0.026	18	0.0	5.971	A
C-A	128			128			
A-B	0			0			
A-C	150			150			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	102	770	0.133	102	0.2	5.930	A
C-AB	18	681	0.026	18	0.0	5.974	A
C-A	128			128			
A-B	0			0			
A-C	150			150			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	779	0.107	84	0.1	5.698	A
C-AB	14	671	0.021	14	0.0	6.027	A
C-A	105			105			
A-B	0			0			
A-C	122			122			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	785	0.089	70	0.1	5.542	A
C-AB	11	664	0.017	11	0.0	6.068	A
C-A	88			88			
A-B	0			0			
A-C	102			102			

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.0.1820

Filename: Wendlebury Rd_Vendee Link Rd_Catalyst Access Rd.j10
Path: P:\26000's\26019
Report generation date: 14/03/2024 09:22:33

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2026 Base					
1 - Wendlebury Road (N)	0.7	6.89	0.41	0.1	3.62	0.07
2 - Catalyst Access Road	0.1	3.29	0.08	0.5	3.92	0.31
3 - Wendlebury Road (S)	0.1	3.15	0.11	0.4	4.51	0.28
4 - Vendee Link Road	0.5	4.27	0.35	0.1	3.22	0.10
	2026 Base + Development					
1 - Wendlebury Road (N)	1.0	8.57	0.50	0.1	3.66	0.08
2 - Catalyst Access Road	0.1	3.55	0.09	0.5	3.95	0.31
3 - Wendlebury Road (S)	0.1	3.20	0.12	0.6	5.18	0.37
4 - Vendee Link Road	0.7	4.70	0.41	0.1	3.25	0.11
	2031 Base					
1 - Wendlebury Road (N)	1.0	8.37	0.51	0.1	3.60	0.07
2 - Catalyst Access Road	0.1	3.46	0.09	0.4	3.89	0.31
3 - Wendlebury Road (S)	0.2	3.36	0.16	0.5	4.84	0.33
4 - Vendee Link Road	0.5	4.27	0.35	0.1	3.19	0.09
	2031 Base + Development					
1 - Wendlebury Road (N)	1.6	10.98	0.61	0.1	4.00	0.08
2 - Catalyst Access Road	0.1	3.76	0.09	0.5	4.32	0.31
3 - Wendlebury Road (S)	0.2	3.42	0.18	0.8	6.18	0.42
4 - Vendee Link Road	0.7	4.70	0.41	0.1	3.54	0.10

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Wendlebury Road/ Vendee Link Road/ Catalyst Access Road
Location	Bicester
Site number	
Date	13/03/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	26019
Enumerator	DTA\nicholasanderson
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15
D3	2026 Base + Development	AM	ONE HOUR	07:45	09:15	15
D4	2026 Base + Development	PM	ONE HOUR	16:45	18:15	15
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15
D7	2031 Base + Development	AM	ONE HOUR	07:45	09:15	15
D8	2031 Base + Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2026 Base , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.93	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Wendlebury Road (N)		
2	Catalyst Access Road		
3	Wendlebury Road (S)		
4	Vendee Link Road		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Wendlebury Road (N)	3.00	4.50	4.0	20.0	36.0	27.0		
2 - Catalyst Access Road	3.70	5.00	5.0	20.0	36.0	23.0		
3 - Wendlebury Road (S)	3.75	5.00	4.5	17.0	36.0	24.0		
4 - Vendee Link Road	3.50	4.50	5.0	25.0	36.0	19.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Wendlebury Road (N)	0.537	1127
2 - Catalyst Access Road	0.590	1369
3 - Wendlebury Road (S)	0.584	1353
4 - Vendee Link Road	0.585	1305

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2026 Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	330	100.000
2 - Catalyst Access Road		✓	88	100.000
3 - Wendlebury Road (S)		✓	128	100.000
4 - Vendee Link Road		✓	415	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	207	100	23
	2 - Catalyst Access Road	0	0	0	88
	3 - Wendlebury Road (S)	7	0	0	121
	4 - Vendee Link Road	7	258	150	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.41	6.89	0.7	A
2 - Catalyst Access Road	0.08	3.29	0.1	A
3 - Wendlebury Road (S)	0.11	3.15	0.1	A
4 - Vendee Link Road	0.35	4.27	0.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	248	306	963	0.258	247	0.3	5.021	A
2 - Catalyst Access Road	66	205	1248	0.053	66	0.1	3.046	A
3 - Wendlebury Road (S)	96	83	1304	0.074	96	0.1	2.979	A
4 - Vendee Link Road	312	5	1302	0.240	311	0.3	3.628	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	297	366	930	0.319	296	0.5	5.674	A
2 - Catalyst Access Road	79	245	1224	0.065	79	0.1	3.144	A
3 - Wendlebury Road (S)	115	100	1295	0.089	115	0.1	3.050	A
4 - Vendee Link Road	373	6	1301	0.287	373	0.4	3.876	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	363	449	886	0.410	362	0.7	6.863	A
2 - Catalyst Access Road	97	300	1191	0.081	97	0.1	3.288	A
3 - Wendlebury Road (S)	141	122	1282	0.110	141	0.1	3.154	A
4 - Vendee Link Road	457	8	1300	0.351	456	0.5	4.262	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	363	449	886	0.410	363	0.7	6.889	A
2 - Catalyst Access Road	97	301	1191	0.081	97	0.1	3.289	A
3 - Wendlebury Road (S)	141	122	1282	0.110	141	0.1	3.154	A
4 - Vendee Link Road	457	8	1300	0.351	457	0.5	4.267	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	297	367	930	0.319	298	0.5	5.700	A
2 - Catalyst Access Road	79	246	1223	0.065	79	0.1	3.148	A
3 - Wendlebury Road (S)	115	100	1295	0.089	115	0.1	3.051	A
4 - Vendee Link Road	373	6	1301	0.287	374	0.4	3.884	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	248	308	962	0.258	249	0.4	5.053	A
2 - Catalyst Access Road	66	206	1247	0.053	66	0.1	3.050	A
3 - Wendlebury Road (S)	96	84	1304	0.074	96	0.1	2.980	A
4 - Vendee Link Road	312	5	1302	0.240	313	0.3	3.640	A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2026 Base	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	71	100.000
2 - Catalyst Access Road		✓	379	100.000
3 - Wendlebury Road (S)		✓	280	100.000
4 - Vendee Link Road		✓	113	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	65	0	6
	2 - Catalyst Access Road	0	0	0	379
	3 - Wendlebury Road (S)	100	0	0	180
	4 - Vendee Link Road	20	49	44	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.07	3.62	0.1	A
2 - Catalyst Access Road	0.31	3.92	0.5	A
3 - Wendlebury Road (S)	0.28	4.51	0.4	A
4 - Vendee Link Road	0.10	3.22	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	53	70	1090	0.049	53	0.1	3.473	A
2 - Catalyst Access Road	285	38	1346	0.212	284	0.3	3.386	A
3 - Wendlebury Road (S)	211	289	1185	0.178	210	0.2	3.690	A
4 - Vendee Link Road	85	75	1261	0.067	85	0.1	3.060	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	64	84	1082	0.059	64	0.1	3.533	A
2 - Catalyst Access Road	341	45	1342	0.254	340	0.3	3.594	A
3 - Wendlebury Road (S)	252	346	1151	0.219	251	0.3	4.000	A
4 - Vendee Link Road	102	90	1252	0.081	102	0.1	3.127	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	78	102	1072	0.073	78	0.1	3.620	A
2 - Catalyst Access Road	417	55	1336	0.312	417	0.5	3.914	A
3 - Wendlebury Road (S)	308	423	1106	0.279	308	0.4	4.509	A
4 - Vendee Link Road	124	110	1241	0.100	124	0.1	3.224	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	78	102	1072	0.073	78	0.1	3.620	A
2 - Catalyst Access Road	417	55	1336	0.312	417	0.5	3.917	A
3 - Wendlebury Road (S)	308	424	1106	0.279	308	0.4	4.514	A
4 - Vendee Link Road	124	110	1241	0.100	124	0.1	3.224	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	64	84	1082	0.059	64	0.1	3.537	A
2 - Catalyst Access Road	341	45	1342	0.254	341	0.3	3.597	A
3 - Wendlebury Road (S)	252	347	1151	0.219	252	0.3	4.008	A
4 - Vendee Link Road	102	90	1252	0.081	102	0.1	3.128	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	53	70	1090	0.049	53	0.1	3.474	A
2 - Catalyst Access Road	285	38	1346	0.212	286	0.3	3.394	A
3 - Wendlebury Road (S)	211	290	1184	0.178	211	0.2	3.703	A
4 - Vendee Link Road	85	75	1261	0.067	85	0.1	3.063	A

2026 Base + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2026 Base + Development	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	385	100.000
2 - Catalyst Access Road		✓	88	100.000
3 - Wendlebury Road (S)		✓	144	100.000
4 - Vendee Link Road		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	207	155	23
	2 - Catalyst Access Road	0	0	0	88
	3 - Wendlebury Road (S)	7	0	0	137
	4 - Vendee Link Road	7	258	221	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.50	8.57	1.0	A
2 - Catalyst Access Road	0.09	3.55	0.1	A
3 - Wendlebury Road (S)	0.12	3.20	0.1	A
4 - Vendee Link Road	0.41	4.70	0.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	290	359	934	0.310	288	0.4	5.558	A
2 - Catalyst Access Road	66	299	1192	0.056	66	0.1	3.196	A
3 - Wendlebury Road (S)	108	83	1304	0.083	108	0.1	3.009	A
4 - Vendee Link Road	366	5	1302	0.281	364	0.4	3.833	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	346	430	896	0.386	345	0.6	6.529	A
2 - Catalyst Access Road	79	358	1157	0.068	79	0.1	3.338	A
3 - Wendlebury Road (S)	129	100	1295	0.100	129	0.1	3.088	A
4 - Vendee Link Road	437	6	1301	0.336	436	0.5	4.161	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	424	527	844	0.502	422	1.0	8.501	A
2 - Catalyst Access Road	97	438	1110	0.087	97	0.1	3.553	A
3 - Wendlebury Road (S)	159	122	1282	0.124	158	0.1	3.204	A
4 - Vendee Link Road	535	8	1300	0.411	534	0.7	4.694	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	424	527	844	0.502	424	1.0	8.570	A
2 - Catalyst Access Road	97	439	1109	0.087	97	0.1	3.555	A
3 - Wendlebury Road (S)	159	122	1282	0.124	159	0.1	3.204	A
4 - Vendee Link Road	535	8	1300	0.411	535	0.7	4.703	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	346	431	895	0.387	348	0.6	6.587	A
2 - Catalyst Access Road	79	360	1156	0.068	79	0.1	3.342	A
3 - Wendlebury Road (S)	129	100	1295	0.100	130	0.1	3.091	A
4 - Vendee Link Road	437	6	1301	0.336	438	0.5	4.173	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	290	361	933	0.311	291	0.5	5.607	A
2 - Catalyst Access Road	66	301	1191	0.056	66	0.1	3.200	A
3 - Wendlebury Road (S)	108	84	1304	0.083	108	0.1	3.010	A
4 - Vendee Link Road	366	5	1302	0.281	366	0.4	3.849	A

2026 Base + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.32	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.32	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Base + Development	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	76	100.000
2 - Catalyst Access Road		✓	379	100.000
3 - Wendlebury Road (S)		✓	373	100.000
4 - Vendee Link Road		✓	121	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	65	5	6
	2 - Catalyst Access Road	0	0	0	379
	3 - Wendlebury Road (S)	100	0	0	273
	4 - Vendee Link Road	20	49	52	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.08	3.66	0.1	A
2 - Catalyst Access Road	0.31	3.95	0.5	A
3 - Wendlebury Road (S)	0.37	5.18	0.6	A
4 - Vendee Link Road	0.11	3.25	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	57	76	1086	0.053	57	0.1	3.496	A
2 - Catalyst Access Road	285	47	1341	0.213	284	0.3	3.405	A
3 - Wendlebury Road (S)	281	289	1185	0.237	280	0.3	3.973	A
4 - Vendee Link Road	91	75	1261	0.072	91	0.1	3.076	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	68	91	1078	0.063	68	0.1	3.563	A
2 - Catalyst Access Road	341	57	1335	0.255	340	0.3	3.619	A
3 - Wendlebury Road (S)	335	346	1151	0.291	335	0.4	4.408	A
4 - Vendee Link Road	109	90	1252	0.087	109	0.1	3.147	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	84	111	1067	0.078	84	0.1	3.658	A
2 - Catalyst Access Road	417	69	1328	0.314	417	0.5	3.951	A
3 - Wendlebury Road (S)	411	423	1106	0.371	410	0.6	5.167	A
4 - Vendee Link Road	133	110	1241	0.107	133	0.1	3.249	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	84	111	1067	0.078	84	0.1	3.658	A
2 - Catalyst Access Road	417	69	1328	0.314	417	0.5	3.954	A
3 - Wendlebury Road (S)	411	424	1106	0.371	411	0.6	5.179	A
4 - Vendee Link Road	133	110	1241	0.107	133	0.1	3.250	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	68	91	1078	0.063	68	0.1	3.566	A
2 - Catalyst Access Road	341	57	1335	0.255	341	0.3	3.622	A
3 - Wendlebury Road (S)	335	347	1151	0.291	336	0.4	4.421	A
4 - Vendee Link Road	109	90	1252	0.087	109	0.1	3.150	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	57	76	1086	0.053	57	0.1	3.500	A
2 - Catalyst Access Road	285	47	1341	0.213	286	0.3	3.415	A
3 - Wendlebury Road (S)	281	290	1184	0.237	281	0.3	3.991	A
4 - Vendee Link Road	91	75	1261	0.072	91	0.1	3.077	A

2031 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.58	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.58	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2031 Base	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	414	100.000
2 - Catalyst Access Road		✓	88	100.000
3 - Wendlebury Road (S)		✓	192	100.000
4 - Vendee Link Road		✓	415	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	207	184	23
	2 - Catalyst Access Road	0	0	0	88
	3 - Wendlebury Road (S)	7	0	0	185
	4 - Vendee Link Road	7	258	150	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.51	8.37	1.0	A
2 - Catalyst Access Road	0.09	3.46	0.1	A
3 - Wendlebury Road (S)	0.16	3.36	0.2	A
4 - Vendee Link Road	0.35	4.27	0.5	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	312	306	963	0.324	310	0.5	5.497	A
2 - Catalyst Access Road	66	267	1211	0.055	66	0.1	3.144	A
3 - Wendlebury Road (S)	145	83	1304	0.111	144	0.1	3.100	A
4 - Vendee Link Road	312	5	1302	0.240	311	0.3	3.628	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	372	366	930	0.400	371	0.7	6.434	A
2 - Catalyst Access Road	79	320	1179	0.067	79	0.1	3.271	A
3 - Wendlebury Road (S)	173	100	1295	0.133	172	0.2	3.206	A
4 - Vendee Link Road	373	6	1301	0.287	373	0.4	3.876	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	456	449	886	0.514	454	1.0	8.307	A
2 - Catalyst Access Road	97	392	1137	0.085	97	0.1	3.460	A
3 - Wendlebury Road (S)	211	122	1282	0.165	211	0.2	3.362	A
4 - Vendee Link Road	457	8	1300	0.351	456	0.5	4.262	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	456	449	886	0.515	456	1.0	8.369	A
2 - Catalyst Access Road	97	393	1137	0.085	97	0.1	3.461	A
3 - Wendlebury Road (S)	211	122	1282	0.165	211	0.2	3.362	A
4 - Vendee Link Road	457	8	1300	0.351	457	0.5	4.267	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	372	367	930	0.400	374	0.7	6.489	A
2 - Catalyst Access Road	79	322	1179	0.067	79	0.1	3.276	A
3 - Wendlebury Road (S)	173	100	1295	0.133	173	0.2	3.210	A
4 - Vendee Link Road	373	6	1301	0.287	374	0.4	3.884	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	312	308	962	0.324	312	0.5	5.550	A
2 - Catalyst Access Road	66	269	1210	0.055	66	0.1	3.150	A
3 - Wendlebury Road (S)	145	84	1304	0.111	145	0.1	3.104	A
4 - Vendee Link Road	312	5	1302	0.240	313	0.3	3.640	A

2031 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.14	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2031 Base	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	71	100.000
2 - Catalyst Access Road		✓	379	100.000
3 - Wendlebury Road (S)		✓	329	100.000
4 - Vendee Link Road		✓	103	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	65	0	6
	2 - Catalyst Access Road	0	0	0	379
	3 - Wendlebury Road (S)	100	0	0	229
	4 - Vendee Link Road	20	49	34	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.07	3.60	0.1	A
2 - Catalyst Access Road	0.31	3.89	0.4	A
3 - Wendlebury Road (S)	0.33	4.84	0.5	A
4 - Vendee Link Road	0.09	3.19	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	53	62	1094	0.049	53	0.1	3.459	A
2 - Catalyst Access Road	285	30	1351	0.211	284	0.3	3.372	A
3 - Wendlebury Road (S)	248	289	1185	0.209	247	0.3	3.834	A
4 - Vendee Link Road	78	75	1261	0.061	77	0.1	3.040	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	64	75	1087	0.059	64	0.1	3.517	A
2 - Catalyst Access Road	341	36	1347	0.253	340	0.3	3.575	A
3 - Wendlebury Road (S)	296	346	1151	0.257	295	0.3	4.206	A
4 - Vendee Link Road	93	90	1252	0.074	93	0.1	3.103	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	78	91	1078	0.073	78	0.1	3.599	A
2 - Catalyst Access Road	417	44	1343	0.311	417	0.4	3.887	A
3 - Wendlebury Road (S)	362	423	1106	0.328	362	0.5	4.834	A
4 - Vendee Link Road	113	110	1241	0.091	113	0.1	3.192	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	78	91	1078	0.073	78	0.1	3.599	A
2 - Catalyst Access Road	417	44	1343	0.311	417	0.4	3.890	A
3 - Wendlebury Road (S)	362	424	1106	0.328	362	0.5	4.841	A
4 - Vendee Link Road	113	110	1241	0.091	113	0.1	3.193	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	64	75	1087	0.059	64	0.1	3.520	A
2 - Catalyst Access Road	341	36	1347	0.253	341	0.3	3.581	A
3 - Wendlebury Road (S)	296	347	1151	0.257	296	0.3	4.216	A
4 - Vendee Link Road	93	90	1252	0.074	93	0.1	3.103	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	53	63	1094	0.049	53	0.1	3.460	A
2 - Catalyst Access Road	285	30	1351	0.211	286	0.3	3.382	A
3 - Wendlebury Road (S)	248	290	1184	0.209	248	0.3	3.848	A
4 - Vendee Link Road	78	75	1261	0.062	78	0.1	3.041	A

2031 Base + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.78	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2031 Base + Development	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	469	100.000
2 - Catalyst Access Road		✓	88	100.000
3 - Wendlebury Road (S)		✓	208	100.000
4 - Vendee Link Road		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	207	239	23
	2 - Catalyst Access Road	0	0	0	88
	3 - Wendlebury Road (S)	7	0	0	201
	4 - Vendee Link Road	7	258	221	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	0	0	0
	2 - Catalyst Access Road	0	0	0	0
	3 - Wendlebury Road (S)	0	0	0	0
	4 - Vendee Link Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.61	10.98	1.6	B
2 - Catalyst Access Road	0.09	3.76	0.1	A
3 - Wendlebury Road (S)	0.18	3.42	0.2	A
4 - Vendee Link Road	0.41	4.70	0.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	353	359	934	0.378	351	0.6	6.145	A
2 - Catalyst Access Road	66	362	1155	0.057	66	0.1	3.305	A
3 - Wendlebury Road (S)	157	83	1305	0.120	156	0.1	3.132	A
4 - Vendee Link Road	366	5	1302	0.281	364	0.4	3.833	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	422	430	896	0.471	421	0.9	7.558	A
2 - Catalyst Access Road	79	433	1113	0.071	79	0.1	3.482	A
3 - Wendlebury Road (S)	187	100	1295	0.144	187	0.2	3.248	A
4 - Vendee Link Road	437	6	1301	0.336	436	0.5	4.161	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	516	527	844	0.612	514	1.5	10.806	B
2 - Catalyst Access Road	97	530	1056	0.092	97	0.1	3.753	A
3 - Wendlebury Road (S)	229	122	1282	0.179	229	0.2	3.418	A
4 - Vendee Link Road	535	8	1300	0.411	534	0.7	4.694	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	516	527	844	0.612	516	1.6	10.982	B
2 - Catalyst Access Road	97	532	1055	0.092	97	0.1	3.757	A
3 - Wendlebury Road (S)	229	122	1282	0.179	229	0.2	3.418	A
4 - Vendee Link Road	535	8	1300	0.411	535	0.7	4.703	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	422	431	895	0.471	424	0.9	7.682	A
2 - Catalyst Access Road	79	436	1111	0.071	79	0.1	3.490	A
3 - Wendlebury Road (S)	187	100	1295	0.144	187	0.2	3.250	A
4 - Vendee Link Road	437	6	1301	0.336	438	0.5	4.173	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	353	361	933	0.378	354	0.6	6.232	A
2 - Catalyst Access Road	66	364	1153	0.057	66	0.1	3.311	A
3 - Wendlebury Road (S)	157	84	1304	0.120	157	0.1	3.136	A
4 - Vendee Link Road	366	5	1302	0.281	366	0.4	3.849	A

2031 Base + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2031 Base + Development	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Wendlebury Road (N)		✓	76	100.000
2 - Catalyst Access Road		✓	379	100.000
3 - Wendlebury Road (S)		✓	422	100.000
4 - Vendee Link Road		✓	111	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	0	65	5	6
	2 - Catalyst Access Road	0	0	0	379
	3 - Wendlebury Road (S)	100	0	0	322
	4 - Vendee Link Road	20	49	42	0

Vehicle Mix

Heavy Vehicle %

		To			
		1 - Wendlebury Road (N)	2 - Catalyst Access Road	3 - Wendlebury Road (S)	4 - Vendee Link Road
From	1 - Wendlebury Road (N)	10	10	10	10
	2 - Catalyst Access Road	10	10	10	10
	3 - Wendlebury Road (S)	10	10	10	10
	4 - Vendee Link Road	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - Wendlebury Road (N)	0.08	4.00	0.1	A
2 - Catalyst Access Road	0.31	4.32	0.5	A
3 - Wendlebury Road (S)	0.42	6.18	0.8	A
4 - Vendee Link Road	0.10	3.54	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	57	68	1091	0.052	57	0.1	3.831	A
2 - Catalyst Access Road	285	40	1345	0.212	284	0.3	3.729	A
3 - Wendlebury Road (S)	318	289	1185	0.268	316	0.4	4.551	A
4 - Vendee Link Road	84	75	1261	0.066	83	0.1	3.361	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	68	82	1083	0.063	68	0.1	3.901	A
2 - Catalyst Access Road	341	48	1340	0.254	340	0.4	3.959	A
3 - Wendlebury Road (S)	379	346	1151	0.330	379	0.5	5.123	A
4 - Vendee Link Road	100	90	1252	0.080	100	0.1	3.434	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	84	100	1073	0.078	84	0.1	4.000	A
2 - Catalyst Access Road	417	58	1334	0.313	417	0.5	4.315	A
3 - Wendlebury Road (S)	465	423	1106	0.420	464	0.8	6.154	A
4 - Vendee Link Road	122	110	1241	0.099	122	0.1	3.539	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	84	100	1073	0.078	84	0.1	4.000	A
2 - Catalyst Access Road	417	58	1334	0.313	417	0.5	4.318	A
3 - Wendlebury Road (S)	465	424	1106	0.420	465	0.8	6.176	A
4 - Vendee Link Road	122	110	1241	0.099	122	0.1	3.539	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	68	82	1083	0.063	68	0.1	3.903	A
2 - Catalyst Access Road	341	48	1340	0.254	341	0.4	3.964	A
3 - Wendlebury Road (S)	379	347	1151	0.330	380	0.5	5.147	A
4 - Vendee Link Road	100	90	1252	0.080	100	0.1	3.438	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Wendlebury Road (N)	57	69	1090	0.052	57	0.1	3.835	A
2 - Catalyst Access Road	285	40	1345	0.212	286	0.3	3.741	A
3 - Wendlebury Road (S)	318	290	1184	0.268	318	0.4	4.579	A
4 - Vendee Link Road	84	75	1261	0.066	84	0.1	3.365	A

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