

## TECHNICAL NOTE ON ACCESS

PROJECT: Lagos Cottage, Twycross

REPORT: 2452/TN/01 – Technical Note on Access

DATE: July 2025

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### Introduction

1. Highgate Transportation (HTp) have been appointed by Luke Elphick to prepare this Technical Note on Access (reference HTp/2452/TN/01) in support of his forthcoming planning application to Hinkley and Bosworth Borough Council (HBBC) for the erection of a detached, 1.5-storey, three-bedroom residential dwelling at Lagos Cottage, 18 Burton Road, Wellesborough, Twycross. **Figure 1** shows the location of the application site.

**Figure 1 – Location of the application site**



2. In 2024, a submission (reference 24/10029/PREHMO) was made to HBBC which sought pre-application advice on the erection of a three-bedroom bungalow at Lagos Cottage, 18 Burton Road, Wellsborough, Twycross. The formal pre-application response received from HBBC is summarised in the Design and Access Statement (DAS).
3. The salient points included in the highway related section of the formal pre-application response can be summarised as:
  - i. Opportunities to promote sustainable transport modes;
  - ii. A safe and suitable access to the site for all users;
  - iii. An adequate level of off-street car parking provision;
  - iv. The lack of a footway on the eastern side of Burton Road;
  - v. Demonstrate that adequate visibility can be achieved at the site access for the recorded 85<sup>th</sup> percentile speeds; and
  - vi. Visibility splays must be constrained within land under the Applicants control or the public highway with nothing above 0.6m in height obscuring either splay.
4. This TN considers Stage 1 of the study, which can be summarised as:
  - i. The existing situation;
  - ii. Highway boundary and Public Rights of Way information;
  - iii. Review the most recently available five-years collision data;
  - iv. Automatic Traffic Count surveys;
  - v. The application proposals;
  - vi. Swept path analysis;
  - vii. Visibility splays from the access to the proposed residential dwelling;
  - viii. Compliance with local policy; and
  - ix. Summary and conclusion.

### The Existing Situation

5. The application site is located on the east side of the A444 Burton Road immediately south of number 18. The site is bounded to the north by number 18, to the east by open grassland, to the south by open space (sports and recreational facilities open to the public), and to the west by the A444 Burton Road.
6. The section of Burton Road which forms the western boundary of the application is around 6.5-metres-wide. There is no footway provision on the east side of the carriageway and a footway circa 1.5-metres-wide is located on the west side of the carriageway.
7. Waiting on both sides of Burton Road is unrestricted. It can be noted that all of the existing residential dwellings served by Burton Road have off-street car parking provision. However, not all of the existing residential dwellings benefit from on-plot turning facilities, meaning that drivers who drive into their off-street car parking space in a forward gear are required to reverse onto the A444 Burton Road with little or no visibility, as shown by **Photograph 1**.

Photograph 1 – Example of existing off-street car parking provision

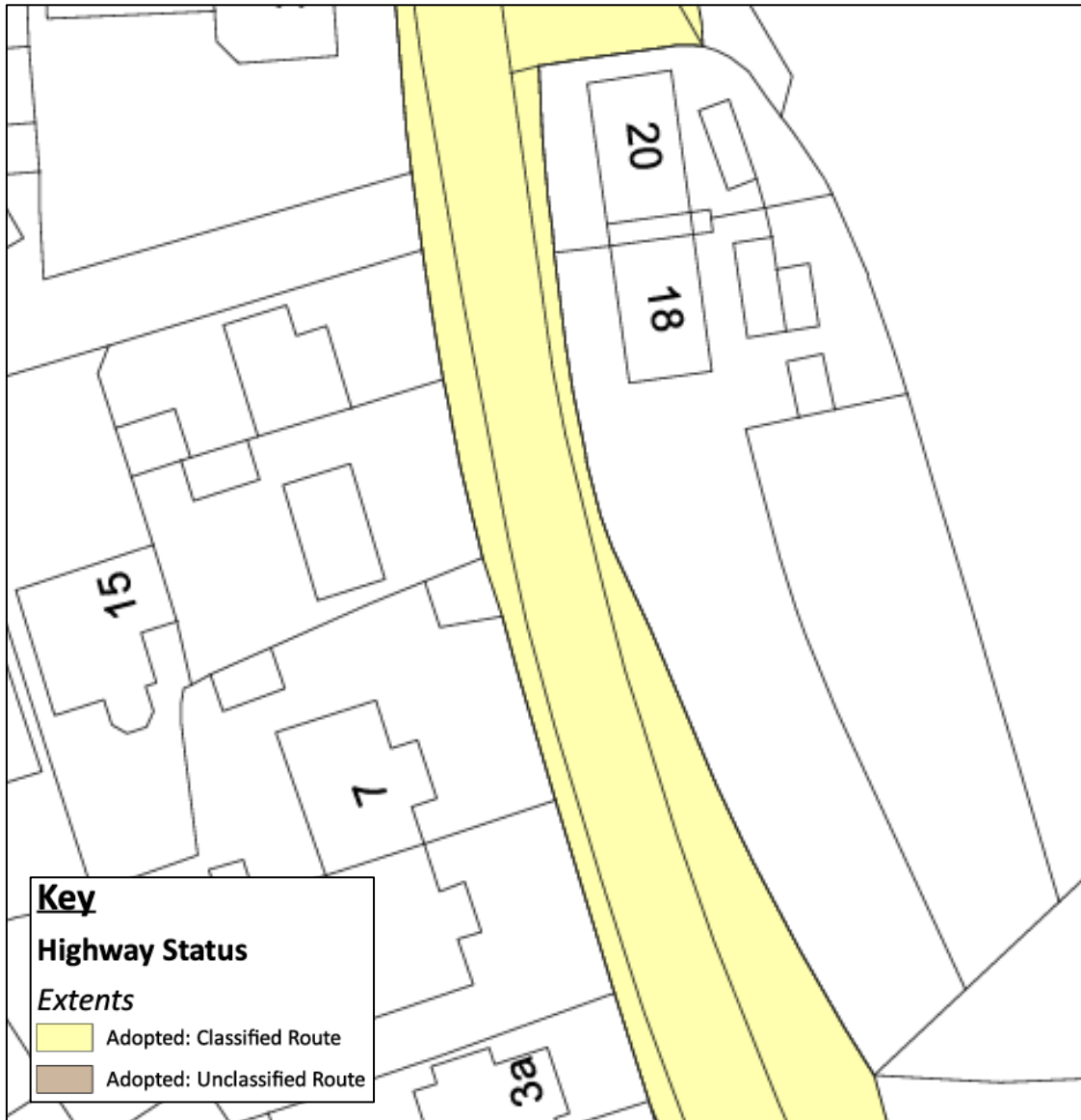


8. Therefore, there is no reason for a vehicle to wait on the main carriageway, except possibly a delivery vehicle, such as a Post Office or supermarket vehicle, making a delivery to one of the existing residential dwellings opposite or adjacent to the application site.
9. The section of Burton Road that forms the western boundary of the application site is subject to a speed limit of 30mph. However, it can be noted that the speed limit changes to 50mph around 100 metres north of the application site. Burton Road is lit by a continuous system of street lighting.

## Highway boundary and Public Rights of Way information

10. The highway boundary and Public Rights of Way plan is provided as **Appendix 1**, an extract of which forms **Figure 2**.

**Figure 2 – Extract of the highway boundary and Public Rights of Way plan**

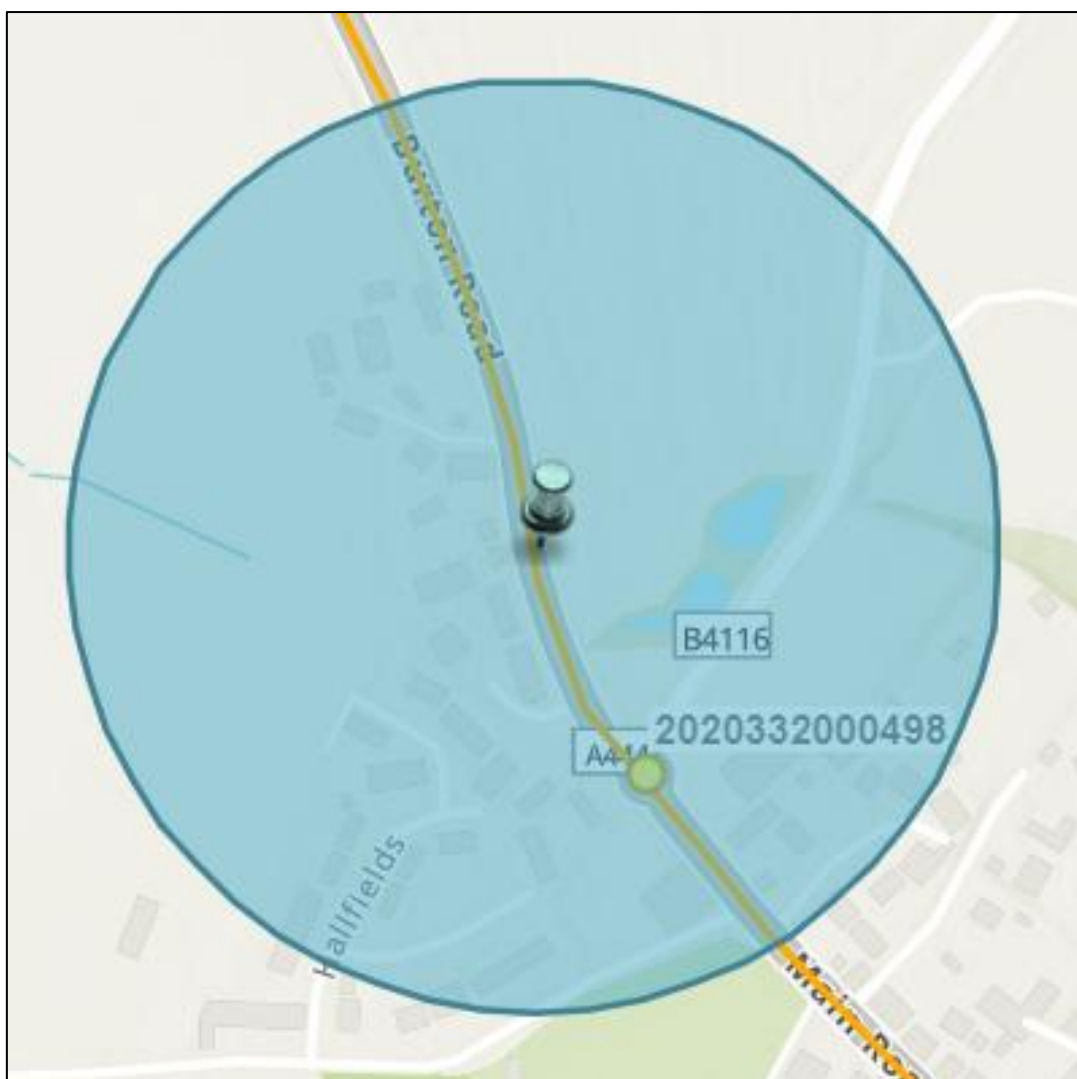


11. From **Figure 2**, it can be seen that the Burton Road carriageway and the footway on the west side of the carriageway are adopted public highway. It can also be seen that the grassed verge of the east side of Burton Road, between the back edge of the kerb and the boundary of the application site, is adopted public highway.
12. It can be seen that there are no existing Public Rights of Way running through the application site, or in its immediate vicinity.

### Review of Personal Injury Collision Data

13. Personal Injury Collision (PIC) data for the period January 2019 and December 2023 has been obtained from the CrashMap Pro database for a radius of 200 metres centred on the existing access to number 18 Burton Road, Twycross. The output file is provided as **Appendix 2**.
14. The PIC plot, included as **Figure 3**, confirms that there has been one 'slight' collision recorded on the local highway network during the study period. No 'serious' or 'fatal' collisions have been recorded.

**Figure 3 – Personal Injury Collision Plot**



15. Collision reference 2020332000498 ('slight') occurred at the roundabout junction of Burton Road and Ashby Road at 14:50 hours on 11<sup>th</sup> March 2020. The collision involved a north-westbound car (Vehicle 1) proceeding normally along the carriageway, not on a bend, and a north-eastbound pedal cycle (Vehicle 2) in the act of turning right, colliding. The collision caused 'slight' injury to the rider of Vehicle 2.



16. From **Figure 3**, it can be seen that manoeuvring into and out of the existing off-street car parking provision, including reversing onto Burton Road, does not cause a highway safety issue.
17. In summary, analysis of the PIC data confirms that there are no underlying road safety problems on the local highway network.

#### Automatic Traffic Counts

18. The highway related section of the formal pre-application response received from HBBC confirmed that *"an Automatic Traffic Count (ATC) should be carried out to establish 85<sup>th</sup> percentile speeds along Burton Road (A444) in the vicinity of the site access."*
19. Therefore, ATC surveys were carried out on Burton Road, circa 43 metres north and 43 metres south of the proposed access to the residential dwelling, which equates to the visibility splays required by the Manual for Streets (MfS) highway design guide for a road subject to a 30mph speed limit.
20. The ATC surveys recorded the volume and speed of traffic using Burton Road for the continuous seven-day period between Friday 7<sup>th</sup> February and Thursday 13<sup>th</sup> February 2025.
21. The ATC data is provided as **Appendix 3**, a summary of which forms **Table 1** and **Table 2**.

**Table 1 – Summary of ATC data (Burton Road northern site)**

Direction	08:00 – 09:00	17:00 – 18:00	Daily	85 <sup>th</sup> Percentile Speed
Northbound	303	335	3,557	38.2mph
Southbound	468	248	4,413	38.3mph

**Table 2 – Summary of ATC data (Burton Road southern site)**

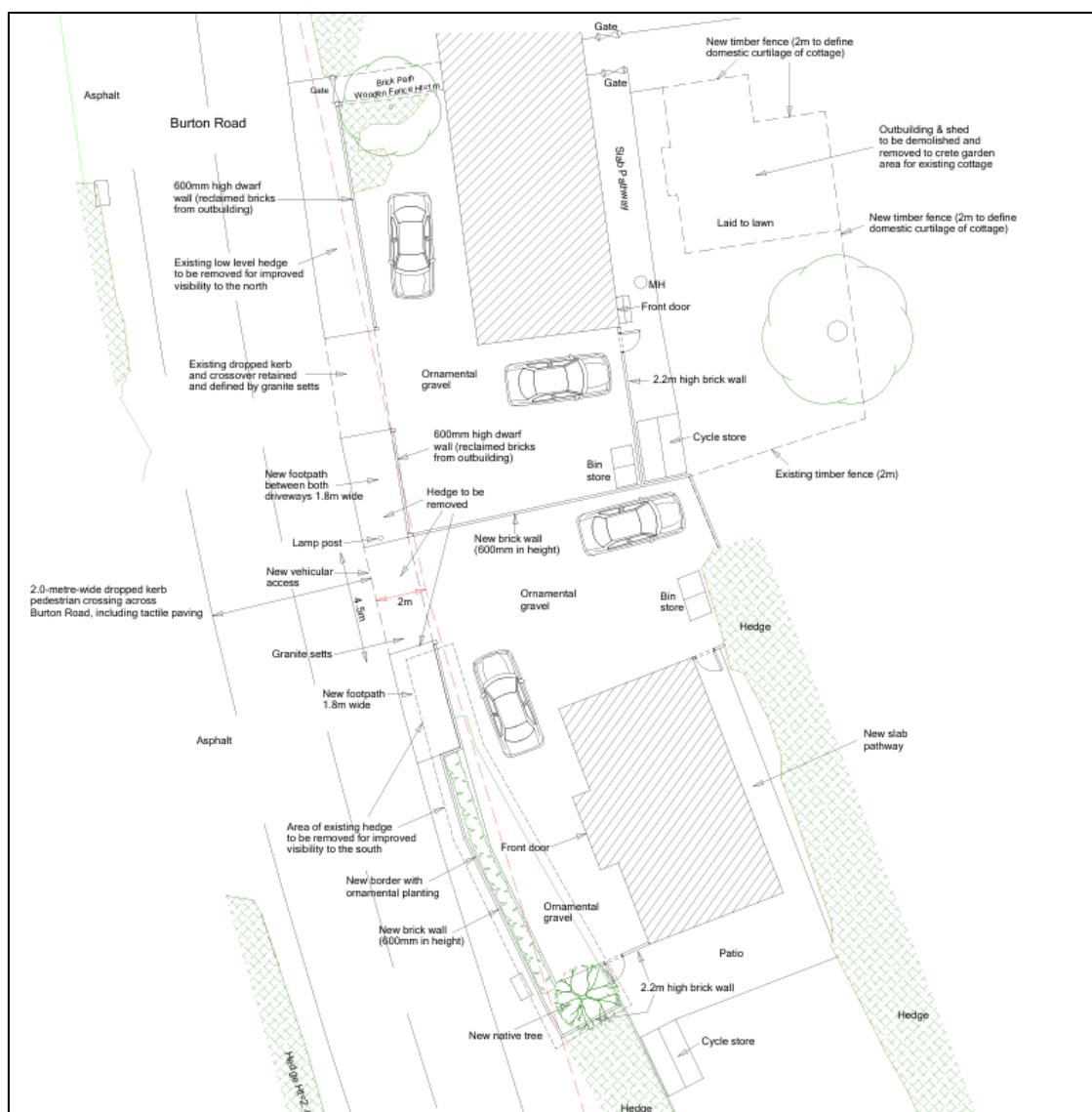
Direction	08:00 – 09:00	17:00 – 18:00	Daily	85 <sup>th</sup> Percentile Speed
Northbound	311	333	3,579	34.5mph
Southbound	477	241	4,443	30.3mph

22. **Table 1** and **Table 2** confirm that the two-way flow on Burton Road at peak hours is around 788 vehicles, with less at other times, together with a daily two-way flow of circa 8,022 vehicles, which is typical of a classified 'A' road such as this.
23. It can also be seen that the recorded 85<sup>th</sup> percentile speed of traffic travelling north on Burton Road at the southern ATC site is 34.5mph with the 85<sup>th</sup> percentile speed of traffic travelling southbound at the northern ATC site being 38.3mph.
24. It is noted that the recorded 85<sup>th</sup> percentile speed of traffic travelling in both directions along Burton Road is above the posted speed limit of 30mph. The recorded 85<sup>th</sup> percentile speed of southbound vehicles can be explained by the change in speed limit from 50mph to 30mph around 100 metres of the application site.

## The Application Proposals

25. The application proposals are for the erection of detached, 1.5-storey, three-bedroom residential dwelling on land immediately south of number 18 Burton Road, including the provision of a new dropped kerb vehicle crossover, on-plot turning facilities and car and cycle parking.
26. The Architect's proposed site layout plan (reference 25/3278/01 Revision E) is provided as **Appendix 4**, an extract of which forms **Figure 4**.

**Figure 4 – Extract of the Architect's proposed site layout plan**



27. From **Figure 4**, it can be seen that the proposed residential dwelling will be served by a newly constructed 4.5-metres-wide dropped kerb vehicle crossover on the east side of Burton Road, located around 8.0 metres south of the southern building line of number 18 Burton Road.

28. The application proposals include the provision of a length of 1.8-metre-wide footway on the east side of Burton Road together with a 2.0-metre-wide dropped kerb pedestrian crossing point, including tactile paving, as requested by HBBC in their formal pre-application consultation response.
29. The proposed crossing point is referenced on **Figure 4** with its exact location to be agreed with the Local Highway Authority.
30. Paragraph 3.169 of part 3 of the Leicestershire County Council Design Guide confirms that a proposed three-bedroom residential dwelling requires the provision of two off-street car parking spaces.
31. **Figure 4** confirms that the proposed residential dwelling will have two off-street car parking spaces, which is policy compliant, and therefore considered to be appropriate.
32. The design guide also confirms that the application proposals require one cycle parking space. **Figure 4** confirms that the proposed residential dwelling will have a secure cycle store in the rear garden with capacity to store two cycles, which is policy compliant, and considered to be appropriate.

#### **Swept Path Analysis**

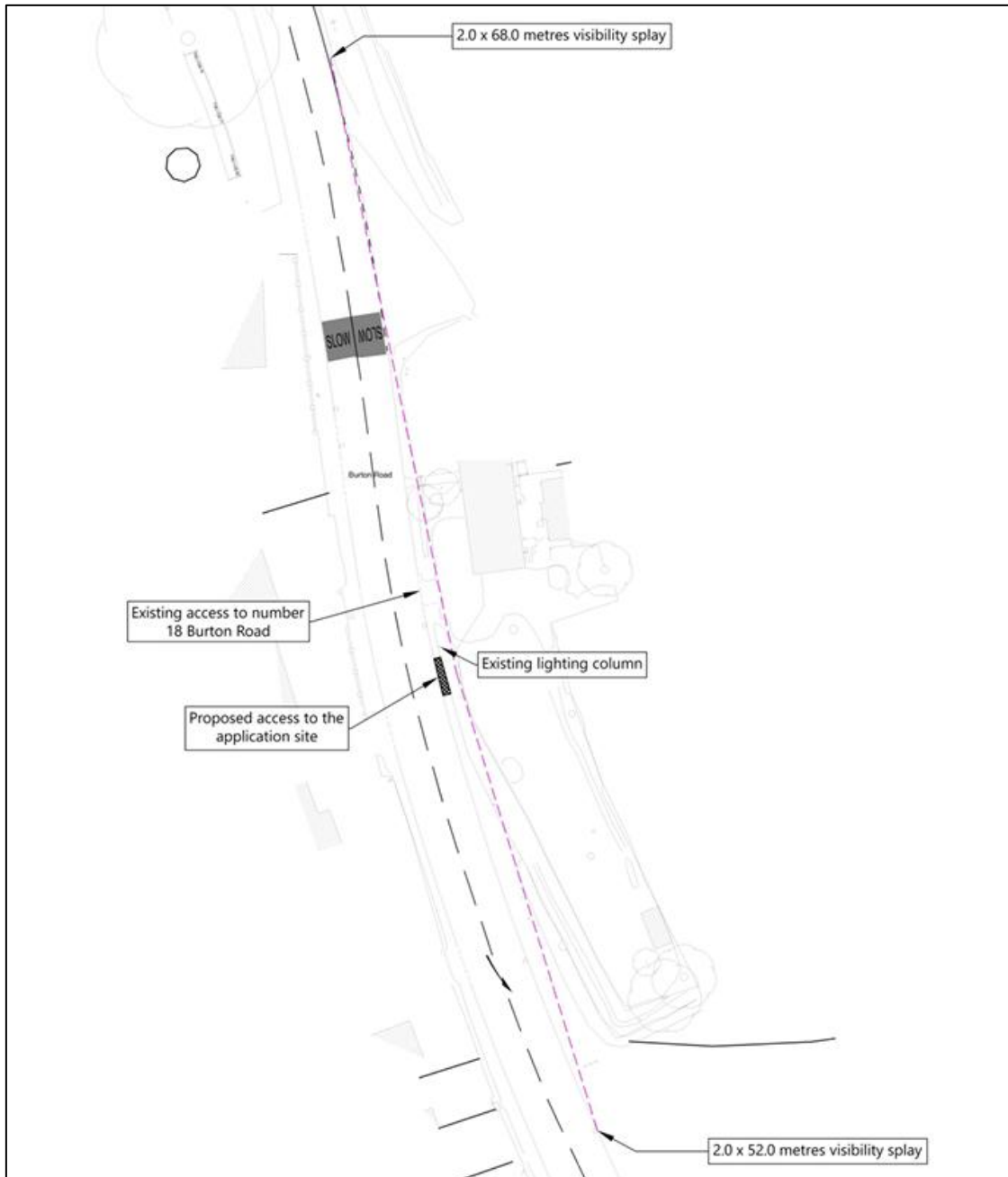
33. Swept path analysis (see **Appendix 5**) has been carried out which confirms that a car can enter the application site from Burton Road, access both of the proposed off-street car parking spaces, manoeuvre within the site, and enter the adopted public highway in a forward gear.
34. It is therefore concluded that the proposed off-street car parking spaces associated with the proposed residential dwelling are fully accessible and that the proposed on-plot turning facilities are appropriate to enable the driver of a car to manoeuvre their vehicle and enter Burton Road in a forward gear.
35. Although not the subject of this planning application, swept path analysis of the off-street car parking provision proposed for number 18 Burton Road has been carried out. The swept path analysis (see **Appendix 5**) confirms that both existing off-street car parking spaces are fully accessible and that a car can manoeuvre within the plot and enter the A444 in a forward gear, which is considered to be appropriate.



### Visibility Splays

36. The section of Burton Road which forms the western boundary of the application site is subject to a speed limit of 30mph. The Design Manual for Roads and Bridges (DMRB) requires visibility of 2.4 metres by 90 metres for a road subject to a speed limit of 30mph.
37. The recorded 85<sup>th</sup> percentile speed of traffic using Burton Road, set out in **Table 1** and **Table 2**, forms the basis on which the required visibility splays have been calculated. Using the formulae provided in the Manual for Street 2 (MfS2) highway design guide confirms that the following visibility splays are required:
- i. Visibility to the south (looking left when exiting the site) – 52 metres for a recorded 85<sup>th</sup> percentile speed of traffic of 34.5mph; and
  - ii. Visibility to the north (looking right when exiting the site) – 68 metres for a recorded 85<sup>th</sup> percentile speed of traffic of 38.3mph.
38. The calculated visibility splays using the formulae provided by MfS2 are provided as **Appendix 6**.
39. The proposed access visibility splays plan, reference HTp/2452/01 Revision D, is provided as **Appendix 7**, an extract of which forms **Figure 5**.

Figure 5 – Extract of the visibility splays plan



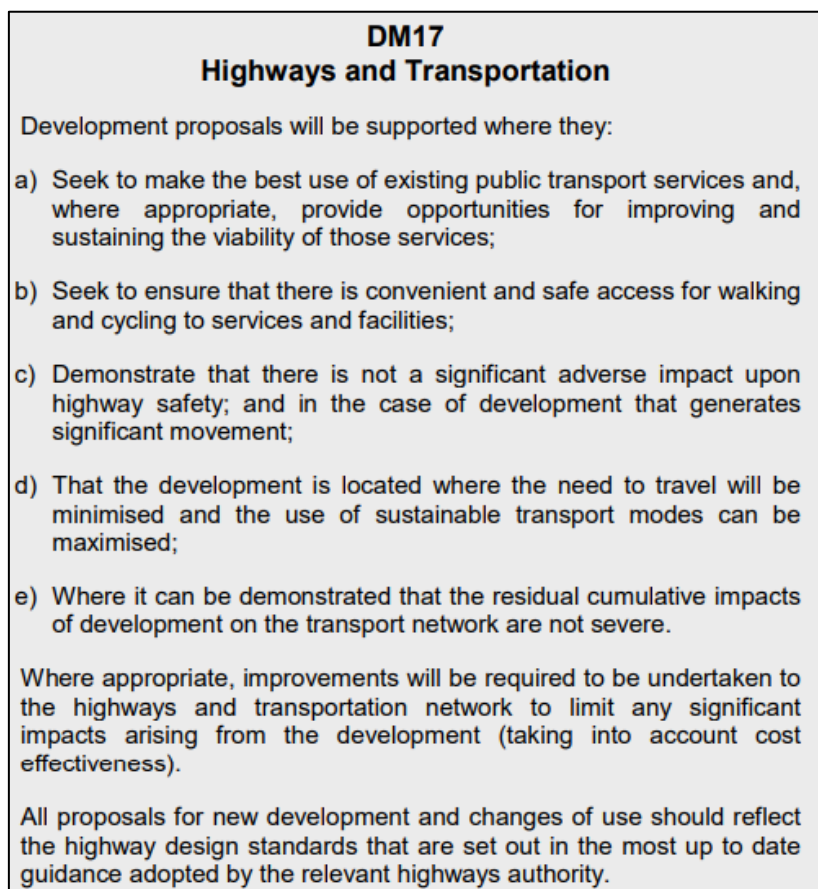
40. From **Figure 5**, it can be seen that the required visibility splay of 2.0 metres by 52 metres to the south (looking to the left when exiting the site) can be provided within the highway boundary, when plotted to the nearside kerbline.
41. **Figure 5** also confirms that the required visibility splay of 2.0 metres by 68 metres to the north (looking right when exiting the site) can be provided within a combination of the highway boundary and land under the control of the applicant, when plotted to the nearside highway channel.
42. A set back ('X') distance of 2.0 metres is considered to be appropriate as visibility is being measured from a single private driveway and not a formal priority junction.

43. It has clearly been demonstrated that appropriate visibility can be achieved in both directions from the proposed access onto Burton Road for the recorded 85<sup>th</sup> percentile speed of traffic using the road.

#### Compliance with Local Policy

44. The HBBC Site Allocations and Development Management Policies DPD (adopted July 2016) set out the criteria against which development proposals will be supported (Policy DM17) and the vehicle parking standards for new developments (Policy DM18).
45. Policy DM17 is reproduced as **Figure 6**.

**Figure 6 – Policy DM17**



46. It is considered that the application proposals comply with Policy DM17 in that they include the provision of a footway on the east side of Burton Road together with a dropped kerb pedestrian crossing point, including tactile paving, providing a safe opportunity for pedestrians to cross to the existing footway network on the west side of Burton Road.
47. This will allow future occupiers to access the village hall, public house, and school all located to the south of the application site.
48. The application site is located where the need to travel will be minimised, as required by Policy DM17.

49. It has clearly been demonstrated that the application proposals will not have an adverse effect on either the capacity or the safety of the local highway network making them compliant with Policy DM17.
50. The residual cumulative impact of the application proposals will not be severe meaning that the proposals comply with Policy DM17, and paragraph 116 of the National Planning Policy Framework (NPPF) last updated in February 2025, which states:  
  
*"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*
51. It is therefore concluded that there are no highway reasons on which the application proposals should be refused planning permission.
52. Policy DM18 is reproduced as **Figure 7**.

**Figure 7 – Policy DM18**



53. The proposed car and cycle parking provision is policy compliant thereby satisfying the requirements of Policy DM18. It is not considered that the application proposals require the provision of blue badge parking spaces.

## Summary and Conclusion

54. In summary:

- i. The existing situation and application proposals have been set out;
- ii. The highway boundary has been established;
- iii. A review of the most recently available five-years collision data confirms that there are no highway safety issues on the local highway network;
- iv. ATC surveys confirm that the recorded 85<sup>th</sup> percentile speed of traffic travelling north on Burton Road as being 34.5mph with the recorded 85<sup>th</sup> percentile speed of traffic travelling south on Burton Road as being 38.3mph;
- v. Swept path analysis confirms that each of the proposed off-street car parking spaces are fully accessible and that the on-plot turning provision is appropriate;
- vi. The recorded 85<sup>th</sup> percentile speed of traffic travelling northbound and southbound on Burton Road form the basis on which the required visibility splays have been calculated, using the formulae provided by MfS2; and
- vii. Appropriate visibility can be achieved in both directions from the proposed access onto Burton Road for the recorded 85<sup>th</sup> percentile speed of traffic using the road; and
- viii. The application proposals accord with local and national transport policy.

55. It is reiterated that paragraph 116 of the NPPF states:

*"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*

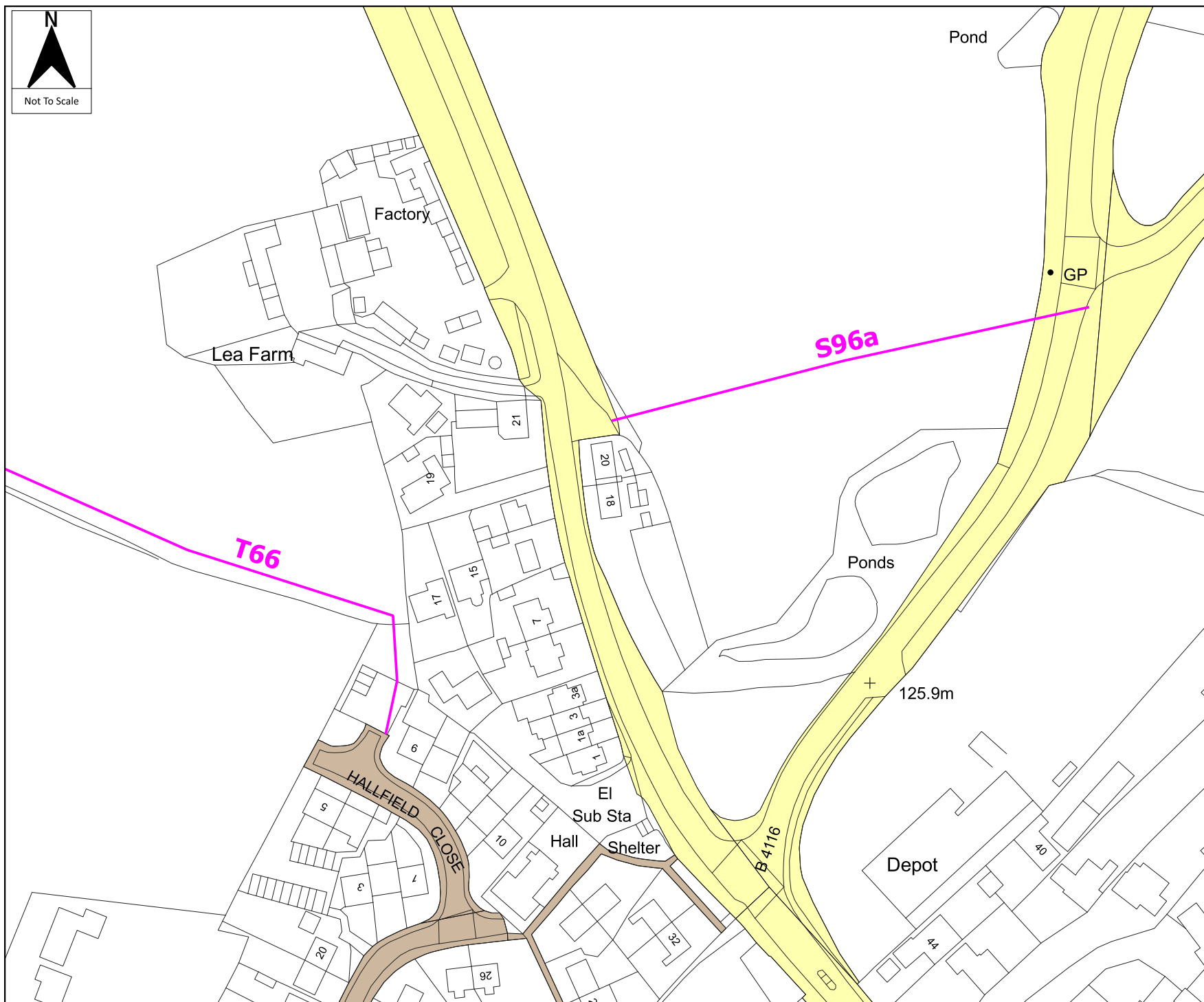
56. It has clearly been demonstrated that the application proposals will not have an unacceptable impact on highway safety or that the residual cumulative impacts on the road network, following mitigation, would be severe, even when taking into account all reasonable future scenarios.

57. It is therefore concluded that the application proposals are acceptable in highway terms.



## **Appendix 1**


The Highway Boundary and Public Rights of Way Plan



Key

### Highway Status

## Extents

-  Adopted: Classified Route  
 Adopted: Unclassified Route

## Public Rights of Way

- Footpath

## NOTES

The highway records are not definitive, but are based on currently available supporting information and are given without warranty. If roadside ditches are present, the legal presumption without evidence to the contrary is that these do not generally form part of the publicly maintainable highway.

This plan has been produced in response to the enquiry shown in the title address and should not be used for any other purpose, since its accuracy cannot be guaranteed.

If a scale has been provided, measurements scaled from this plan may not match measurements between the same points on the ground.



ENVIRONMENT AND TRANSPORT  
DEPARTMENT

On Behalf Of  
Ann Carruthers, Director

Highway Record Enquiry

**Location**

Lagos Cottage, 18 Burton Road,  
Wellesborough, Twycross

<b>Reference</b>	NDI/HRE/2501032
<b>Drawing No.</b>	100/A
<b>Date Produced</b>	23/01/2025

Highway Record Enquiries  
County Hall, Glenfield, LE3 8RJ  
0116 305 7189 | [hre@leics.gov.uk](mailto:hre@leics.gov.uk)

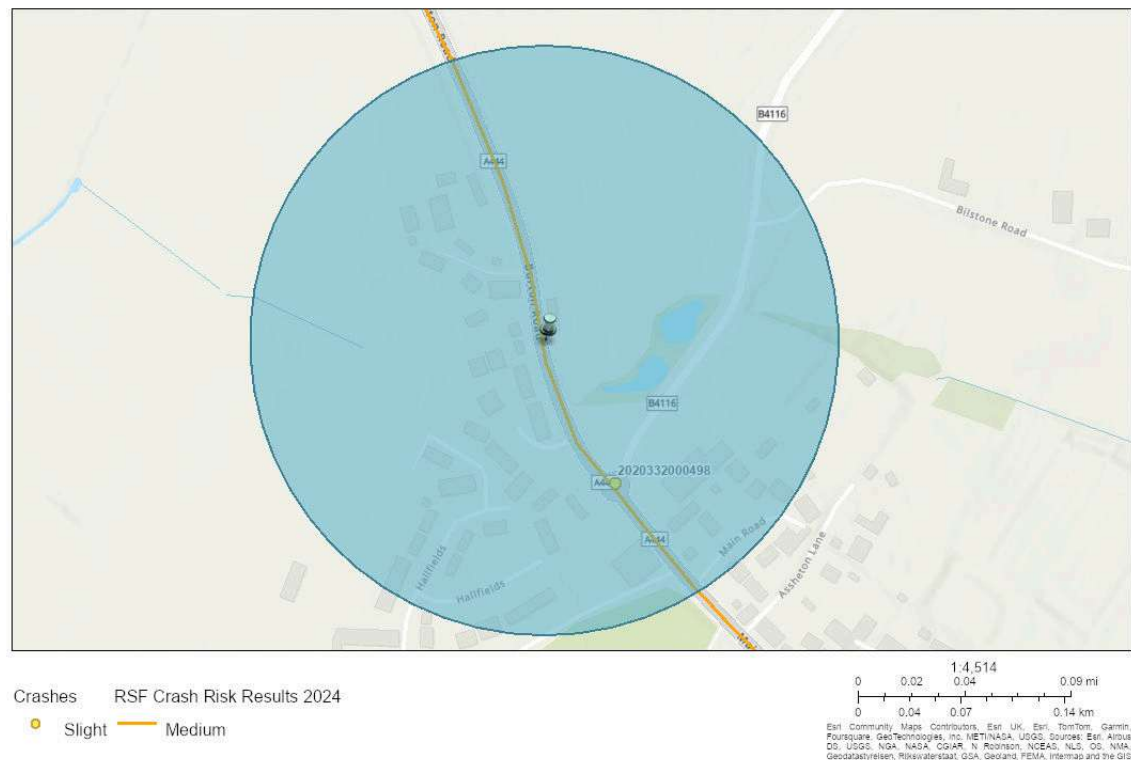
## **Appendix 2**

### Personal Injury Collision Report

### Area of Interest (AOI) Information

Area : 125,380.35 m<sup>2</sup>

Feb 18 2025 17:18:18 Greenwich Mean Time



Summary

Name	Count	Area(m²)	Length(m)
Crashes	1	N/A	N/A

Crashes

#	Carriageway_Hazards	Severity	Officer_Attended	Accident_DateTime	Year	Number_of_vehicles	Number_of_casualties	Easting
1	None	Slight	Police officer attended crash scene	March 11, 2020	2020	2	1	433530

#	Northing	Highway_Authority	Road_Number	Weather_conditions	Road_Type	Road_surface	Speed_Limit	Light_conditions
1	305120	Leicestershire	A444	Fine without high winds	Roundabout	Dry	30	Daylight: regardless of presence of streetlights

#	Junction_detail	Pedestrian_Crossing	Involved_pedalcycle	Involved_Motorcycle	Pedestrian_casualty	Child_casualty	Pedal_cycleuser_casualty	Motorcycle_user_casualty
1	Mini roundabout	No physical crossing facility within 50 metres	1	0	0	0	1	0

#	Involved_car	Involved_goodsvehicle	Involved_Bus	Involved_young_driver	Local_Authority_District	Junction_control	Is_Provisional	Is_Amended	Web_Link	Count
1	1	0	0	0	Hinckley and Bosworth	Give way or uncontrolled	N	No	<a href="https://www.crashmap.co.uk/reports/proreportservice?reportId=2020332000498">https://www.crashmap.co.uk/reports/proreportservice?reportId=2020332000498</a>	1



## **Appendix 3**

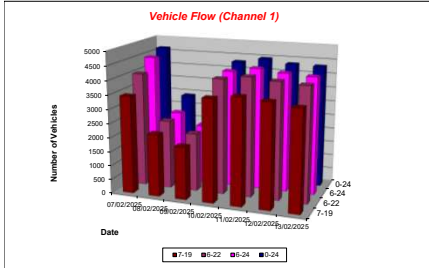
### Automatic Traffic Count Data

# Twycross ATC 1, A444 Burton Road (Northern Site)

Produced by Road Data Services Ltd.

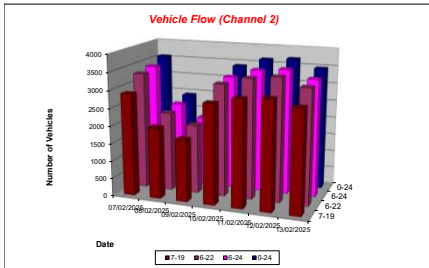
Channel 1 - Southbound										
Hr Ending	07/02/2025	08/02/2025	09/02/2025	10/02/2025	11/02/2025	12/02/2025	13/02/2025	Weekday	Week 1	
	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Average	85th Percentile	95th Percentile
1	20	180	26	7	12	14	21	15	40	40
2	19	103	10	12	11	5	8	11	24	24
3	19	74	6	8	9	7	12	11	19	19
4	20	15	9	19	15	21	15	17	16	14
5	36	15	4	33	29	23	34	28	26	26
6	80	29	29	86	84	84	80	73	14	14
7	199	46	17	242	253	201	275	246	185	185
8	421	71	41	418	401	590	347	490	488	488
9	372	108	55	497	527	515	481	468	368	368
10	256	180	122	221	261	269	242	242	242	242
11	188	168	196	243	240	233	194	221	204	204
12	288	259	219	223	250	215	257	233	219	219
13	281	252	212	173	229	212	172	209	117	117
14	253	222	218	243	194	214	248	236	227	227
15	327	332	291	343	354	343	326	320	297	297
16	389	246	289	319	352	314	349	330	308	308
17	345	180	189	314	354	328	327	332	301	301
18	232	165	132	246	251	250	252	248	220	220
19	181	140	81	164	155	155	210	182	161	161
20	129	87	85	79	104	75	106	99	95	95
21	82	63	51	77	63	64	78	73	66	66
22	177	32	46	56	42	60	55	78	67	67
23	32	47	22	48	56	42	46	52	51	51
24	189	23	15	36	48	51	50	75	69	69

7-19	3445	2194	1857	3604	3732	3648	3631	3695	3144	
6-22	3532	2352	2056	3558	4159	4105	4057	3959		
6-22	3532	2352	2056	3558	4159	4105	4057	3959		
0-24	4647	2908	2177	4301	4468	4336	4314	4413	3819	



Channel 2 - Northbound										
Hr Ending	07/02/2025	08/02/2025	09/02/2025	10/02/2025	11/02/2025	12/02/2025	13/02/2025	Weekday	Week 1	
	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Average	85th Percentile	95th Percentile
1	13	16	13	15	8	8	11	12	11	11
2	15	15	21	6	16	7	6	10	12	12
3	7	19	3	5	12	9	7	12	9	9
4	16	9	10	17	14	16	12	15	13	13
5	103	31	24	113	35	102	82	100	80	80
6	152	42	25	156	154	153	140	151	117	117
7	216	61	44	230	245	250	246	238	185	185
8	275	148	63	288	329	342	303	303	268	268
9	195	136	134	185	217	248	198	212	186	186
10	220	241	174	169	174	169	199	177	166	166
11	191	222	234	164	178	182	205	189	196	196
12	220	241	174	169	174	169	199	177	166	166
13	225	261	188	172	173	173	187	182	187	187
14	244	250	185	217	255	211	150	230	207	207
15	209	174	202	226	245	223	221	225	215	215
16	188	174	183	206	352	296	246	246	204	204
17	336	166	143	359	352	371	361	354	304	304
18	239	149	121	316	374	372	372	335	278	278
19	165	30	65	162	189	250	156	174	151	151
20	119	77	65	109	88	118	100	107	101	101
21	71	46	42	37	73	65	67	65	66	66
22	69	81	44	57	74	78	46	65	61	61
23	53	52	19	38	62	45	51	50	46	46
24	28	34	7	10	17	14	20	18	19	19

7-19	2897	2016	1796	2619	3002	3063	2897	2636	2636	
6-22	3036	2325	2025	3054	3123	3213	3081	3021	2873	
6-22	3036	2325	2025	3054	3123	3213	3081	3021	2873	
0-24	3662	2431	2080	3406	3642	3705	3473	3607	3185	

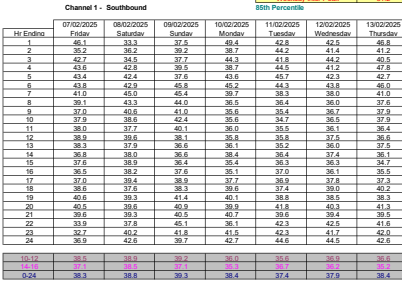


# Twycross ATC 1, A444 Burton Road (Northern Site)

Produced by Road Data Services Ltd.

Channel 1 - Southbound										
Hr Ending	07/02/2025	08/02/2025	09/02/2025	10/02/2025	11/02/2025	12/02/2025	13/02/2025	Average	Week 1	
	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	85th Percentile	95th Percentile	99th Percentile
1	40.5	29.5	33.5	41.1	36.6	37.4	40.3	36.6	36.6	36.6
2	32.4	35.6	31.5	34.3	38.6	34.7	39.3	34.7	34.7	34.7
3	36.3	29.5	32.5	33.2	37.2	38.9	36.7	36.7	36.7	36.7
4	27.0	24.8	45.2	34.2	37.0	37.0	39.4	34.2	34.2	34.2
5	38.2	35.5	34.0	37.3	38.6	38.4	38.0	38.0	38.0	38.0
6	47.4	38.3	36.1	45.2	38.4	39.3	38.8	38.8	38.8	38.8
7	34.9	38.1	38.4	33.2	32.6	32.4	34.5	34.5	34.5	34.5
8	33.5	33.5	34.1	29.4	30.1	31.9	36.1	31.9	31.9	31.9
9	31.5	34.2	35.4	29.6	30.3	29.2	31.4	31.4	31.4	31.4
10	39.2	31.7	35.5	29.4	30.1	31.9	36.1	31.9	31.9	31.9
11	32.8	32.6	33.5	29.7	30.9	31.2	31.9	31.9	31.9	31.9
12	32.0	32.5	30.7	30.4	30.9	31.3	31.3	31.3	31.3	31.3
13	29.8	32.8	30.9	30.9	29.9	30.0	30.1	30.1	30.1	30.1
14	31.8	32.9	31.6	32.8	31.3	32.0	31.5	31.5	31.5	31.5
15	32.4	32.2	31.5	30.9	31.6	31.4	29.5	29.5	29.5	29.5
16	31.4	33.1	32.7	30.8	34.1	31.6	31.0	31.0	31.0	31.0
17	34.2	34.0	34.1	35.9	34.4	33.8	34.2	34.2	34.2	34.2
18	33.1	33.1	33.1	33.8	32.6	32.8	34.7	34.7	34.7	34.7
19	30.0	34.2	35.5	34.7	33.2	32.7	33.2	33.2	33.2	33.2
20	34.7	34.0	35.3	34.1	35.2	34.0	35.4	35.4	35.4	35.4
21	34.9	34.9	35.0	35.1	35.8	37.5	36.1	36.1	36.1	36.1
22	29.3	34.6	37.8	32.8	36.3	36.1	36.8	36.8	36.8	36.8
23	29.6	34.9	36.0	35.1	36.6	37.5	36.1	36.1	36.1	36.1
24	29.5	36.5	36.5	35.2	37.8	37.8	37.8	37.8	37.8	37.8

10-12	32.3	32.8	32.0	30.1	32.6	31.4	31.6	31.6		
6-22	32.3	33.0	32.2	31.0	31.8	31.6	32.5	32.5		
0-24	32.3	33.0	32.2	31.0	31.8	31.6	32.5	32.5		

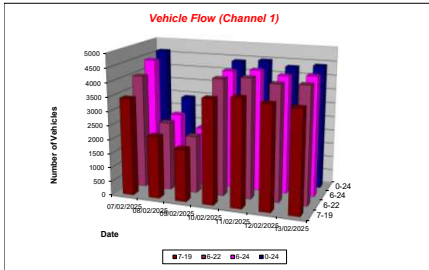


Channel 2 - Northbound								Average Speed	Week	
Hr Ending	07/02/2025 Friday	08/02/2025 Saturday	09/02/2025 Sunday	10/02/2025 Monday	11/02/2025 Tuesday	12/02/2025 Wednesday	13/02/2025 Thursday			
1	36.8	37.2	32.8	33.4	35.5	34.7	33.6			
2	36.8	37.2	32.8	33.4	35.5	34.7	33.6			
3	33.7	30.8	31.5	31.2	33.4	31.3	35.3			
4	33.7	30.8	31.5	31.2	33.4	31.3	35.3			
5	36.8	37.2	32.8	33.4	35.5	34.7	33.6			
6	36.8	37.2	32.8	33.4	35.5	34.7	33.6			
7	35.2	36.5	35.5	34.4	34.2	34.2	35.8			
8	35.2	36.5	35.5	34.4	34.2	34.2	35.8			
9	33.3	31.7	32.5	31.6	30.6	31.8	31.9			
10	33.3	31.7	32.5	31.6	30.6	31.8	31.9			
11	30.5	28.7	29.2	27.9	28.7	30.6	27.5			
12	30.5	28.7	29.2	27.9	28.7	30.6	27.5			
13	31.1	29.3	29.7	30.2	29.8	29.8	30.4			
14	31.1	29.3	29.7	30.2	29.8	29.8	30.4			
15	31.9	32.9	31.5	26.9	29.9	29.9	31.1			
16	31.9	32.9	31.5	26.9	29.9	29.9	31.1			
17	32.6	32.4	31.1	31.1	31.6	31.2	32.2			
18	32.6	32.4	31.1	31.1	31.6	31.2	32.2			
19	33.2	34.5	32.7	33.1	32.6	32.7	34.1			
20	33.2	34.5	32.7	33.1	32.6	32.7	34.1			
21	35.1	32.2	36.9	34.6	35.0	34.4	35.5			
22	35.1	32.2	36.9	34.6	35.0	34.4	35.5			
23	31.7	33.2	33.4	31.9	35.8	38.4	37.8			
24	33.8	33.3	33.6	33.6	34.2	34.2	35.2			

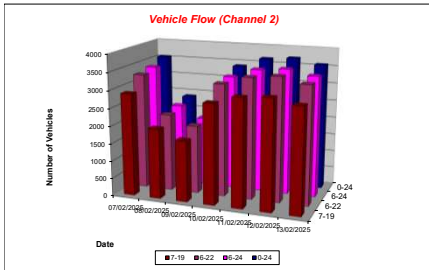
# Twycross ATC 2, A444 Burton Road (Southern Site)

Produced by Road Data Services Ltd.

Channel 1 - Southbound												
Vehicle Flow												
Hr Ending	07/02/2025 Friday	08/02/2025 Saturday	09/02/2025 Sunday	10/02/2025 Monday	11/02/2025 Tuesday	12/02/2025 Wednesday	13/02/2025 Thursday	Weekday Average	Weekend Average	Week 1		
1	16	183	28	7	13	11	22	14	40			
2	13	96	4	15	16	6	6	10	21			
3	15	79	5	10	11	5	17	12	20			
4	23	20	9	12	17	20	13	17	43			
5	35	17	4	38	36	25	33	33	27			
6	87	26	33	92	80	67	84	82	67			
7	202	51	14	242	242	255	280	244	184			
8	432	74	35	605	633	545	540	565	405			
9	380	99	63	525	522	510	447	477	364			
10	412	181	108	238	255	280	266	266	266			
11	179	167	194	255	254	247	211	229	126			
12	278	206	210	175	204	235	269	244	236			
13	286	200	210	175	204	235	269	244	236			
14	254	221	220	252	255	201	255	234	330			
15	337	485	109	349	359	353	331	332	400			
16	382	234	296	328	315	330	306	336	309			
17	343	215	188	309	339	338	324	334	338			
18	227	172	132	249	255	236	237	241	215			
19	186	145	85	174	151	159	205	185	164			
20	128	95	75	89	112	74	117	104	98			
21	81	52	52	77	60	55	70	69	56			
22	124	88	42	61	44	55	67	80	67			
23	30	46	26	59	46	41	47	63	55			
24	178	18	18	36	39	44	60	71	58			
Week 1 Summary												
7-19	3438	2198	1853	3606	3770	3601	3693	3634	3187			
6-22	3032	2134	2030	4136	5229	5202	4127	4171	3062			
0-24	4622	2918	2161	4399	4478	4305	4409	4443	3069			



Channel 2 - Northbound												
Vehicle Flow												
Hr Ending	07/02/2025 Friday	08/02/2025 Saturday	09/02/2025 Sunday	10/02/2025 Monday	11/02/2025 Tuesday	12/02/2025 Wednesday	13/02/2025 Thursday	Weekday Average	Weekend Average	Week 1		
1	9	15	13	14	9	9	13	11				
2	13	17	20	6	11	9	9	19	12			
3	11	10	6	5	7	14	11	12	9			
4	19	10	9	11	17	14	15	19	13			
5	20	17	22	27	27	33	29	33	21			
6	108	36	22	108	103	109	87	103	82			
7	141	38	21	198	147	145	153	149	115			
8	274	89	49	217	256	251	256	239	186			
9	283	145	61	278	332	353	307	311	251			
10	115	184	116	189	223	244	203	213	186			
11	252	221	223	175	184	191	197	189	198			
12	216	240	187	162	175	161	164	170	147			
13	223	214	197	167	177	187	169	180	187			
14	233	188	182	217	259	259	177	208	201			
15	201	175	184	221	239	227	240	228	212			
16	386	161	183	251	352	336	337	347	286			
17	340	166	147	365	367	385	370	371	310			
18	257	138	123	327	357	353	360	332	275			
19	154	89	85	167	166	210	166	177	152			
20	104	70	64	90	107	102	109	107	102			
21	75	46	45	66	65	71	68	65	60			
22	60	56	55	62	72	75	58	65	63			
23	57	55	23	36	58	39	53	45	46			
24	30	31	6	12	15	14	23	19	19			
Week 1 Summary												
7-19	2698	1980	1726	2621	3039	3093	2946	2699	2643			
6-22	2176	2125	2120	3126	3123	3252	2345	2481	2079			
0-24	3548	2184	2054	3398	3606	3717	3078	3679	2180			



# Twycross ATC 2, A444 Burton Road (Southern Site)

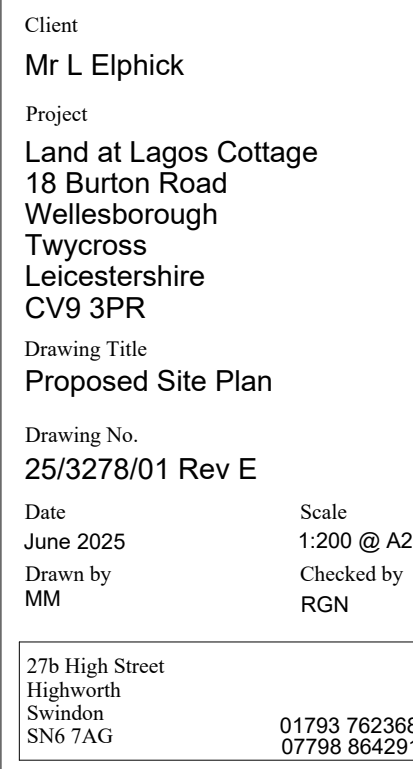
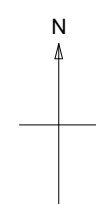
Produced by Road Data Services Ltd.

Channel 1 - Southbound												
Average Speed												
Hr Ending	07/02/2025 Friday	08/02/2025 Saturday	09/02/2025 Sunday	10/02/2025 Monday	11/02/2025 Tuesday	12/02/2025 Wednesday	13/02/2025 Thursday	Week 1				
1	30.5	20.7	27.4	33.2	27.3	35.9	31.8					
2	29.6	21.6	29.6	27.2	34.6	29.7	31.8					
3	29.4	21.7	29.2	27.6	27.3	27.3	29.5					
4	29.0	24.7	30.7	27.2	29.6	29.7	27.4					
5	28.7	28.6	31.9	29.6	29.5	27.8	29.7					
6	29.0	29.5	30.2	29.9	29.7	29.8	27.8					
7	29.0	29.8	30.9	29.3	24.5	23.5	29.2					
8	29.7	27.8	30.7	30.9	24.5	23.1	29.2					
9	22.6	27.6	28.5	27.7	20.6	19.6	29.3					
10	29.4	29.6	29.5	24.1	23.5	24.5	29.1					
11	29.2	29.5	29.1	24.1	24.5	24.8	29.7					
12	29.1	29.5	29.3	23.7	23.9	29.3	29.7					
13	29.6	29.3	29.3	29.3	29.6	29.0	29.0					
14	29.1	29.9	29.7	29.5	29.2	29.1	29.4					
15	29.2	29.1	29.5	23.1	24.5	24.2	29.5					
16	29.1	29.3	29.5	23.6	24.1	24.4	29.2					
17	27.8	29.3	27.5	24.9	22.9	23.2	29.1					
18	29.6	29.5	29.9	24.7	24.6	29.0	29.2					
19	27.1	29.8	27.7	29.7	29.5	29.5	29.3					
20	27.0	27.3	29.5	27.9	29.9	27.8	27.4					
21	29.6	29.6	29.8	27.7	29.1	29.0	27.6					
22	21.5	26.7	28.0	29.4	29.8	29.7	29.3					
23	29.6	29.6	29.8	27.7	29.1	29.0	27.6					
24	21.7	29.1	29.3	27.8	29.3	29.9	29.8					
Week 1 Summary												
10-12	34.5	26.1	25.0	23.9	24.2	25.5	25.1					
0-24	24.3	25.8	29.8	23.3	23.7	23.8	24.8					
85th Percentile												
Average (ALL)												24.4
Weekday Late Peak												23.2

Channel 1 - Southbound								85th Percentile				
Hr Ending	07/02/2025 Friday	08/02/2025 Saturday	09/02/2025 Sunday	10/02/2025 Monday	11/02/2025 Tuesday	12/02/2025 Wednesday	13/02/2025 Thursday					
1	34.2	34.2	31.5	30.7	37.8	29.8	31.1					
2	32.3	27.3	31.5	30.7	37.8	29.8	31.1					
3	30.3	27.3	30.5	33.2	31.8	31.9	27.5					
4	34.8	33.8	34.4	30.9	34.8	31.8	31.6					
5	33.8	32.2	34.5	34.4	34.8	33.4	34.4					
6	34.0	34.4	34.9	33.8	34.1	33.4	34.6					
7	30.8	34.7	36.0	36.6	29.9	29.5	30.8					
8	34.3	32.0	34.9	24.9	27.4	27.1	28.8					
9	28.6	32.1	33.5	27.2	26.6	26.9	30.4					
10	29.7	30.3	33.6	28.9	28.4	28.6	29.2					
11	30.0	31.1	31.5	28.8	29.7	29.3	30.3					
12	29.6	29.6	31.4	29.3	29.3	29.2	30.3					
13	32.2	29.8	29.4	31.2	29.3	29.6	30.2					
14	29.9	30.1	30.4	30.0	29.9	29.7	30.7					
15	29.7	30.0	30.0	29.9	29.9	29.9	29.4					
16	30.1	30.7	30.6	29.7	29.9	29.9	29.9					
17	29.6	31.3	31.6	29.3	29.3	29.9	30.3					
18	29.9	30.4	30.7	31.6	30.6	30.6	31.3					
19	33.1	32.1	32.0	31.3	30.5	30.4	29.6					
20	30.4	31.7	32.7	29.6	31.6	32.0	30.1					
21	29.6	30.3	31.3	30.2	30.2	30.2	30.3					
22	29.4	31.7	32.7	29.6	31.6	32.0	30.1					
23	29.4	31.7	32.7	29.6	31.6	32.0	30.1					
24	29.3	32.6	32.6	30.3	34.6	33.7	30.7					
15-19	29.8	31.6	31.8	29.8	29.2	30.1	29.6					
20-24	30.0	30.8	31.6	29.8	29.4	29.8	30.1					
5-24	30.0	30.8	31.6	29.8	29.4	29.8	30.1					

## **Appendix 4**

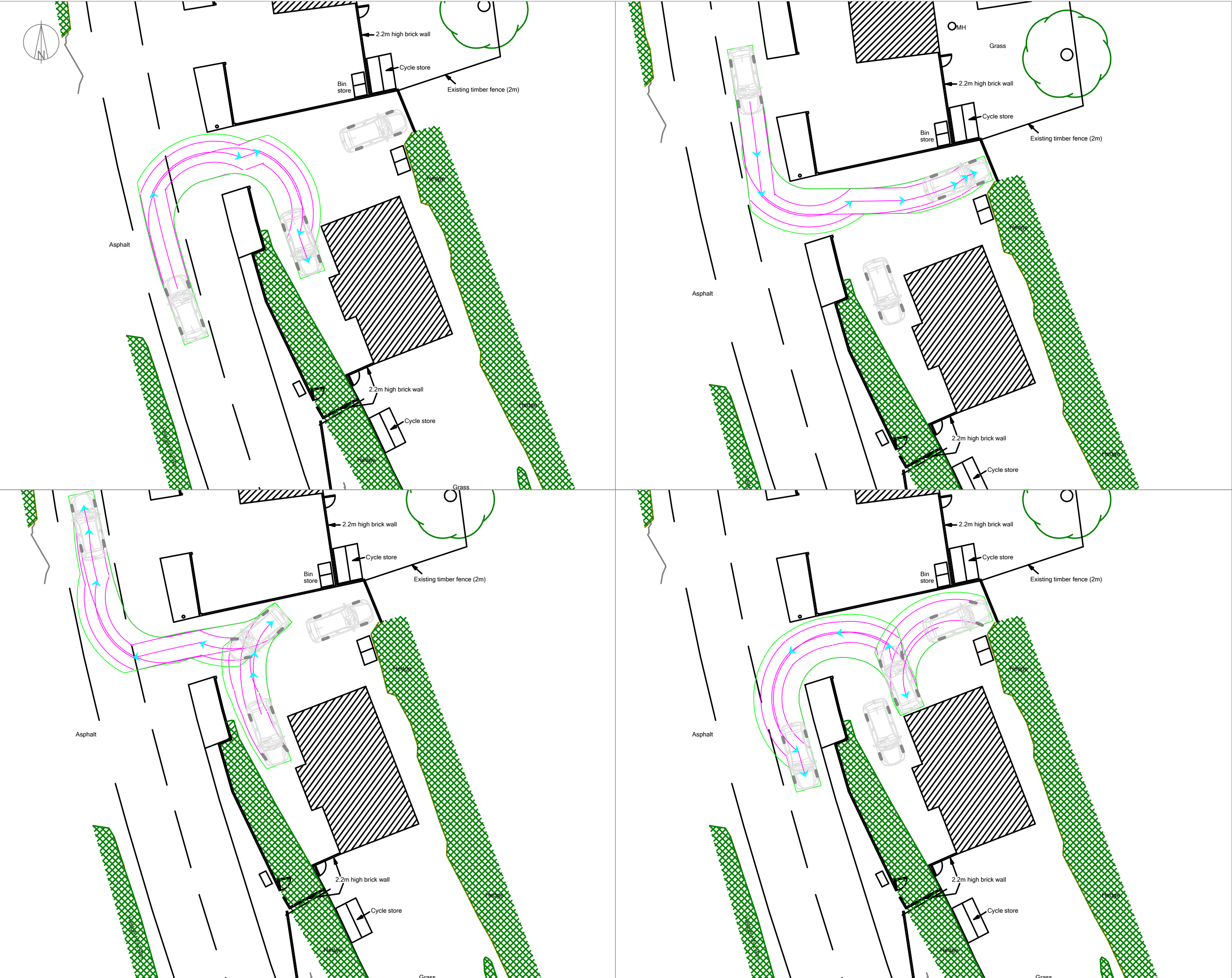
The Architect's Proposed Site Layout Plan





## **Appendix 5**

### Swept Path Analysis



NOTES:

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Drawing Based on Architect's Proposed Site Plan (reference: 25/3278/01\_D) Received 02.06.2025

C	Updated Site Layout Received	JT	02.06.25
B	Updated Site Layout Received	JT	29.05.25
A	Updated Site Layout Received	JT	29.05.25
ISSUE	REASON FOR REVISION	BY	DATE

SDV

Width	: 1800
Track	: 1800
Lock to Lock Time	: 6.0
Steering Angle	: 37.8

PROJECT:

LAGOS COTTAGE  
18 BURTON ROAD  
TWYCROSS

CLIENT:

LUKE ELPHICK

PROJECT REF:	DRAWING NUMBER:	SCALE (AT A3):
2452	TR01	1:250

SHEET NUMBER:

SHEET NUMBER 1 OF 2

SCALE BAR:

0m

5m

10m

Highgate*Transportation*

[www.highgatetransportation.co.uk](http://www.highgatetransportation.co.uk)

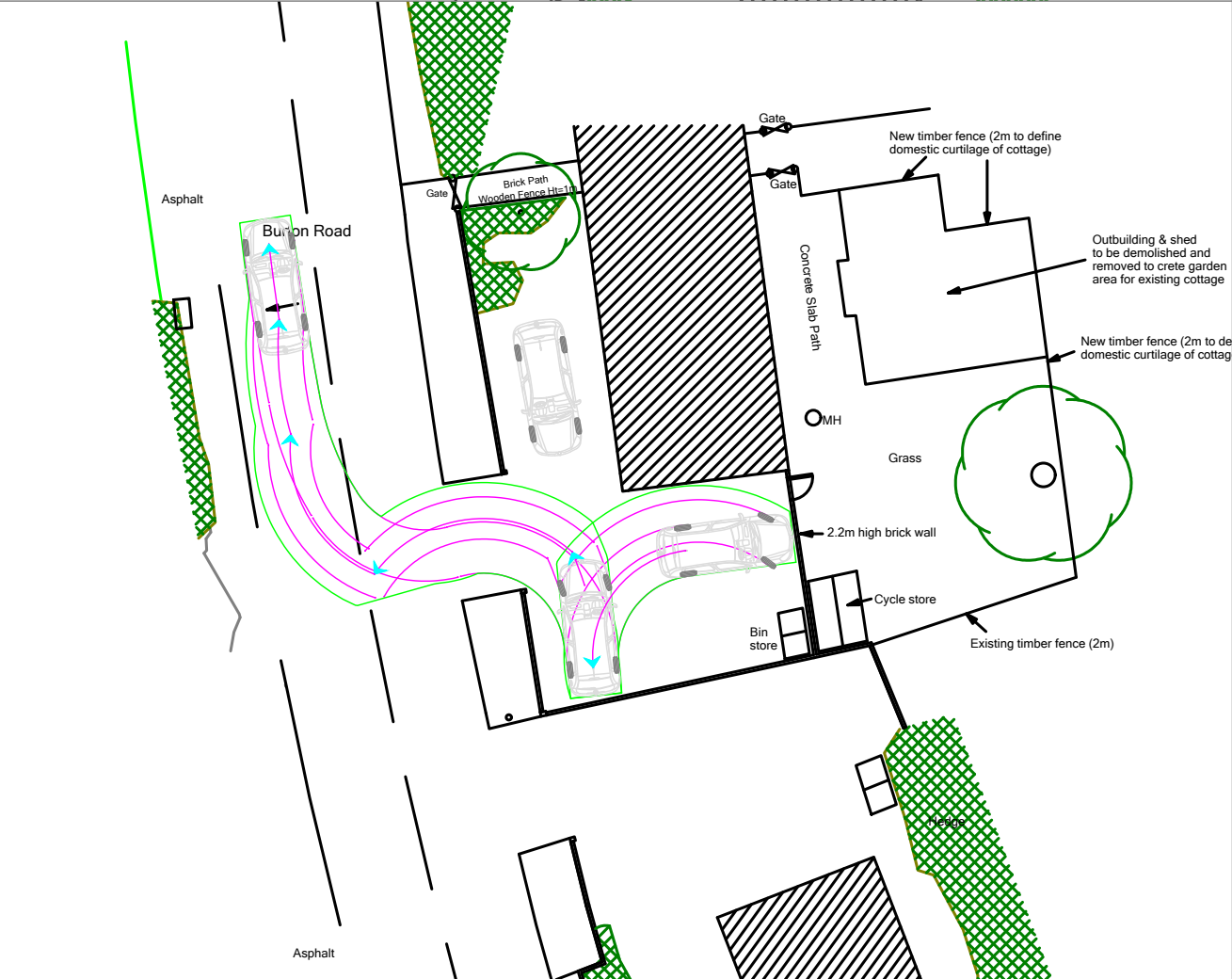
First Floor, 43-45 Park Street  
Bristol BS1 5NL  
01179 349 121

© Highgate Transportation Limited

TITLE:

CAR SWEEP PATH  
ANALYSIS

DATE:	DRAWN BY:	CHECKED:
28.05.2025	JT	DC



NOTES:

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Drawing Based on Architect's Proposed Site Plan (reference: 25/3278/01\_D) Received 02.06.2025

C	Updated Site Layout Received	JT	02.06.25
B	Updated Site Layout Received	JT	29.05.25
A	Updated Site Layout Received	JT	29.05.25
ISSUE	REASON FOR REVISION	BY	DATE

SDV

mm

Width : 1800

Track : 1800

Lock to Lock Time : 6.0

Steering Angle : 37.8

PROJECT:

**LAGOS COTTAGE**

**18 BURTON ROAD**

**TWYCROSS**

CLIENT:

**LUKE ELPHICK**

PROJECT REF:	DRAWING NUMBER:	SCALE (AT A3):
2452	TR01	1:250

SHEET NUMBER:

**SHEET NUMBER 2 OF 2**

SCALE BAR:

0m 5m 10m

**Highgate***Transportation*

[www.highgatetransportation.co.uk](http://www.highgatetransportation.co.uk)

First Floor, 43-45 Park Street  
Bristol BS1 5NL  
01179 349 121

© Highgate Transportation Limited

TITLE:

**CAR SWEEP PATH ANALYSIS**

DATE:	DRAWN BY:	CHECKED:
28.05.2025	JT	DC

## **Appendix 6**

### Calculated Visibility Splays

2452 – Lagos Cottage, Burton Road, Twycross

## Visibility Calculations

### Northern ATC Site – Southbound Direction

#### Stopping Sight Distance Calculator

Formula for calculating SSD (from Manual for Streets 2):  $SSD = vt + v^2/2(d+0.1a)$   
v = Speed of vehicle (m/s)      d = deceleration rate (m/s)  
t = driver perception-reaction time (seconds)      a = longitudinal gradient (%)

**Fill in the white boxes only**

Enter the vehicle 85%ile speed below

38.3	mph	17.122	m/s
------	-----	--------	-----

v = 17.122 m/s  
t = 1.5 taken from MfS2 table 10.1  
d = 3.679 Vehicle type Buses and/or HGV's greater than 5% of the traffic  
a = 0 +ve for upgrades and -ve Select vehicle type

Based on Table 10.1 MfS2

Design speed	Vehicle Type	Reaction Time t (s)	Deceleration rate d (m/s) (ie factor x 9.81)	Standard
60kph and below	Light vehicles only	1.5	0.450 g	MfS2
	Buses and/or HGV's greater than 5% of the traffic	1.5	0.375 g	MfS2
Above 60kph	All vehicles (≤64kph)	2	0.375 g (Absolute minimum)	CD 109
	All vehicles (>64kph)	2	0.250 g (Desirable minimum)	CD 109

**SSD =** 66 m  
**SSD adjusted for bonnet length (MfS only) =** 68 m (SSD + 2.4m)

**NOTE:** The adjustment for the bonnet length is only required on the MfS SSD as the MfS formula is calculated from drivers eye. To avoid a collision, the bonnet length must be added.

### Southern ATC Site – Northbound Direction

#### Stopping Sight Distance Calculator

Formula for calculating SSD (from Manual for Streets 2):  $SSD = vt + v^2/2(d+0.1a)$   
v = Speed of vehicle (m/s)      d = deceleration rate (m/s)  
t = driver perception-reaction time (seconds)      a = longitudinal gradient (%)

**Fill in the white boxes only**

Enter the vehicle 85%ile speed below

34.5	mph	15.423	m/s
------	-----	--------	-----

v = 15.423 m/s  
t = 1.5 taken from MfS2 table 10.1  
d = 4.415 Vehicle type Light vehicles < 5%  
a = 0 +ve for upgrades and -ve Select vehicle type

Based on Table 10.1 MfS2

Design speed	Vehicle Type	Reaction Time t (s)	Deceleration rate d (m/s) (ie factor x 9.81)	Standard
60kph and below	Light vehicles only	1.5	0.450 g	MfS2
	Buses and/or HGV's greater than 5% of the traffic	1.5	0.375 g	MfS2
Above 60kph	All vehicles (≤64kph)	2	0.375 g (Absolute minimum)	CD 109
	All vehicles (>64kph)	2	0.250 g (Desirable minimum)	CD 109

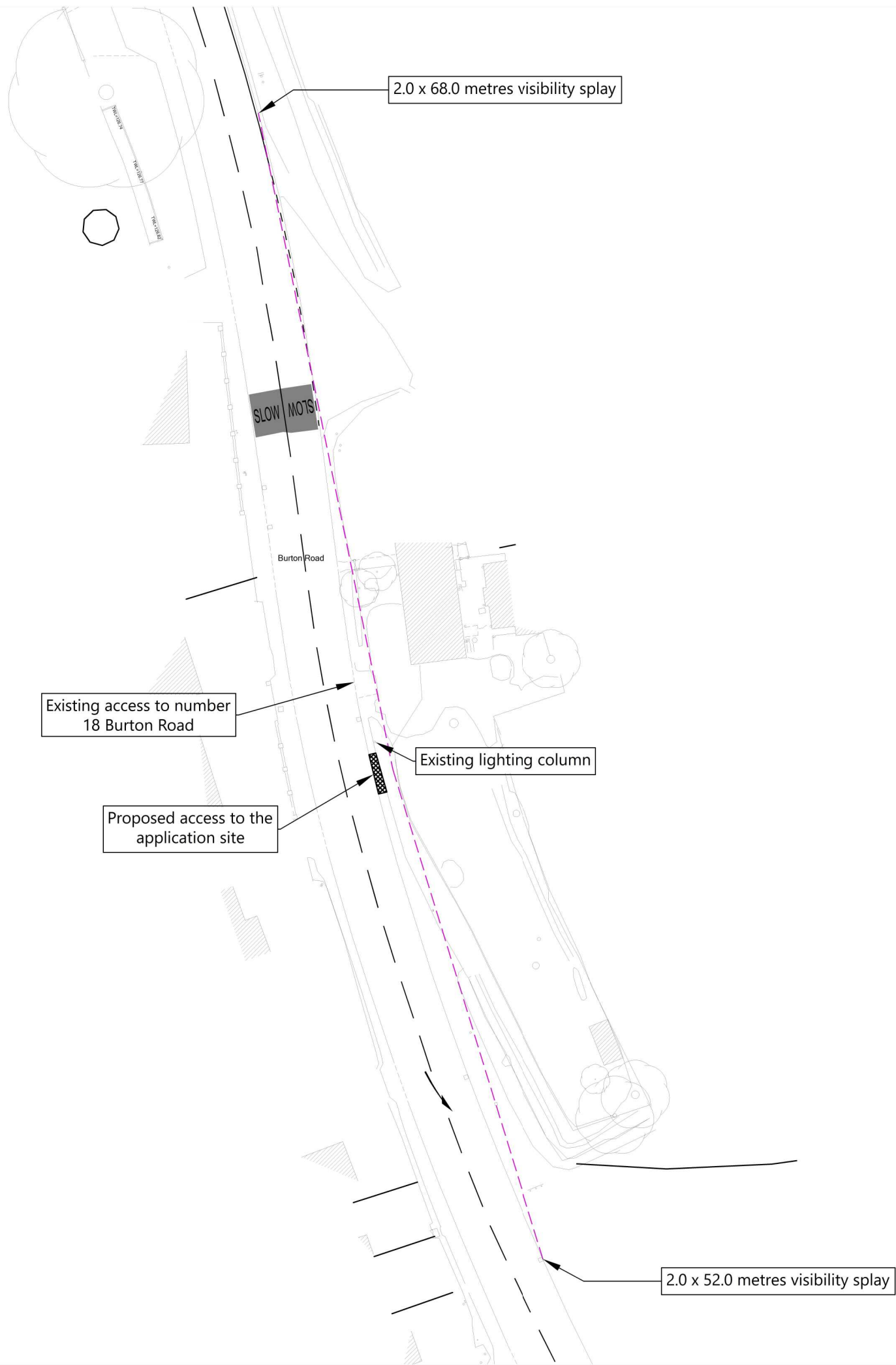
**SSD =** 50 m  
**SSD adjusted for bonnet length (MfS only) =** 52 m (SSD + 2.4m)

**NOTE:** The adjustment for the bonnet length is only required on the MfS SSD as the MfS formula is calculated from drivers eye. To avoid a collision, the bonnet length must be added.



## **Appendix 7**

### The Proposed Access Visibility Splays Plan



NOTES:

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Based on Brunel Surveys Topographical Survey base reference 27358-500-1 dated Mar 2025.

PRELIMINARY

D	Application site access relocated	DC	11.04.25
C	Visibility splays plotted on topographical surveys base	AM	10.04.25
B	Application site access relocated	DC	05.03.25
A	Application site boundary revised	DC	03.03.25
ISSUE	REASON FOR REVISION	BY	DATE

PROJECT:  
**LAGOS COTTAGE  
18 BURTON ROAD  
TWYCROSS**

CLIENT:  
**LUKE ELPHICK**

PROJECT REF:	DRAWING NUMBER:	SCALE (AT A3):
2452	01	1:500

SHEET NUMBER:  
**SHEET NUMBER 1 OF 1**



**HighgateTransportation**  
www.highgatetransportation.co.uk  
First Floor, 43-45 Park Street  
Bristol BS1 5NL  
01179 349 121  
© Highgate Transportation Limited

TITLE:  
**VISIBILITY SPLAYS**

DATE:	DRAWN BY:	CHECKED:
27.02.2025	DC	FB