

Transport Technical Note Warren Crest Farm, Wick Hill Lane, Wokingham

1.0 Introduction

- 1.1 This Transport Technical Note (TTN) has been prepared by Glanville Consultants on behalf of Mr and Mrs. Nasser in relation their property at Warren Crest Farm, Wick Hill Lane, Finchampstead, Wokingham, RG40 3PY.
- 1.2 The application site comprises an operational farm, alongside a farmhouse, agricultural buildings, grassland and woodland. The property is currently accessed via Wick Hill Lane to the north. The property also has a second informal gated access to the south, off Jubilee Road. See Figure 1 below which shows the location of the site in the context of the two accesses.



Figure 1: Site Context

- 1.3 The current access arrangement for Warren Crest Farm requires agricultural vehicles to navigate Nine Mile Ride and the narrow restricted byway which serves Warren Crest Farm and several houses. The existing access arrangement for agricultural vehicles is therefore suboptimal and poses a potential risk to walkers and riders using the byway. The development proposals therefore seek to relocate the existing gated access to the south for the use of agricultural vehicles in order to provide an enhanced and safer access to the site.
- 1.4 A planning application (ref: 242129) was submitted for the relocation and upgrade of the existing access off Jubilee Road. Wokingham Borough Council (WBC), acting in their role as Local Highway Authority (LHA), provided consultation comments on this application, and it is in response to these comments that this TTN and associated updated access arrangement has been prepared.

1.5 A full copy of the Highway Authority's comments is provided at Appendix A; a summary is provided below:

- Assess necessity for visibility splays of 2.4 x 120m;
- Assess forward visibility for vehicles approaching the access from the south wanting to turn right;
- Obtain speed surveys to confirm visibility requirements;
- Ensure that large vehicles can pass each other in close proximity to the junction;
- Swept path analysis of a tractor & trailer and HGV;
- Obtain traffic flow data of the proposed junction;
- Provide a Stage 1 Road Safety Audit; and
- Explore the feasibility of an alternative access between Arden House and the existing track without involving the Wick Hill Lane junction.

1.6 The following paragraphs detail the updated proposed access arrangement and address the above Highway Authority comments from Wokingham Borough Council.

2.0 Access Design

2.1 The proposed agricultural access has been designed as 6.5m wide for the first 16m, subsequently narrowing to 3.7m within the site. The access design involves the slight narrowing of Wick Hill Lane to 3.7m wide, in addition to the realignment of the southern kerbline to help reduce the overall width of the Wick Hill Lane junction.

2.2 It is also proposed to re-introduce line markings between Jubilee Road and Wick Hill Lane and the new agricultural access, to inform road users of the presence of the junction. The proposals can be viewed on the Access and Visibility Splay Drawing provided at Appendix B.

3.0 Response to Highway Authority Comments

Visibility

3.1 To determine the appropriate visibility splays at the access, Automatic Traffic Count (ATC) speed surveys were undertaken at two locations either side of the proposed access on Jubilee Road. A copy of the full ATC results is provided at Appendix C. The results provided the recorded 85th percentile speeds, which have been used to calculate the stopping sight distance for the 'y' distance visibility splays.

3.2 The results of the speed survey confirmed that the 85th percentile recorded speeds were 31.2mph southeast bound and 36.8mph northwest bound. Based on the calculation included in Manual for Streets (MfS), the recorded 85th percentile speeds would require the stopping sight distances (SSD) presented in Table 1 below.

Table 1: 85th Percentile Recorded Speeds and Stopping Sight Distances

Approach / Direction	85 th Percentile Speed	Stopping Sight Distance (SSD)
Site 1 – Jubilee Road, eastbound	31.2mph	45.38m
Site 2 – Jubilee Road, northbound	36.8mph	57.76m

- 3.3 Table 1 demonstrates that the proposed access would require 'y' distance visibility splays of 45.38m and 57.76m to the right and left of the junction respectively. The required 'y' distance visibility splays have been plotted on the Site Access and Visibility Splay drawing provided at Appendix B. This drawing demonstrates that the calculated visibility splays can be achieved within the highway boundary.
- 3.4 The Highway Authority stated that the necessity for visibility splays of 2.4m x 120m, which are the calculated visibility splays for a 40mph road in accordance with the DMRB, be assessed. It has been demonstrated above that due to the existing road layout, vehicle speeds are lower than the posted speed limit, and therefore visibility splays of 2.4m x 120m are not considered necessary in this instance.

Swept Path Analysis

- 3.5 As requested by the Highway Authority, a swept path analysis has been undertaken of the site access using a tractor, a Landrover and horsebox, and a tractor and hay wagon. The swept path analysis drawings are provided at Appendix D. The drawings demonstrate that all of the aforementioned vehicles can safely access and egress the site.
- 3.6 The Highway Authority also requested that forward visibility be assessed for vehicles approaching the site from the south. The swept path analysis for the tractor and hay wagon (considered to be the largest vehicle to access the site) demonstrates that sufficient forward visibility can be achieved when approaching the site from both the west and the south on Jubilee Road.

Stage 1 Road Safety Audit (RSA1)

- 3.7 A Stage 1 Road Safety Audit (RSA1) has been undertaken (a copy of which is provided at Appendix E), which reviewed the following drawings:
- 6101 – Site Access and Visibility Splays
 - 6201 – Swept Path Analysis (Tractor)
 - 6202 – Swept Path Analysis (Landrover and Horsebox)
 - 6203 – Swept Path Analysis (Tractor and Hay Wagon)
- 3.8 The RSA1 identified no safety issues in relation to the above drawings. It is therefore considered that the location and design of the proposed agricultural access is acceptable in safety terms.

Traffic Flows

- 3.9 The Highway Authority requested that traffic flow data be obtained for the proposed junction. The ATC surveys which were undertaken to inform the visibility requirements also provide traffic flow data for Jubilee Road. On average across the survey (weekdays only), there were 557 two-way trips in the AM peak hour (264 southeast bound and 293 northwest bound) and 444 two-way trips in the PM peak hour (216 northwest bound and 228 southeast bound). This equates to a maximum of approximately 4 vehicles per minute travelling in either direction along Jubilee Road.
- 3.10 The landowner has advised that they only anticipate moderate use of the proposed access. It has already been confirmed that the agricultural vehicles which would use the proposed access currently use the existing access to the north of the site, and therefore, there is no new traffic generation arising from the proposals, rather it is being redistributed via a more appropriate route. It is therefore not anticipated that there would be an adverse or significant impact on the local highway network as a result of the proposed access.

Alternative Access Position

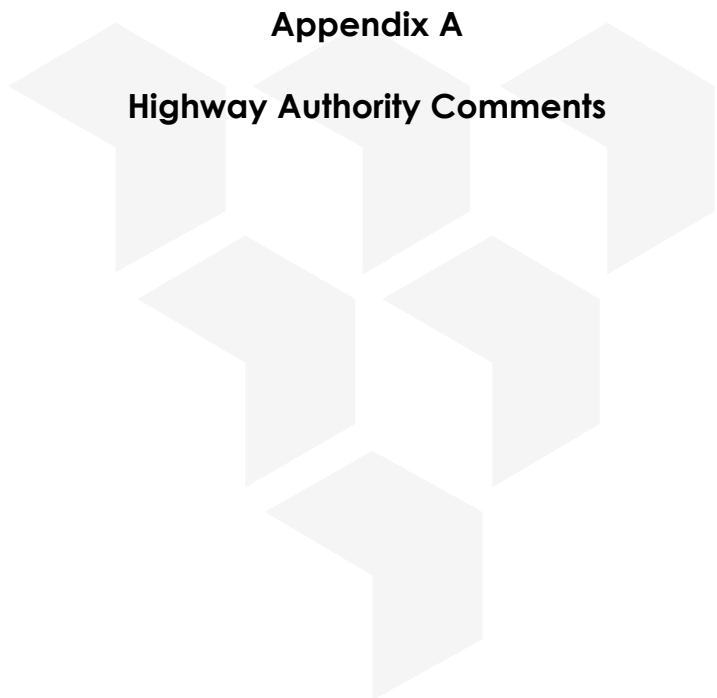
- 3.11 The Highway Authority requested that the feasibility of an alternative access between Arden House and the existing track without involving the Wick Hill Lane junction be explored. Moving the access westwards is constrained by the dense hedgerows and trees which front Jubilee Road, a significant proportion of which would require removal to achieve the necessary visibility splays.
- 3.12 It is considered that the movement of the access westwards may also increase the risk of rear end shunt collisions, in addition to a lack of visibility of cars turning right into the site from the south.
- 3.13 It is therefore considered that for the reasons outlined above, pertaining to loss of vegetation, visibility and safety, the movement of the access westwards is not necessarily feasible. The location of the proposed access shown at Appendix B is therefore considered to be most appropriate to serve the site.

4.0 Summary

- 4.1 This Transport Technical Note has been prepared by Glanville Consultants on behalf of Mr and Mrs Nasser in relation to their property at Warren Crest Farm, Wick Hill Lane, Finchampstead, Wokingham.
- 4.2 The proposals seek to provide a new agricultural access to replace the existing gated access to the south of the farm on Jubilee Road for the use of agricultural vehicles. An application (ref: 242129) has already been submitted for the above improvement works, to which the Local Highway Authority provided consultation comments.
- 4.3 This Note has been prepared to address the comments made by the Local Highway Authority, and has demonstrated the following:
- The proposed site access can achieve 'y' distance visibility splays in accordance with the 85th percentile recorded speeds, and these visibility splays can be achieved within highway-maintained land.
 - Visibility splays of 2.4m x 120m are not considered to be necessary due to the reduced vehicle speeds outlined above.
 - Forward visibility for vehicles approaching the access from both the west and south has been demonstrated to be sufficient.
 - The swept path analysis has demonstrated that the vehicle types anticipated to use the access (tractor, Landrover and horsebox, and tractor and hay wagon) can safely access and egress the site in forward gear.
 - The Stage 1 Road Safety Audit has demonstrated that the proposed access arrangement is suitable to serve the site, and that there are no safety concerns.
 - The delivery of the proposed agricultural access will have a negligible impact on the local highway network.
 - The access in its current location is the most appropriate; moving the access westwards would result in reduced visibility, significant loss of vegetation and trees, and associated safety concerns.
- 4.4 As such, it is considered that a safe and suitable access arrangement for the use of agricultural vehicles has been developed to serve the site, and that the Local Highway Authority's comments have been sufficiently addressed.

- 4.5 The proposed development is in accordance with the National Planning Policy Framework (December 2023), which is in favour of sustainable development and advises that *'Development should only be prevented or refused on highway 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.'*





Appendix A

Highway Authority Comments

MEMORANDUM

From:	JP		
Service	WBC Highways	App No:	242129
Address:	Warren Crest Farm, Wick Hill Lane, Finchampstead, Wokingham, RG40 3PY.		
Proposal:	Full application for a proposed access, including formation of new trackway, improvement of existing track, and installation of new gates.		
Type of Development:	Minor All other developments		
Site Visit Made:	Yes/No		

Summary Of Recommendations

- ☐ No comment
- ☐ No objection
- ☐ No objection subject to conditions (and reasons) **stated below**
- ☒ Request further information before determination as **stated below**
- ☐ Objection due to the reason(s) **stated below**

Comments On Proposal

The proposal involves a new access route to serve the farm buildings. The access will connect with the public highway at the junction of Jubilee Road / Wick Hill Lane to form a crossroad. Stage 1 Road Safety Audit is expected for a new access.

The applicant provides the visibility splays of 2.4m x 65m in both directions. However, Jubilee Road is subject to a 40mph speed limit. According to the DMRB, 2.4m x 120m visibility splays to the nearside edge of the carriageway in both direction of Jubilee Road shall be assessed.

The applicant is required to access the forward visibility of right turn movement on Wick Hill Lane and visibility splays from the junction of Jubilee Road / Wick Hill Lane. The actual speed along this section of Jubilee Road by speed survey are also required to support sufficient visibility can be achieved.

The applicant suggests that the new access will be used by large farm machinery and HGVs. The proposed access width and passing area are unlikely to be sufficient for the proposed vehicles. The access design shall be revised to ensure large vehicles are able to pass each other in close proximity to the junction.

Swept path analysis for tractor trailer and HGV are also required to demonstrate the vehicle can access and egress to the public highway in forward gear.

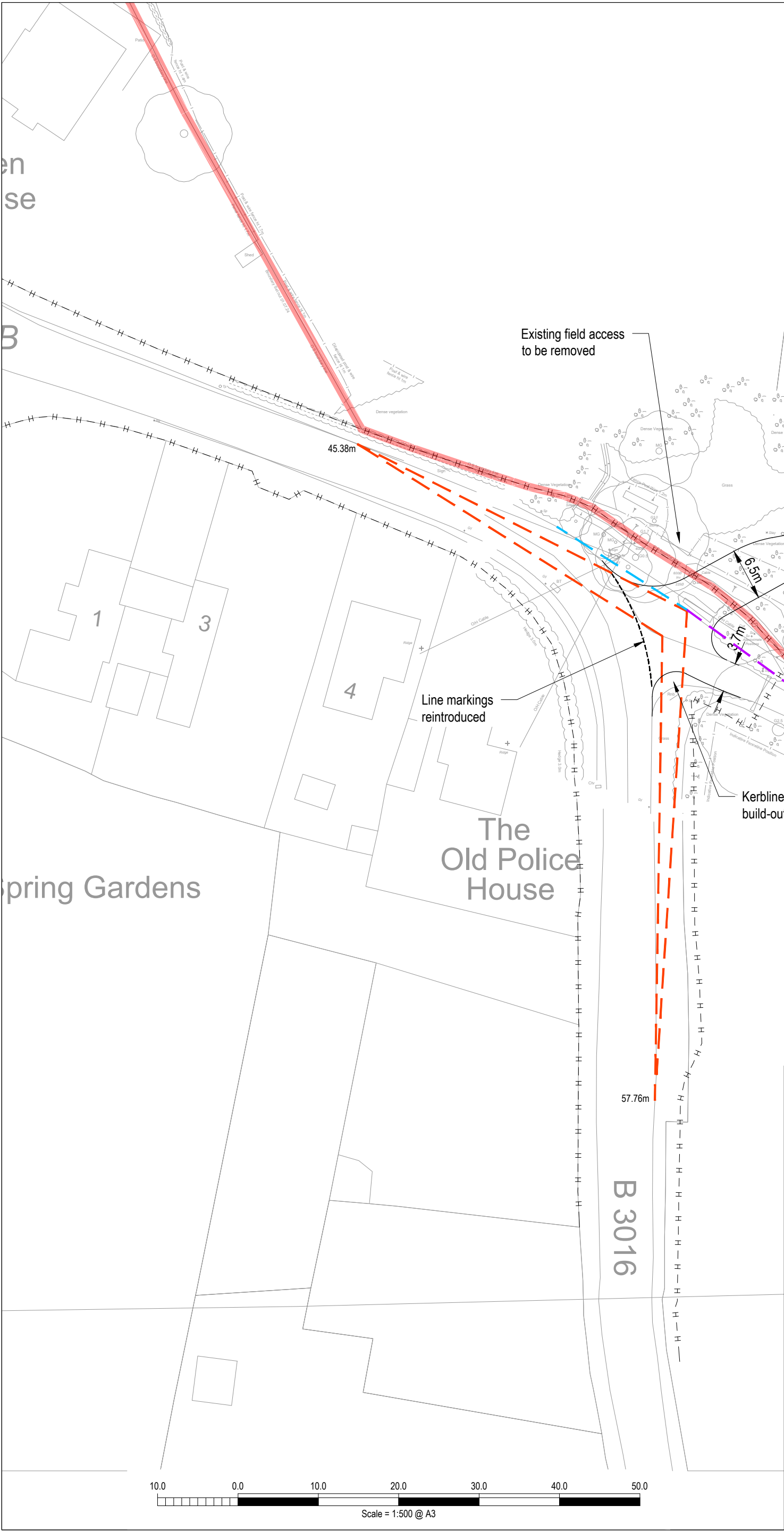
As the site traffic flows will be diverted from the Wick Hill Lane to Jubilee Road at a bend, the applicant is also required to provide traffic flow data of the proposed junction.

Further to the comments on the proposed position of the access, the Highways recommend the applicant to explore the feasibility of alternative farm gate position, between Arden House and the existing track along the blue line boundary, without involving the Wick Hill Lane junction.

Conditions & Reasons (if required)			
Date:	13/9/2024	Signed:	JP

Appendix B

Site Access and Visibility Splay Drawing



NOTES

1. This drawing is to be read in conjunction with all relevant documents and specifications.

2. Dimensions are not to be scaled.

Source: Mapmatic's drawing number 6246 001 Rev 2
AndersonOrr drawing number 23046-SKP1013-D

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KEY

2.4m x 'y'm visibility splays

Tangential visibility splay

2.4m x 43m visibility splay

H H

Highway boundary interpreted from WBC records

Site boundary

N

Rev.	Description	Date	By	Chkd
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Glanville

Survey > Plan > Engineer

Civil Engineering

Structural Engineering

Transport Planning

Highways Engineering

Building Surveying

Geomatics

Hertfordshire

Oxfordshire

Cambridgeshire

Bristol

Client :
Tony and Rosaline Nasser

Project :
Warren Crest Farm, Wick Hill Lane
Wokingham RG40 3PY

Title :
Site Access and Visibility Splays

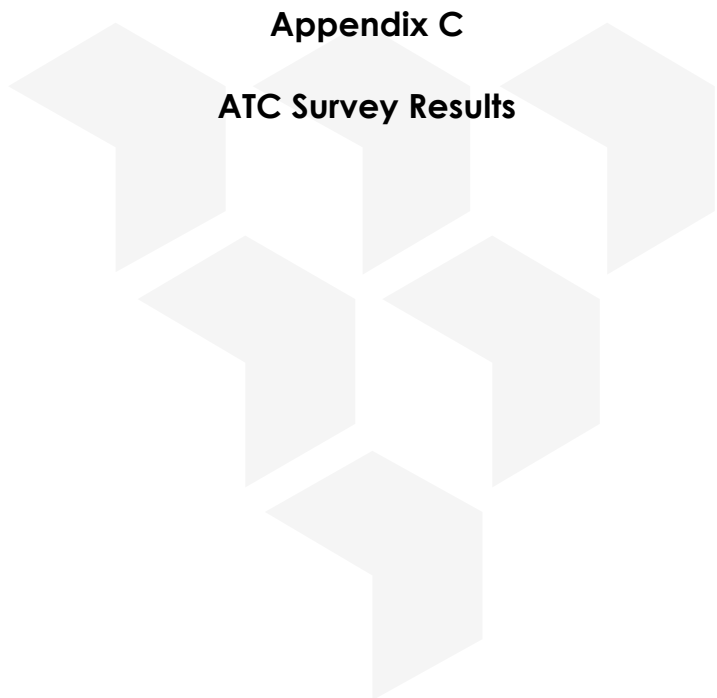
Engineer : J. Cooper
Director : T. Foxall

Date : December 2024
Scale : 1:500 @ A3

Status :
PRELIMINARY

Drawing No.
8240747/6101

Rev



Appendix C

ATC Survey Results

Class		Axes	Groups	Description	Parameters	Dominant Vehicle	Aggregate
1	SV	2	1 OR 2	Short - Car, light Van	d(1)>=1.7m, d(1)<=3.2m & axles=2		Light
2	SVT	3, 4 OR 5	3	Short Towing - Trailer, Caravan, Boat, etc.	groups=3, d(1)>=2.1m, d(1)<=3.2m, d(2)>=2.1m & axles=3,4,5		
3	TB2	2	2	Two axle truck or Bus	d(1)>3.2m & axles=2		Medium
4	TB3	3	2	Three axle truck or Bus	axles=3 & groups=2		
5	T4	>3	2	Four axle truck	axles>3 & groups=2		
6	ART3	3	3	Three axle articulated vehicle or Rigid vehicle and trailer	d(1)>3.2m, axles=3 & groups=3		Heavy
7	ART4	4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 4 & groups>2		
8	ART5	5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 5 & groups>2		
9	ART6	>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	axles=6 & groups>2 or axles>6 & groups=3		
10	BD	>6	4	B-Double or Heavy truck and trailer	groups=4 & axles>6		
11	DRT	>6	5	Double road train or Heavy truck and two trailers	groups=5,6 & axles>6		
12	TRT	>6	>6	Triple road train or Heavy truck and three (or more) trailers	groups>6 & axles>6		Light
14	M/C	2	1 OR 2	Motorcycle	d(1)>=1.18m, d(1)<=1.7m & axles=2		
15	CYCLE	2	1 OR 2	Cycle	d(1)<1.18 & axles=2		

	Eastbound	Westbound
Total	15534	15388
Mean Speed	28	26.7
85%	31.2	29.5

Year	Total	Cn 1	Cn 3	Cn 4	Cn 5	Cn 6	Cn 7	Cn 8	Cn 9	Cn 10	Cn 11	Cn 12	Cn 14	Cn 15	Days	Days
2010	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	219
2011	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	220
2012	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	262
2013	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	262
2014	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	257
2015	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262
2016	36	29	3	0	0	0	0	0	0	0	0	0	0	1	0	262
2017	986	173	0	105	105	0	0	0	1	0	0	0	0	0	0	262
2018	236	139	1	24	1	0	1	0	0	0	0	0	0	0	0	262
2019	236	139	1	14	0	0	0	0	0	0	0	0	0	0	0	262
2020	107	135	0	16	0	0	0	1	0	0	0	0	0	0	0	262
2021	105	131	0	16	0	0	0	1	0	0	0	0	0	0	0	262
2022	100	130	0	19	0	0	1	0	0	0	0	0	0	0	0	279
2023	102	144	0	12	0	0	0	0	0	0	0	0	0	0	0	279
2024	178	146	2	22	1	0	1	0	0	0	0	0	1	2	0	279
2025	206	181	1	19	0	0	0	0	0	0	0	0	0	0	0	279
2026	207	207	0	15	0	1	0	0	0	0	0	0	0	0	0	279
2027	214	207	1	7	0	0	0	0	0	0	0	0	0	0	0	279
2028	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279
2029	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279
2030	104	104	0	9	0	0	0	0	0	0	0	0	0	0	0	281
2031	104	104	0	9	0	0	0	0	0	0	0	0	0	0	0	281
2032	81	78	0	2	1	0	0	0	0	0	0	0	0	0	0	281
2033	27	26	0	2	0	0	0	0	0	0	0	0	0	0	0	281
2034	20	19	0	0	0	0	0	0	0	0	0	0	0	0	0	281
2035	39	38	0	0	0	0	0	0	0	0	0	0	0	0	0	281
2036	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	281
2037	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	281
2038	2463	1847	4	191	0	2	2	2	1	0	0	1	0	3	0	279
2039	2463	1847	4	203	0	2	2	2	1	0	0	1	0	3	0	279
2040	2463	1847	4	203	0	2	2	2	1	0	0	1	0	3	0	279
2041	2463	1847	4	203	0	2	2	2	1	0	0	1	0	3	0	279
2042	2463	1847	4	203	0	2	2	2	1	0	0	1	0	3	0	279
2043	2463	1847	4	203	0	2	2	2	1	0	0	1	0	3	0	279
2044																

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1st December 2014																																																																																																																																																																																																																																																																																																																																																																																																																																	
Time	Team	Total	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41	W42	W43	W44	W45	W46	W47	W48	W49	W50	W51	W52	W53	W54	W55	W56	W57	W58	W59	W60	W61	W62	W63	W64	W65	W66	W67	W68	W69	W70	W71	W72	W73	W74	W75	W76	W77	W78	W79	W80	W81	W82	W83	W84	W85	W86	W87	W88	W89	W90	W91	W92	W93	W94	W95	W96	W97	W98	W99	W100	W101	W102	W103	W104	W105	W106	W107	W108	W109	W110	W111	W112	W113	W114	W115	W116	W117	W118	W119	W120	W121	W122	W123	W124	W125	W126	W127	W128	W129	W130	W131	W132	W133	W134	W135	W136	W137	W138	W139	W140	W141	W142	W143	W144	W145	W146	W147	W148	W149	W150	W151	W152	W153	W154	W155	W156	W157	W158	W159	W160	W161	W162	W163	W164	W165	W166	W167	W168	W169	W170	W171	W172	W173	W174	W175	W176	W177	W178	W179	W180	W181	W182	W183	W184	W185	W186	W187	W188	W189	W190	W191	W192	W193	W194	W195	W196	W197	W198	W199	W200	W201	W202	W203	W204	W205	W206	W207	W208	W209	W210	W211	W212	W213	W214	W215	W216	W217	W218	W219	W220	W221	W222	W223	W224	W225	W226	W227	W228	W229	W230	W231	W232	W233	W234	W235	W236	W237	W238	W239	W240	W241	W242	W243	W244	W245	W246	W247	W248	W249	W250	W251	W252	W253	W254	W255	W256	W257	W258	W259	W260	W261	W262	W263	W264	W265	W266	W267	W268	W269	W270	W271	W272	W273	W274	W275	W276	W277	W278	W279	W280	W281	W282	W283	W284	W285	W286	W287	W288	W289	W290	W291	W292	W293	W294	W295	W296	W297	W298	W299	W300	W301	W302	W303	W304	W305	W306	W307	W308	W309	W310	W311	W312	W313	W314	W315	W316	W317	W318	W319	W320	W321	W322	W323	W324	W325	W326	W327	W328	W329	W330	W331	W332	W333	W334	W335	W336	W337	W338	W339	W340	W341	W342	W343	W344	W345	W346	W347	W348	W349	W350	W351	W352	W353	W354	W355	W356	W357	W358	W359	W360	W361	W362	W363	W364	W365	W366	W367	W368	W369	W370	W371	W372	W373	W374	W375	W376	W377	W378	W379	W380	W381	W382	W383	W384	W385	W386	W387	W388	W389	W390	W391	W392	W393	W394	W395	W396	W397	W398	W399	W400	W401	W402	W403	W404	W405	W406	W407	W408	W409	W410	W411	W412	W413	W414	W415</

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7th December 2019														Miles		Hours	
Time	Total	Van 1	Van 2	Van 3	Van 4	Van 5	Van 6	Van 7	Van 8	Van 9	Van 10	Van 11	Van 12	Van 13	Van 14	Van 15	Van 16
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0050	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0055	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0210	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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Grand Total																		
Time [-]	Total	Win 6	Win 12	Win 18	Win 25	Win 31	Win 37	Win 43	Win 50	Win 56	Win 62	Win 68	Win 75	Win 81	Win 87	Win 93	Mean	Ypp 25
00:00:00	1000	12	19	25	31	37	43	50	56	62	68	75	81	87	93	99	50	25



SITE: ATC 1 - Jubilee Road, Finchampstead

LOCATION: Attached to telegraph pole

GRID REFERENCE: 51.370477, -0.856324

DIRECTION: EASTBOUND

SPEED LIMIT: 40

	Tue 03-Dec	Wed 04-Dec	Thu 05-Dec	Fri 06-Dec	Sat 07-Dec	Sun 08-Dec	Mon 09-Dec	Averages 1-5.	1-7.
Hour									
0000-0100	1	2	2	6	24	25	4	3	9.1
0100-0200	0	0	2	2	8	10	2	1.2	3.4
0200-0300	0	0	1	1	5	9	3	1	2.7
0300-0400	0	0	1	4	1	3	2	1.4	1.6
0400-0500	2	3	4	3	2	1	3	3	2.6
0500-0600	10	11	6	7	1	2	6	8	6.1
0600-0700	30	40	43	36	15	9	36	37	29.9
0700-0800	153	211	190	169	52	28	186	181.8	141.3
0800-0900	254	300	264	245	76	45	259	264.4	206.1
0900-1000	65	139	145	143	115	95	146	127.6	121.1
1000-1100	47	160	138	156	144	124	157	131.6	132.3
1100-1200	111	158	149	171	139	169	151	148	149.7
1200-1300	127	168	165	179	135	187	150	157.8	158.7
1300-1400	124	123	157	173	131	121	144	144.2	139
1400-1500	183	159	178	180	149	124	178	175.6	164.4
1500-1600	177	198	197	207	127	117	206	197	175.6
1600-1700	232	253	224	236	112	100	223	233.6	197.1
1700-1800	227	271	218	215	104	87	216	229.4	191.1
1800-1900	149	153	128	175	135	72	147	150.4	137
1900-2000	91	103	77	92	99	50	104	93.4	88
2000-2100	49	50	72	79	42	45	81	66.2	59.7
2100-2200	48	36	50	48	57	25	37	43.8	43
2200-2300	27	40	48	72	45	19	25	42.4	39.4
2300-2400	5	8	21	45	43	9	9	17.6	20
Totals									
0700-1900	1849	2293	2153	2249	1419	1269	2163	2141.4	1913.6
0600-2200	2067	2522	2395	2504	1632	1398	2421	2381.8	2134.1
0600-0000	2099	2570	2464	2621	1720	1426	2455	2441.8	2193.6
0000-0000	2112	2586	2480	2644	1761	1476	2475	2459.4	2219.1
AM Peak	800 254	800 300	800 264	800 245	1000 144	1100 169	800 259		
PM Peak	1600 232	1700 271	1600 224	1600 236	1400 149	1200 187	1600 223		



SITE: ATC 1 - Jubilee Road, Finchampstead
GRID REFERENCE: S1.375477, -0.856204

LOCATION: Attached to telegraph pole

DIRECTION: WESTBOUND

SPEED LIMIT: 40

03 December 2024

Time [s]	Total	Cn 1	Cn 2	Cn 3	Cn 4	Cn 5	Cn 6	Cn 7	Cn 8	Cn 9	Cn 10	Cn 11	Cn 12	Cn 13	Cn 14	Cn 15	Mean	Top 5%
0000	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
0001	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	257
0002	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	277
0003	17	13	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	278 267
0004	30	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	274 214
0700	263	227	1	24	0	0	0	0	0	0	0	0	0	1	0	0	0	271 266
0800	266	232	0	24	1	0	0	0	0	0	0	0	0	1	0	0	0	264 262
0900	73	46	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	268 262
1000	42	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262 262
1100	78	71	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	268 262
1111	86	0	0	22	1	0	0	1	0	0	0	0	0	0	0	0	0	268 262
1400	171	89	0	22	1	0	0	1	0	0	0	0	0	0	1	1	0	27 262
1500	127	107	2	18	0	0	0	1	0	0	0	0	0	0	0	1	0	262 261
1510	128	108	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	271 262
1600	236	186	0	11	0	0	0	0	0	0	0	0	0	0	0	1	0	268 262
1700	216	186	0	17	0	0	0	0	0	0	0	0	0	0	0	1	0	268 262
1800	126	126	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
1900	89	89	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	262 261
2000	47	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
2100	21	20	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	268 261
2200	26	25	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	262 262
2300	15	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261 262
05-06	1886	1716	3	164	4	1	0	3	1	1	0	0	0	0	4	4	0	262 262
06-07	2163	1943	0	176	4	3	0	0	0	0	0	0	0	0	0	0	0	268 262
08-09	2105	1885	3	175	4	1	0	3	1	1	0	0	0	0	4	4	0	268 262
09-10	2077	1857	3	178	5	1	0	3	1	1	0	0	0	0	4	4	0	268 262

04 December 2024

Time [s]	Total	Cn 1	Cn 2	Cn 3	Cn 4	Cn 5	Cn 6	Cn 7	Cn 8	Cn 9	Cn 10	Cn 11	Cn 12	Cn 13	Cn 14	Cn 15	Mean	Top 5%
0000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	274
0100	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262
0200	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	267
0300	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	277
0400	15	13	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	264 262
0500	30	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26 214
0700	265	234	0	24	0	0	0	0	0	0	0	0	0	0	1	0	0	268 262
0800	262	230	0	24	0	0	0	0	0	0	0	0	0	0	1	0	0	27 262
0900	168	144	0	23	0	0	0	0	1	0	0	0	0	0	0	0	0	271 262
1000	126	126	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
1100	138	119	1	14	1	1	0	0	0	1	0	0	0	0	1	0	0	262 262
1400	142	126	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	267 262
1500	133	117	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
1600	146	122	0	23	1	0	0	0	0	0	0	0	0	0	0	0	0	272 262
1700	201	168	0	21	1	1	0	0	0	0	0	0	0	0	0	0	0	261 262
1800	168	148	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	262 262
1900	233	216	0	13	0	1	0	1	0	0	0	0	0	1	1	0	0	262 262
2000	112	106	0	3	0	0	0	0	0	0	0	0	0	1	1	0	0	271 262
2100	112	110	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
2200	21	20	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	268 261
2300	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26 262
05-06	2202	1986	3	186	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
06-07	2202	1986	3	186	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
08-09	2207	1991	3	189	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
09-10	2207	1991	3	189	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
09-10	2207	1991	3	189	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262

05 December 2024

Time [s]	Total	Cn 1	Cn 2	Cn 3	Cn 4	Cn 5	Cn 6	Cn 7	Cn 8	Cn 9	Cn 10	Cn 11	Cn 12	Cn 13	Cn 14	Cn 15	Mean	Top 5%
0000	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	271
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261
0200	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	264
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261
0400	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	267
0500	14	15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	278 212
0600	46	40	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	273 212
0700	265	265	0	24	0	1	0	1	0	0	0	0	0	2	0	0	0	268 262
0800	267	232	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
0900	158	144	0	13	0	0	0	1	0	0	0	0	0	0	0	0	0	268 262
1000	127	127	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	26 26
1100	140	120	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	268 262
1400	142	124	1	16	2	1	0	0	0	0	0	0	0	0	0	0	0	264 264
1500	133	123	0	10	0	1	1	0	0	0	0	0	0	0	0	0	0	261 268
1600	127	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261 268
1700	214	203	1	20	0	0	1	1	0	0	0	0	0	0	2	0	0	268 267
1800	124	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
1900	124	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268 262
2000	106	102	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	262 262
2100	66	63	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	262 26
2200	246	246	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268 268
2300	41	40	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	271 262
05-06	2242	1999	4	188	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
06-07	2242	1999	4	188	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
08-09	2247	1999	4	189	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
09-10	2247	1999	4	189	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262
09-10	2247	1999	4	189	3	0	2	1	1	2	0	0	0	0	4	4	0	268 262

06 December 2024

Time [s]	Total	Cn 1	Cn 2	Cn 3	Cn 4	Cn 5	Cn 6	Cn 7	Cn 8	Cn 9	Cn 10	Cn 11	Cn 12	Cn 13	Cn 14	Cn 15	Mean	Top 5%	
0000	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262	
0100	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	268	
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	261	
0300	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	262	
0400	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	271 262	
0500	46	44	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	268 217	
0600	46	40	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	273 261	
0700	265	262	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	273 267	
0800	327	324	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	273 267	
0900	554	535	0	15	1	0	1	0	0	0	0	0	0	0	1	2	56.3	266 261	
1000	1135	1105	0	19	0	0	0	0	0	0	0	0	0	0	1	4	106.3	267 261	
1100	1610	1575	0	19	0	0	0	0	0	0	0	0	0	0	1	4	161.3	267 261	
1200	1610	1520	0	21	0	0	0	0	0	0	0	0	0	0	2	2	173.3	267 261	
1300	1610	1520	0	9	0	0	0	0	0	0	0	0	0	0	2	2	173.3	267 261	
1400	231	229	0	11	0	0	0	0	0	0	0	0	0	0	0	0	231.3	267 261	
1500	321	318	0	16	0	0	0	0	0	0	0	0	0	0	2	0	326.3	266 261	
1600	355	350	0	6	0	0	0	0	0	0	0	0	0	0	0	0	353.3	267 261	
1700	355	350	0	6	0	0	0	0	0	0	0	0	0	0	0	0	353.3	267 261	
1800	140	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140.3	267 261	
1900	37	37	0	4	0	0	0	0	0	0	0	0	0	0	0	0	37.3	267 261	
2000	64	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64.3	267 261	
2100	53	53	0	3	0	0	0	0	0	0	0	0	0	0	0	0	53.3	267 261	
2200	55	52	0	1	0	0	0	0	0	0	0	0	0	0	2	0	57.3	267 261	
2300	55	52	0	1	0	0	0	0	0	0	0	0	0	0	2	0	57.3	267 261	
0001	2498	2498	3	170	4	1	0	2	0	0	0	0	0	0	0	0	2498.3	267 261	
0101	2498	2497	3	181	4	1	0	2	0	0	0	0	0	0	0	0	2497.3	267 261	
0201	2498	2495	3	184	4	1	0	2	0	0	0	0	0	0	0	12	15	2495.3	267 261

Year	Total	Male	Male %	Female	Female %	Male	Male %	Female	Female %	Male	Male %	Female	Female %	Mean	SD
1990	1	0	0.0	1	100.0	0	0.0	1	100.0	0	0.0	1	100.0	25.7	0.0
1991	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1992	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1993	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1994	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1995	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1996	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1997	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1998	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
1999	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2000	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2001	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2002	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2003	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2004	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2005	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2006	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2007	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2008	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2009	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2010	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2011	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2012	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2013	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2014	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2015	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2016	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2017	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2018	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2019	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2020	2	0	0.0	2	100.0	0	0.0	2	100.0	0	0.0	2	100.0	25.7	0.0
2021	2	0	0.0	2											

[illegible]

December 2024													
Time	Total	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
0000	0	0	0	0	0	0	0	0	0	0	0	0	267
0005	0	0	0	0	0	0	0	0	0	0	0	0	267
0010	4	0	0	1	3	0	0	0	0	0	0	0	0
0015	0	0	0	0	0	0	0	0	0	0	0	0	0
0020	0	0	0	0	0	0	0	0	0	0	0	0	0
0025	0	0	0	0	0	0	0	0	0	0	0	0	0
0030	0	0	0	0	0	0	0	0	0	0	0	0	0
0035	0	0	0	0	0	0	0	0	0	0	0	0	0
0040	0	0	0	0	0	0	0	0	0	0	0	0	0
0045	0	0	0	0	0	0	0	0	0	0	0	0	0
0050	0	0	0	0	0	0	0	0	0	0	0	0	0
0055	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	0
0105	0	0	0	0	0	0	0	0	0	0	0	0	0
0110	0	0	0	0	0	0	0	0	0	0	0	0	0
0115	0	0	0	0	0	0	0	0	0	0	0	0	0
0120	0	0	0	0	0	0	0	0	0	0	0	0	0
0125	0	0	0	0	0	0	0	0	0	0	0	0	0
0130	0	0	0	0	0	0	0	0	0	0	0	0	0
0135	0	0	0	0	0	0	0	0	0	0	0	0	0
0140	0	0	0	0	0	0	0	0	0	0	0	0	0
0145	0	0	0	0	0	0	0	0	0	0	0	0	0
0150	0	0	0	0	0	0	0	0	0	0	0	0	0
0155	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	0	0	0
0205	0	0	0	0	0	0	0	0	0	0	0	0	0
0210	0	0	0	0	0	0	0	0	0	0	0	0	0
0215	0	0	0	0	0	0	0	0	0	0	0	0	0
0220	0	0	0	0	0	0	0	0	0	0	0	0	0
0225	0	0	0	0	0	0	0	0	0	0	0	0	0
0230	0	0	0	0	0	0	0	0	0	0	0	0	0
0235	0	0	0	0	0	0	0	0	0	0	0	0	0
0240	0	0	0	0	0	0	0	0	0	0	0	0	0
0245	0	0	0	0	0	0	0	0	0	0	0	0	0
0250	0	0	0	0	0	0	0	0	0	0	0	0	0
0255	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	0	0	0
0305	0	0	0	0	0	0	0	0	0	0	0	0	0
0310	0	0	0	0	0	0	0	0	0	0	0	0	0
0315	0	0	0	0	0	0	0	0	0	0	0	0	0
0320	0	0	0	0	0	0	0	0	0	0	0	0	0
0325	0	0	0	0	0	0	0	0	0	0	0	0	0
0330	0	0	0	0									

[illegible][illegible][illegible][illegible]

Time	Total	Vbin 6	Vbin 12	Vbin 19	Vbin 25	Vbin 31	Vbin 37	Vbin 43	Vbin 50	Vbin 56	Vbin 62	Vbin 68	Vbin 75	Vbin 81	Vbin 87	Vbin 93	Mean	Vpp 85
--	12388	36	139	340A	1067I	895	20	2	0	56	62	68	75	81	87	93	26.7	28.9



SITE: ATC 1 - Jubilee Road, Finchampstead

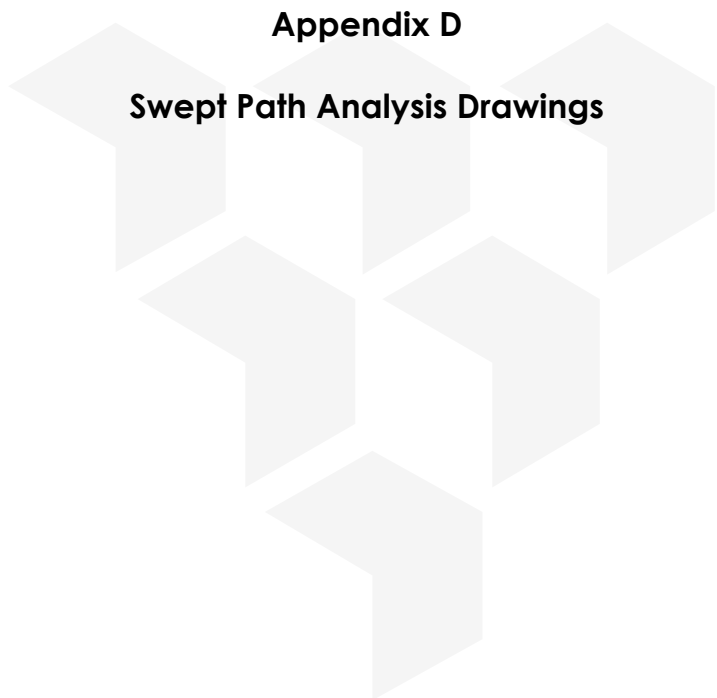
LOCATION: Attached to telegraph pole

GRID REFERENCE: 51.370477, -0.856324

DIRECTION: WESTBOUND

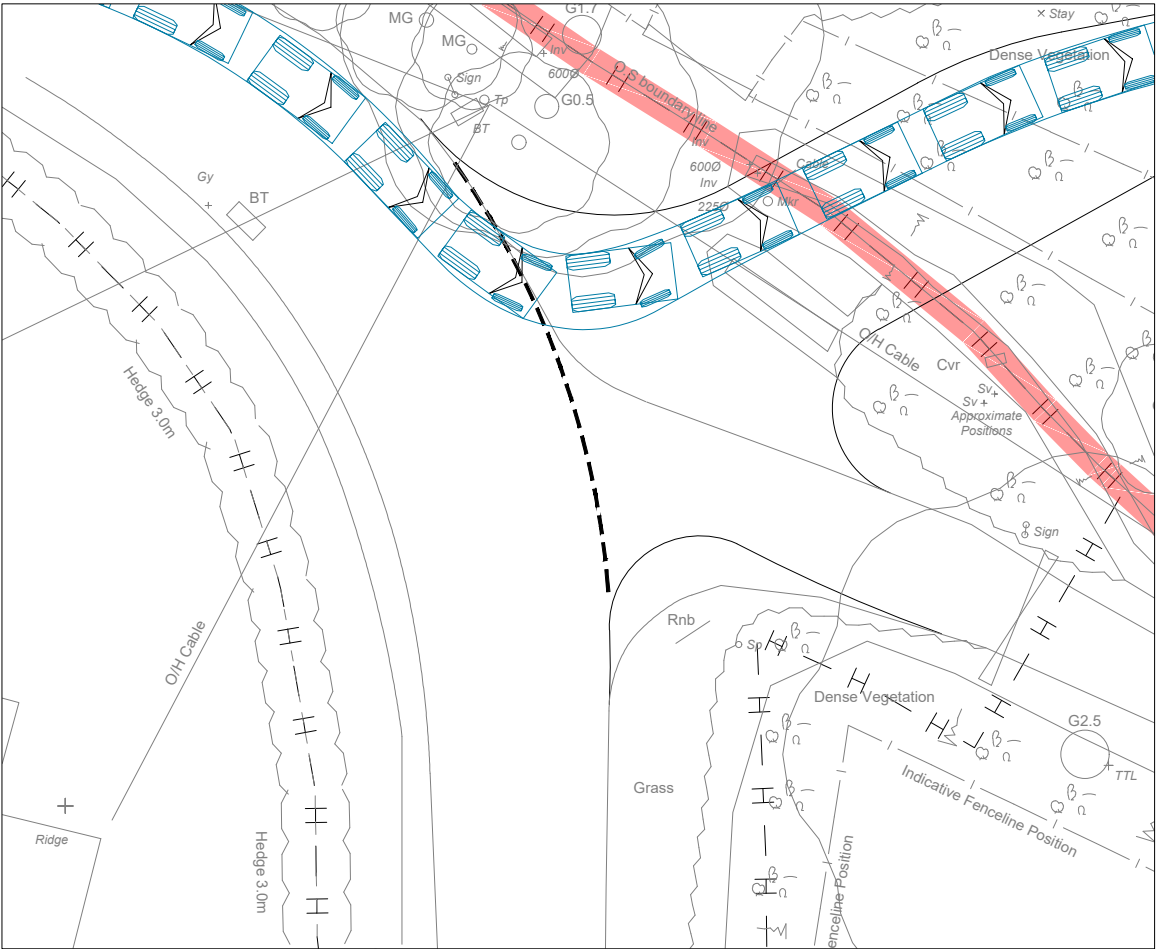
SPEED LIMIT: 40

	Tue 03-Dec	Wed 04-Dec	Thu 05-Dec	Fri 06-Dec	Sat 07-Dec	Sun 08-Dec	Mon 09-Dec	Averages 1-5.	1-7.
Hour									
0000-0100	0	3	5	10	31	57	5	4.6	15.9
0100-0200	1	3	1	2	12	30	0	1.4	7
0200-0300	2	0	4	0	2	10	1	1.4	2.7
0300-0400	1	2	0	3	3	9	0	1.2	2.6
0400-0500	0	5	2	3	3	5	2	2.4	2.9
0500-0600	17	15	18	16	1	4	9	15	11.4
0600-0700	50	60	46	48	21	5	56	52	40.9
0700-0800	263	229	193	185	49	21	197	213.4	162.4
0800-0900	296	305	285	284	90	33	298	293.6	227.3
0900-1000	73	168	158	154	101	75	157	142	126.6
1000-1100	54	128	150	139	101	137	111	116.4	117.1
1100-1200	78	138	142	134	150	105	143	127	127.1
1200-1300	111	143	145	163	122	135	143	141	137.4
1300-1400	111	133	139	146	128	108	150	135.8	130.7
1400-1500	179	146	150	170	138	125	162	161.4	152.9
1500-1600	172	221	216	251	133	147	223	216.6	194.7
1600-1700	209	199	219	191	108	143	210	205.6	182.7
1700-1800	216	233	190	226	101	60	206	214.2	176
1800-1900	136	159	158	143	99	83	162	151.6	134.3
1900-2000	89	115	91	121	91	62	98	102.8	95.3
2000-2100	47	57	66	64	43	40	51	57	52.6
2100-2200	31	38	35	53	51	33	24	36.2	37.9
2200-2300	26	35	41	55	56	10	40	39.4	37.6
2300-2400	15	10	22	39	53	8	10	19.2	22.4
Totals									
0700-1900	1898	2202	2145	2186	1320	1172	2162	2118.6	1869.3
0600-2200	2115	2472	2383	2472	1526	1312	2391	2366.6	2095.9
0600-0000	2156	2517	2446	2566	1635	1330	2441	2425.2	2155.9
0000-0000	2177	2545	2476	2600	1687	1445	2458	2451.2	2198.3
AM Peak	800 296	800 305	800 285	800 284	1100 150	1000 137	800 298		
PM Peak	1700 216	1700 233	1600 219	1500 251	1400 138	1500 147	1500 223		

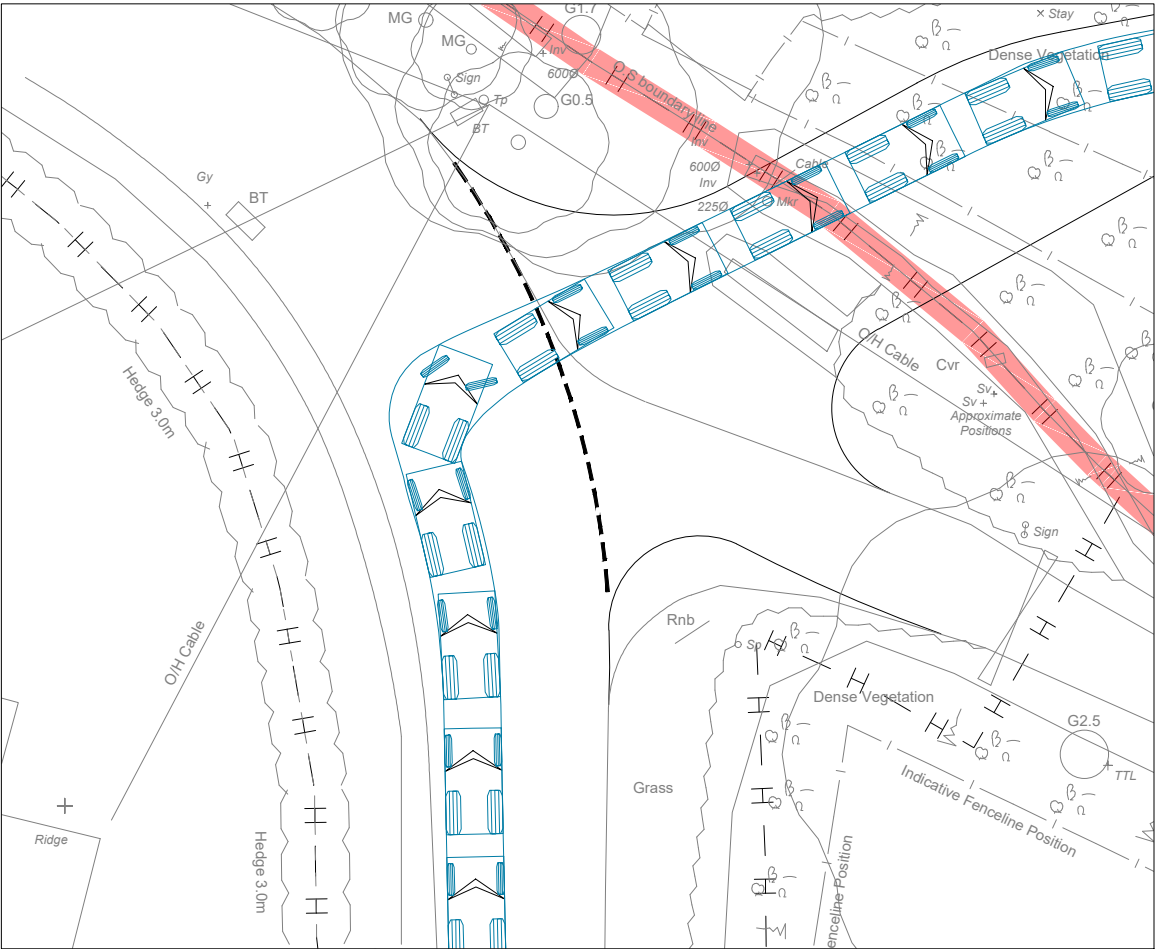


Appendix D

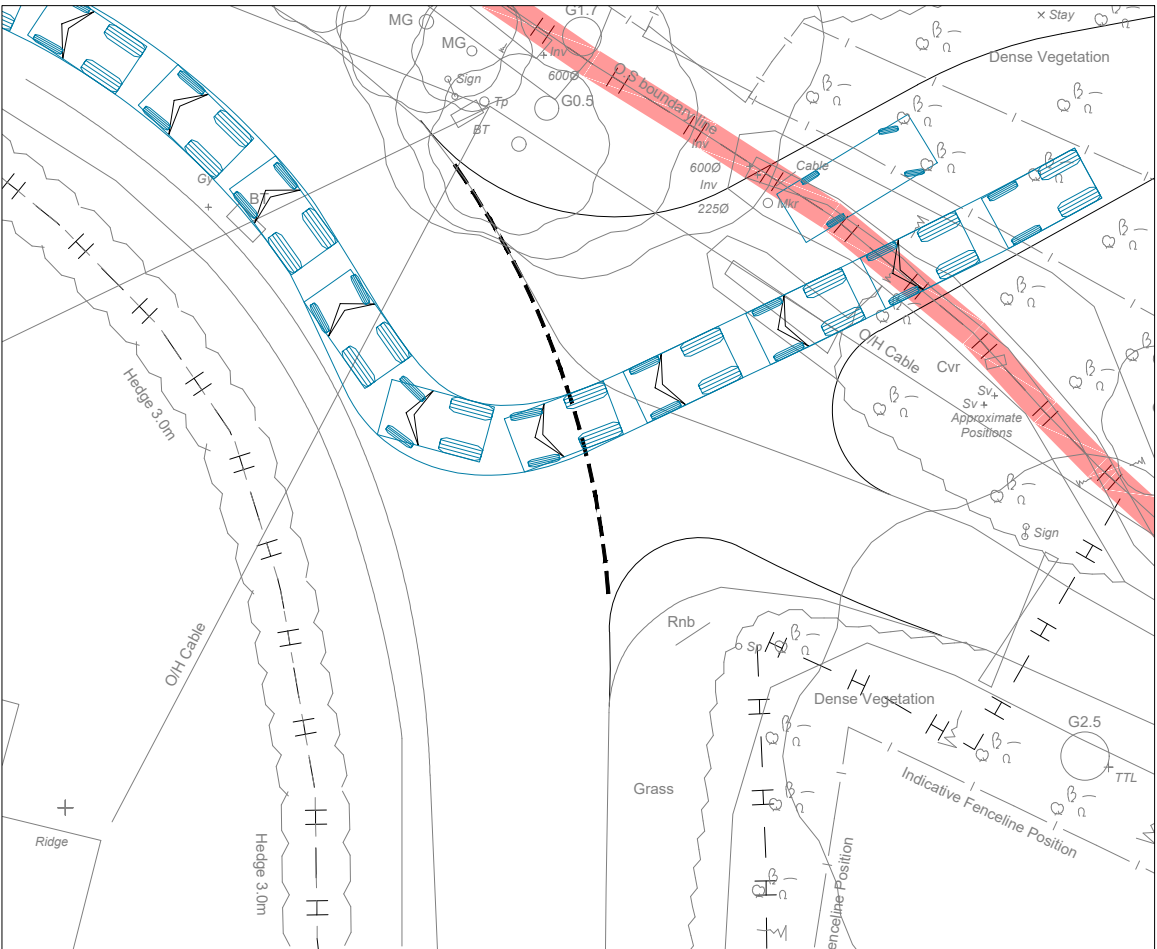
Swept Path Analysis Drawings



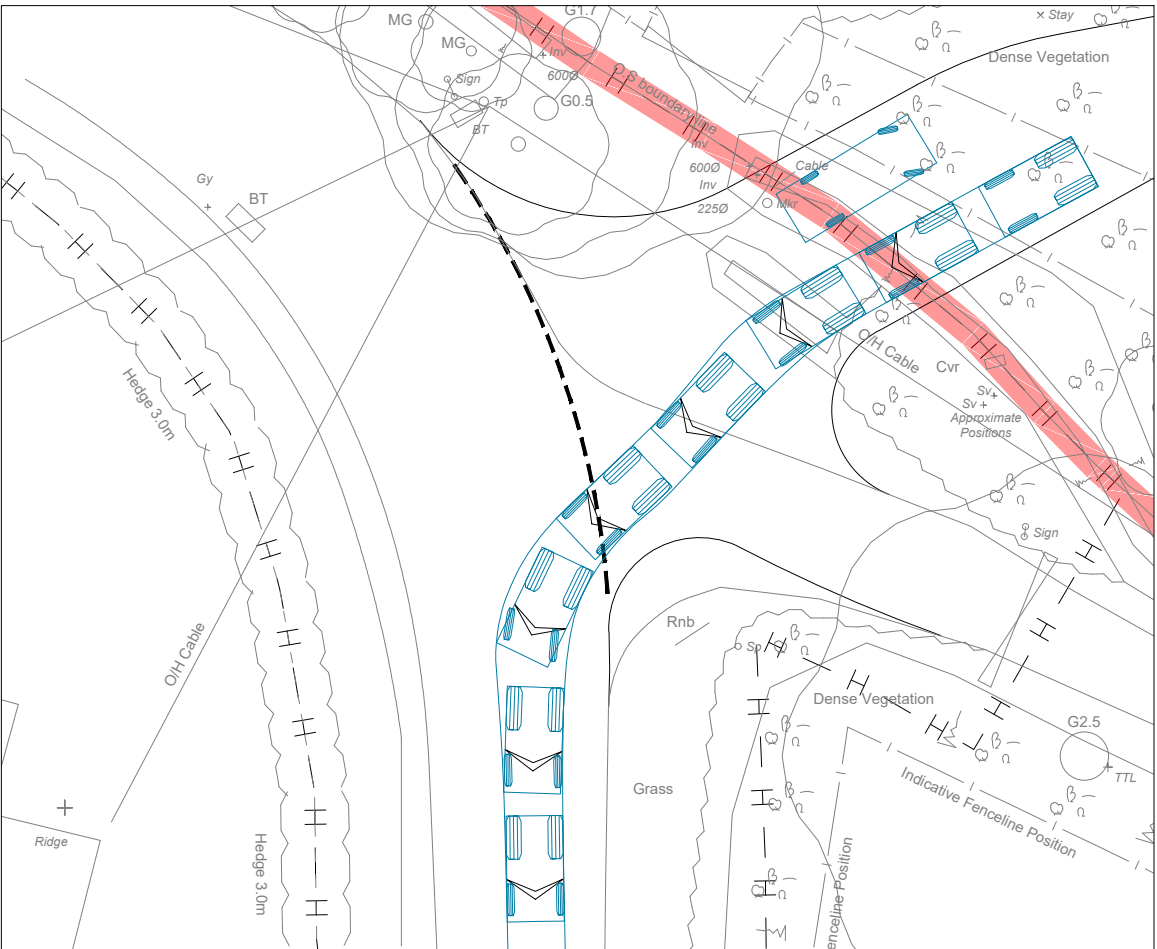
LEFT-TURN - ENTRY



RIGHT-TURN - ENTRY



LEFT-TURN - EXIT



RIGHT-TURN - EXIT

- NOTES**
1. This drawing is to be read in conjunction with all relevant documents and specifications.
 2. Dimensions are not to be scaled.
- Source:Mapmatic's drawing number 6246 001 Rev 2
AndersonOrr drawing number 23046-SKP1013-D
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KEY



John Deere 5403 tractor - forward gear



Rev.	Description	Date	By	Chkd
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- Civil Engineering

Structural Engineering

Transport Planning
- Highways Engineering

Building Surveying

Geomatics
- Hertfordshire | Oxfordshire | Cambridgeshire | Bristol

Client :
Tony and Rosaline Nasser

Project :
**Warren Crest Farm, Wick Hill Lane
Wokingham RG40 3PY**

Title :
**Swept Path Analysis
John Deere 5403 Tractor**

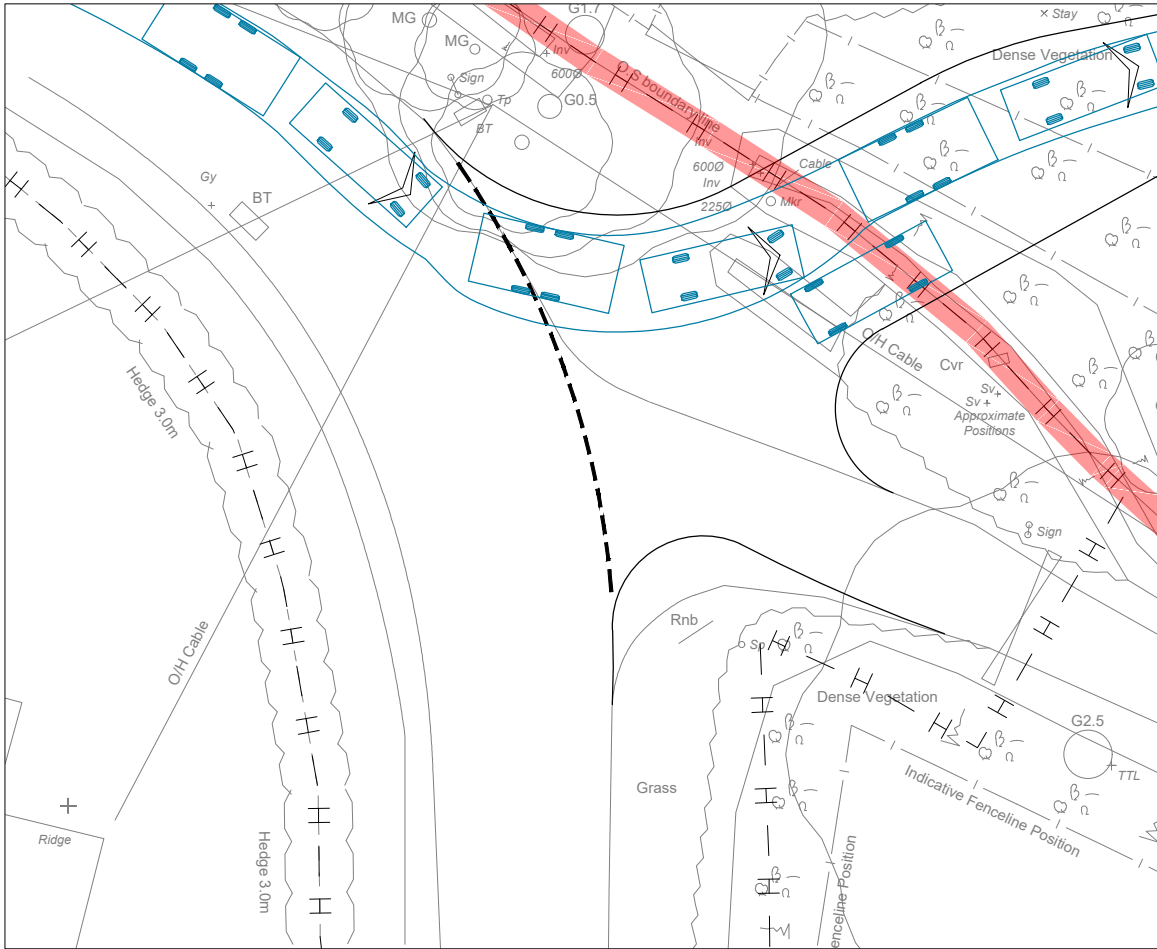
Engineer : J. Cooper Date : December 2024

Director : T. Foxall Scale : 1:250 @ A3

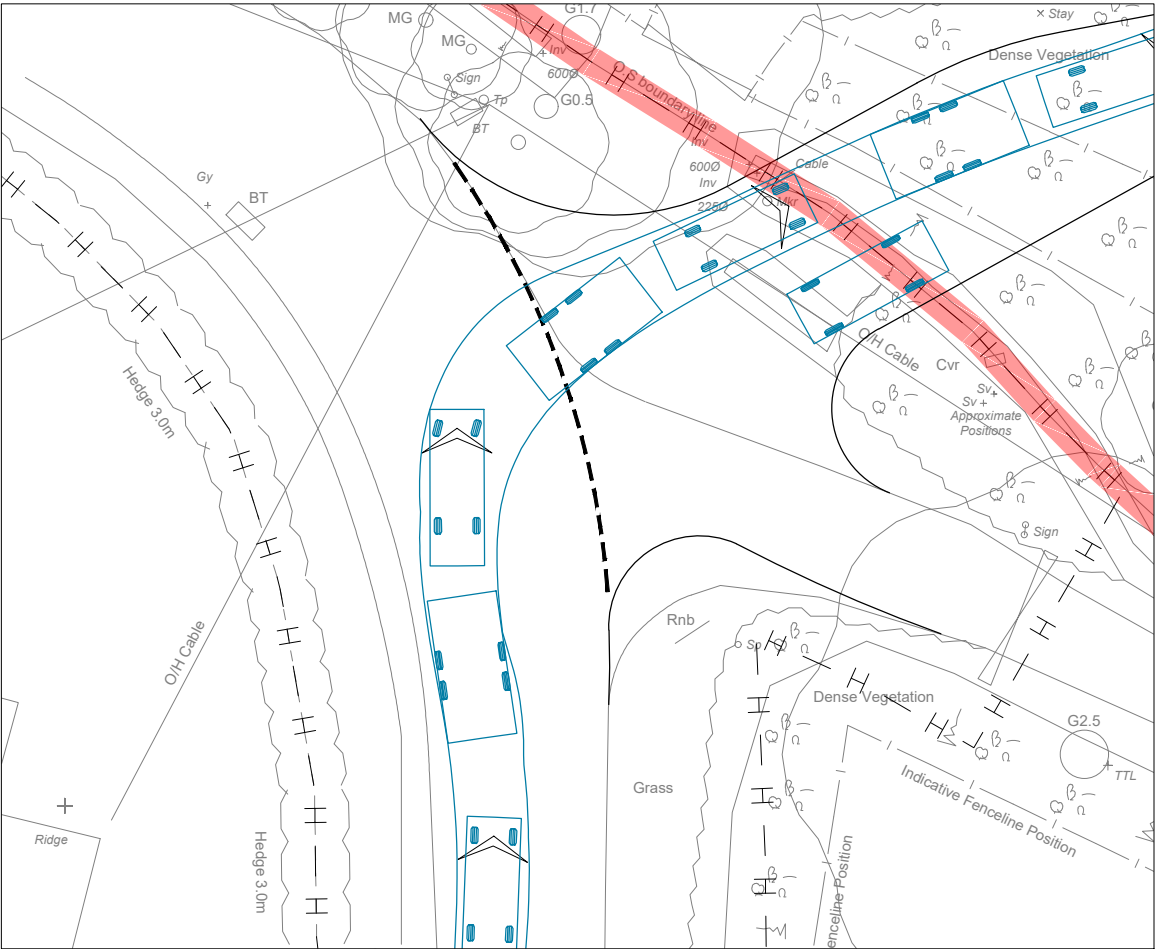
Status : PRELIMINARY

Drawing No. **8240747/6201**

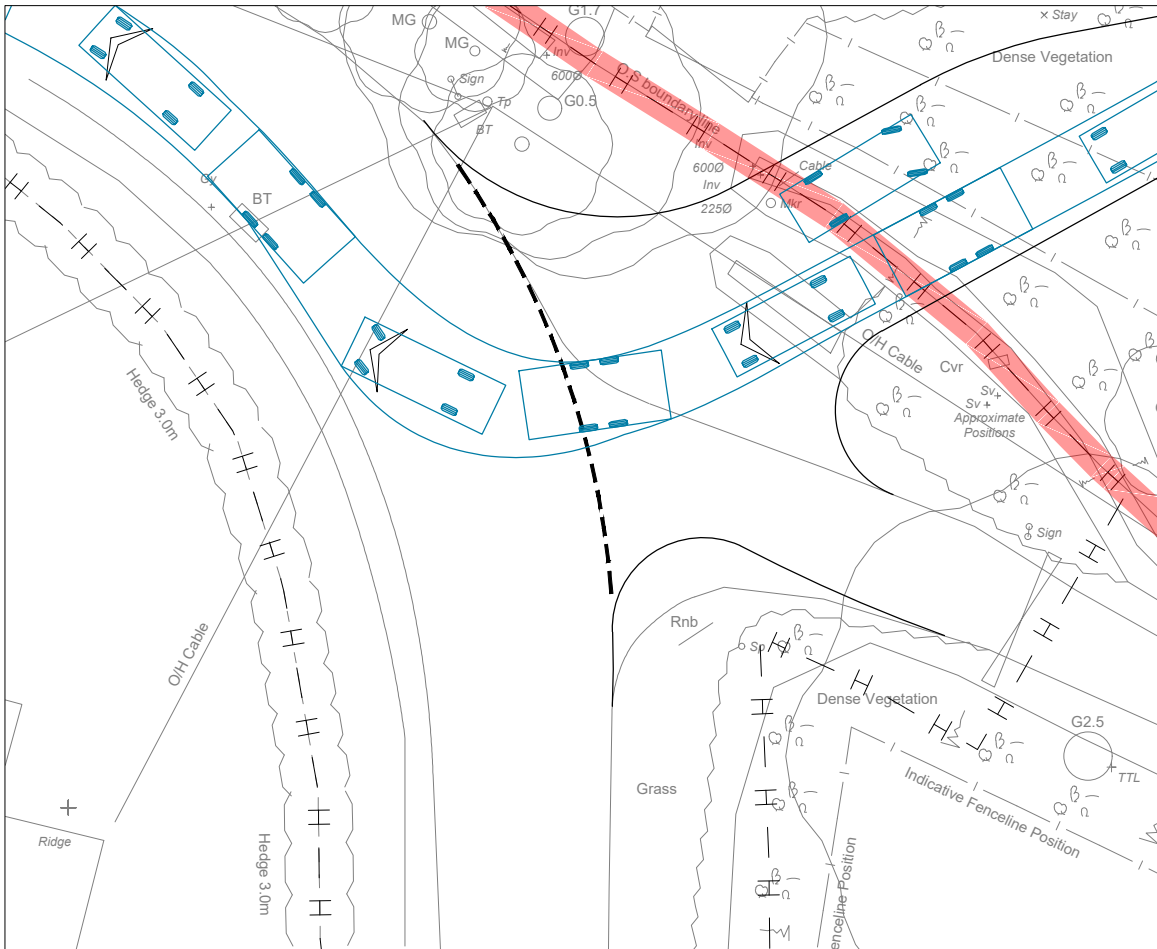
Rev



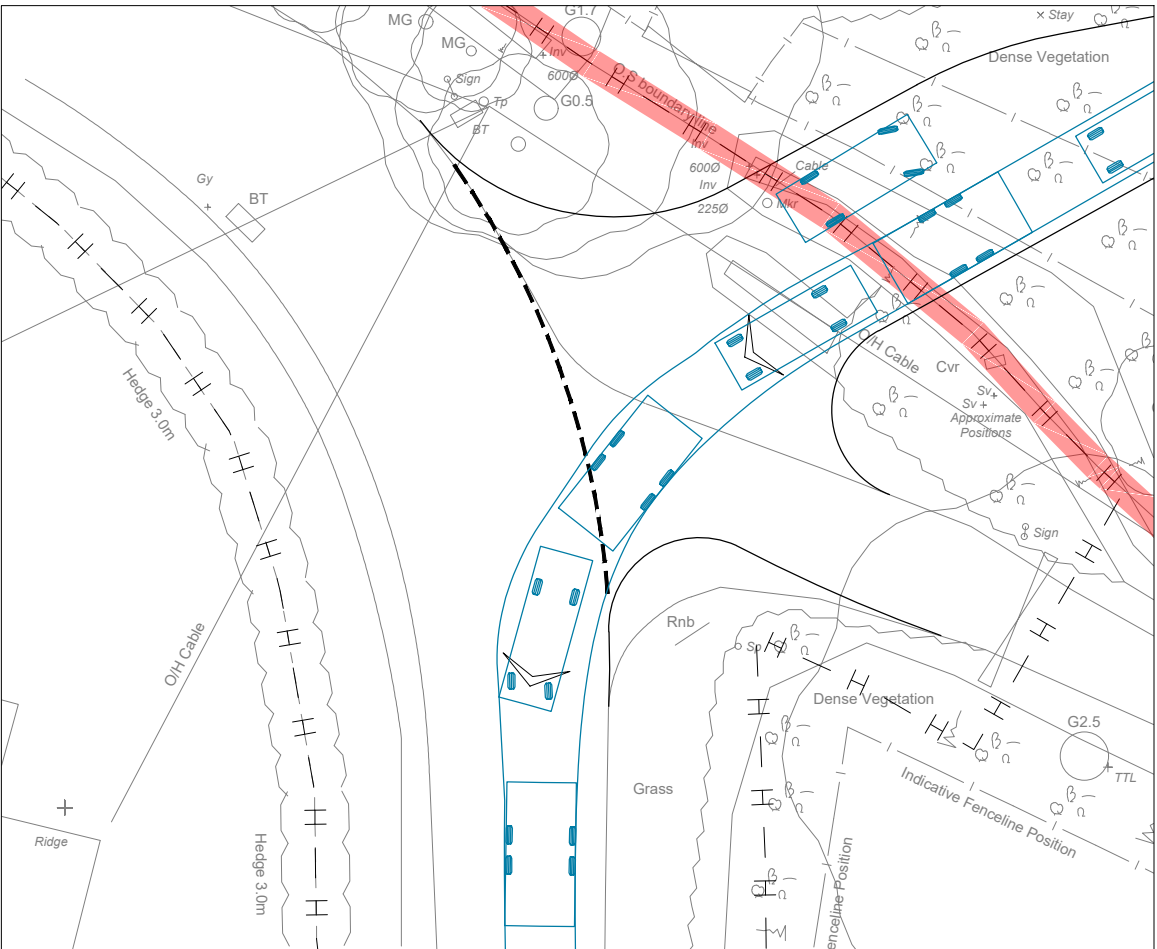
LEFT-TURN - ENTRY



RIGHT-TURN - ENTRY



LEFT-TURN - EXIT



RIGHT-TURN - EXIT

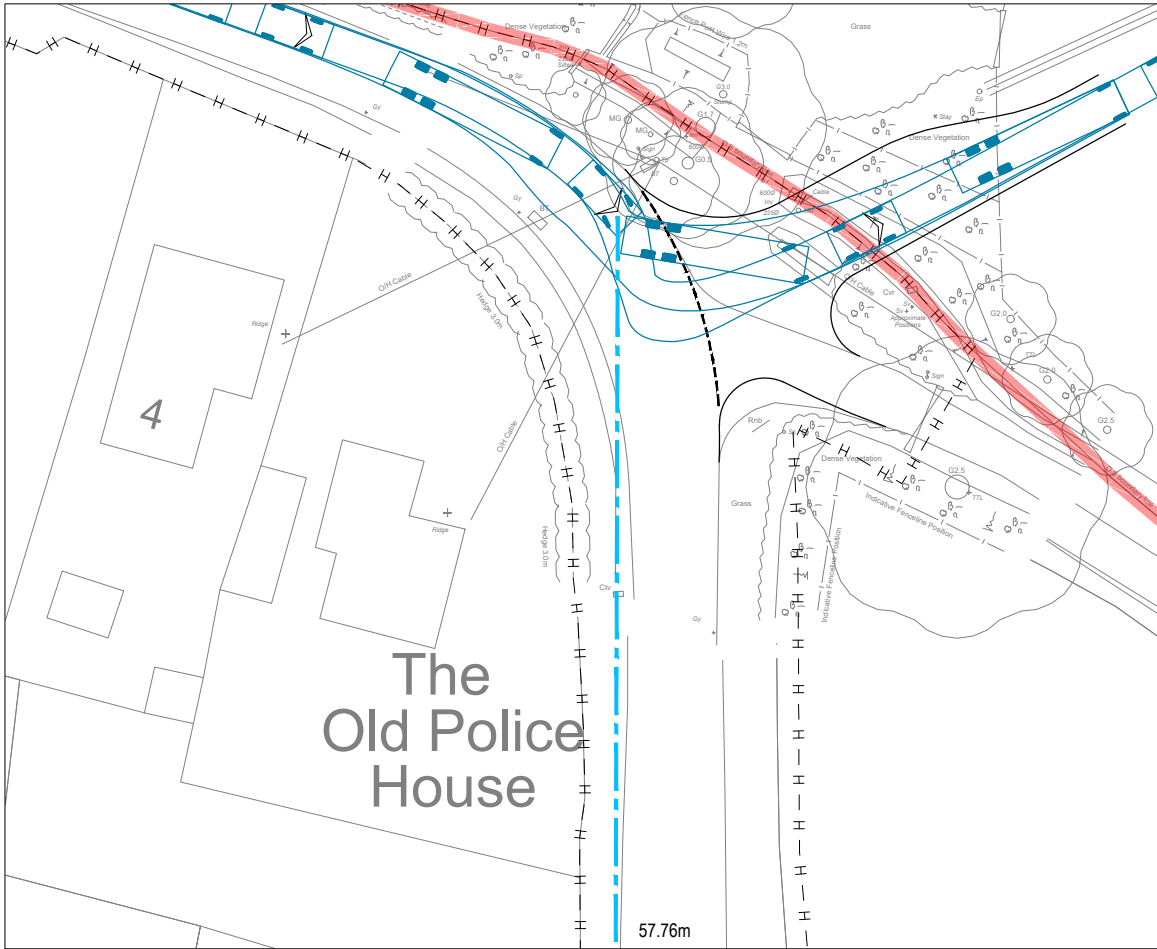
- NOTES**
1. This drawing is to be read in conjunction with all relevant documents and specifications.
 2. Dimensions are not to be scaled.
- Source: Mapmatic's drawing number 6246 001 Rev 2
AndersonOrr drawing number 23046-SKP1013-D
- © Crown copyright and database rights 2024 OS 100018363.

KEY

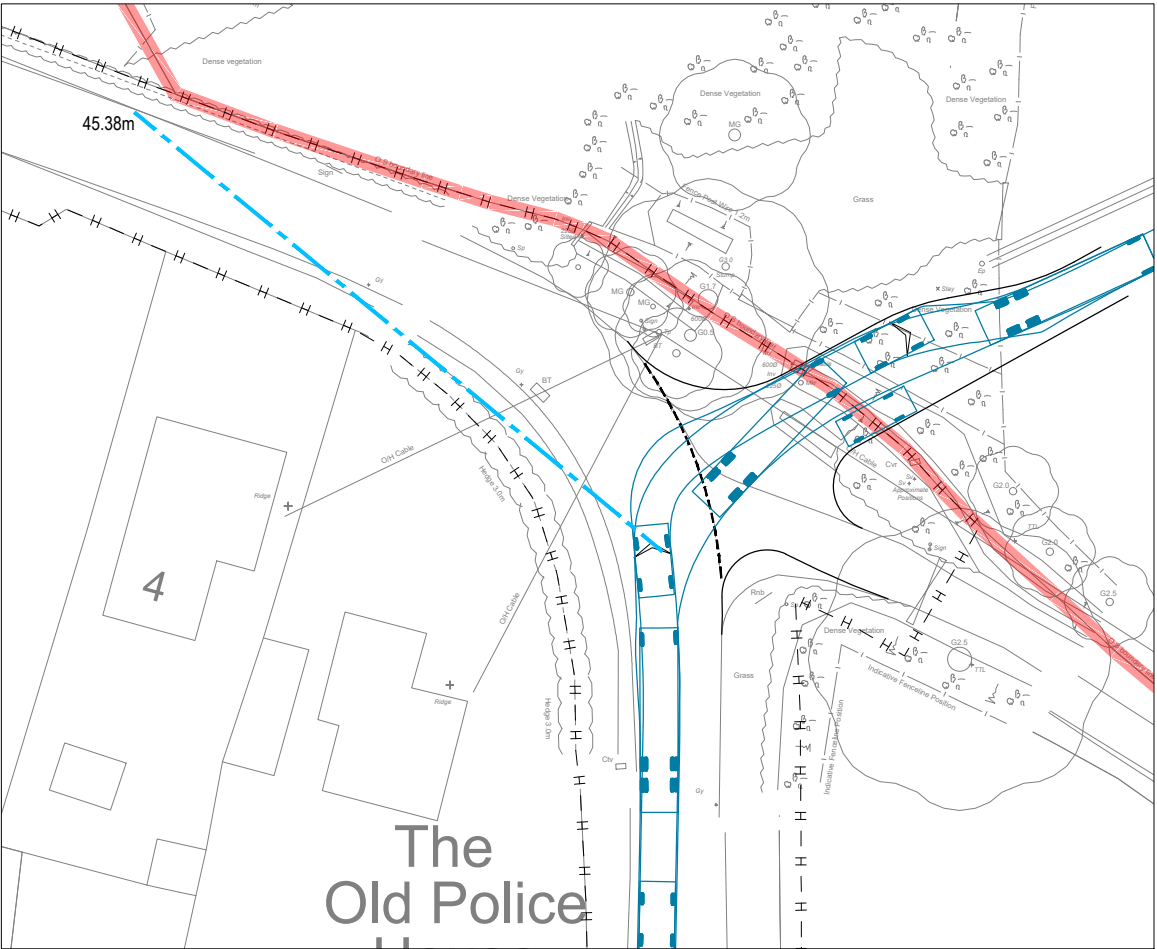
Landrover and horse box - forward gear



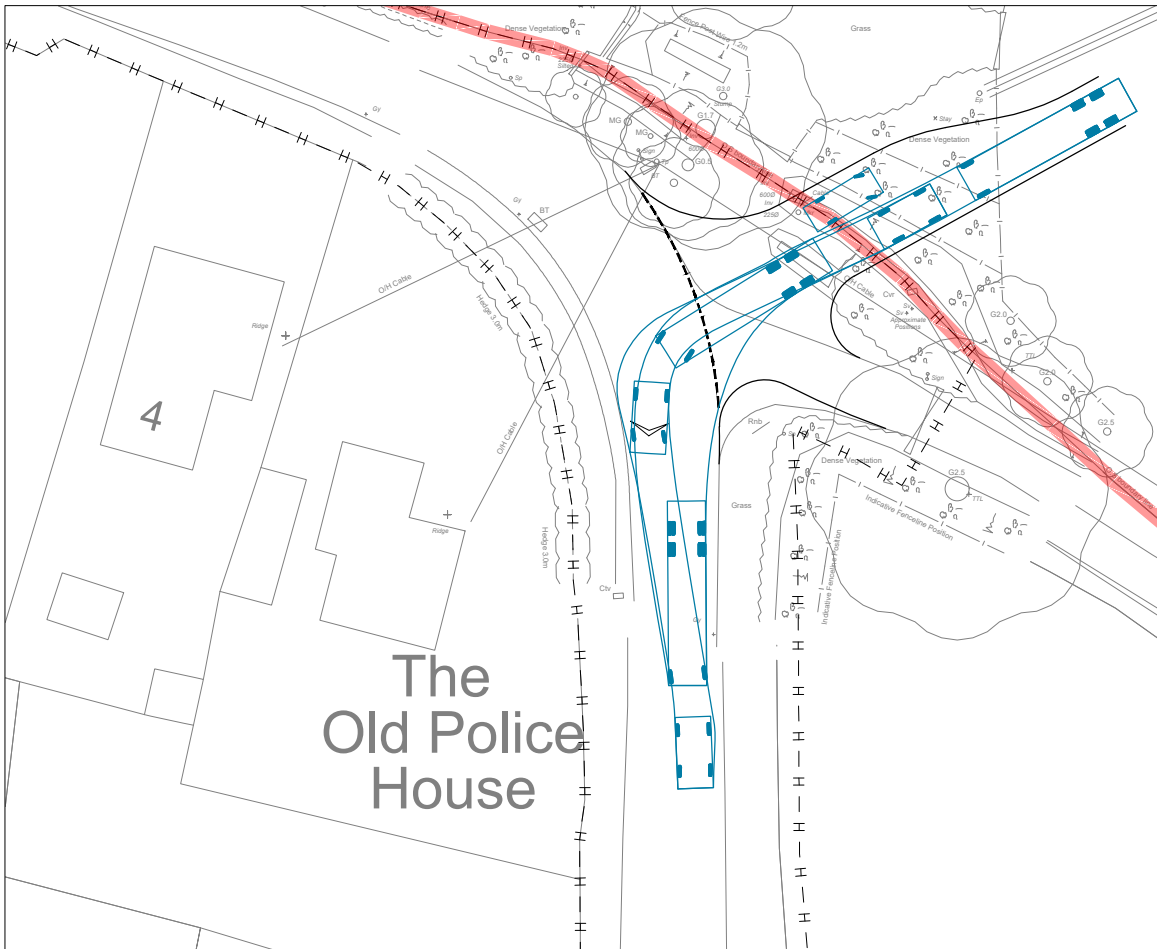
Rev.	Description	Date	By	Chkd
 Survey > Plan > Engineer				
 Civil Engineering  Structural Engineering  Transport Planning  Highways Engineering  Building Surveying  Geomatics				
Hertfordshire Oxfordshire Cambridgeshire Bristol				
Client : Tony and Rosaline Nasser				
Project : Warren Crest Farm, Wick Hill Lane Wokingham RG40 3PY				
Title : Swept Path Analysis Landrover and Horse Box				
Engineer : J. Cooper Date : December 2024				
Director : T. Foxall Scale : 1:250 @ A3				
Status : PRELIMINARY				
Drawing No. 8240747/6202				Rev



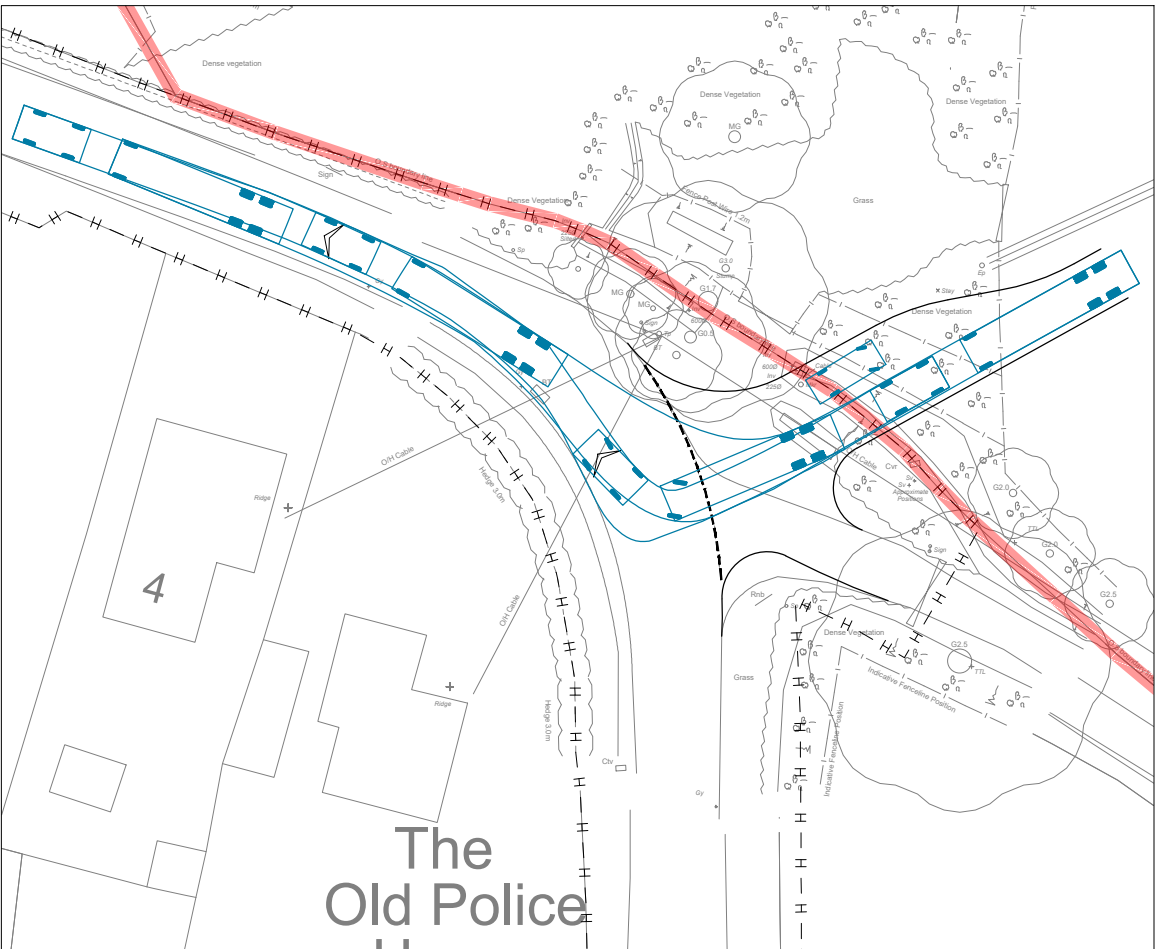
LEFT-TURN - ENTRY



RIGHT-TURN - ENTRY



LEFT-TURN - EXIT



RIGHT-TURN - EXIT

- NOTES**
1. This drawing is to be read in conjunction with all relevant documents and specifications.
 2. Dimensions are not to be scaled.
- Source:Mapmatic's drawing number 6246 001 Rev 2
AndersonOrr drawing number 23046-SKP1013-D
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KEY

Tractor and hay wagon - forward gear



Rev.	Description	Date	By	Chkd
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Glanville
Survey > Plan > Engineer

 Civil Engineering

 Structural Engineering

 Transport Planning

 Highways Engineering

 Building Surveying

 Geomatics

 Hertfordshire

 Oxfordshire

 Cambridgeshire

 Bristol

Client :
Tony and Rosaline Nasser

Project :
Warren Crest Farm, Wick Hill Lane
Wokingham RG40 3PY

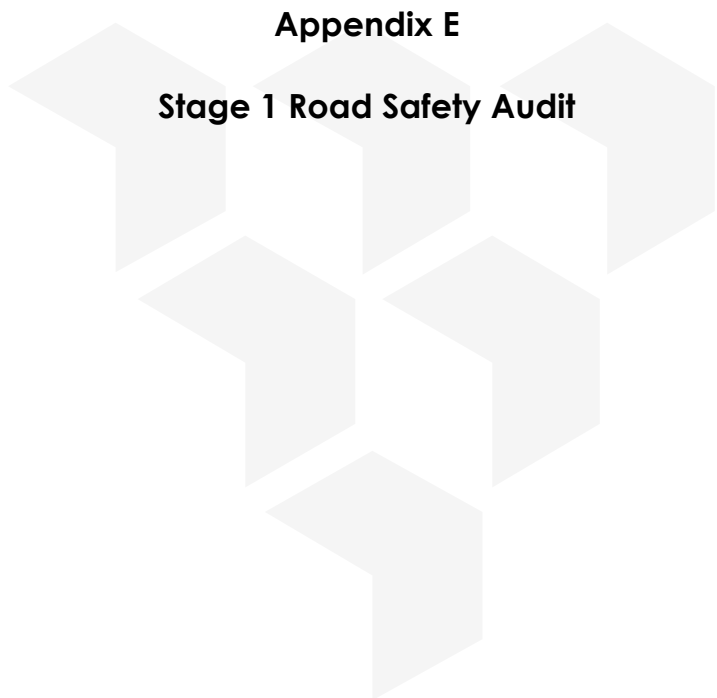
Title :
Swept Path Analysis
Tractor and Hay Wagon

Engineer : J. Cooper **Date :** December 2024

Director : T. Foxall **Scale :** 1:500 @ A3

Status : PRELIMINARY

Drawing No.	Rev
8240747/6203	



Appendix E

Stage 1 Road Safety Audit

STAGE 1 ROAD SAFETY AUDIT

Proposed Off-Site Highway Works
Jubilee Road, Finchampstead, Wokingham



Prepared for: Tony and Rosaline Nasser
Ref: 003_8240747_GT_Stage_1_RSA

Project Details

Report Title	Stage 1 Road Safety Audit
Prepared on behalf of	Wokingham Borough Council

Control

	Name	Date	Signature
Author	Graeme Turner	18 Dec 2024	
Checker	Duncan Lord	18 Dec 2024	
Authoriser	Graeme Turner	18 Dec 2024	

Report Version

RSA Report Ref	Issue No.	Date of Issue
003_8240747_GT	Issue 1 to Design Organisation, Jasmine Cooper (Glanville)	18 Dec 2024

Hertfordshire | Oxfordshire | Cambridgeshire | Bristol
postbox@glanvillegroup.com | www.glanvillegroup.com

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3.0	Items Resulting from Stage 1 Road Safety Audit	5
	Audit Team Statement	6

Appendices

No figures included



1.0 Introduction

- 1.1 This report results from an independent Stage 1 Road Safety Audit carried out on proposed off-site highway works in connection with upgrading the existing access arrangements to a farm from the B3348 Jubilee Road, Finchampstead, Wokingham. The audit was carried out at the request of Jasmine Cooper, representing the Design Organisation (Glanville) and the Client / Applicant (Tony and Rosaline Nasser) and on behalf of the Overseeing Organisation (Wokingham Borough Council).

The Audit Team membership was as follows:

Road Safety Audit Team Leader

G. Turner BEng MSoRSA
Associate, Glanville Consultants

Road Safety Audit Team Member

D Lord IEng FIHE
HE Approved RSA Certificate of Competency (2012)
Duncan Lord Road Safety Consultancy

- 1.2 The terms of reference of the Road Safety Audit are as described in GG 119 'Road Safety Audit' (Revision 2), which forms part of the Design Manual for Roads and Bridges. The Audit Team has examined and reported only on the road safety implications for users of the scheme as presented. The scheme has not been examined or verified for compliance with any other standards or criteria. However, to clearly explain a safety problem or a recommendation to resolve a safety problem, the Audit Team may on occasion refer to a design standard for information only. Any recommendations or comments made in this report should not be construed as implying that a technical audit of the scheme, as presented, has been undertaken in any respect.
- 1.3 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the safety problem identified. Recommendations are intended only to indicate a proportionate and viable means of eliminating or mitigating the safety problem identified, in accordance with GG 119 (Revision 2), and considered by the Audit Team to require action to improve the safety of the scheme and to minimise accident occurrence. The Audit Team recognises that there may be alternative methods for addressing a safety problem which may be equally acceptable in achieving the desired elimination or mitigation and thus such alternatives should also be considered when responding to this report.
- 1.4 The Audit Team has not been involved in any aspect of the scheme design and the Design Organisation has not been involved in the road safety auditing process, other than when responding to any safety concerns identified herein.
- 1.5 Although a formal Audit Brief has not been issued to the Audit Team they are, nevertheless, satisfied that adequate information has been provided to enable them to carry out a valid Road Safety Audit.

1.6 The Audit took place in December 2024 and comprised examination of the following information:

Drawings

- 8240747/6101 Site Access and Visibility Splays
- 8240747/6201 Swept Path Analysis (John Deere 5403 Tractor)
- 8240747/6202 Swept Path Analysis (Landrover and Horsebox)
- 8240747/6203 Swept Path Analysis (Tractor and Hay Wagon)

1.7 The site is located on the inside of a bend on the B3348 Jubilee Road, Finchampstead and lies approximately 4.5km to the south of Wokingham. Within the site area there is an existing informal (gated) access to land forming part of Warren Crest Farm, which itself is located off and currently gains access from Wick Hill Lane to the north-east. Additionally, within the site area there is a part-culverted watercourse and a private road which also serves as a bridleway.

1.8 The B3348 Jubilee Road is a single-carriageway with a posted speed limit of 40mph and no street lighting. In the vicinity of the site Jubilee Road lies broadly on a north-west to south alignment, with the apex of the bend being opposite the existing access and the adjacent private road / bridleway. There is a footway on one side only of the carriageway which continues west, towards and a short distance beyond, Church Lane before it switches to the opposite side of the carriageway. Approximately 30 metres to the south of the apex the same footway terminates at a private access to a residential dwelling. The existing arrangement including the approaches is shown in the following photos.



View looking north-west from private road (existing access demarcated by a concrete barrier is visible to the right of the image).



View along private road / bridleway.



View looking north towards existing access and private road / bridleway.



View looking east towards private road / bridleway.

- 1.9 It is proposed that the existing access arrangement be upgraded to accommodate entry and exit manoeuvres undertaken by agricultural vehicles. As part of this upgrade the existing informal access will be removed and a new access will be formed which will share its junction at Jubilee Road with the private road. The new access will be 6.5 metres wide initially before narrowing to 3.7 metres as it continues into the site. It is understood that the wider length is provided to accommodate passing manoeuvres, for which a swept path has been prepared. A single, dashed edge of carriageway marking will be included as part of the works.
- 1.10 Visibility splays of 57.8 metres and 45.4 metres are shown to the left and right of the proposed new access. These splays are shown for a set-back distance of 2.4 metres from the proposed edge line and from the new access. The splays are understood to be commensurate with 85th percentile vehicle speeds recorded in December 2024 via an ATC survey.
- 1.11 The road safety audit has been requested in respect of the proposed off-site highway works for the subject site only, as described above. The Audit Team has not been asked to review any other part of the development, including that which constitutes on-site work. Furthermore, the Audit Team has not been asked to review any part of that which constitutes works associated with any other development, proposed or otherwise, in the locality.
- 1.12 A site visit was undertaken by both members of the Audit Team together on 11 December 2024 between 13.30 and 14.30 hours. The weather conditions were fine and dry and carriageway and footway surfaces were largely dry as a result. Traffic flows on Jubilee Road were light and, whilst not measured by either member of the Audit Team, vehicle speeds immediately approaching and around the bend appeared to be lower than the posted speed limit. This is consistent with the results of the ATC survey.
- 1.13 The Audit Team is not aware, nor has it been notified, of any requirements for a Departure from Standard, pending or otherwise, or Relaxation of Standards applied in connection with the proposed highway works.
- 1.14 No details have been provided for the Audit Team to review in respect of levels, drainage (including gully provision and location), surfacing materials, landscaping, traffic signs (beyond that already indicated and including roads studs and removal of existing signs where applicable), vehicle restraint systems and street lighting. It is recommended that these are reviewed as part of a Stage 2 Road Safety Audit to be conducted following completion of the detailed design proposals.

2.0 Items Raised at Previous Road Safety Audit

- 2.1 The Audit Team is not aware that any previous Road Safety Audits have been carried out on these, or similar, proposals.



3.0 Items Resulting from Stage 1 Road Safety Audit

- 3.1 Following a review of the proposals in context, the Audit Team concluded that the proposed highway works did not give rise to any significant safety concerns sufficient to warrant further investigation or mitigation.



Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG 119 (Revision 2).

Road Safety Audit Team Leader

G Turner BEng MSoRSA
Associate
Glanville Consultants

Signed

Date:18 Dec 2024.....

Road Safety Audit Team Member

D Lord IEng FIHE
Duncan Lord Road Safety Consultancy

Signed:

Date:18 Dec 2024.....

Hertfordshire

|

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