



SOUTH WOKINGHAM SDL EXTENSION

UPDATED TRAFFIC MODELLING - PRELIMINARY RESULTS

LIGHTWOOD STRATEGIC & NICHOLAS KING HOMES

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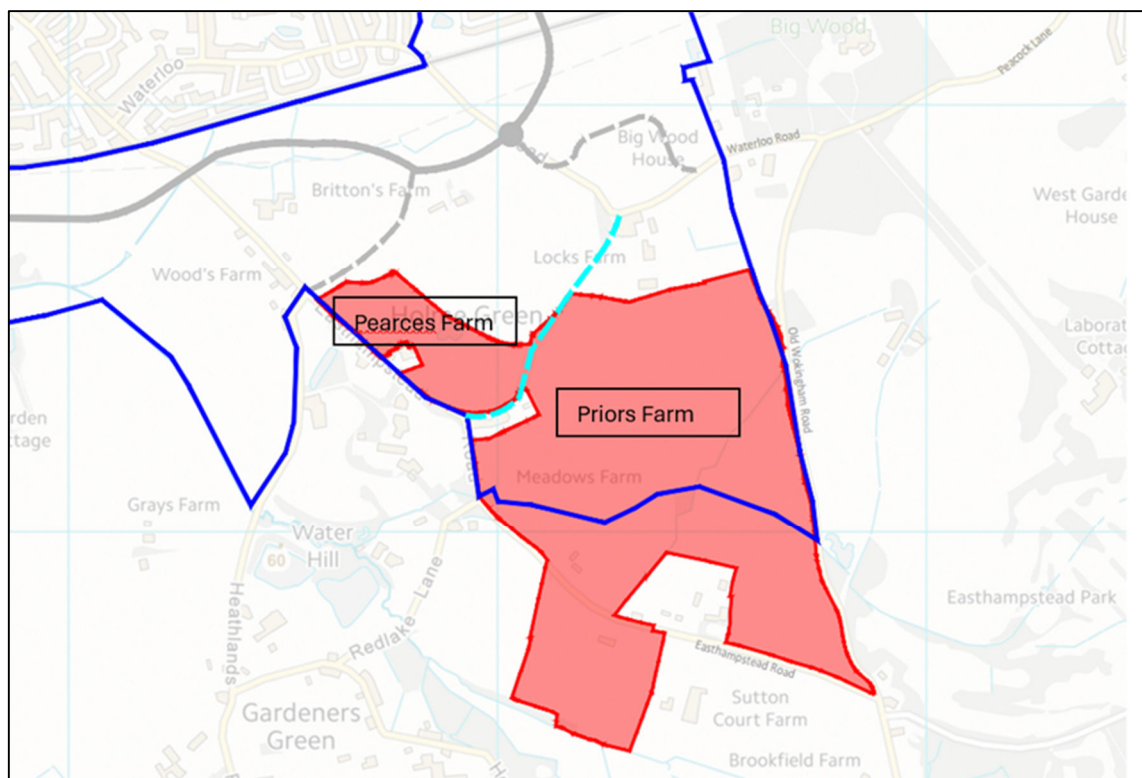
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1.0 Introduction

1.1 Context

- 1.1.1 This Technical Report has been prepared by Abley Letchford on behalf of Lightwood Strategic and Nicholas King Homes in respect of the proposals for up to 1,030 dwellings on land at the South Wokingham SDL Extension which is located within Wokingham Borough Council.
- 1.1.2 A planning application seeking outline permission for up to 850 dwellings on land within the eastern area of the SDL Extension was submitted by Lightwood Strategic in 2024 (WBC Ref : 241933). Similarly, a planning application for up to 180 dwellings with the north-western area of the site was submitted by Nicholas Kings Homes in 2024 (WBC Ref : 242279).
- 1.1.3 The locations of the development parcels are identified on **Figure 1.1** below.

Figure 1.1 : Site Location



1.2 Access Arrangements

- 1.2.1 Primary access into the Lightwood Strategic Parcel is to be provided via a new roundabout formed on the Old Wokingham Road corridor which routes along the eastern frontage. Secondary access is to be via a priority junction onto the Easthampstead Road corridor which routes to the west.



1.2.2 The Nicholas King Parcel is to be accessed via a priority junction onto Easthampstead Road in the north-western area of the site. Of note is that land is being retained and safeguarded as part of the proposals to enable delivery of an additional access to the development parcel from the 'Heathlands Link' road which forms part of the highway infrastructure being delivered as part of the previously consented South Wokingham SDL.

1.2.3 A Primary Street is being provided within the site which routes through both of the parcels, thereby providing a continuous route through the development between accesses on the Old Wokingham Road and Easthampstead Road corridors. This in turn facilitates provision for a point closure on Easthampstead Road along the southern frontage to the east of Redlake Lane.

1.3 Traffic Modelling (2038 Scenarios)

1.3.1 The Transport Assessment Reports prepared for both the Lightwood Strategic and Nicholas King planning applications were informed from the results of traffic modelling undertaken in 2023 using the Wokingham Borough Council Strategic Transport Model (WSTM). The modelling was undertaken based on an agreed scope which identified the assessment years, testing scenarios and geographical scope of assessments to be undertaken. Notably, the capacity analysis presented within the Transport Assessment Reports was based on 2038 "With Development" flows which allowed for the impacts of the combined parcels (1,050 units) to be appraised on a cumulative basis in conjunction with other planned growth within the area.

1.3.2 The results of the capacity analysis demonstrated that the proposed site access junctions would operate within capacity with minimal queuing along the approaches during both peak hours. It was concluded therefore that the proposed access arrangements can satisfactorily accommodate the traffic generated by the proposed developments.

1.3.3 The capacity analysis for the nearby junctions on the highway network demonstrated that the proposed development traffic would have some effect on queuing levels, but typically at junctions already anticipated to experience capacity constraint in the future year baseline scenario. Notably, traffic arising from the proposed developments would not compromise the effectiveness of the mitigation schemes being promoted as part of the South Wokingham SDL development. Notwithstanding, improvement schemes were identified at the following locations which lie to the east of the site within Bracknell Forest Council.

- Old Wokingham Road / Peacock Lane / Waterloo Road roundabout
- Jennetts Park Roundabout
- Peacock Lane / Sparrowhawk Lane roundabout

1.4 Updated Traffic Modelling (2040 Scenarios)

1.4.1 Since the submission of the planning applications, Wokingham Borough Council has updated its Strategic Traffic Model to help inform its Local Plan Update which is currently at Examination in Public stage. The updated WSTM model contains refined estimations of future year growth and committed development as well as being based on a 2040 future design year which aligns with the Local Plan period.



- 1.4.2 Use has been made of the updated WSTM to undertake revised modelling for the South Wokingham SDL extension, including undertaking a number of sensitivity tests that seek to identify the effects of varying access arrangements at the development.
- 1.4.3 It should be noted that the results of the updated modelling have only been issued in 'Preliminary' format. The outputs provided depict link flows along the network during the 2040 AM and PM peak hours. Ancillary outputs, such as effects on junction delay, turning movements and select link analysis have not yet been issued by Wokingham Borough Council.
- **Section 2** of This Technical Report summarises the key parameters of the updated modelling scenarios that have been tested.
 - **Section 3** then appraises the updated peak hour flows along neighbouring highway links and junctions to identify the extent of change from the flows that were used to inform the Transport Assessment Reports which were submitted alongside the Lightwood Strategic and Nicholas King planning applications.
 - **Section 4** and **Section 5** of this Technical Report then present the findings of the Sensitivity Tests to establish the extent to which specific access arrangements influence traffic flow patterns along the wider network.



2.0 Updated Modelling (2040 Scenarios)

2.1 Introduction

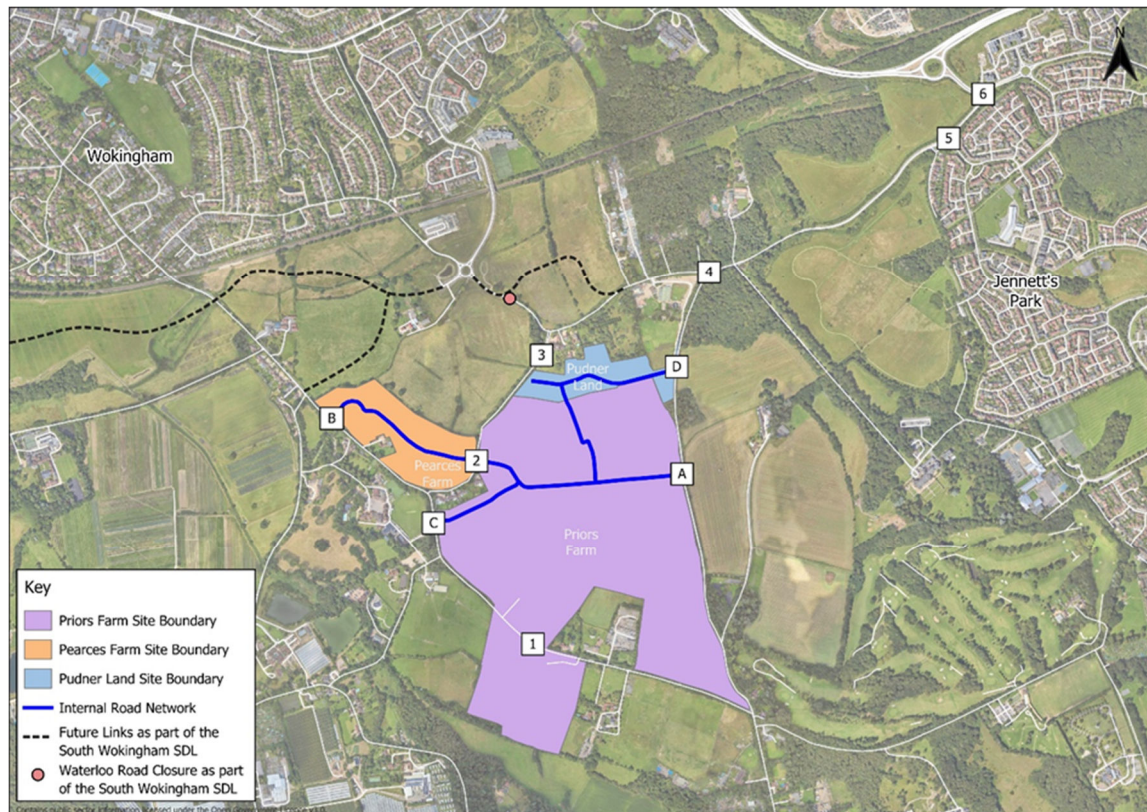
- 2.1.1 Following discussions with Wokingham Borough Council, it was agreed to undertake updated traffic modelling using the updated WSTM model based on a 2040 future year.
- 2.1.2 A Technical Note (A218-R042/E) dated 25th September 2025 was produced by Abley Letchford which established the modelling parameters for the agreed testing scenarios. For ease of reference, these are summarised in turn below.

2.2 Scenario A : 2040 Forecast Baseline

- 2.2.1 The 2040 'Forecast Base' scenario has been formed by using the latest WSTM4 model which includes all development growth being promoted within the Local Plan Update as well as the associated highway infrastructure.
- 2.2.2 The model run presents the future year situation without the South Wokingham SDL Extension. Accordingly, the traffic flows associated with the South Wokingham SDL Extension are not included in the model; nor are the proposed access junctions and off-site mitigation works which include the proposed point closure along the Easthampstead Rad corridor.
- 2.2.3 The link flow outputs from the 2040 Forecast Base model run are presented within **Appendix A** of this Technical Report.

2.3 Scenario B: 2040 With Full Development

- 2.3.1 This 'With Full Development' Scenario replicates the 2040 Forecast Base scenario, albeit it includes the traffic arising from the South Wokingham SDL Extension Allocation (1,030 units) and at the Pudner Land (95 units) as well as the proposed access arrangements and the off-site mitigation package.
- 2.3.2 For ease of reference, the proposed vehicle access arrangements and off-site mitigation measures associated with this scenario are depicted diagrammatically on **Figure 2.1** below. Items A to D of the Mitigation Package relate to the access junctions and internal infrastructure within the site. The remaining elements, which comprise off-site highway works, are summarised below:
 - 1. Point Road Closure along Easthampstead Road.
 - 2. Byway 30 – Primary Street Junction with Byway.
 - 3. Byway 30 - Active travel improvements to Byway 30 and proposed lighting bollards.
 - 4. Approved Peacock Lane / Old Wokingham Road / Waterloo Road Roundabout – As per the arrangements for the junction as modelled in the Forecast Base but with minor changes to the Old Wokingham Road approach arm entry.
 - 5. Peacock Lane / Sparrowhawk Way Roundabout – Extension of the flare lane length on the northern and southern arms.
 - 6. Peacock Lane / Vigar Way Roundabout – Extension of the flare lane length on the southern arm and an additional lane along the northbound side of Vigar Way.



2.3.3 The link flow outputs from the 2040 'With Development' model run are presented within **Appendix B** of this Technical Report.

2.4 Scenario C: 2040 Sensitivity Test (Additional Heathlands Link Access and Area X Works)

2.4.1 At Wokingham Borough Council's request, a sensitivity test has been created based on the 2040 'With Development' scenario, albeit with the following refinements:

- Inclusion of the access onto the Heathlands Link that is being safeguarded within the Nicholas King planning application. For the avoidance of doubt, this has been allowed for in addition to the access which is being promoted onto the Easthampstead Road corridor.
- Allowance for an alternative arrangement for a cycle link along Waterloo Road which in turn would allow any priority working arrangements at the eastern end of Waterloo Road to be removed.

2.4.2 The link flow outputs from the 2040 Scenario C Sensitivity Test model run are presented within **Appendix C** of this Technical Report.

2.5 Scenario D: 2040 Sensitivity Test (Additional Heathlands Link Access and Area X Works)

2.5.1 A second sensitivity test has been created based on the 2040 'With Development' scenario, albeit with the following refinements:

- Removal of the proposed point closure along Easthampstead Road and, as a consequence, introduction of signal control at the Old Wokingham Raod / Easthampstead Road junction.



- Allowance for an alternative arrangement for a cycle link along Waterloo Road which in turn would allow any priority working arrangements at the eastern end of Waterloo Road to be removed.

2.5.2 The link flow outputs from the 2040 Scenario D Sensitivity Test model run are presented within **Appendix D** of this Technical Report.



3.0 Comparison with Previous Model Outputs

3.1 Two Way Link Flow Appraisal

3.1.1 The previous WSTM model outputs which informed the 2024 Transport Assessment Reports are summarised in Table 3.1 (the original data is attached as **Appendix E**). Table 3.1 also shows how flows along the surrounding highway network have changed as a result of the updated 2040 WSTM 'With Development' scenario (Run B).

Table 3.1 : Effect on Two Way Link Flows – Updated 2040 With Development Scenario

Link No	Highway Link	AM Peak Hour		PM Peak Hour	
		With Dev Flows used in TAs	Updated With Dev Flows (Run B)	With Dev Flows used in TAs	Updated With Dev Flows (Run B)
1	A329 to the west of London Road	3,949	-1,383	3,581	-1,135
2	London Road (east)	2,952	-383	3,137	-540
3	A239 west of Jennett's Park Roundabout	6,193	+474	5,555	+612
4	A239 east of Jennett's Park Roundabout	4,606	-887	3,628	+70
5	Vigar Way	1,723	+1,168	3,052	-236
6	Peacock Lane (east)	1,143	+822	641	+254
7	Peacock Lane east of Vigar Way	1,163	+432	509	+252
8	Peacock Lane west of Vigar Way	2,706	-626	3,333	-354
9	Old Wokingham Rd south of Peacock Lane	2,626	-388	2,366	-205
10	Waterloo Road west of Old Wokingham Rd	1,383	-612	1,477	-582
11	New Waterloo Road Link (R10 Link Rd)	1,388	-565	1,477	-558
12	SWDR north of Waterloo Road	1,779	-542	1,479	-429
13	SWDR west of Heathlands Link	1,871	-463	1,518	-222
14	SWDR Link Road (South)	961	-111	892	-108
15	Internal Spine Road	436	-95	399	-74
16	Old Wokingham Road south of Site Access A	2,560	-545	2,255	-278
17	Easthampstead Road east	0	+0	0	+0
18	Old Wokingham Rd north of Nine Mile Ride	2,575	-509	2,278	-210
19	Nine Mile Road East	1,599	-474	1,490	-442
20	Old Wokingham Rd south of Nine Mile Ride	1,528	-340	1,654	-137
21	Nine Mile Ride west	1,510	-319	1,428	-114
22	Easthampstead Road west of Site Access C	242	+1	258	-21
23	Heathlands Road	646	-7	743	-128
24	Easthampstead Rd west of Heathlands Link	34	+17	37	+13



- 3.1.2 For ease of references, a sketch depicting the location of each of the Highway Links is attached as **Appendix F**.
- 3.1.3 As can be seen, there are a small number of links where the magnitude of flow in the updated modelling is comparable to the outputs used to inform the 2024 Transport Assessment reports. These are in the area immediately to the north-west of the site in the vicinity of the access junction for the Nicolas King Parcel (eg Easthampstead Road, Heathlands Road).
- 3.1.4 It is however very evident that, in the majority of cases, two-ways flows along the surrounding network are lower within the updated traffic modelling when compared to the data used to inform the Transport Assessment Reports. Notably, the reduction in flow is evident across both of the peak hours, albeit is more pronounced in the AM peak.
- 3.1.5 The reductions in flow include areas of the network such as along the Old Wokingham Road corridor at the site frontage and also to the south where the corridor meets with Nine Mile Ride. Similarly, the updated modelling is exhibiting lower flows along the R10 Link and Waterloo corridors as well as along Peacock Lane to the west of Jennetts Park.
- 3.1.6 Conversely, the updated modelling is predicting a different pattern of traffic in the area of Jennett's Park where flows are higher when compared to the previous modelling. Again, this change is more pronounced in the AM peak albeit increases of a lower magnitude are evident in the PM peak. The redistribution effect in this area appears to be as a result of traffic moving across to the Peacock Lane corridor (east of the Vigar Way junction) through Jennett's Park instead of utilising the A327 Berkshire Way and London Road corridors to travel to / from areas both within Bracknell and then to cut the corner on routes via the A3095 and A322 to/from the M3.
- 3.1.7 It is likely that traffic is redistributing within the updated model as a result of capacity constraints that are experienced along the A329 corridor, particularly at the Coppid Beech and Jennetts Park Junctions. The Infrastructure Delivery Plan (IDP) that accompanies the Wokingham Local Plan Update includes allowance for significant improvements at these locations, although at this stage it is unclear whether the benefits of the planned improvements are being represented within the updated modelling.
- 3.1.8 In summary, the updated traffic modelling demonstrates generally lower two-way flows across most of the network surrounding SS12 compared to the figures used in the previous Transport Assessments, with the reductions particularly notable during the AM peak period. However, some areas not relating to the SDL Extension development directly, such as Jennett's Park, show increased flows, indicating a shift in traffic patterns likely due to capacity constraints on the A329 corridor. This redistribution suggests that planned infrastructure improvements, as outlined in the Infrastructure Delivery Plan, may not yet be fully reflected in the current modelling outputs.
- 3.2 Junction Flow Appraisal**
- 3.2.1 A similar exercise has been undertaken to ascertain how the total approach flows at the junctions along the surrounding network have changed as a result of the updated 2040 'With Development' scenario (Run B). The results of this review are presented in Table 3.2 below.



Table 3.2 : Effect on Total Approach at Junctions – Updated 2040 With Development Scenario

Junction	AM Peak Hour		PM Peak Hour	
	With Dev Flows used in TAs	Updated With Dev Flows (Run B)	With Dev Flows used in TAs	Updated With Dev Flows (Run B)
London Road / A329 Roundabout	5,873	-1,180	5,302	-857
A329 Jennett's Park Roundabout	6,261	+434	6,115	+225
Vigar Way / Peacock Lane Roundabout	2,816	+467	3,459	-181
Peacock Lane / Sparrowhawk Way Roundabout	2,813	-599	3,454	-311
Waterloo Road / Old Wokingham Rd Junction	3,272	-762	3,195	-491
Old Wokingham Road / Pudner Access	2,641	-397	2,377	-210
Old Wokingham Road / Site Access (A) Roundabout	2,906	-493	2,619	-313
Old Wokingham Road / Easthampstead Rd Junction	2,560	-545	2,237	-287
Old Wokingham Road / Nine Mile Ride Junction	3,607	-822	3,425	-452
Easthampstead Rd/ Redlake Junction	294	-94	332	-133
Easthampstead Rd / Site Access (C) Junction	383	-43	406	-66
Easthampstead Rd / Heathlands Rd / Heathlands Link Junction	792	+37	904	-41
SWDR / Heathlands Link Roundabout	2,242	-455	2,041	-354
Waterloo Road / William Heelas Way / SWDR Roundabout	2,571	-729	2,387	-654

- 3.2.2 The junctions to the west of Vigar Way/ Peacock Lane junction, along the Peacock Lane corridor, show large reductions in traffic compared to those modelled previously and tested in the TAs for Priors and Pearce's. This trend continues south along the Old Wokingham Road corridor from the new rbt with Waterloo Rd/ Peacock Lane, which also gets a boost from the Pt Closure on Easthampstead Road.
- 3.2.3 As can be seen from the above, the updated modelling has a limited effect in terms of the total approach flows utilising junctions in the north-western area of the site such as at the Easthampstead Road / Heathlands Link Road junction which is currently under construction.



- 3.2.4 The total approach flows at almost all other junctions on the surrounding highway network is however lower when compared to the outputs used to inform the 2024 Transport Assessment Reports for the Lightwood Strategic and Nicholas King planning applications. The detailed capacity analysis presented with the 2024 Transport Assessment Reports for these junctions is therefore considered to represent a robust position in respect of traffic impact.
- 3.2.5 Pearce's Farm new Site Access and Heathlands crossroads to the north work very well. The site access junctions have been designed to deliver an appropriate form of access that accords with highway standards. It is unlikely therefore that the reduced traffic flows will correspond to lesser form of junction design.
- 3.2.6 Of note however is that the Transport Assessment Reports promote off-site mitigation measures at the Peacock Lane / Old Wokingham Road roundabout and the Peacock Lane / Sparrowhawk Way roundabouts. Given that the updated modelling is now predicting lower flows at these locations it may be appropriate to review the position in respect of mitigation measures once the ancillary model information is available (junction turning movement and delay plots).
- 3.2.7 Conversely, it is apparent that the A329 Jennett's Park roundabout and the Vigar Way / Peacock Lane roundabout are predicted to cater for a higher level of flow when compared to the previous assessments, particularly during the 2040 AM peak hour. The detailed appraisal of these junctions should therefore be reviewed in light of the updated traffic flows. However, as identified at para 3.1.7, it would be prudent to first ascertain whether the benefits of the planned improvements for these locations allowed for the Wokingham Borough Council IDP are being represented within the updated modelling before embarking on any detailed analysis.
- 3.2.8 Coppid Beech indicates a large reduction in flows on Berkshire Way (NW) with reduced traffic also on London Rd (E) seemingly adding to increased traffic on Berkshire Way (SE) in the direction of Jennett's Park and then Vigar way.
- 3.2.9 Both the Jennett's Park and Vigar Way junctions experience increases in the new model but this is due to significant flow increases along Peacock Lane EAST of the Vigar Way Peacock Lane rbt. Again, most likely due to the possible cut throughs to/from the A3095 and A322 and ultimately the M3. It is not directly due to the SDL Extension SS12 loadings.
- 3.2.10 The benefits of the EHR Pt Closure are evident here and later on when comparing with Run D which removes the closure (keeps EHR open).
- 3.2.11 In summary, the updated 2040 'With Development' traffic modelling shows that most junctions surrounding the site experience reduced approach flows compared to those previously used in the 2024 Transport Assessment Reports. This reduction is particularly notable along the Peacock Lane and Old Wokingham Road corridors, suggesting that prior detailed capacity analysis remains robust.



- 3.2.12 Site access junctions have been designed to meet highway standards, and the lower flows are unlikely to necessitate changes to junction design. However, given that predicted flows assigned to/from Jennett's Park area (including those at the A329 Jennett's Park and Vigar Way/Peacock Lane roundabouts) are higher, especially during the AM peak, most likely due to cutting through to the A3095, A322 and M3 then this points to a wider area of future appraisal. They are not considered to be impacts directly related to SS12.
- 3.2.13 Additionally, the new modelling supports possible reconsideration of off-site mitigation measures of a capacity nature at junctions now forecast to see reduced flows, pending further ancillary data. Overall, traffic redistribution appears influenced by network changes and closure effects, rather than solely by the SDL Extension SS12 development.



4.0 Sensitivity Scenario C (2040)

4.1 Effect of Scenario C

- 4.1.1 The link flows for the 2040 'With Development' scenario (Run B) for the AM and PM peak hours have been compiled and summarised in Table 4.1 below. The Table also shows how the flows change for the Scenario C Sensitivity Test. This allows an evaluation of the effects of the provision of an additional junction onto the Heathlands Link as well as the potential removal of capacity restrictions along the Waterloo Road corridor ('Area X').

Table 4.1 : Effect on Two Way Link Flows – 2040 Scenarios

Link No	Highway Link	AM Peak Hour		PM Peak Hour	
		2040 With Dev Scenario (Run B)	Sensitivity Test (Run C)	2040 With Dev Scenario (Run B)	Sensitivity Test (Run C)
1	A329 to the west of London Road	2,566	-5	2,446	-14
2	London Road (east)	2,569	-4	2,597	+3
3	A239 west of Jennett's Park Roundabout	6,667	-35	6,167	-28
4	A239 east of Jennett's Park Roundabout	3,719	-2	3,698	-22
5	Vigar Way	2,891	-12	2,816	+0
6	Peacock Lane (east)	1,965	+3	895	+31
7	Peacock Lane east of Vigar Way	1,595	+7	761	+25
8	Peacock Lane west of Vigar Way	2,080	+21	2,979	+31
9	Old Wokingham Rd south of Peacock Lane	2,238	+37	2,161	+45
10	Waterloo Road west of Old Wokingham Rd	771	+107	895	+295
11	New Waterloo Road Link (R10 Link Rd)	823	+97	919	+265
12	SWDR north of Waterloo Road	1,237	+14	1,050	-7
13	SWDR west of Heathlands Link	1,408	+16	1,296	+40
14	SWDR Link Road (South)	850	-39	784	-38
15	Internal Spine Road	341	+8	325	-23
16	Old Wokingham Road south of Site Access A	2,015	+36	1,977	+33
17	Easthampstead Road east	0	+0	0	+0
18	Old Wokingham Rd north of Nine Mile Ride	2,066	+34	2,068	+36
19	Nine Mile Road East	1,125	+16	1,048	+4
20	Old Wokingham Rd south of Nine Mile Ride	1,188	+12	1517	+31
21	Nine Mile Ride west	1,191	+17	1,314	-7
22	Easthampstead Road west of Site Access C	243	-72	237	-71
23	Heathlands Road	639	-40	615	-43
24	Easthampstead Rd west of Heathlands Link	51	-1	50	+5



- 4.1.2 In general terms and in the majority of cases, the change in flow as a result of Scenario C test would be minimal, equating to less than one vehicle each minute. Differences of this magnitude lie well within the day to day variation of flow and are not deemed to be significant.
- 4.1.3 It is however apparent that flows along the R10 Link Road and Waterloo Road corridor would be higher in the Scenario C test. The degree of change is fairly significant, particularly in the PM peak hour where the increases are more pronounced. Of note however is that the traffic flows along links immediately adjacent to the site access junctions remain relatively unchanged, indicating that this increase in traffic represents re-routing of baseline flows rather than traffic attributable to the development.
- 4.1.4 The effect of this re-routing dissipates along links further to the east, with the increase in traffic amounting to approximately +30 vehicles along Peacock Lane in the vicinity of the Vigar Way roundabout. The pattern of change does however continue eastwards with approximately +20 vehicles continuing to utilise the Peacock Lane corridor through Jennett's Park instead of the A329 Berkshire Way (east) corridor which would experience a commensurate reduction in flow.
- 4.1.5 The other change of note as a result of the Scenario C test is that that traffic flows along the short section of Easthampstead Road to the north of the access for the Nicholas King parcel would decrease in both the AM and PM peak hours. This is a very localised effect which is representative of traffic arising from the development utilising the alternative access onto the Heathlands Link rather than the proposed access onto Easthampstead Road. This reduction does not point to any requirement for the Croudace Link to be delivered in order to enable the NKH development to proceed.
- 4.1.6 In summary, the Scenario C test indicates only minimal changes in traffic flows across most areas, with variations well within normal daily fluctuations and thus not considered significant. Notably, there are moderate increases in flow along the R10 Link Road and Waterloo Road corridor, particularly during the PM peak hour, which are attributed to the re-routing of existing traffic rather than new development traffic. These increases taper off further east, with small rises along Peacock Lane and a corresponding decrease on the A329 Berkshire Way (east). Additionally, a localised reduction in traffic is observed on Easthampstead Road north of the Nicholas King parcel, reflecting the use of an alternative access route by development traffic. This suggests there is no immediate need to deliver the Croudace Link for the NKH development to proceed.



5.0 Sensitivity Scenario D (2040)

5.1 Effect of Scenario D

5.1.1 The two-way link flows for the 2040 'With Development' scenario (Run B) for the AM and PM peak hours have been compiled and summarised in Table 5.1 below. The Table also shows how the flows change for the Scenario D Sensitivity Test. This allows an evaluation of the effects of not promoting the points closure along the Easthampstead Road corridor as well as the potential removal of capacity restrictions along the Waterloo Road corridor ('Area X').

Table 5.1 : Effect on Two Way Link Flows – 2040 Scenarios

Link No	Highway Link	AM Peak Hour		PM Peak Hour	
		2040 With Dev Scenario (Run B)	Sensitivity Test (Run D)	2040 With Dev Scenario (Run B)	Sensitivity Test (Run D)
1	A329 to the west of London Road	2,566	+0	2,446	-16
2	London Road (east)	2,569	-10	2,597	+5
3	A239 west of Jennett's Park Roundabout	6,667	-46	6,167	-38
4	A239 east of Jennett's Park Roundabout	3,719	-3	3,698	-25
5	Vigar Way	2,891	-30	2,816	-7
6	Peacock Lane (east)	1,965	+7	895	+58
7	Peacock Lane east of Vigar Way	1,595	-6	761	+52
8	Peacock Lane west of Vigar Way	2,080	+8	2,979	+27
9	Old Wokingham Rd south of Peacock Lane	2,238	-148	2,161	-87
10	Waterloo Road west of Old Wokingham Rd	771	+7	895	+237
11	New Waterloo Road Link (R10 Link Rd)	823	-3	919	+215
12	SWDR north of Waterloo Road	1,237	+35	1,050	-12
13	SWDR west of Heathlands Link	1,408	+30	1,296	+47
14	SWDR Link Road (South)	850	+139	784	+45
15	Internal Spine Road	341	-136	325	-121
16	Old Wokingham Road south of Site Access A	2,015	-262	1,977	-217
17	Easthampstead Road east	0	+302	0	+181
18	Old Wokingham Rd north of Nine Mile Ride	2,066	+39	2,068	-32
19	Nine Mile Road East	1,125	+38	1,048	-11
20	Old Wokingham Rd south of Nine Mile Ride	1,188	+34	1517	-2
21	Nine Mile Ride west	1,191	-12	1,314	-38
22	Easthampstead Road west of Site Access C	243	+131	237	+53
23	Heathlands Road	639	-47	615	-3
24	Easthampstead Rd west of Heathlands Link	51	+0	50	-5



- 5.1.2 Again, in general terms and in the majority of cases, the change in flow as a result of Scenario D would be minimal, equating to less than one vehicle each minute. Differences of this magnitude lie well within the day to day variation of flow and are not deemed to be significant.
- 5.1.3 As is to be expected, without the point closure in place along the Easthampstead Road, traffic flows would increase along the corridor when compared to the Scenario B run. There is a reduction in traffic utilising the internal spine road within the site which, again, is as anticipated. These changes in flows are representative of traffic travelling between origins / destinations in the south-east and north-west utilising Easthampstead Road, as is evident from the reduction in flows along Old Wokingham Road along the frontage of the Lightwood Strategic parcel.
- 5.1.4 The effect of Easthampstead Road remaining open for through traffic is also evidenced further to the east, where flows along the eastern section of the South Wokingham Distributor Road would also increase, particularly in the AM peak hour.
- 5.1.5 It is notable that increases in traffic are predicted along R10 Link Road and Waterloo Road corridor which are similar in magnitude to the Scenario B Test, albeit only for the PM peak hour (unlike the Scenario C test, the AM peak hour flows are relatively unchanged).
- 5.1.6 As is the case for the Scenario C test, this increase in traffic most likely represents re-routing of baseline flows rather than traffic attributable to the development. The effect of this re-routing dissipates along links further to the east, with the increase in traffic amounting to approximately +30 vehicles along Peacock Lane in the vicinity of the Vigar Way roundabout. Again, the pattern of change continues eastwards with additional traffic utilising the Peacock Lane corridor through Jennett's Park instead of the A329 Berkshire Way (east) corridor which would experience a commensurate reduction in flow.
- 5.1.7 In summary, the analysis indicates that, for Scenario D, the changes in traffic flow are generally very minor, typically amounting to less than one vehicle per minute. Variations of this scale are well within normal daily fluctuations and are therefore not considered significant. As anticipated, with Easthampstead Road remaining open and the point closure removed, there is an increase in traffic along this corridor compared to Scenario B. This is accompanied by a decrease in the number of vehicles using the site's internal spine road, which aligns with expectations. These alterations reflect traffic movements between the south-east and north-west, with Easthampstead Road being preferred, as shown by reduced flows on Old Wokingham Road near the Lightwood Strategic parcel.
- 5.1.8 Further to the east, keeping Easthampstead Road open leads to higher traffic volumes along the eastern section of the South Wokingham Distributor Road, especially during the morning peak. Increases are also seen along the R10 Link Road and Waterloo Road corridor, similar to Scenario B, but only during the evening peak hour; the morning peak remains largely unchanged, as in Scenario C. These increases are most likely due to baseline traffic re-routing rather than additional traffic generated by the development itself. The impact of this re-routing lessens further east, with an extra 30 vehicles observed along Peacock Lane near the Vigar Way roundabout. The trend continues with more vehicles using the Peacock Lane corridor through Jennett's Park, while the A329 Berkshire Way (east) sees a corresponding reduction in flow.



6.0 Conclusion & Next Steps

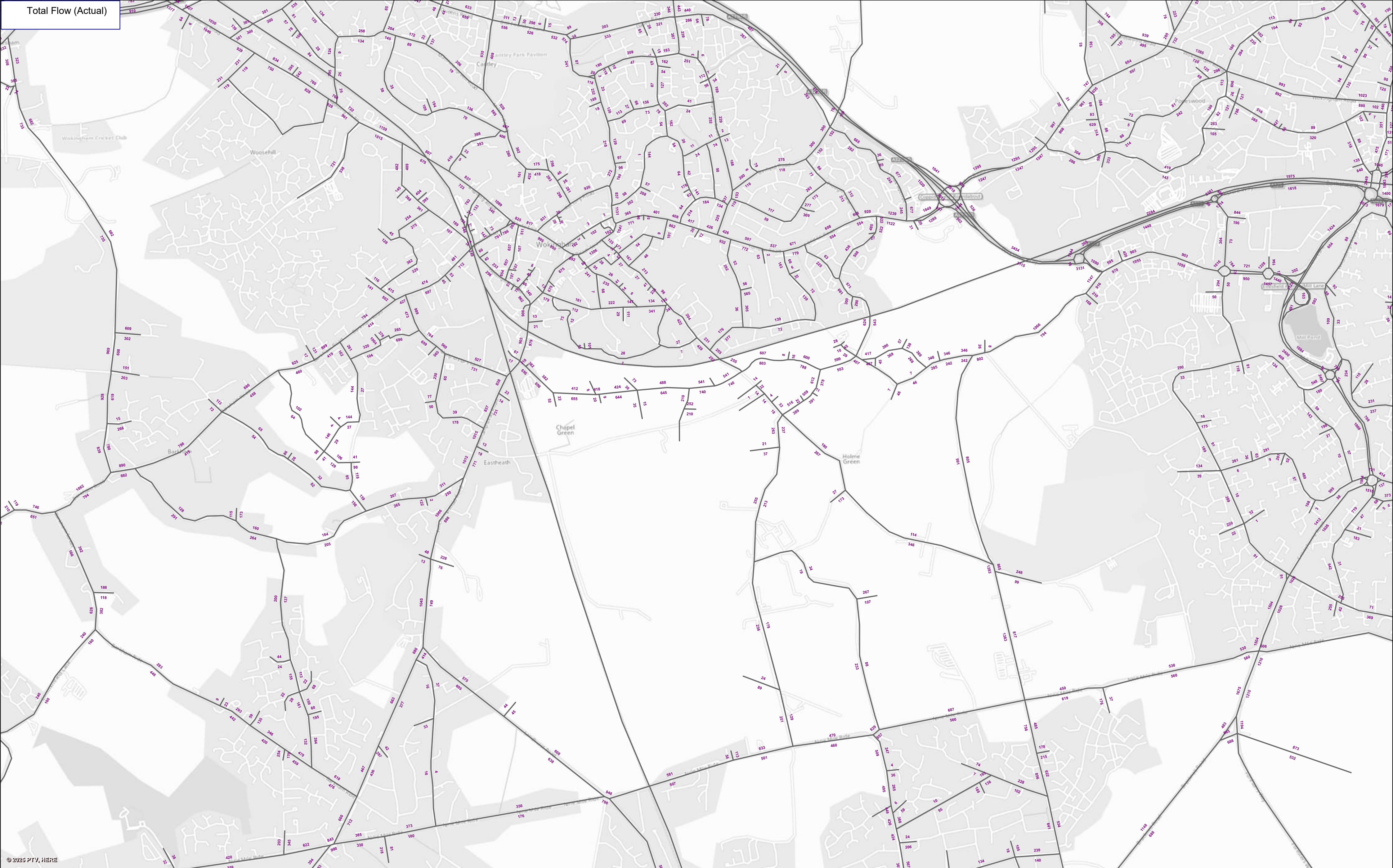
- 6.1.1 Abley Letchford's preliminary findings reported in this document, in comparing the new WSTM outputs with those previously prepared from the previous model to support the July 2024 planning applications for NKH and LS, are both compelling and reassuring in that the assessment undertaken to support the respective applications can be considered to be highly robust.
- 6.1.2 This should enable the detailed junction testing to be readily undertaken for completeness on the receipt of turning movement data from WBC's WSTM consultants, if deemed necessary given the more robust assessment already delivered.
- 6.1.3 Importantly, it is hoped that this reflects a breakthrough in terms of determining the planning applications, subject to detailed responses on the non-modelling related items set out in Gordon Adam's response documents for each site, many of which have been iteratively progressed in design terms since receiving them.
- 6.1.4 We trust this provides a valuable update and enables consultation to proceed rapidly going forwards.



Appendices

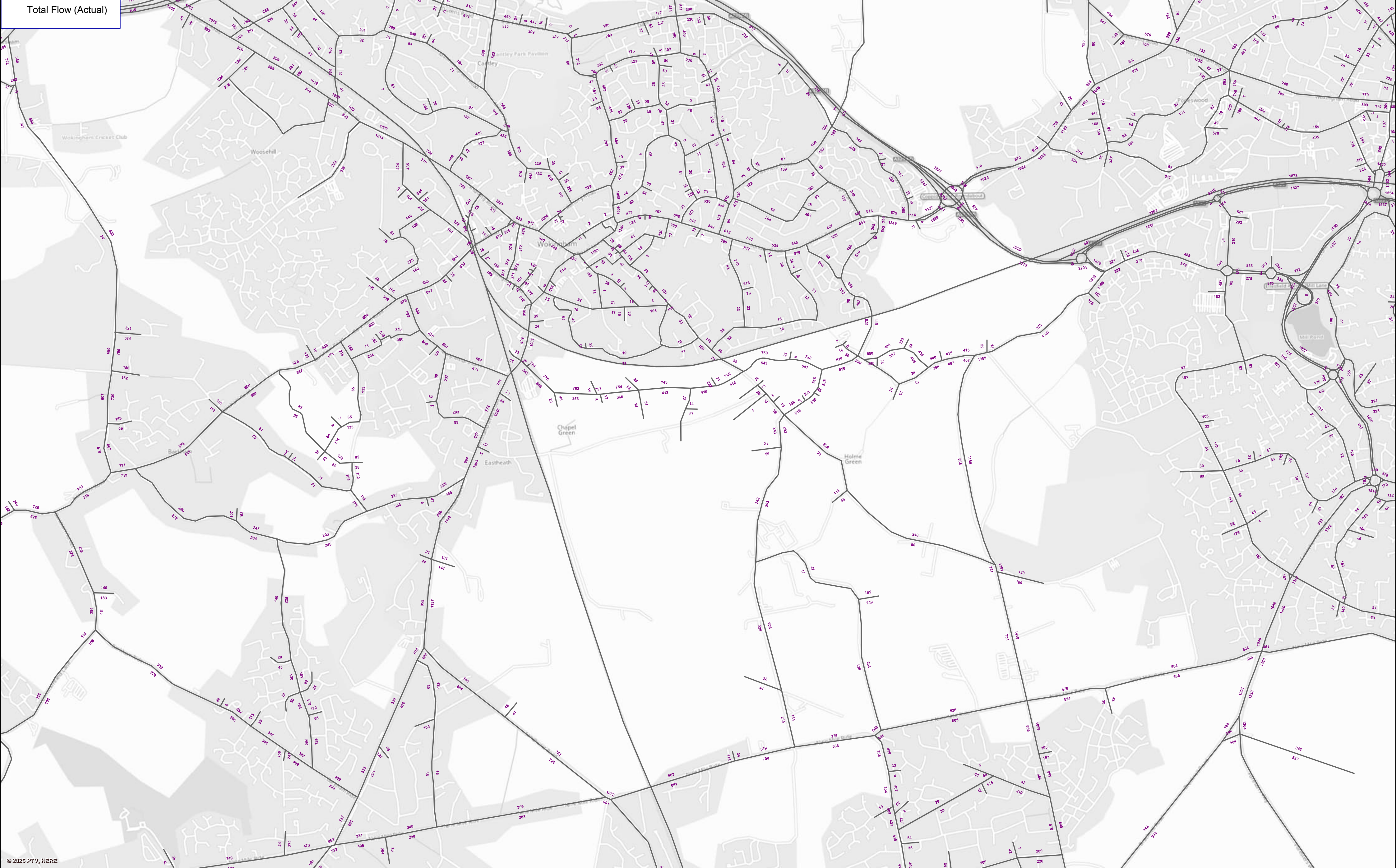


Appendix A - Updated Modelling : 2040 Forecast Base (Run A)



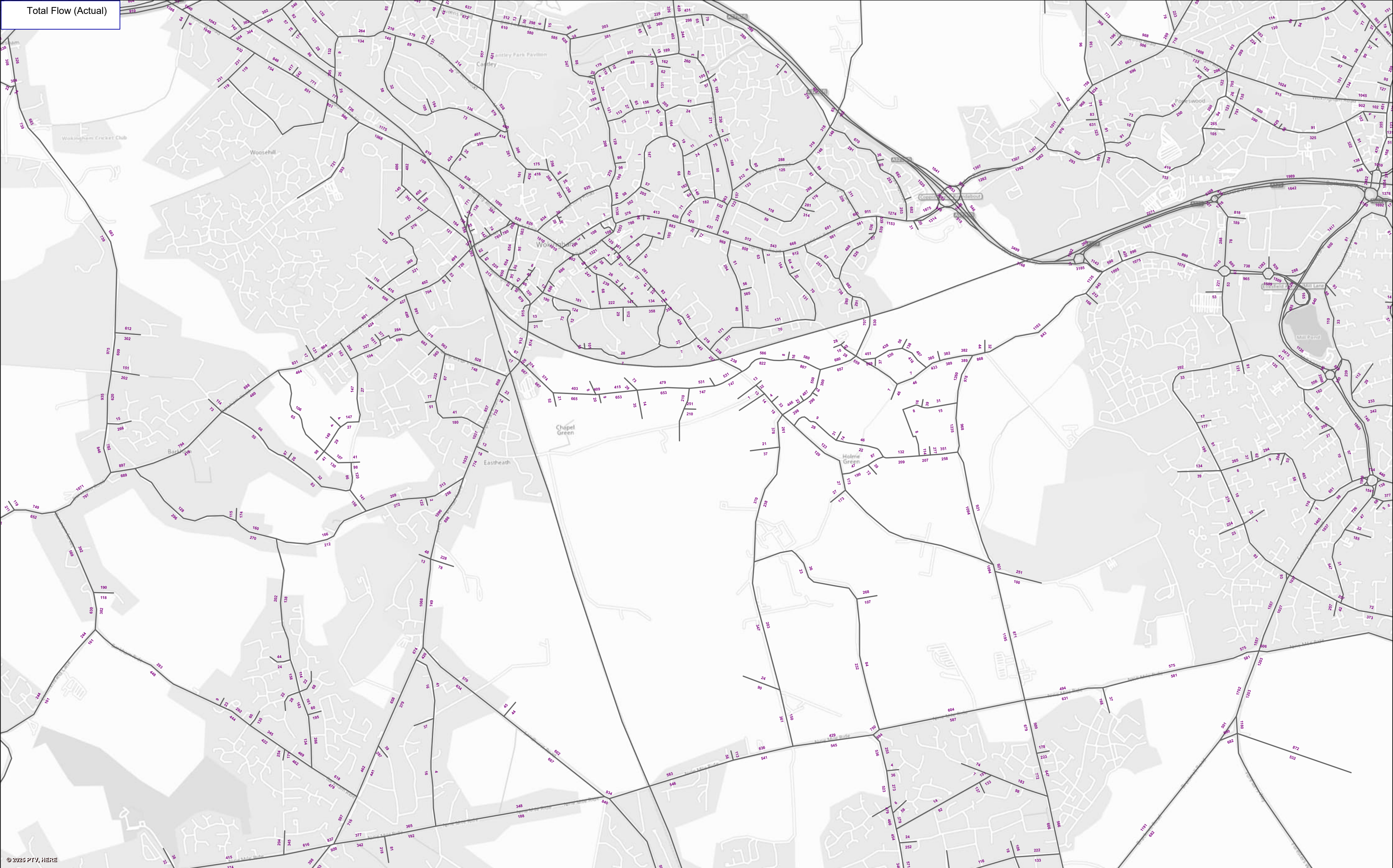
Total Flow (Actual)

Total Flow (Actual)

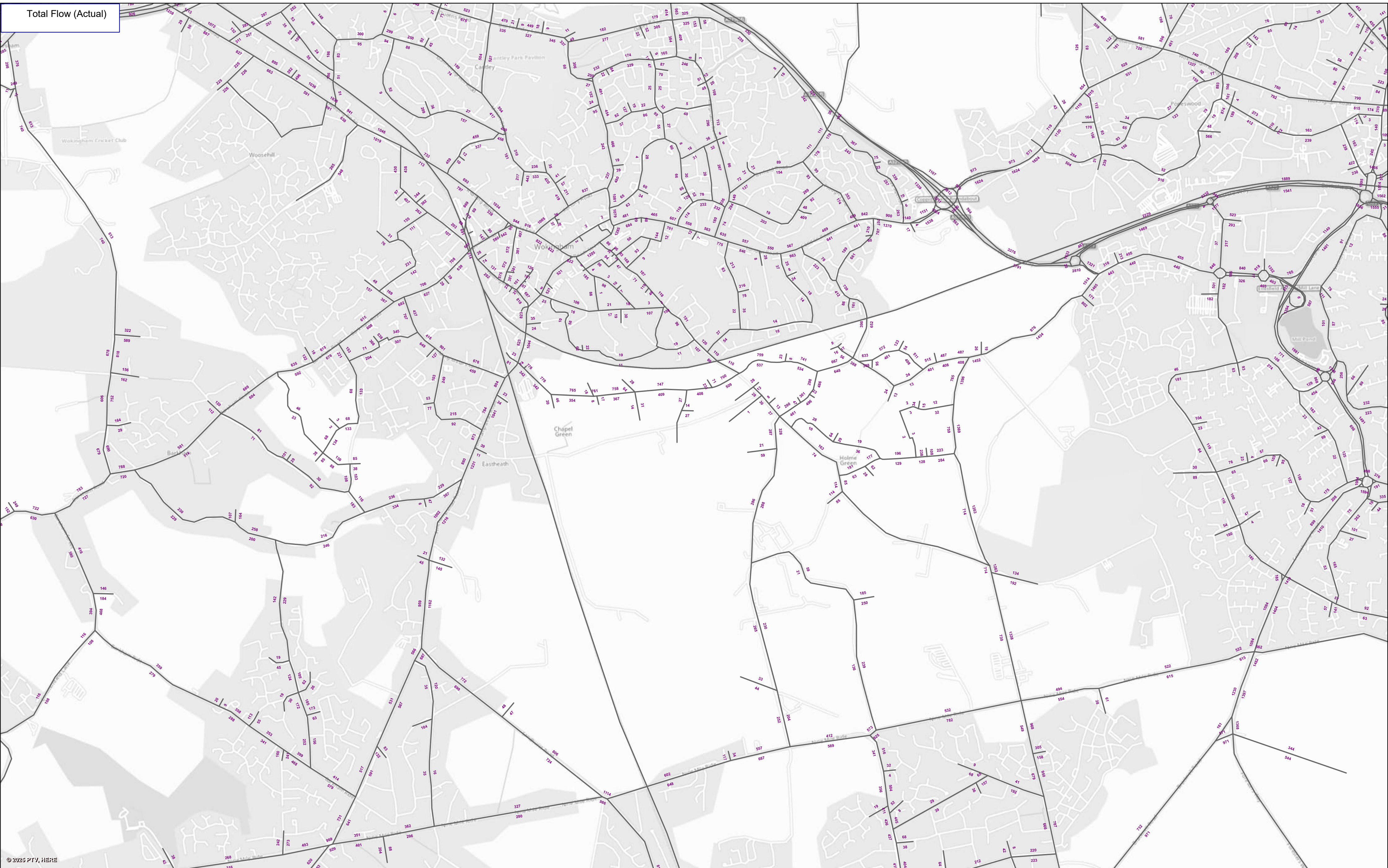




Appendix B - Updated Modelling : 2040 With Dev (Run B)

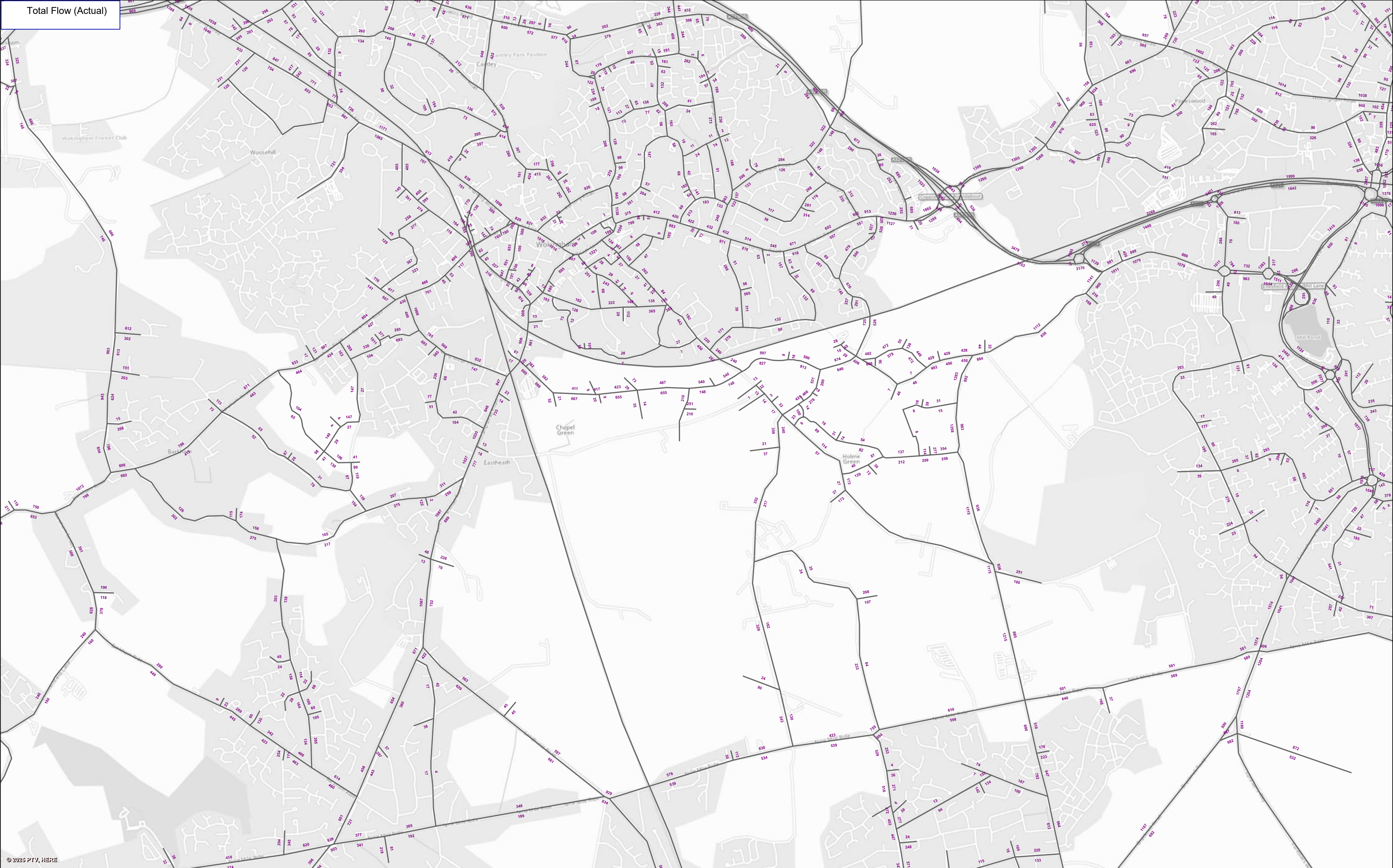


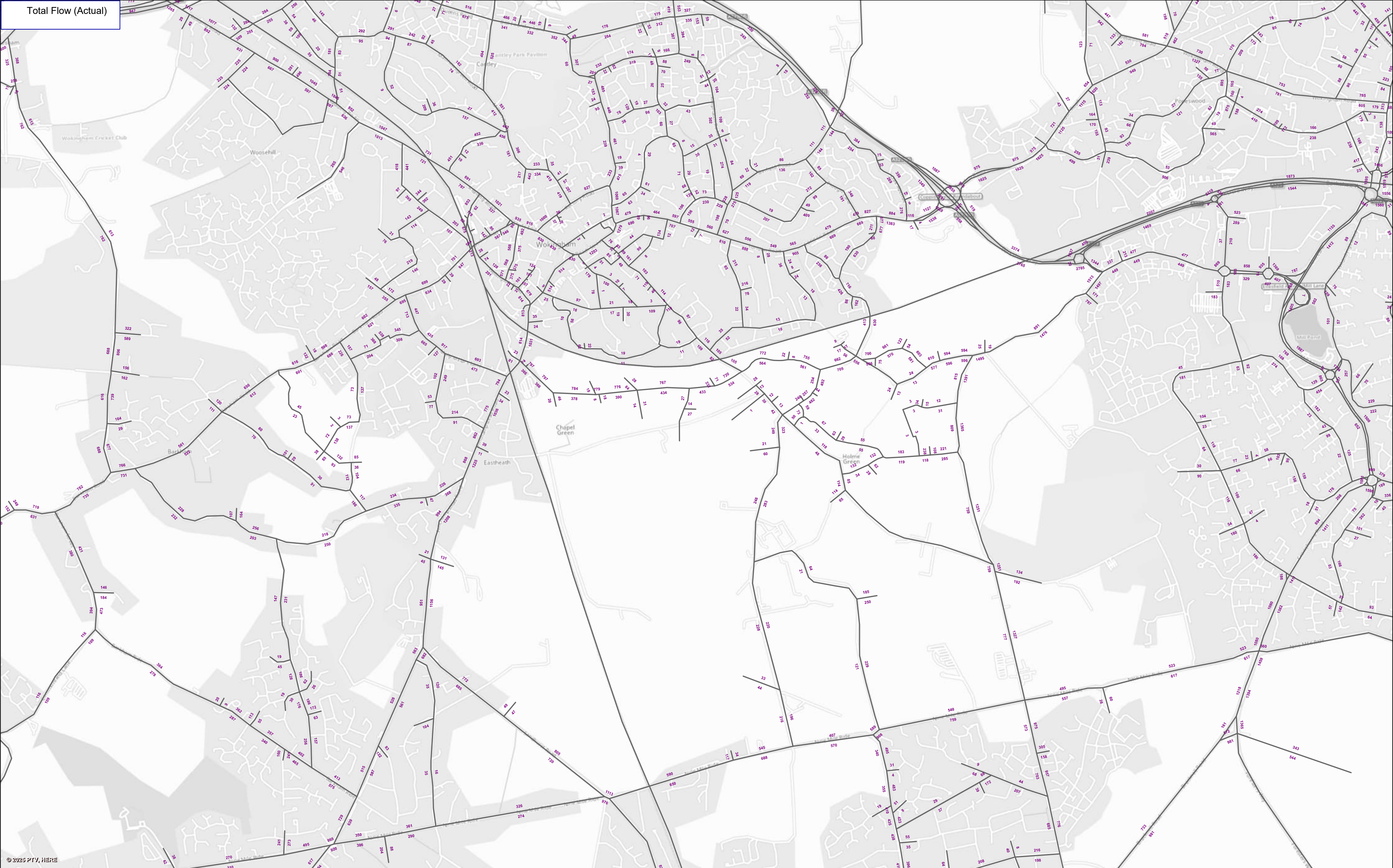
Total Flow (Actual)





Appendix C - Updated Modelling : Sensitivity Test (Run C)

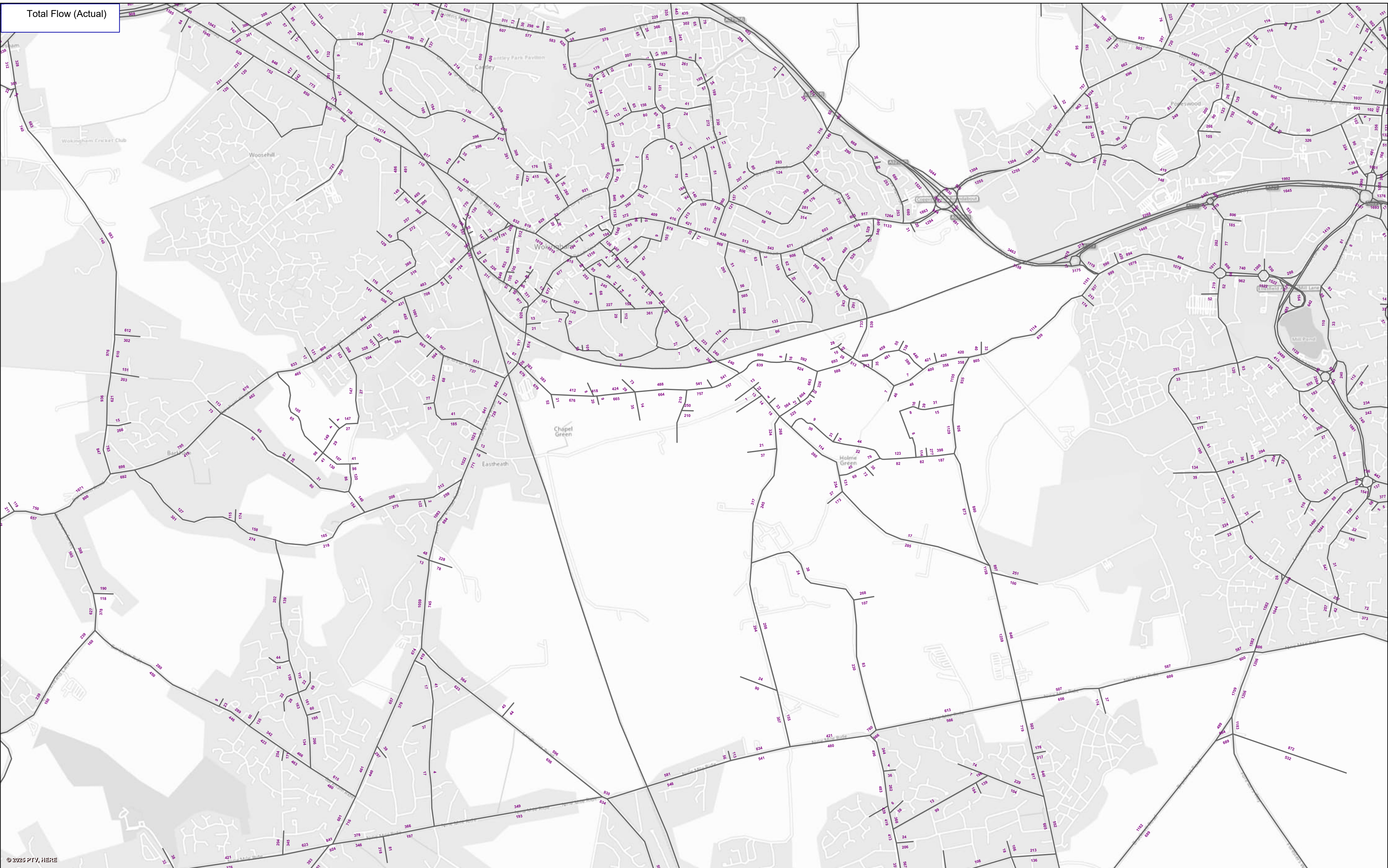


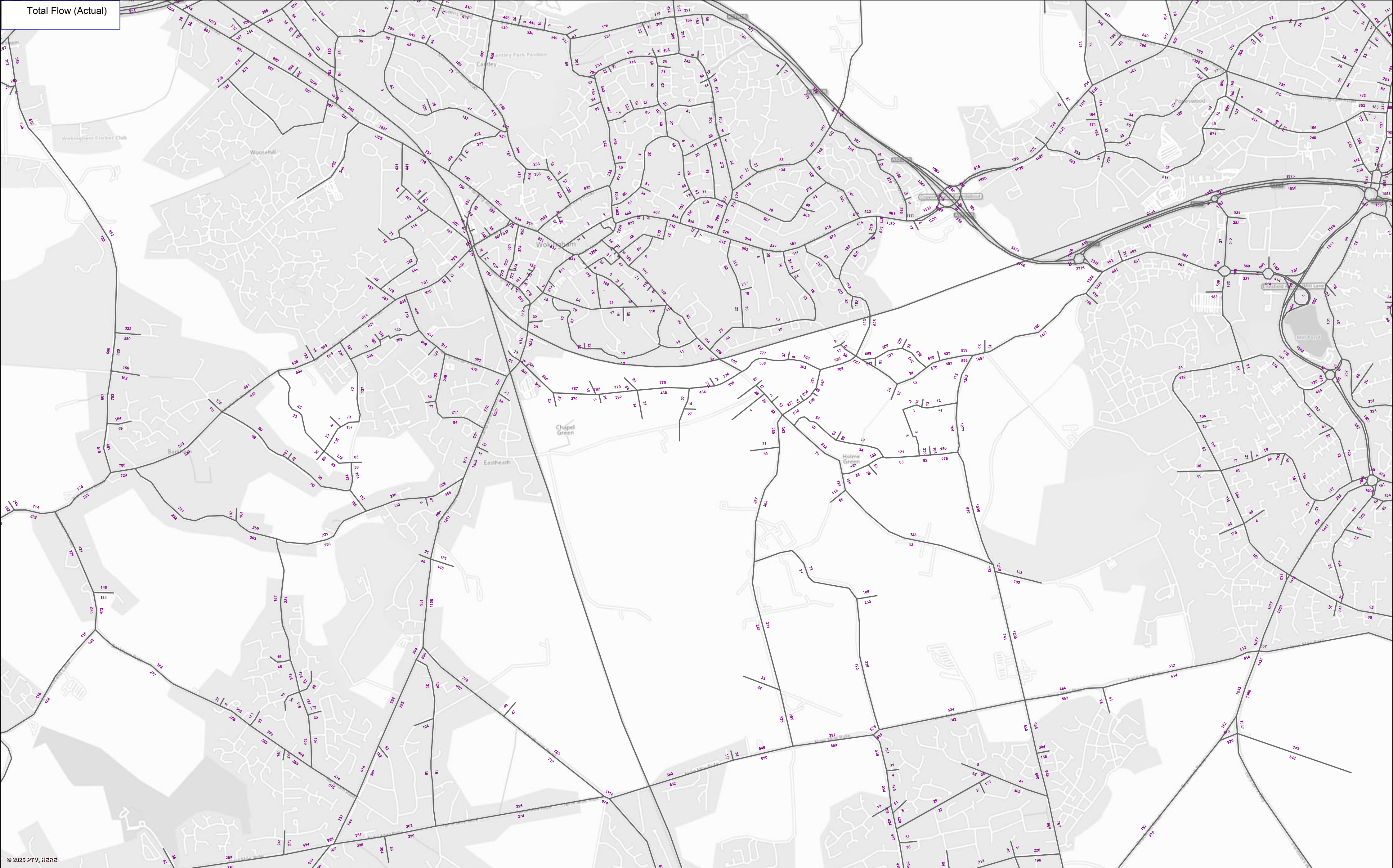




Appendix D - Updated Modelling : Sensitivity Test (Run D)

Total Flow (Actual)

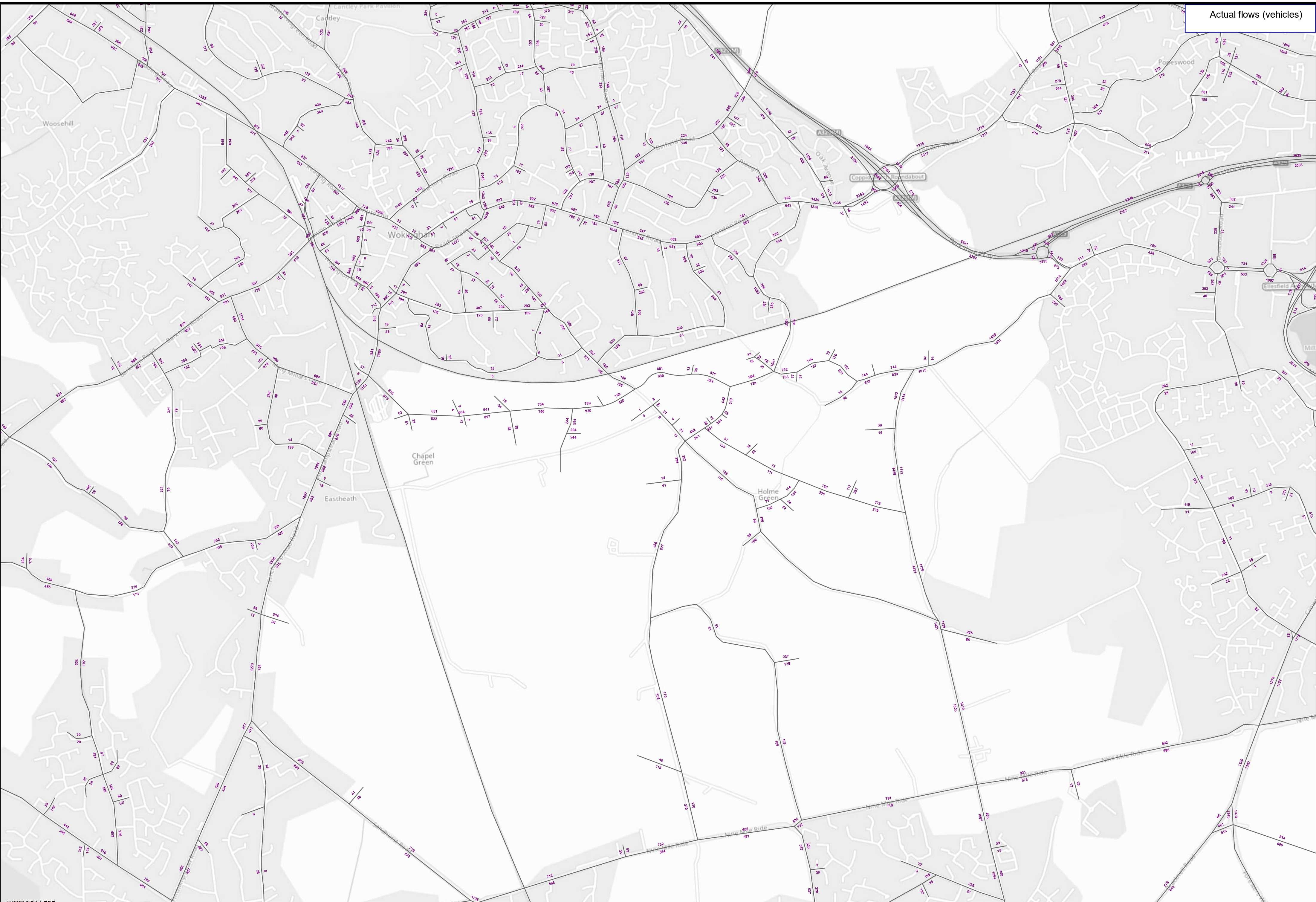






Appendix E - Previous Modelling : With Full Development

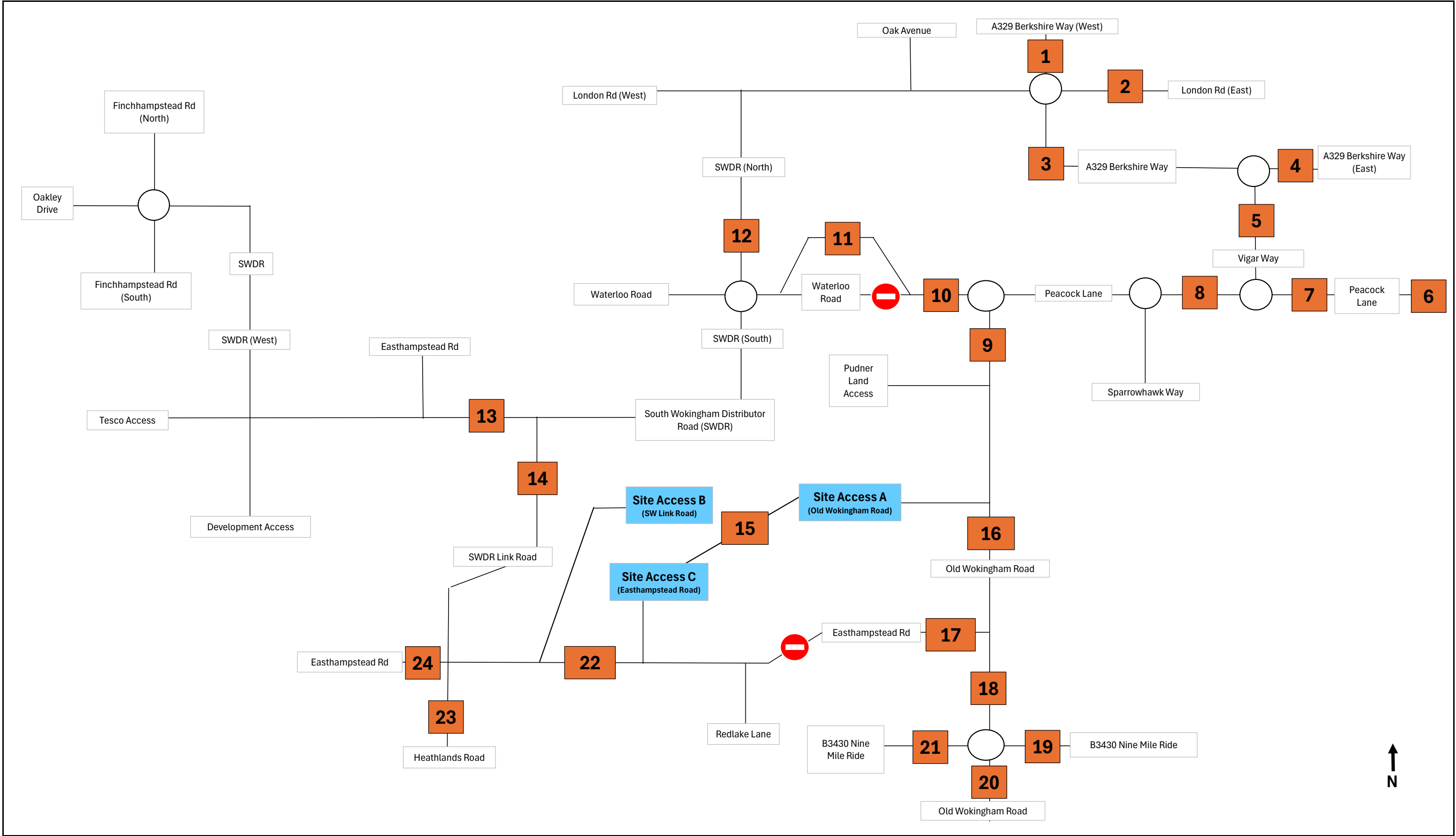
Actual flows (vehicles)







Appendix F - Highway Link Locations



Job No A218	Project : Land at Priors Farm
Date NOV 2025	Title : Link Locations
Drawn EH	Figure No : FIGURE 1



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