

Northfleet Harbourside Kent County Council Highway Consultee Comments Review (PROW)

226728/N21

09th February 2024

Introduction

1. This note has been prepared to provide a review and response to the transport comments made by Kent County Council (KCC) in response to the Northfleet Harbourside Planning application (ref. 2022/1064) with specific reference to the Transport Assessment Addendum (TAA) dated August 2023 and subsequent KCC Comments Review (N17) submitted in October 2023 and N20 submitted in January 2024. N20 can be found at **Appendix A** of this Note.
2. After the submission of N20 in January 2024 a subsequent meeting was held between Vectos (SLR), KCC Public Right of Way (PROW) and National Trail on the 6th February 2024. Within this meeting the comments and responses within N20 were discussed and any final amendments made. This note sets out the final PROW amendments, all of which were agreed within the meeting on the 6th.
3. Responses have been provided against each comment in turn. The KCC comments are provided in ***Bold Italic*** font below, with our comments following below.

Public Rights of Way (PROW) Comments

Public Footpath NU1 – Paragraph 52 of N17 should amend NU2 to NU1.

4. The amended NU1 text is below:

“As requested, and discussed within the meeting, the PROWs to the northwest of the site have been combined to show one coherent route comprising the NU1 route and KCSCP trail. This has been done to allow the route to follow the most efficient desire line as requested by KCC.

The alignment of the PROW to the north-west of the site, outside the red line would be maintained and not diverted as part of the proposals. The realigned PROW within the site would connect directly to this PROW at the site boundary. The updated PROW plan can be found at Appendix H.”

Public Footpath NU44/DS27 – Can you confirm the level of the route in relation to surroundings. The plan at Appendix H should show and label the DS27 exit point and continuation just for context and clarity.

5. The NU44 path will be at the ground floor level. The top of the retail units would be circa 9m higher, planting and landscaping would be in place along this route, this is illustrated within the Design Code

for NU44 at Appendix I of N20. The DS27 route external to the site has been shown within the updated PROW plan at **Appendix B**.

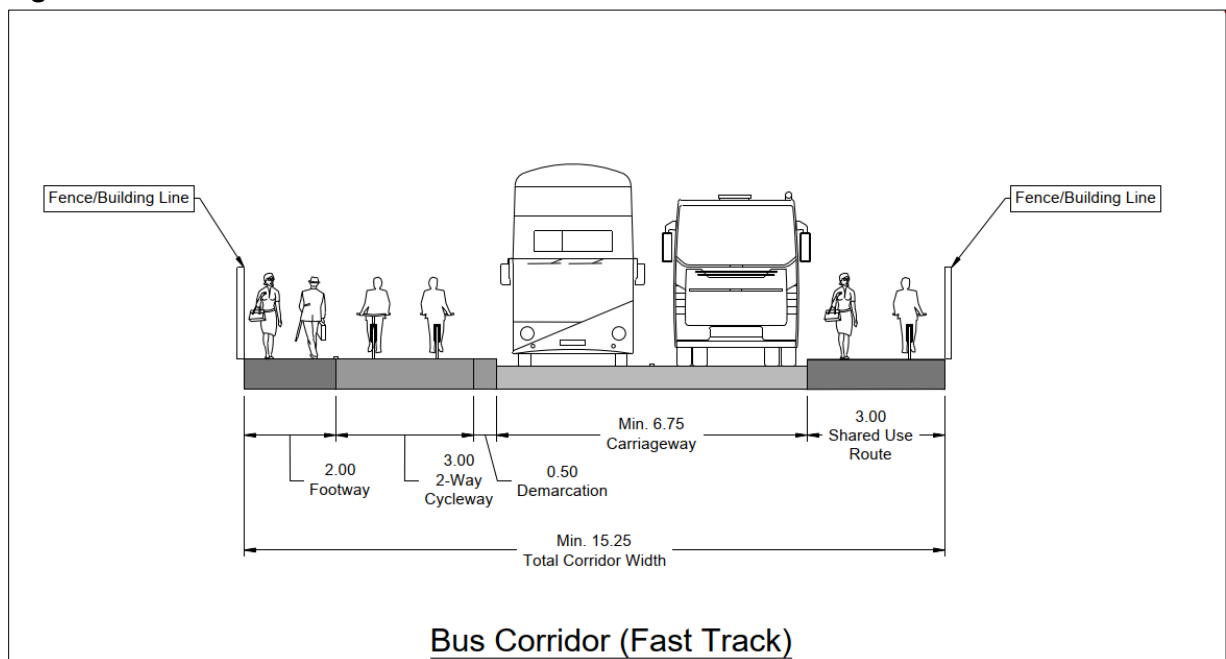
Public Footpath NU2 – As per previous discussion the route will require a legal diversion in any event, the route through the public realm is not ideal. Consideration should be given to routing through the green space on the plan to the south. A PROW has to connect to a Highway and we would not wish to extinguish part of a route (if stopped at public realm).

6. This route has been realigned through the green space to the south connecting to the A226 to the southeast. This route would benefit from similar characteristics to the NU44 route (shown within the Design Code extract at Appendix I of N20). This realigned route is shown within **Appendix B**.

KCIIIECP - Would the section of the re-aligned KCIIIECP that travels along the Fastrack corridor be located along a footway? I just want to confirm the route wouldn't pass along the carriageway.

7. Yes a footway/shared use route would be provided along the Fastrack corridor (along with a separate cycleway). The below snip shows the cross section proposed for the Fastrack corridor.

Figure 1: Fastrack Corridor Cross Section



Ideally, pedestrian routes should be accommodated within open green corridors, which have good natural surveillance and sight lines from public places. Routes should be convenient for the public, with attractive, welcoming environments. However, the PROW map suggests the re-aligned KCIIIECP would be squeezed behind a new building, along an enclosed route (Reference made to the section of the realigned KCIIIECP as it travels between Grove Road and the Fastrack Corridor). Could you clarify the nature of this section or indicate the potential path width?

8. Given the realignment of the internal road layout this section of the KCIIECP (would be located along the Fastrack corridor. Accordingly, it would benefit from the same characteristics as the section outlined above for which the cross-sectional plan is shown. Landscaping would be present along this section of the route to ensure the nature of the route is pleasant and enticing. The width of the path, as outlined in the snip above would be 2-3 meters wide.

Appendix A

Northfleet Harbourside Kent County Council Highway Consultee Comments Review

226728/N20

18th January 2024

Introduction

1. This note has been prepared to provide a review and response to the transport comments made by Kent County Council (KCC) in response to the Northfleet Harbourside Planning application (ref. 2022/1064) with specific reference to the Transport Assessment Addendum (TAA) dated August 2023 and subsequent KCC Comments Review (N17) submitted in October 2023. The KCC comments referred to within this note were dated 23rd November 2023.
2. We have prepared a review of these comments with consideration made to meetings held with KCC highways, KCC Public Right of Way (PROW) and National Trail (dated 4th and 12th December 2023).
3. Responses have been provided against each comment in turn. The KCC comments are provided in ***Bold Italic*** font below, with our comments following below.
4. This response does not repeat those comments where an acceptance has been provided regarding submitted information.

Kent County Council Highway Comments

With regard to the Road Safety Audit, the auditor requested additional crossing facilities at junctions, yet the locations are not shown in the appendices. The County Council questions whether this plan was included in the original report from the Auditor. In line with issue two, the location of the bus stops on Galley Hill Road must be reviewed, although this can be undertaken at Reserved Matters Application stage if required. Confirmation that this will be addressed at this stage is required.

5. We have provided a designer's response to the RSA team addressing all of the comments raised through the Stage 1 RSA. This is included in **Appendix A**. The location of the signalised junction in question is the first plan shown at Appendix C of the attached RSA. With consideration made to this RSA, an additional crossing has been added as recommended at the relevant junction as shown within the drawings at **Appendix B**.
6. For completeness sake, this junction has been remodelled with the addition of the new signalised crossing included. The results are presented in **Table 1** below and at **Appendix C**. The relevant HGV tracking is also provided at **Appendix F**.

Table 1: A226/Lower Road/New Link Road Junction Modelling Results

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2030 With Development Flows (Without LTC)									
Lower Road	89.1	50.9	11.0	84.7	40.9	10.7	80.3	34.3	8.7
New Link Road	88.3	48.4	13.7	85.7	47.4	11.4	81.4	55.5	6.2
A226 Galley Hill Road	74.4	33.6	10.5	48.3	25.2	6.1	22.1	17.4	2.2
Cycle Time	80 Seconds			80 Seconds			56 Seconds		
PRC	1.0			5.0			10.6		

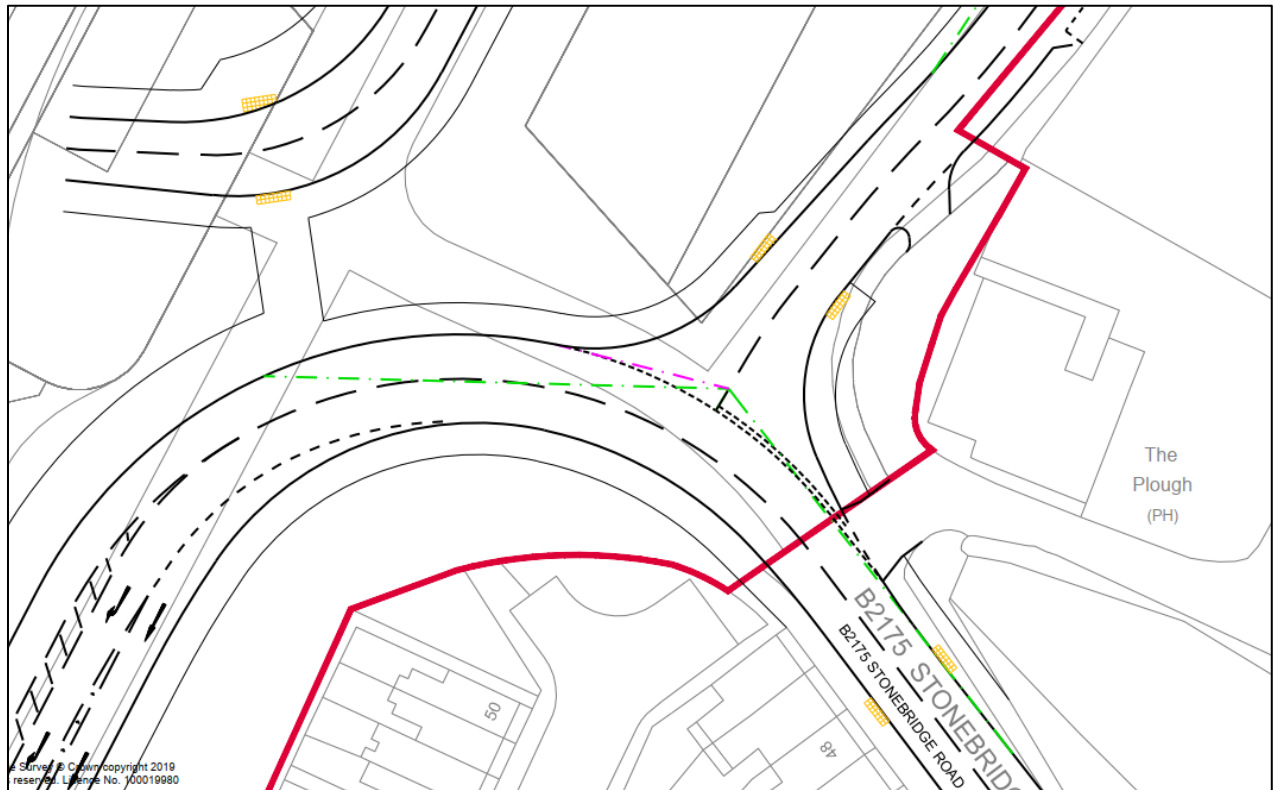
7. As shown by these results, the maximum DoS recorded was 89.1 in the AM Peak hour. The associated delay and queue are 50.9 seconds with a queue of 11 vehicles. Furthermore, the Practical Reserve Capacity (PRC) in all the assessed hours was positive, suggesting that there is spare capacity at the junction when the additional signalised crossing is provided.

8. The bus stops along Galley Hill Road will be reviewed at the Reserved Matters Stage.

With regard to the lack of pedestrian and cycle crossing to Station Road, the Note states “There is a dedicated signalised pedestrian crossing point provided as part of the development proposals on the B2175 to facilitate access to location south of the carriageway”. The County Council questions whether this is referring to the crossing at Junction one. This is significantly off the desire line approximately 200m detour). An additional crossing should be provided so that a direct connection to Station Road can be made.

9. The signalised junction referenced is the one located at Junction 1. This crossing is expected to accommodate the majority of pedestrian movements between the site and station road.
10. However, in any case new pedestrian crossings have been added to this junction. These crossings are located along the key desire line between the residential areas of the site and Northfleet Station. These crossings comprise dropped kerbs and tactile paving and can be used to cross Grove Road and Stonebridge Road. The location of these crossings is shown within **Figure 1** below and within the site plans at **Appendix B**.

Figure 1: New Pedestrian crossings



Drawing 226728/PD106 Rev A shows the distance between the Grove Road and Site Access priority junctions is 32m. The Kent Design Guide requires 60m for local distributor / district distributor roads and the plan should be revised to accommodate this. No dimension is shown for the distance between the B2175 and the car park access, but this is approximately 15m. The County Council requires a minimum of 20m between a minor arm and major road, but this may need to be increased further to prevent cars accessing the car park from backing up onto the B2175. As this junction is internal, this can be revised at detailed design if required, providing the parameter plans allow for relocation.

11. With consideration of the above, the design of this junction has been revised, with the site access connection removed to remove the concern regarding the proximity of the two junctions along the northern side of the carriageway. The revised layout is located at **Appendix B** of this response.
12. In order to ensure that vehicles accessing/egressing the podium car parking from the east can still connect to Stonebridge Road a new link is proposed between The Boulevard and Grove Road, north of the junction in question. This link is shown between the internal junctions labelled J8 and J9 on the Key Plan at **Appendix B**. It is noted that a second connection between the northern most point of The Boulevard and Grove Road has also been provided, this would be for Fastrack buses only. This is described in more detail below. It is noted that both of these links will cross the Ebbsfleet River and as such the river will be culverted as it passes under both of these roads.

With regard to the right turn lanes for Grove Road and the Site Access, DMRB CD123 states “2.12 Priority junctions shall include a major road central treatment when the minor road flow exceeds 300 vehicles 2-way annual average daily traffic (AADT), or the major road flow

exceeds 13,000 vehicles 2-way AADT". The two minor arms are likely to attract over 300 two-way AADT trips each and therefore right turn bays are required.

13. In order to understand whether any major road central treatment would be necessary at this junction modelling was undertaken to understand the junctions operation in its new arrangement. The modelling results are set out below in **Table 2** and at **Appendix D**.

Table 2: Stonebridge Road/Grove Road Junction

Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 With Development Flows (Without LTC)									
Grove Road – B2175 (SE)	0.2	12.16	0.16	0.2	11.31	0.13	0.3	12.17	0.21
Grove Road – B2175 (NW)	1.9	32.39	0.62	0.9	22.84	0.47	1.4	22.78	0.58
B2175 (SE) – Grove Road/ B2175 (NW)	0.4	4.47	0.14	0.7	5.28	0.22	0.5	5.49	0.21

14. As shown within **Table 2**, the junction operates within capacity, with a maximum RFC of 0.62 recorded during the AM peak hour, between Grove Road and the B2175 (NW). For traffic travelling westbound along the B2175 the maximum RFC is 0.22 during the PM peak hour. This suggests that in the 2030 scenario there would be ample capacity at the junction, and therefore providing any central treatment is not necessary.

The County Council is liaising with Jacobs regarding the reduction in turning movements and may provide further comments in due course and the County Council reserves the right to provide further commentary on this as may be necessary.

15. We understand from correspondence with KCC that this concerns the inclusion of existing baseline traffic for those links removed within the KTM when the without development scenario is presented. We can confirm that upon receipt of the Jacobs outputs, we reviewed these links and combined the forecast traffic flows with those observed baseline flows where the baseline data was not present. This was necessary for the following links to ensure existing traffic was included:

- Lower Road
- Grove Road

The additional modelling reflecting the Ebbsfleet Central junction proposals is welcome. However, the Thames Way / Tarmac junction has not been modelled and is required, particularly given the high PRC shown in the Ebbsfleet Central modelling outputs.

16. As requested, modelling has been undertaken for the Thames Way/Tarmac Junction. The modelling results are presented within **Table 3** below and at **Appendix E**.

Table 3: Thames Way / Tarmac Junction

Movement	AM Peak Hour			PM Peak Hour		
	Degree of Saturation (%)	Delay (s)	Queue (pcu)	Degree of Saturation (%)	Delay (s)	Queue (pcu)
2032 + Max Commercial + Development						
A226 (North) – Left Ahead	52.9 : 52.9	16.8	7.5	60.7 : 60.7	17.9	9.2
Tarmac Access – Right Left	27.5 : 27.5	22.9	3.4	37.1 : 37.1	23.8	4.9
A226 (South) – Ahead	52	20.3	8.9	48.8	19.7	8.2
A226 (South) – Ahead Right	65.6 : 65.0	26.6	10.1	61.7 : 61.3	25.8	8.8
Cycle Time	90 seconds			90 seconds		
PRC	37.2			45.8		
2032 + Max Residential + Development						
A226 (North) – Left Ahead	54.7 : 54.7	17.0	7.9	58.5 : 58.5	17.6	8.7
Tarmac Access – Right Left	27.5 : 27.5	22.9	3.4	37.1 : 37.1	23.8	4.9
A226 (South) – Ahead	49.6	19.9	8.4	50.3	20.0	8.5
A226 (South) – Ahead Right	65.0 : 65.0	26.7	9.3	63.0 : 61.3	25.9	9.4
Cycle Time	90 seconds			90 seconds		
PRC	38.4			42.9		

17. As shown by the results in **Table 3**, the Thames Way/Tarmac junction will operate significantly below capacity in the AM and PM network peak hours in both the Max Residential and Max Commercial scenarios.

The junction modelling results show junction 8 (A226 London Road / A206 / B255) is predicted to operate over desired (and approaching theoretical) capacity during the weekday AM and PM peak periods with max RFCs of 0.94 and 0.98 and increased delays of 32 seconds and 60 seconds, respectively. Mitigation is therefore required for this junction and the County Council requests details of the proposals.

18. The junction model for Junction 8 was checked prior to additional work being done and an error in the model was identified. This error was caused due to the non-standard way in which the junction model had to be set up. The results now suggest that the junction operates within capacity, as shown below in **Table 4**.

Table 4: A226 London Road/A206/B255 Junction

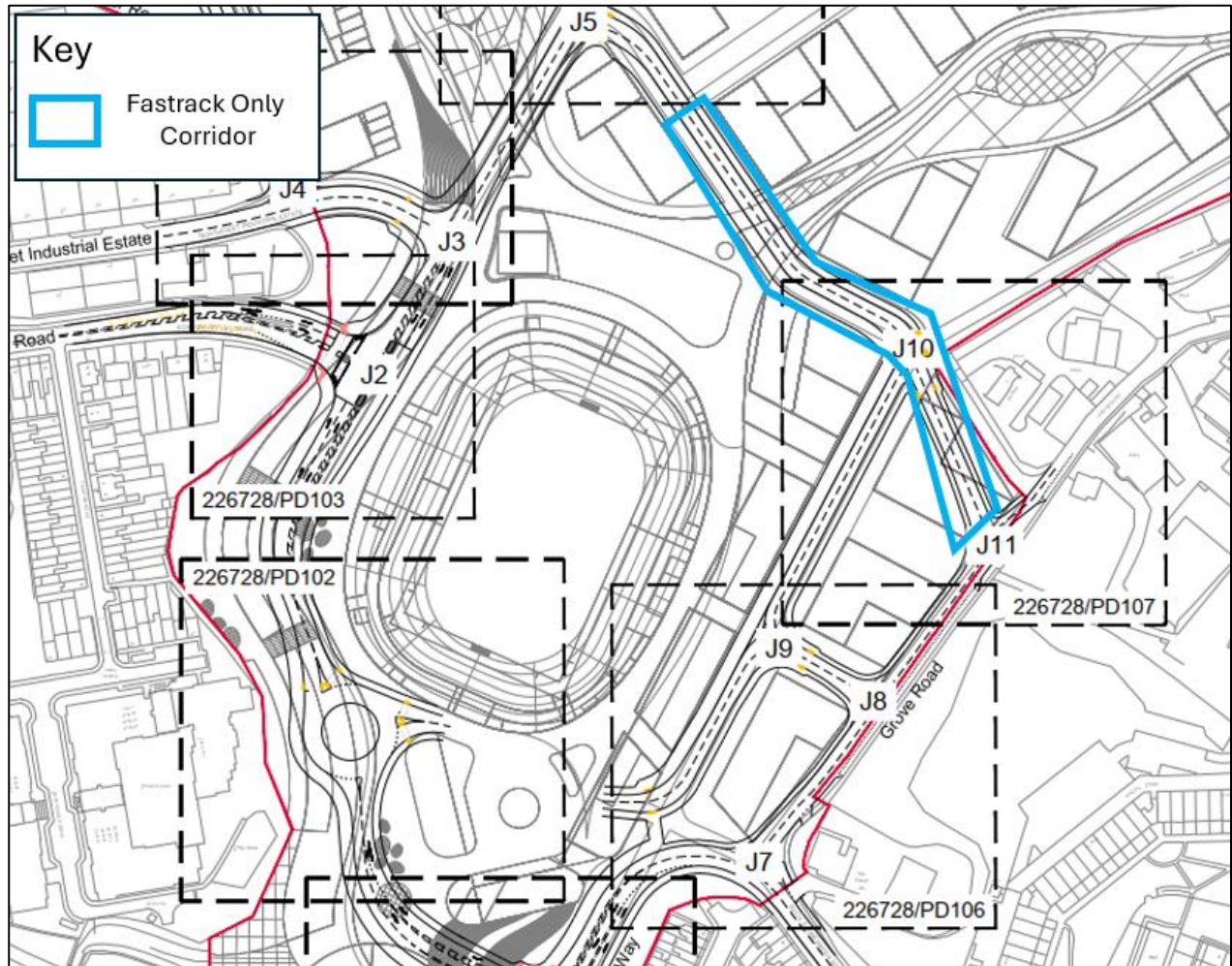
Movement	AM Peak Hour			PM Peak Hour			Saturday		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 With Development Flows (Without LTC)									
A206 (North) - Left Turn	0.3	4.2	0.21	2.3	11.99	0.70	0.3	4.26	0.24
A206 (North) - Ahead	0	1.99	0.03	0	2.17	0.03	0	0	0
A226 London Road (East)	1.6	4.64	0.60	0.6	2.95	0.39	0.5	2.62	0.32
B255 (South) - Left Turn	0.1	5.11	0.12	0.1	3.99	0.09	0	3.54	0.05
B255 (South) - Ahead	0.1	2.83	0.05	0.2	2.52	0.15	0.1	2.27	0.06
A226 London Road (West)	0.2	2.48	0.16	0.2	2.32	0.19	0.1	2.01	0.10

19. As shown by the results in **Table 4**, the highest RFC at the junction is in fact 0.70 at the A206 (N) – Left Turn during the PM peak hour. This RFC is associated with a queue of 2.3 PCU and delay of 11.99 seconds.
20. With consideration of the above, it is evident that this junction would operate significantly within capacity during both the weekday and Saturday peak hours.

The County Council welcomes the Fastrack link through the site as this will provide a high quality, high frequency service to site users, and also increase the attractiveness of the service. However, it is disappointing that the majority of the route will be shared with general traffic.

21. The Fastrack route has been extended within the revised highways layout within the site. **Figure 2** below highlights the Fastrack only aspect of the site.

Figure 2: Fastrack Only Route



The Design Code shows ‘Secondary’ and ‘tertiary’ routes from Grove Road. Whilst the applicant has stated no vehicle route through to The Boulevard is proposed, the County Council requests that further consideration during Reserved Matters application stage is given to a Fastrack only route at this location, to provide further time savings and in light of the uncertainty around the Galley Hill Road closure.

22. This comment is noted and the Design Code can be assessed in more detail at the Reserved Matters Stage.

Drawing 226728/PD100/AT02 Rev A shows the swept path for the electric bus along the Fastrack route, along with forward visibility splays for the 90-degree corner. It was understood that the one-way working section would be on the Fastrack only route, yet the plan shows this will also incorporate the junction of Harbourside Drive. As this one-way working section of the highway will be used by both Fastrack buses and general vehicle traffic, northbound traffic would prevent Fastrack from continuing around the corner in the southbound direction and vice versa. Northbound vehicles would also not be aware that they need to allow room for a bus to manoeuvre around the bend, which could cause conflicts. In addition, the bus driver would only just be within the 25m forward visibility splay when they have to stop to allow room

for an oncoming bus. As a result, the 43m splay would be required. The swept path shows the wheels of the bus over running the footway which is unacceptable. The one-way working section of the highway needs further consideration.

23. With consideration of the above the design of the Fastrack corridor has been amended as shown at **Figure 2** and within the site plans located at **Appendix B**. This revised layout removes the 90-degree corner.

The tracking drawings show larger vehicles such as the Fastrack bus would need to use both lanes to turn into / out of the Grove Road junction. Not only could this impact traffic along the primary route, it could also delay Fastrack. The junction therefore needs to be widened to accommodate this manoeuvre.

24. This Grove Road/B2175 junction has been revised as outlined above. The revised layout includes a widened junction to ensure that flex buses can access and egress the site with only a minor overrunning of the opposing lane when buses exit Grove Road to the west or enter Grove Road from the east. Vehicle tracking is provided at **Appendix F**.

Confirmation of the provision of a fund to provide remedial measures, should the Travel Plan not achieve its targets, is welcomed. The amount should be agreed prior to the determination of the application. Further comments on the FTP are provided below.

25. A dedicated budget will be allocated to providing remedial measures as required if the Travel Plan does not achieve its targets. The exact amount would be agreed in the final Travel Plan to be submitted and approved prior to first occupation.

The County Council is not clear how the uses along the Boulevard (e.g hotel, offices etc.) are accessed by vehicles as the Design Code states this area is for buses and cycles only. However, this can be determined at Reserved Matters application stage if required.

26. A new arrangement for The Boulevard is shown within **Appendix B**. This revised arrangement would be expected to have some personal vehicle and servicing vehicle traffic, along with cycles. The uses along The Boulevard and how they are accessed will be determined and confirmed at Reserved Matters.

Paragraph 5.63 states office trips have been reduced by 12% for internalisation. Evidence for this assumption is requested by the County Council.

27. The weekday trip generation for the site, including internalisation, was presented within a dedicated Trip Generation Note prepared in February 2023. KCC subsequently approved this information prior to the submission of the TAA. The relevant note has been appended to this response at **Appendix G**.
28. In any case, data from the Office for National Statistics 'Opinions and Lifestyle Survey' was consulted. The data suggests that across all salary bands the average proportion of those hybrid working is 21%, with 12% always working from home. As such, an internalisation rate of 12% for the office aspect of the development is considered reasonable and could in fact be considered an underestimation as this does not consider the prominence of those hybrid working.

During previous meetings with the County Council, the consultant stated a proportion of the food and beverage use would be behind the football stadium payline, thereby not attracting any additional trips. Confirmation is requested as to the amount behind the payline and how this has been taken account of.

29. The proportion of the total F&B floorspace located behind the payline has not yet been confirmed and as such cannot be calculated accurately at this stage. In any case, the removal of some floorspace would only act to reduce the trip generation associated with F&B floorspace at the site at any given time. As such by considering the total F&B floorspace within the Trip Generation calculations the most robust approach has been followed.
30. Furthermore, F&B behind the payline in the stadium would not be a trip generator itself, and instead would be a service provided to those already travelling into the stadium.

It is unclear how many of the non-residential parking spaces will be allocated to / predicted to be occupied by the football stadium use. This element must be clarified to the County Council.

31. Within the TA and TAA the number of allocated parking spaces for the stadium was not presented, even as a prediction. Instead, it is the assumption that such details would be confirmed within the Events Management Plan for the stadium, along with the Stadium Travel Plan which may look to allocate a certain parking provision to help achieve the travel targets of the TP.
32. Deriving a specific parking allocation at this stage is difficult. As noted within the TAA, and agreed Saturday Trip Generation Note, it is forecast that there would be a significant number of linked trips associated with spectators, who would also use either food and beverage or retail facilities, making use of the greater number of facilities that will be available around the stadium that are not currently present.
33. In any case, it is understood that KCC would like a predicted allocation. At present fans are directed to Car Park C of Ebbsfleet International for matchday parking. A review of this car park suggests that the western extent of Car Park C (assumed to be the area used by Ebbsfleet fans) has an approximate capacity of 411 spaces. It is understood that some on-street parking also undertaken by some spectators on matchdays.
34. As such, as a high level and initial prediction, it can be expected that up 400 car parking spaces would be allocated to the stadium for matchdays. This allocation is a slight reduction on the number of spaces available within Car Park C. It is also noted that due to extensive parking restrictions, including within the proposed site, on-street parking opportunities will be removed.
35. In any case, this provision is deemed suitable as it represents a slight reduction in parking when compared to the existing situation which illustrates the sites desire to encourage travel using the various other modes of transport that are easily accessible in proximity to the site. The level of parking would be monitored within the Events Management Plan for the stadium, along with the Stadium Travel Plan to work towards the most suitable provision for different games.
36. It is also of note that the Stadium Travel Plan would promote travel using alternative modes, informing spectators of the timetables and routes associated with local bus and rail services. Active

travel opportunities would also be promoted. Various incentives could also be explored within the Stadium Travel Plan to further encourage travel using active and public transport modes.

As the trip generation is based on a very low proportion of parking, the internal roads must be subject to parking restrictions, otherwise this could attract a higher number of trips than has been assessed and would also undermine the sustainable principles of the development.

37. This is agreed, and parking restrictions would be implemented across all internal roads. The proposals to introduce restrictions is set out within Section 3 of the Framework Car Park Management Plan submitted in August 2023 to support the TAA.

Key internal junctions should be modelled during Reserved Matters application stage to ensure they are able to cope with the predicted demand.

38. These can be modelled at the Reserved Matters Stage.

The Framework Travel Plan states “Cycle parking will be provided in line with the required KCC cycle parking standards which seeks 1 space per unit for flats/maisonettes”. The County Council considers that this is not enough for a site with 0.5 parking spaces and should be increased to one per bedroom.

39. The amount of cycle parking proposed aligns with the KCC cycle parking standards as outlined previously and as such can be considered suitable for the site. Furthermore, the baseline residential mode split forecasts that 3% of trips will be undertaken by bicycle, which does underestimate the number of residents that may own a bike but implies that providing a cycling provision of 1 space per unit (many of which are 1-bedroom units anyway) is suitable.

40. Furthermore, it is important to consider the sites location with regard to public transport modes. High quality bus and rail services are accessible within walking distance of the site, meaning that they would be easily accessible without a bicycle. Accordingly, the uptake of such modes would not be limited by the level of cycle parking at the site, even if all spaces were to be occupied.

41. The car parking provision of 0.5 spaces per unit was set out in the original Transport Assessment and was based upon car ownership data, suggesting that it is an appropriate provision for the site.

The 10% reduction in single occupancy vehicle movements for both residential and commercial is shown as an increase, not a decrease.

42. This is a typo and has been updated to show a decrease.

The Action at 4.7 states “To appoint a Travel Plan Co-Ordinator within first six months of occupation”. The Travel Plan Coordinator must be appointed prior to occupation in order to implement the measures from day one, including the preparing and distribution of Travel Information Packs.

43. This has been updated within the Travel Plan.

The County Council notes that any monitoring / surveys must include vehicle counts at all vehicle access points. Paragraph 4.11 says monitoring will be undertaken during years 1, 3 and 5 when monitoring will cease. This is not agreed by the County Council. Given the significant scale of the development, monitoring of the Travel Plan must be undertaken on an annual basis so that remedial measures can be implemented should they be required, and it should be made clear that they should continue until five years post full occupation of the site.

44. This has been updated within the Travel Plan to confirm that monitoring is undertaken annually.

As previously requested, a Travel Plan Review Group (TRG) is required to be established. The TRG should consist of the Travel Plan Coordinator, members from the applicant's team, the County Council and the Local Planning Authority, and should meet on an annual basis (or sooner) after each annual monitoring period in order to discuss the results and determine if any intervention is necessary and this must be secured accordingly.

45. This can be achieved and has been added to the Framework Travel Plan.

The football stadium and other uses which breach the Travel Plan threshold will be required to have their own Travel Plan.

46. Separate Travel Plans will be prepared for the football stadium and other uses if they are to breach the Travel Plan threshold. These documents will be prepared prior to occupation of the site. This is outlined in the updated Framework Travel Plan.

Furthermore, 'Table 3: Action Plan for Travel Plan Measures' should be updated to include the public transport tickets.

47. This has been updated within the Framework Travel Plan.

Structures

There are numerous oversailing elements (i.e. structures overhanging public highway), which will need structures technical approval and an oversailing license. The County Council considers that inadequate detail has been provided to identify each one so these will have to be revisited during Reserved Matters application stage.

The County Council does not consider that enough detail has been provided to identify where retaining elements may be and whether they need structures technical approval. This will need to be revisited when more detailed designs are available to identify what may need approval. The above statement can also be applied to other structural elements.

The County Council notes that statements made in the Design Code appear to directly contradict the tunnel design standards. All schemes need to be designed in line with the relevant standards.

48. The above comments are noted and agreed with.

Tunnels have numerous legal requirements that need to be met such as ventilation, fire suppression and lighting requirements. It is considered that this would lead the proposal to be far greater in scope than has been anticipated by the applicant. Once constructed, they also often incur high running and maintenance costs, which would fall to the County Council. As a result, the County Council seeks to avoid tunnels where possible, especially where suitable alternatives are available. As requested during a previous meeting with the County Council and the applicant's consultants, alternative options should be explored such as a podium style construction which would leave the sides open and reduce the construction and maintenance liability.

49. The design of the podium and A226 would be refined at the Reserved Matters stage, with the option of providing an open sided podium explored in detail once more detail on the structures and design of this aspect of the development are considered in detail. However, there is no expectation that the A226 will be a tunnel as it passes beneath the podium.

Public Rights of Way (PROW)

The County Council, in respect of Public Rights of Way (PROW), would like to bring to the applicant's attention the existence of Public Footpaths NU1, NU44 and National Trail, the King Charles III Coast Path (KC3CP), which are directly affected by the development proposals. The Footpaths are identified on the extract of the Network Map of Kent in Appendix 1. The Network Map is a working copy of the Definitive Map. The existence of the right of way is a material consideration and the Definitive Map provides conclusive evidence in law of the existence and alignment of PROW. While the Definitive Map is the legal record, it does not preclude the existence of higher rights, or rights of way not recorded on it.

The National Trail is a leisure opportunity of considerable importance to both Gravesham and Kent, use of which is only going to grow in the future and is heavily promoted on a national level.

As a general statement, the County Council is keen to ensure that its interests are represented within the local policy frameworks of the districts in Kent. The County Council is committed to working in partnership with the Borough Council to achieve the aims contained within the Rights of Way Improvement Plan which relate to quality of life, supporting the rural economy, tackling disadvantage and safety issues, and providing sustainable transport choices.

The County Council continues to be disappointed with the application in respect of PROW. The impact of the proposals on both the Public Footpath and the KC3CP will be significant and the application is not considered by the County Council to go far enough in addressing this. The alternative routes are not acceptable as proposed and the County Council considers that the PROW issues cannot be determined at a later Reserved Matters stage. In respect of PROW, the County Council maintains its holding objection on this application until these issues are fully addressed and resolved.

50. With consideration of these comments, a meeting was undertaken between KCC (Kate Beswick), National Trail (Thomas Kennedy) and SLR (Formerly Vectos). Within the meeting all the PROWs in proximity to the site were discussed. Subsequent information is provided below:

Public Footpath NU1

The proposed diversion route as shown on Fig. 4.4 is not ideal, due to the multiple routes proposed for this section. The County Council would advise that the route of the PRow, the KC3CP and the development pedestrian route are on the same alignment, making a convenient and direct route to avoid duplication and reduce maintenance. The blue dashed line on Fig. 4.4 is the suggested alignment with this route recorded PRow NU1 and the National Trail.

51. As requested, and discussed within the meeting, the PRows to the northwest of the site have been combined to show one coherent route comprising the NU2 route and KCSCP trail. This has been done to allow the route to follow the most efficient desire line as requested by KCC.
52. The alignment of the PRow to the north-west of the site, outside the red line would be maintained and not diverted as part of the proposals. The realigned PRow within the site would connect directly to this PRow at the site boundary. The updated PRow plan can be found at **Appendix H**.

Public Footpath NU44

The County Council considers that the proposed diversion route is not ideal as it appears to run between (the rear?) of the retail units and the existing house gardens, in a narrow space (although, it is noted that Fig. 4.4 is not detailed, nor to scale). The route should be within a green, open and attractive to use space with natural surveillance for reasons of public user safety. The County Council also require details / confirmation regarding the route of DS27 which currently connects to NU44 as to how this route fits into the application design. The applicant should note that lighting does not come under the remit of the County Council, but the Local Authority i.e. Gravesham Borough Council.

53. The NU44 route would travel to the rear of the retail units to the west of the site. However, as discussed with KCC this is a high-quality route that would benefit from landscaping and lighting to ensure that it is pleasant and desirable to use. The proposed nature of this aspect of the site is clearly set out within the Design Code for the site, the relevant page of which is provided at **Appendix I**. Specifically, the Design Code sets out how the 'Green Buffer' along the western side of the site would include:
 - Native species planting
 - Habitat enhancement measures (e.g. bird, bat and bee boxes)
 - Evergreen species
 - Gravel (or similar) paths with a minimum 3m width
54. Furthermore, the alignment of this route is such to ensure that the route can avoid the public realm around the retail units and stadium helping to retain the nature of the footpath as much as possible. To the northwest, NU44 would connect to the residential area to the west, as per the existing alignment thus ensuring that this key connection is not lost. This connection would not involve a level change as the NU44 footpath travels at the ground floor level, not upon the raised podium.

Public Footpath NU2

The reference to the Footpath following “a similar alignment to the existing route” requires urgent clarification, as any deviation from the existing alignment will require a legal diversion. The Public Footpath requires a definitive route, rather than just a general direction through the public realm as is suggested.

55. As discussed with the KCC PRow officer, the ‘similar alignment’ phrasing was as such due to the routing of the NU2 footpath through the area of public realm to the south of the stadium. It is not considered most appropriate for this route to continue through the area of public realm, with its current alignment and instead a revision to this alignment may allow the route to connect more effectively to other pedestrian routes.
56. Exactly how this PRow routes cannot be deciphered until the detailed design stage to allow the best route to be determined. In any case, slightly amending the NU2 route would only act to improve the route, especially given the proposed context. At present, the options include either halting the PRow upon entry to the retail areas public realm or extending it east through this area towards the B2175.

King Charles III Coastal Path (KCSCP)

The County Council is aware the applicant is consulting directly with the National Trails Officer, who works in partnership with the County Council regarding the National Trail. Where the route is East of the site, the County Council supports the Trails Officer regarding utilising the green space to realign the route. The eastern section of the proposed re-alignment is an unappealing, indirect route with sharp turns that passes between buildings. To address this, it is requested that the new route connects to the adjacent Northfleet development via Robins Creek and passes along the proposed pedestrian route through green space. This link would establish a direct connection between two major development areas, providing significant opportunities for active travel and outdoor recreation. With regards to the northwest section of the site, the proposed cluster of paths should be consolidated, with the KC3CP on the alignment of a PRow that is direct and convenient to use. This approach would avoid a duplication of routes and minimise the burden of path maintenance.

57. After discussions with National Trail the KCSCP has been amended, and two route options are now shown within the pedestrian routing figure. The first option considers a similar route to that previously proposed but takes a more direct route with less tight turns, passing through areas with a considerable amount of public realm. The second route considers the trail passing through Robbins Creek as it travels to the east. As agreed with the National Trail officer, this ‘Robins Creek’ route would be explored at a later stage to understand whether it is achievable. This route would involve discussions with relevant parties given that it is outside of the sites red line, and believed to be within the ownership of EDC, as opposed to Gravesham.
58. Such discussions would be had at the Reserved Matters stage and if the Robins Creek route is achievable then the KCSCP would be realigned accordingly. It was also discussed that a suitable Condition could be implemented to ensure that the Robins Creek route is explored thoroughly at the Reserved Matters stage, and if achievable will be progressed.

Also, the applicant should be aware that the KC3CP is not a PRow, but a National Trail as previously advised, and therefore references (e.g. at paragraph 4.34) require amendment as these are currently legally incorrect.

59. This is understood, and references within the relevant documents have been updated to National Trail.

The County Council notes that a PRow Scheme of Management is to be conditioned, detailing the PRow affected, including the England Coast Path, to cover diversion procedure to enable a timely and legal delivery of any development; construction management, (routes must remain open and safe for public use); width, surface, signage on completion; any phasing must ensure the delivery of infrastructure to support the development.

60. This is understood.

Appendix A

STAGE 1 ROAD SAFETY AUDIT

Landmarque Property Group

Northfleet Harbourside

13th October 2023

Contents

1 Introduction 1

2 Matters Arising from the Audit 3

3 Audit Team Statement..... 5

Appendices

- Appendix A – Site Location Plan
- Appendix B – Documents Submitted for Audit
- Appendix C – Problem Location Plan

1 Introduction

- 1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on Friday, 13th October 2023. The audit was carried out on behalf of SLR. The overseeing organisation and project sponsor is Kent County Council.
- 1.2 An RSA brief was prepared by Rory Spiller of Vectos South part of SLR on 17th April 2023 and was subsequently accepted by the Audit Team on the same day. Following this, an updated set of plans have been submitted to the Audit Team which forms the basis of this audit.
- 1.3 This RSA team was as follows:
- PATRICK WEST BA (Hons), MCIHT, MSoRSA, HE Approved Cert. Comp.
Audit Team Leader
Associate Director
Vectos part of SLR
- ASA JOHN PLANT MCIHT, MSoRSA, HE Approved Cert. Comp.
Audit Team Member
Director
Vectos part of SLR
- 1.4 A site visit was undertaken on Wednesday the 3rd of May 2023 between the hours of 1100 and 1200. The weather was fine, overcast and the road surface dry. At the time of the site visit moderate levels of traffic and low non-motorised users were observed. Following the receipt of the updated set of plans, it has been considered that a new site visit is not necessary.
- 1.5 A site location plan can be found at **Appendix A** of this report.
- 1.6 The terms of reference of the RSA are as described in the Design Manual for Roads and Bridges (DMRB) Standard, GG119 RSA.
- 1.7 The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 1.8 The scheme subject to Stage 1 RSA relates to the proposed realignment of the A226 carriageway and associated site access junctions surrounding the site.
- 1.9 A list of the documents and drawings submitted for this Stage 1 RSA can be found at **Appendix B**.
- 1.10 A submitted design drawing has been annotated to show the locations of any problems identified during this Stage 1 RSA. These plans can be found at **Appendix C**.

- 1.11 Whilst recommendations have been made within this report, there may be equally satisfactory alternatives. The Audit Team will be pleased to consider alternatives if required.

Departures from Standards

- 1.12 The Audit Team were not informed of any departures from standards.

2 Matters Arising from the Audit

Drawing No. 226728/PD15 Rev. A

2.1 Problem

Location: General - Proposed signalised junctions.

Summary: Signalised crossings are not proposed on the proposed signalised junctions, which could lead to pedestrians crossing injudiciously and being struck by oncoming traffic.

Signalised crossings are proposed on some arms of the proposed signalised junctions, however there are multiple instances where they are missing. If signalised crossings are not provided on all arms of the signalised junctions, when considering desire lines, pedestrians are likely to cross where it is not safe to do so and could be struck by oncoming vehicles.

Recommendation: It is recommended that signalised crossings are provided on desire lines of each junction.

2.2 Problem

Location: Bus stops on Galley Hill Road.

Summary: Bus stops are close together and if buses depart simultaneously, they could create a pinchpoint for overtaking vehicles, particularly for two-wheeled vehicles.

The eastbound and westbound bus stops on Galley Hill Road are located close together. This creates a pinchpoint for overtaking vehicles and particularly for vulnerable road users such as cyclists. If a cyclist was to overtake a stationary bus just as both buses departed their stop, this would limit the space available to the cyclist who could be struck by either bus.

Recommendation: It is recommended that the bus stops are relocated further apart from each other so that two-wheeled vehicles overtaking stationary buses are not affected if buses depart simultaneously.

2.3 Problem

Location: Flexible bus route.

Summary: Two-way bus movements cannot be accommodated within the carriageway and this could lead to head on collisions.

The swept path analysis of flexible buses travelling both northbound and southbound show that when travelling around corners with tight radii the bus is required to overrun the majority of the opposite side of the carriageway for a significant length. This could result in head on collisions between buses and/or other traffic.

Recommendation: It is recommended that the alignment of the road is amended to facilitate two-way bus movements.

3 Audit Team Statement

3.1 We certify that this Audit has been carried out in accordance with the requirements of GG119.

Road Safety Audit Team Leader

Name: Patrick West

Signed:



Position: Associate Director

Organisation: Vectos part of SLR

Date: 13th October 2023

Road Safety Audit Team Member

Name: Asa John Plant

Signed:



Position: Director

Organisation: Vectos part of SLR

Date: 13th October 2023

Appendix A

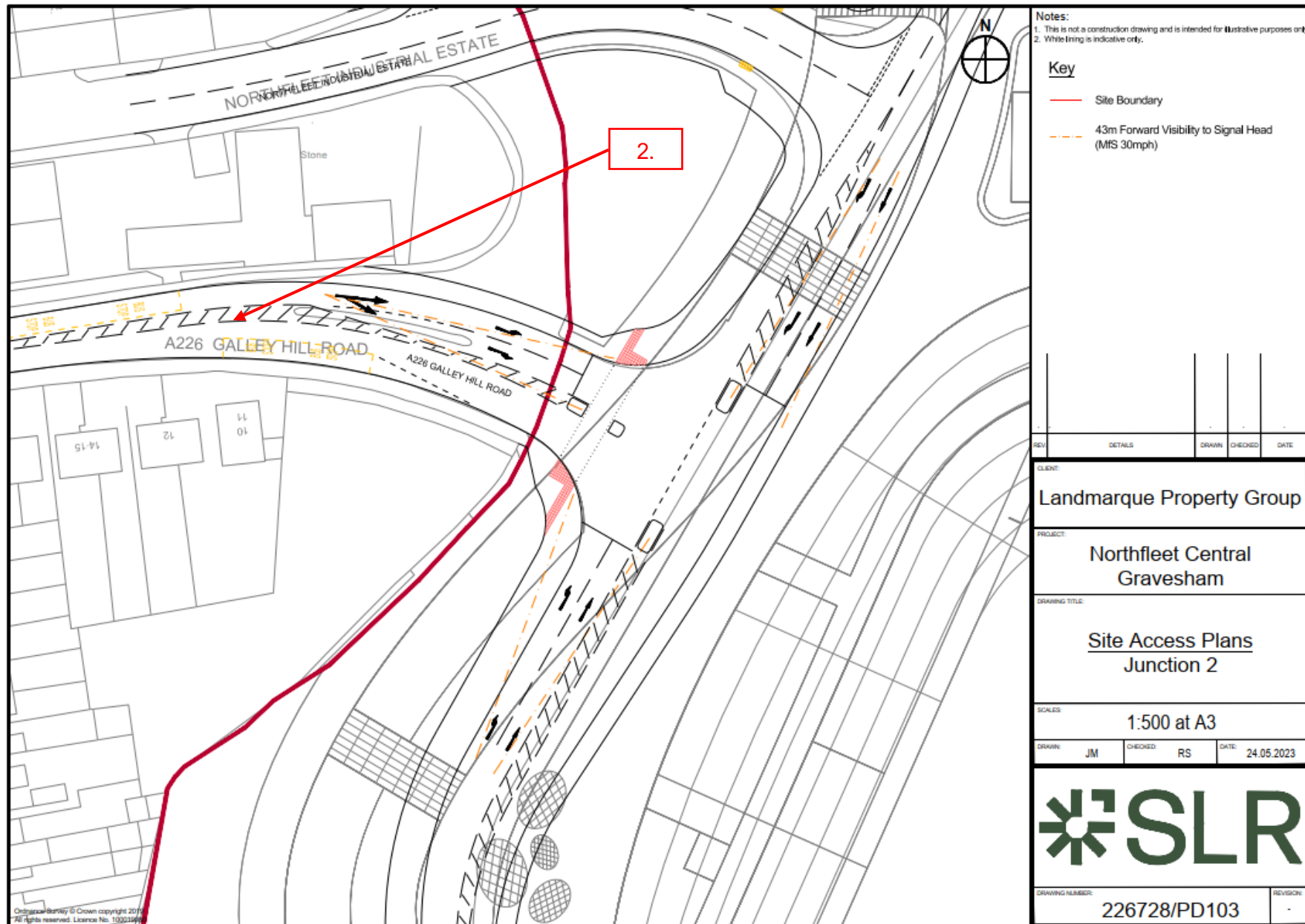
Appendix B

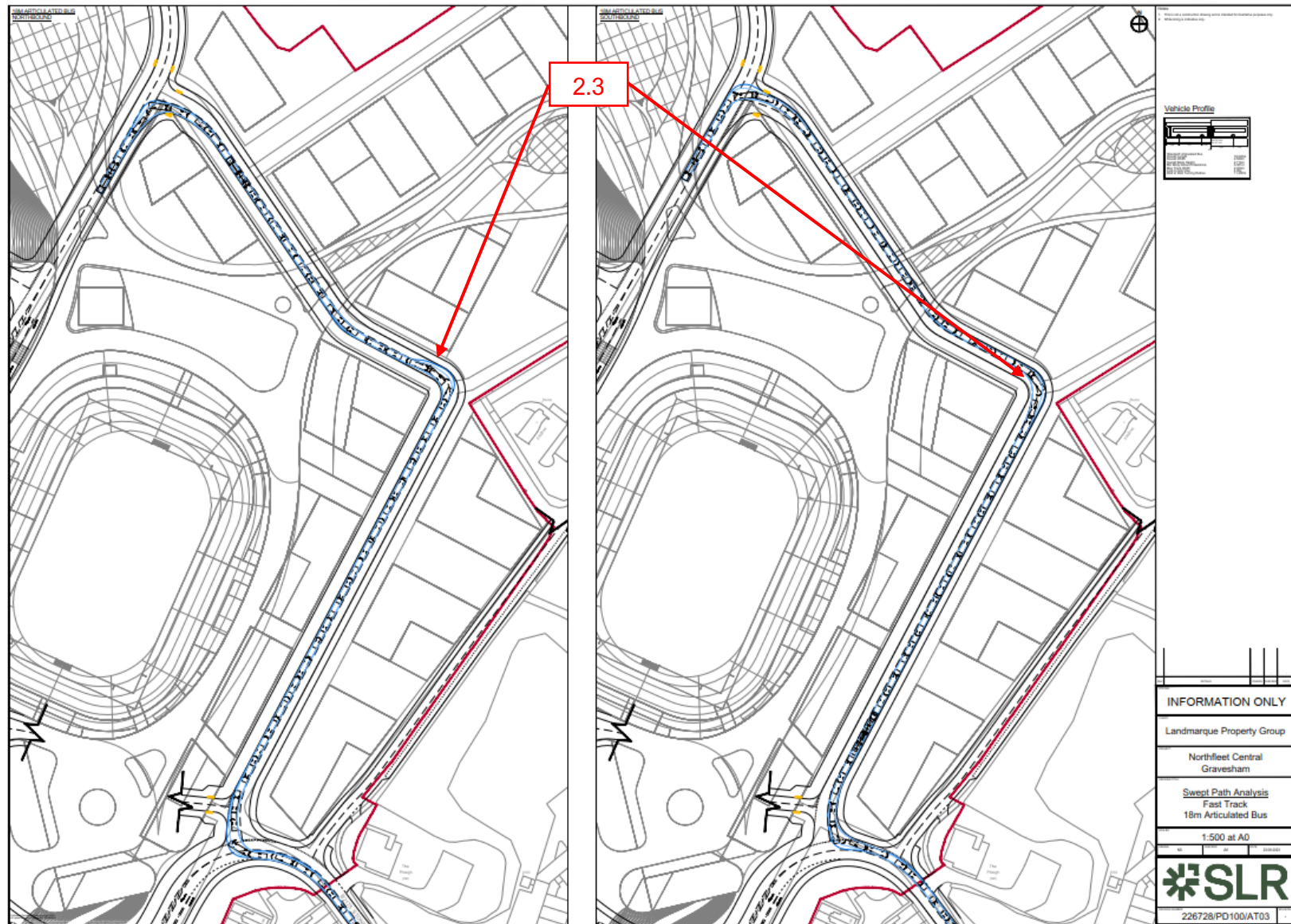
List of included documents and drawings:	
Documents (inc. title, date and revision number):	Stage 1 RSA Brief Highway Boundary Data
Drawings	226728_PD07_Rev A - Typical Cross Sections 226728_PD100 - Site Access Plan 226728_PD100_AT01 - SPA_Galley Hill_16.5m Artic 226728_PD100_AT02 - SPA_Fast Track_Elec Bus 226728_PD100_AT03 - SPA_Fast Track_18m Bus 226728_PD100_AT04 - SPA_Stadium_Refuse_Entry 226728_PD100_AT05 - SPA_Stadium_Refuse_Exit 226728_PD101 - Site Access Plans_Junction 1 226728_PD101_AT01 - SPA_Junc1_16.5m Artic 226728_PD102 - Site Access Plans_Roundabout 226728_PD103 - Site Access Plans_Junction 2 226728_PD103_AT01 - SPA_Junc2_16.5m Artic 226728_PD104 - Site Access Plans_Junction 3&4 226728_PD104_AT01 - SPA_Junc3_16.5m Artic 226728_PD104_AT02 - SPA_Junc4_Refuse 226728_PD105 - Site Access Plans_Junction 5&6 226728_PD105_AT01 - SPA_Junc6_16.5m Artic 226728_PD106 - Site Access Plans_Junction 7 8 & 9 226728_PD106_AT01 - SPA_Junc7_Panel Van

Tick all that are included and provide reasons for those that are not included:			
Site Location Plan	☒	Scale layout plans	☒
Departures and relaxations from standards	☐	Construction/ typical details	☐
Previous RSA reports	☐	Previous RSA response reports and evidence of agreed actions	☐
Collision data and collision data analysis	☒	Road traffic collision plot	☒
Traffic signal staging	☐	Traffic counts	☐
Speed surveys	☐	Pedestrian, cyclist and horse-riding desire lines and volumes	☐

Walking, cycling and horse-riding assessment and reviews	☐	Items outside the scope of the RSA/ strategic decisions	☐
Other factors that may impact on road safety	☐	Design speeds/ speed limits	☐
Design standards used	☐	Adjacent land uses	☒

Appendix C





Contact

London

Network Building,
97 Tottenham Court Road,
London W1T 4TP.
Tel: 020 7580 7373

Bristol

5th Floor, 4 Colston Avenue,
Bristol BS1 4ST
Tel: 0117 203 5240

Cardiff

Helmont House, Churchill Way,
Cardiff CF10 2HE
Tel: 029 2072 0860

Exeter

6 Victory House,
Dean Clarke Gardens,
Exeter EX2 4AA
Tel: 01392 422 315

Birmingham

Great Charles Street,
Birmingham B3 3JY
Tel: 0121 2895 624

Manchester

Oxford Place, 61 Oxford Street,
Manchester M1 6EQ.
Tel: 0161 228 1008

Leeds

7 Park Row, Leeds LS1 5HD
Tel: 0113 512 0293

Bonn

Stockenstrasse 5, 53113,
Bonn, Germany
Tel: +49 176 8609 1360
www.vectos.eu

Registered Office

Vectos (South) Limited

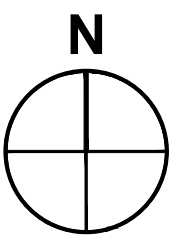
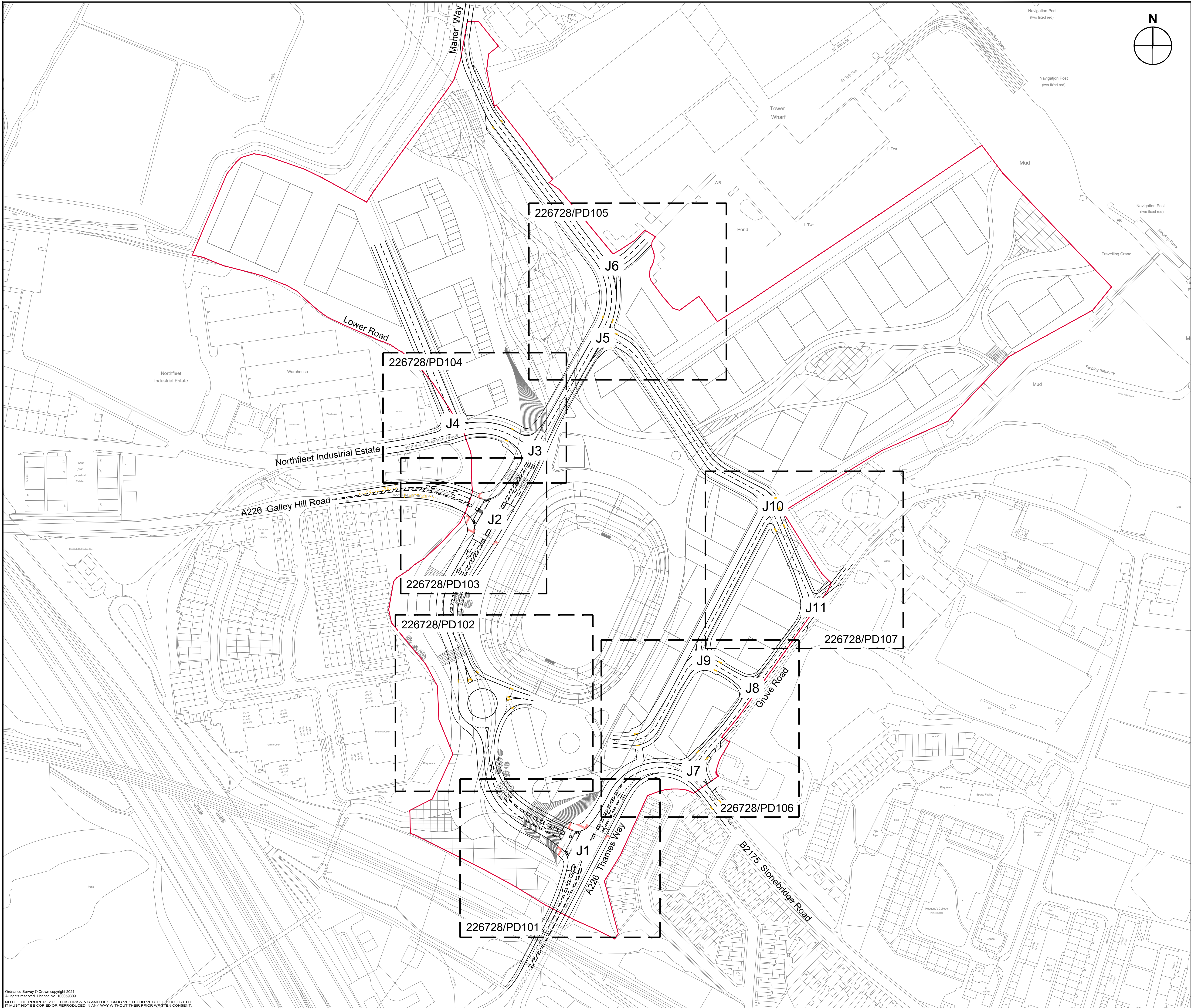
Network Building,

97 Tottenham Court Road,

London W1T 4TP

Company no. 7591661

Appendix B



- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
 2. While lining is indicative only.

Key

— Site Boundary

B	Junction 2, 7, 8 & 9 amended. Junction 10 & 11 added.	NS	RS	16.01.2024
A	Minor amendments	NS	RS	18.10.2023
REV	DETAILS	DRAWN	CHECKED	DATE

STATUS:

INFORMATION ONLY

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Site Access Plans
KEYPLAN

SCALES:

NTS at A1

DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
--------	----	----------	----	-------	------------

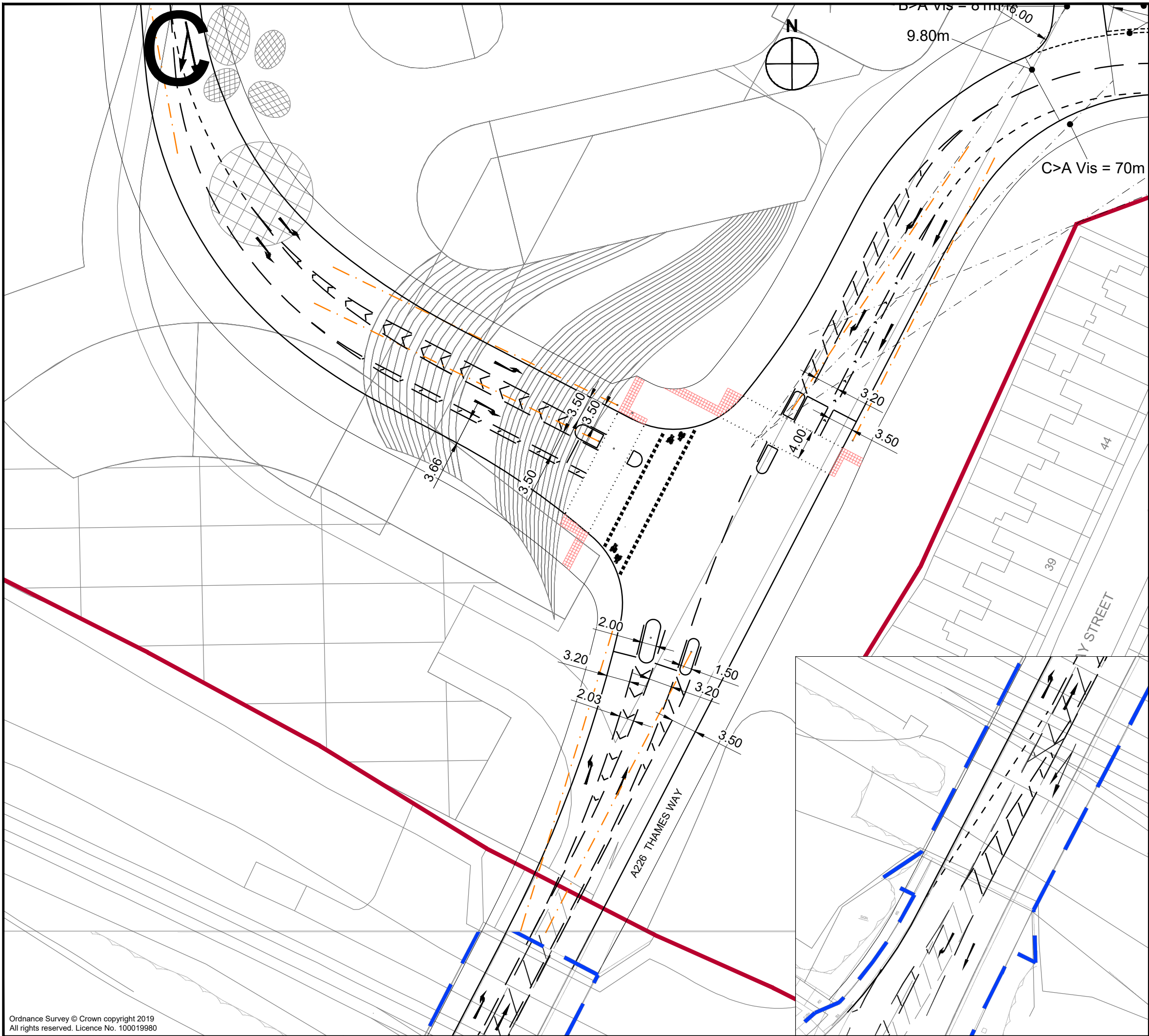


DRAWING NUMBER:

226728/PD100

REVISION:

B



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility to Signal Head (MfS 30mph)

REV.	DETAILS	DRAWN	CHECKED	DATE
A	Dimensions added	NS	RS	18.10.2023

CLIENT:
Landmarque Property Group

PROJECT:
Northfleet Central Gravesham

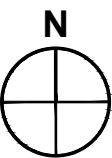
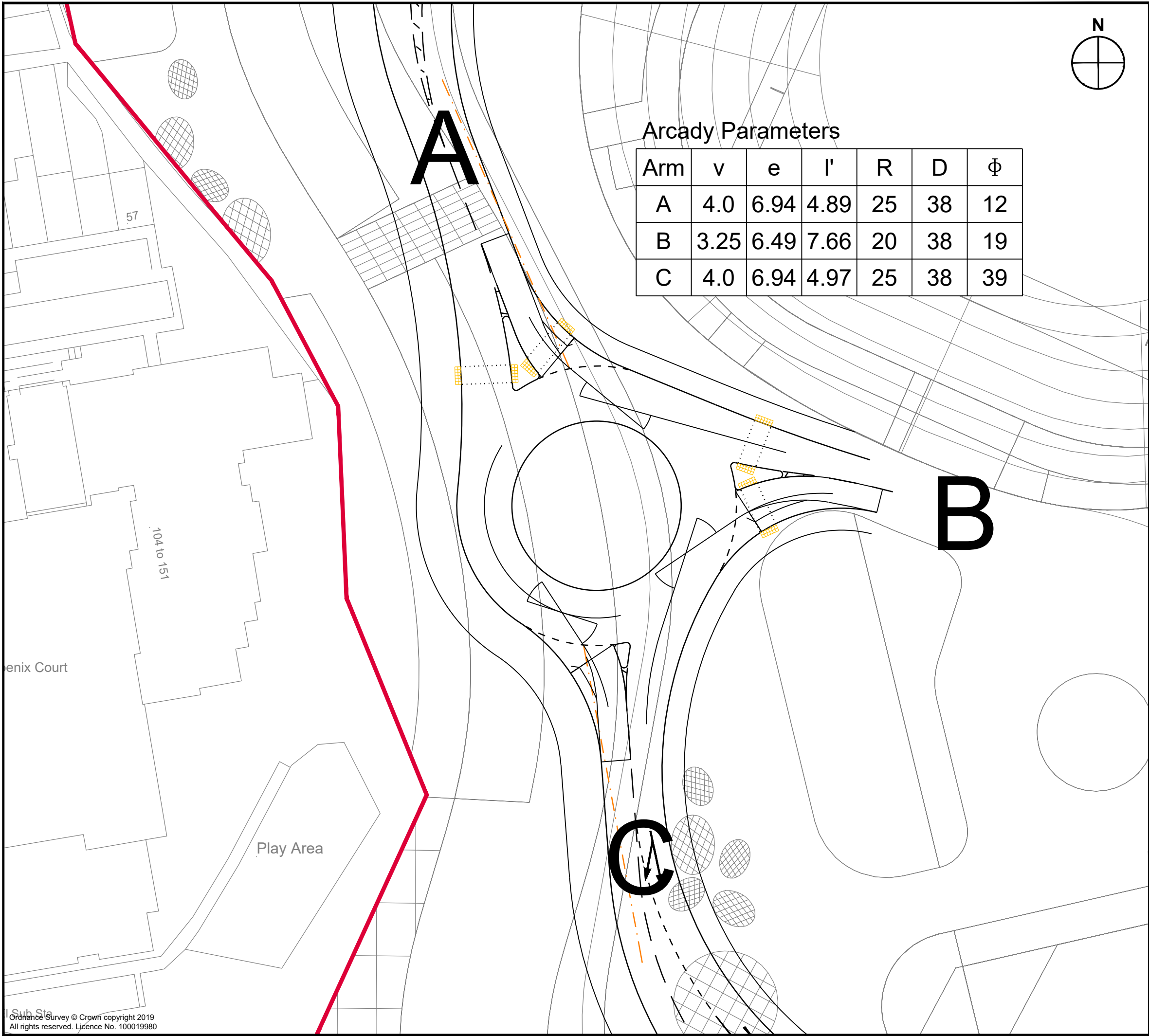
DRAWING TITLE:
Site Access Plans Junction 1

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
--------	----	----------	----	-------	------------



DRAWING NUMBER:	226728/PD101	REVISION:	A
-----------------	--------------	-----------	---



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility on approach (MfS 30mph)

REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
Northfleet Central
Gravesham

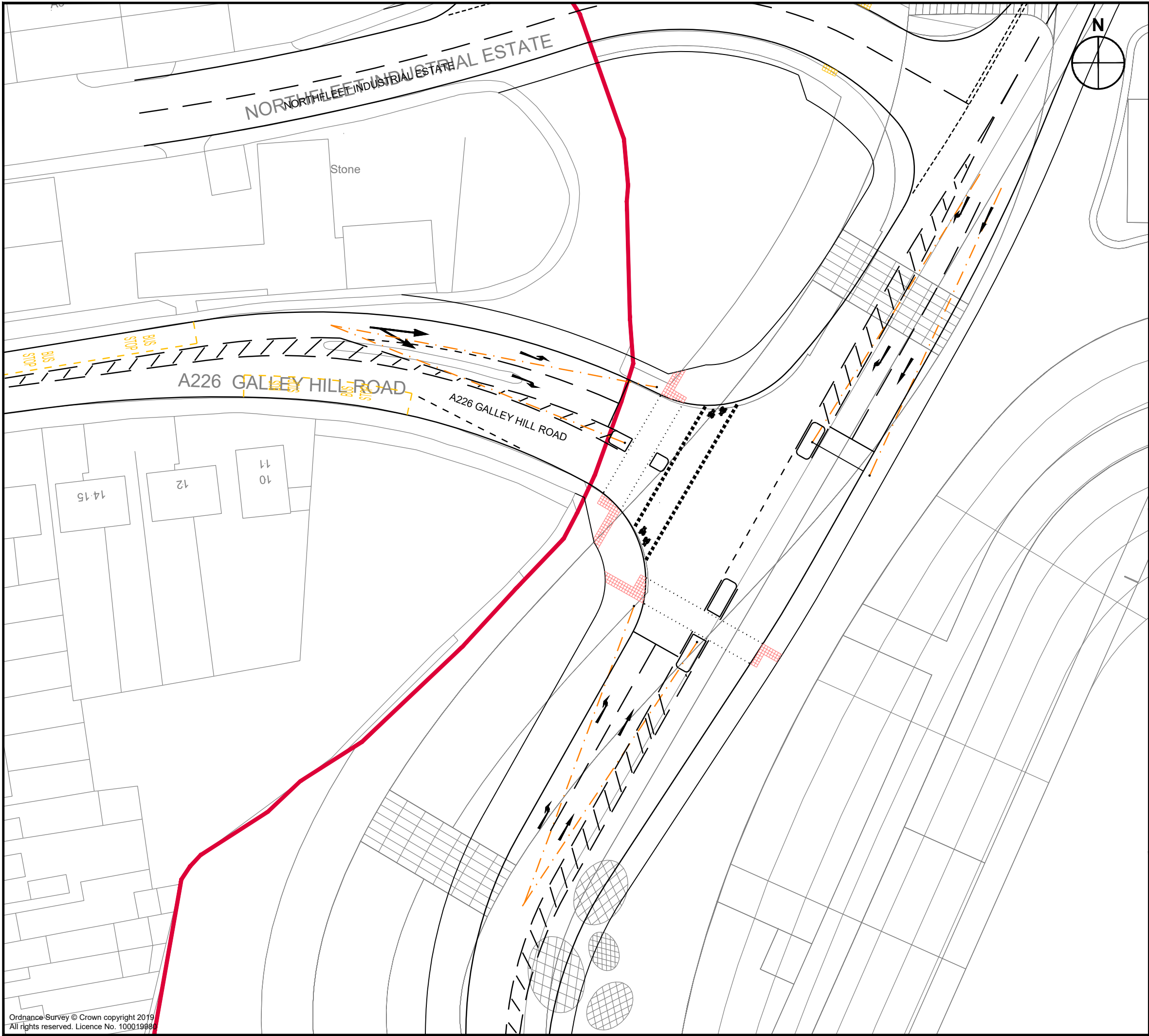
DRAWING TITLE:
Site Access Plans
Roundabout

SCALES:
1:500 at A3

DRAWN: JM	CHECKED: RS	DATE: 24.05.2023
-----------	-------------	------------------



DRAWING NUMBER: 226728/PD102	REVISION: .
---------------------------------	----------------



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Key

- Site Boundary
- 43m Forward Visibility to Signal Head (MfS 30mph)

REV.	B	Crossing added to southern arm	NS	BH	16.01.2024
	A	Dimensions added	NS	RS	18.10.2023
DETAILS			DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

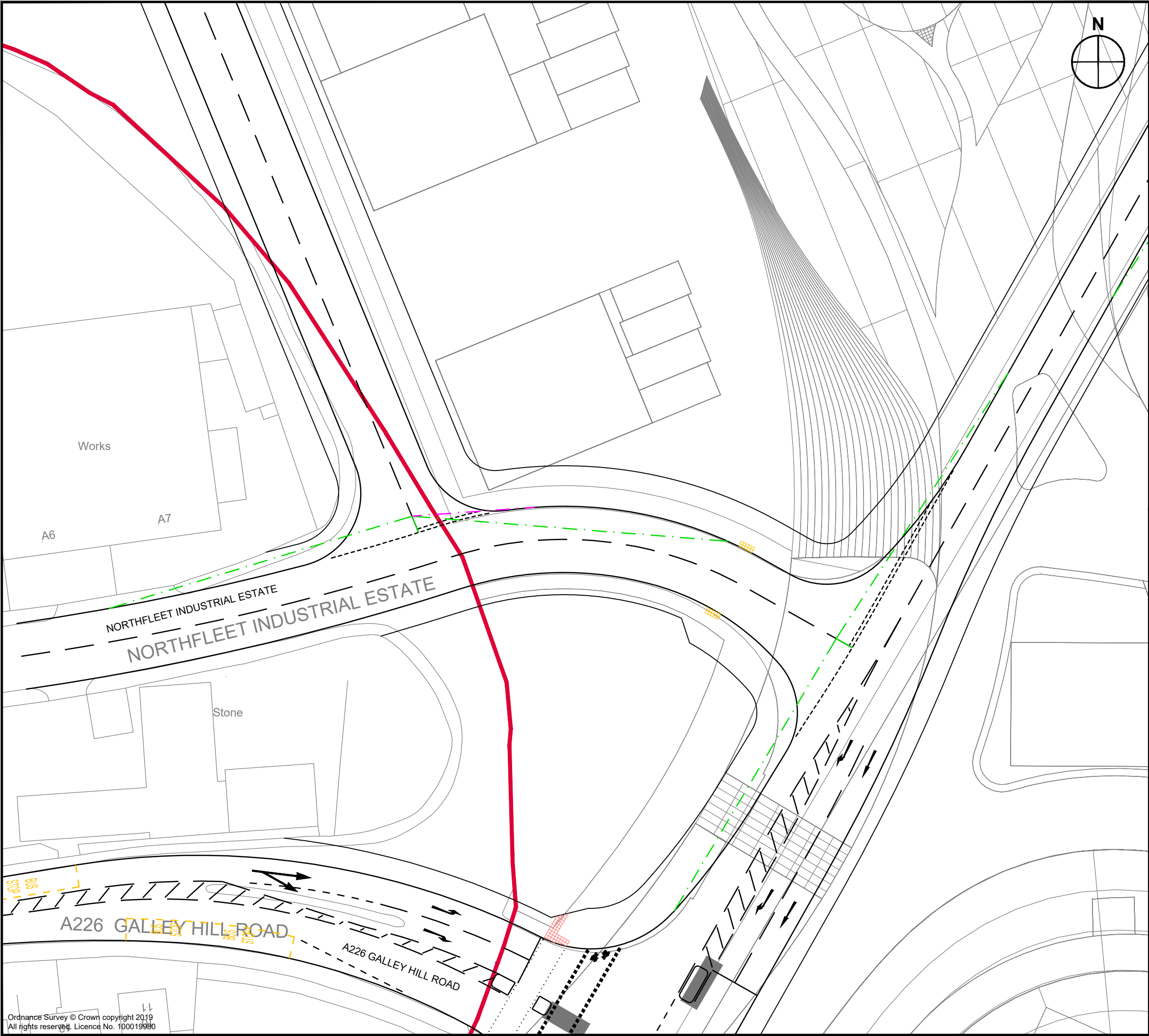
DRAWING TITLE:
**Site Access Plans
Junction 2**

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	24.05.2023
--------	----	----------	----	-------	------------



DRAWING NUMBER:	226728/PD103	REVISION:	B
-----------------	--------------	-----------	---



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Tangential visibility

A	J3 north west kerb radii amended	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
Northfleet Central
Gravesham

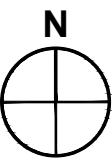
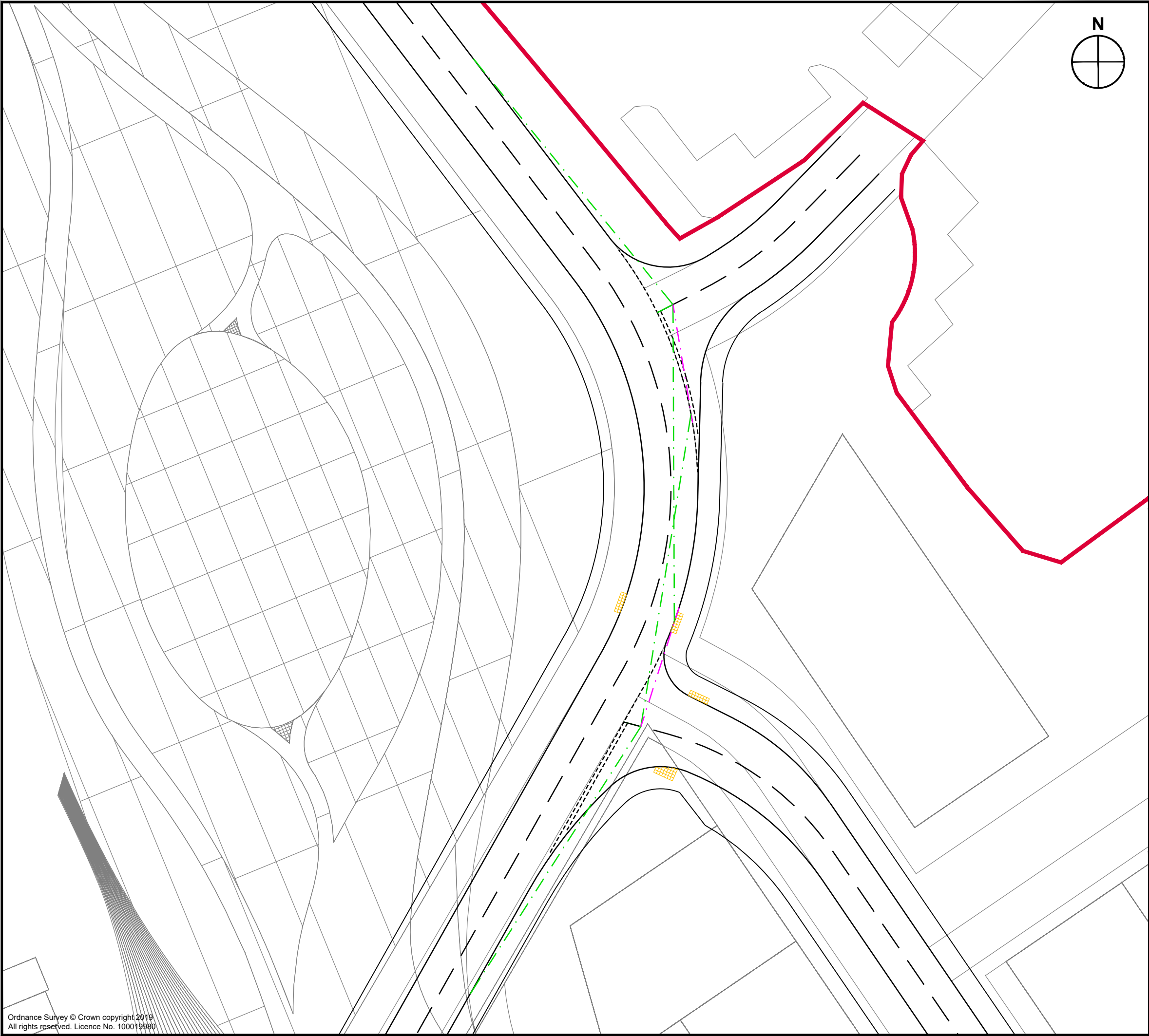
DRAWING TITLE:
Site Access Plans
Junction 3 & 4

SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	23.08.2023
--------	----	----------	----	-------	------------



DRAWING NUMBER:	226728/PD104	REVISION:	A
-----------------	--------------	-----------	---



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Tangential visibility

A	J6 south east kerb radii amended	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Site Access Plans
Junction 5 & 6**

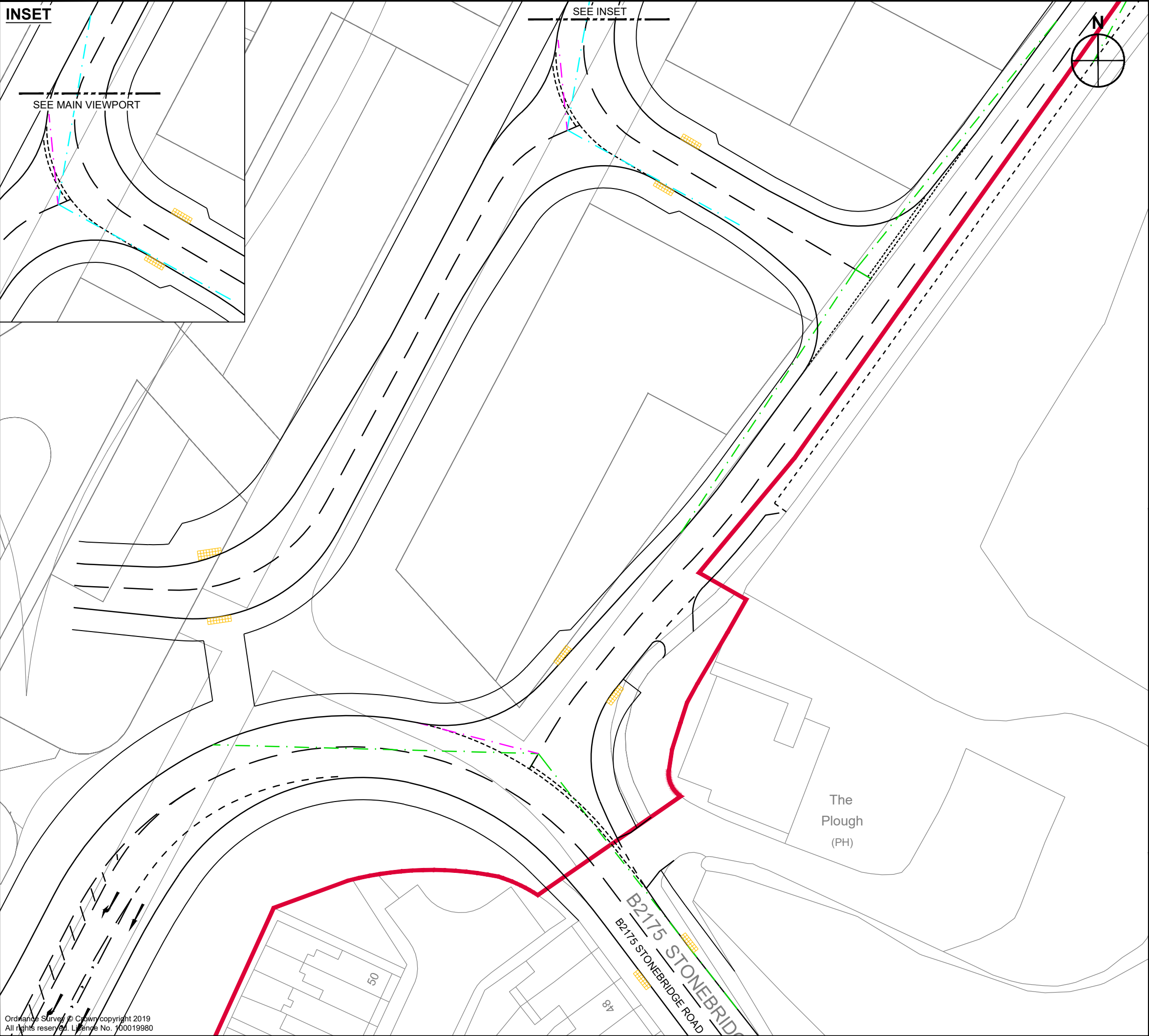
SCALES:
1:500 at A3

DRAWN:	JM	CHECKED:	RS	DATE:	23.08.2023
--------	----	----------	----	-------	------------



DRAWING NUMBER:	226728/PD105	REVISION:	A
-----------------	--------------	-----------	---

INSET



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Visibility splay 2.4m x 25m (MfS 20mph)
- Tangential visibility

REV.	B	Junction 7 amended, junctions 8 & 9 relocated	NS	RS	15.01.2024
	A	Dimensions added	NS	RS	18.10.2023
REV.	DETAILS		DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Site Access Plans
Junction 7, 8 & 9**

SCALES:		1:500 at A3		
DRAWN:	JM	CHECKED:	RS	DATE: 23.08.2023

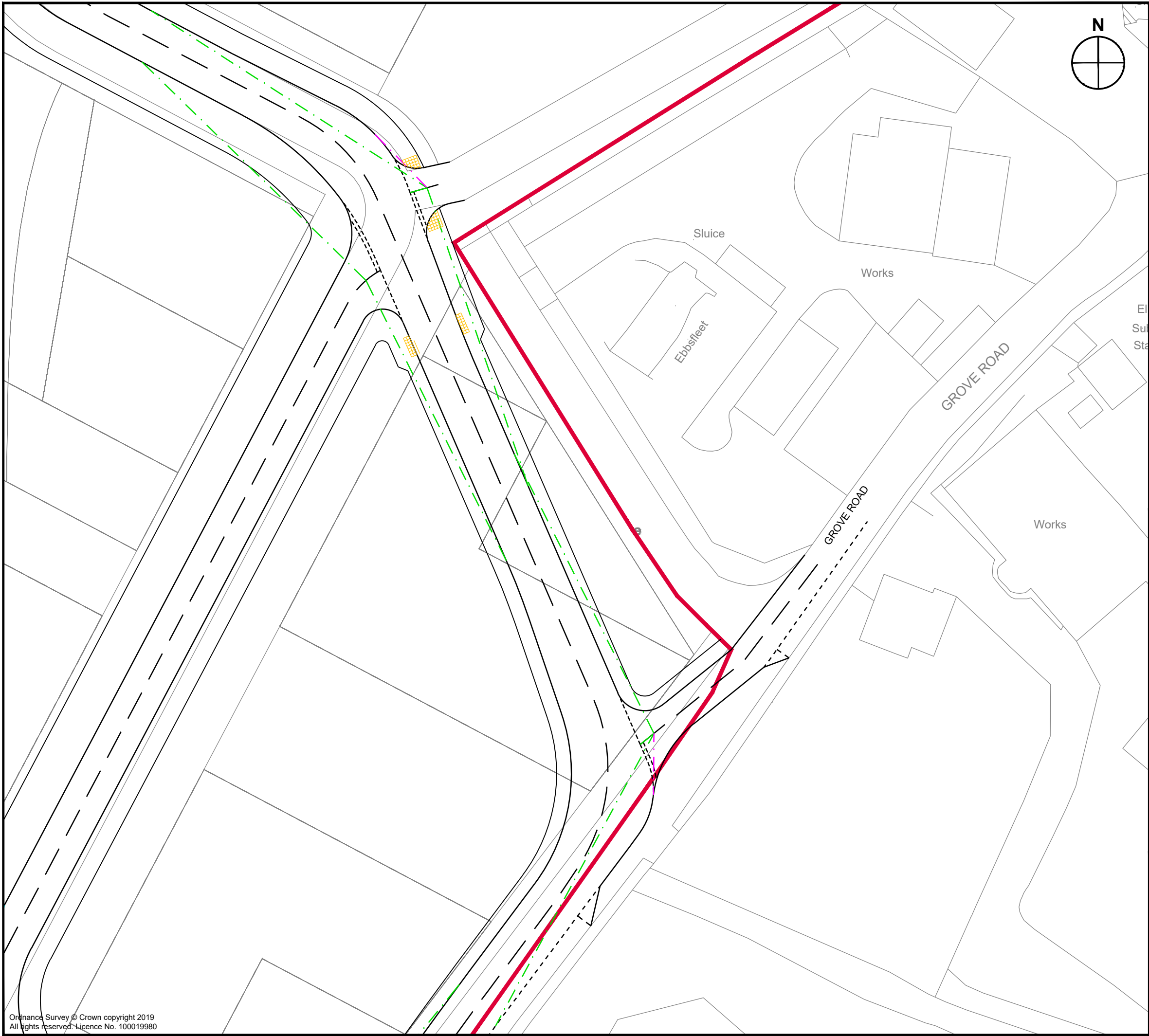


DRAWING NUMBER:

226728/PD106

REVISION:

B



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only.
2. White lining is indicative only.

Key

- Site Boundary
- Visibility splay 2.4m x 43m (MfS 30mph)
- Tangential visibility

REV.	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Site Access Plans
Junction 10 & 11**

SCALES:
1:500 at A3

DRAWN:	NS	CHECKED:	RS	DATE:	15.12.2023
--------	----	----------	----	-------	------------



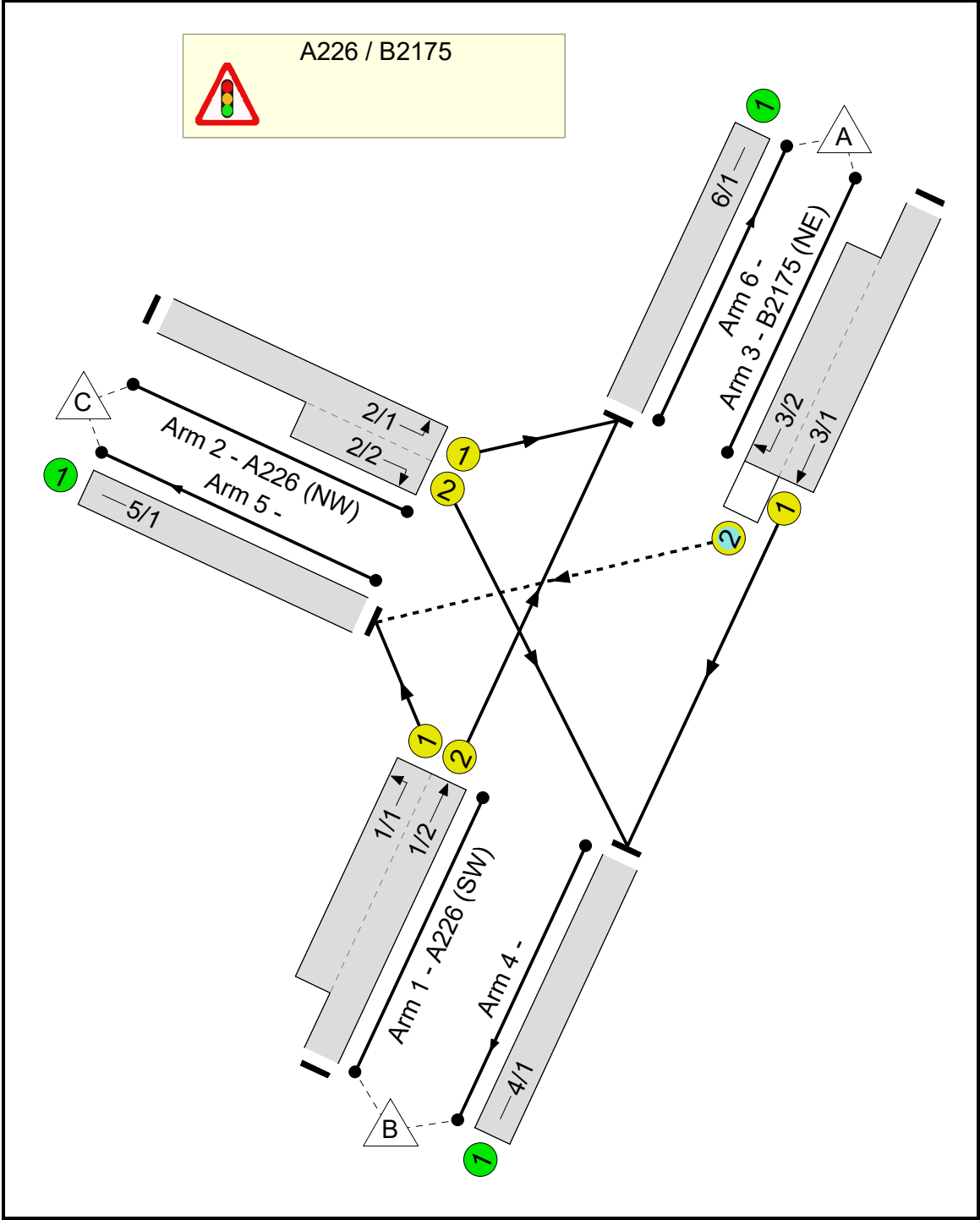
DRAWING NUMBER:	226728/PD107	REVISION:	-
-----------------	--------------	-----------	---

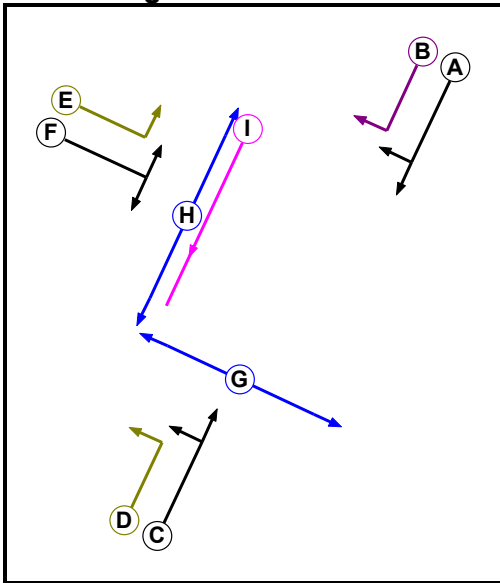
Appendix C

User and Project Details

Project:	Northfleet
Title:	A226 / New Link Road Junction
Design Layout Ref:	Based on Layout on Drg. No: 226728 / PD103 Rev B
File name:	J1 - A226_New Link Rd (PD103 Rev B) v3.0.lsg3x
Author:	David Noyce
Company:	Vectos / SLR
Address:	The Cursitor, 38 Chancery Lane, London WC2A 1EN

Junction Layout Diagram



Phase Diagram**Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Ind. Arrow	A	-9999	4
C	Traffic		-9999	7
D	Filter	C	-9999	4
E	Filter	F	-9999	4
F	Traffic		-9999	7
G	Pedestrian		-9999	6
H	Pedestrian		-9999	6
I	Cycle		-9999	5

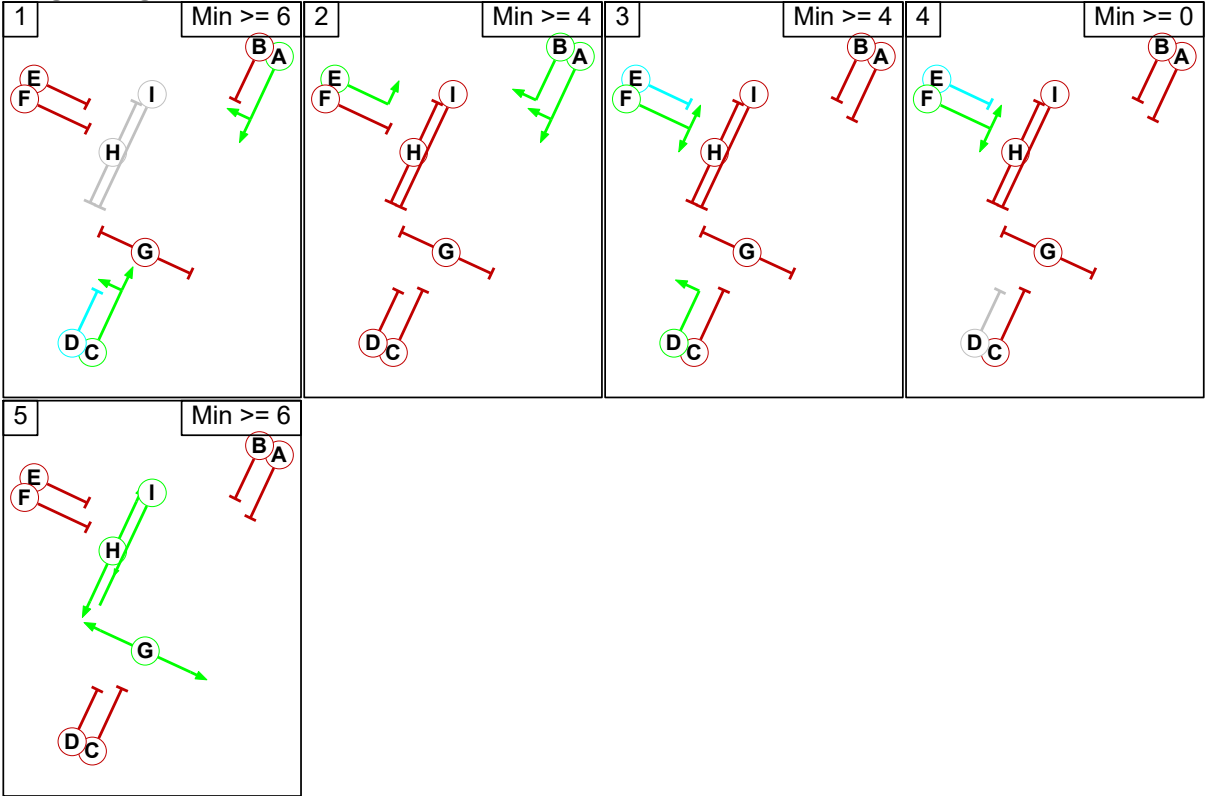
Intergreens

		Starting Phase								
Terminating Phase		A	B	C	D	E	F	G	H	I
	A		-	-	-	-	5	8	-	-
	B	-		5	6	-	5	-	9	8
	C	-	5		-	6	5	5	-	-
	D	-	5	-		-	-	5	7	6
	E	-	-	5	-		-	-	5	6
	F	6	5	5	-	-		9	5	6
	G	12	-	12	12	-	12		-	-
	H	-	10	-	10	10	10	-		-
	I	-	10	-	10	10	10	-	-	

Stage Data

Stage No.	Phases in Stage
1	A C
2	A B E
3	D F
4	F
5	G H I

Stage Diagrams



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
5	3	H	Losing	2	2
5	3	I	Losing	2	2
5	4	H	Losing	2	2
5	4	I	Losing	2	2

Junction: A226 / B2175												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A226 (SW))	U	C D	2	3	10.0	Geom	-	3.50	0.00	Y	Arm 5 Left	16.50
1/2 (A226 (SW))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	180.00
2/1 (A226 (NW))	U	F E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	16.50
2/2 (A226 (NW))	U	F	2	3	5.5	Geom	-	3.50	0.00	N	Arm 4 Right	15.00
3/1 (B2175 (NE))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
3/2 (B2175 (NE))	O	A B	2	3	9.8	Geom	-	3.50	0.00	N	Arm 5 Right	15.00

Junction: A226 / B2175											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/2 (B2175 (NE))	5/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				1/2	1.09	All					

(FG1: '2030 Adjusted Flows (Without LTC), AM', Plan 2: 'Peds Every Cycle')

Desired Flow :

	Destination				
Origin	A	0	472	138	610
	B	303	0	341	644
	C	88	456	0	544
	Tot.	391	928	479	1798

Stage	1	2	4	5
Duration	16	4	22	6
Change Point	0	28	38	65

[illegible]

(FG2: '2030 Adjusted Flows (Without LTC), PM', Plan 2: 'Peds Every Cycle')

Desired Flow :

	Destination				
Origin	A	0	338	84	422
	B	375	0	381	756
	C	99	382	0	481
	Tot.	474	720	465	1659

Stage	1	2	4	5
Duration	19	4	19	6
Change Point	0	31	41	65

[illegible]

(FG3: '2030 With Dev Flows (Without LTC), SAT', Plan 2: 'Peds Every Cycle')

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	170	48	218
	B	217	0	383	600
	C	29	229	0	258
	Tot.	246	399	431	1076

Stage	1	2	4	5
Duration	17	4	9	6
Change Point	0	29	39	53

[illegible]

Appendix D

Junctions 10								
PICADY 10 - Priority Intersection Module								
Version: 10.0.4.1693 © Copyright TRL Software Limited, 2021								
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com								
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution								

Filename: J2B - A226_B2175 (PD106 Rev B) v3.2.j10
Path: C:\DSN\226728 - Northfleet
Report generation date: 11/01/2024 12:38:44

- »2030 Adjusted Flows (Without LTC), AM
- »2030 Adjusted Flows (Without LTC), PM
- »2030 With Dev Flows (Without LTC), SAT

Summary of junction performance

	AM			PM			SAT		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2030 Adjusted Flows (Without LTC)									
Stream B-C	0.2	12.16	0.16	0.2	11.31	0.13			
Stream B-A	1.9	32.39	0.62	0.9	22.84	0.47			
Stream C-AB	0.4	4.47	0.14	0.7	5.28	0.22			
2030 With Dev Flows (Without LTC)									
Stream B-C							0.3	12.17	0.21
Stream B-A							1.4	22.78	0.58
Stream C-AB							0.5	5.49	0.21

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

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

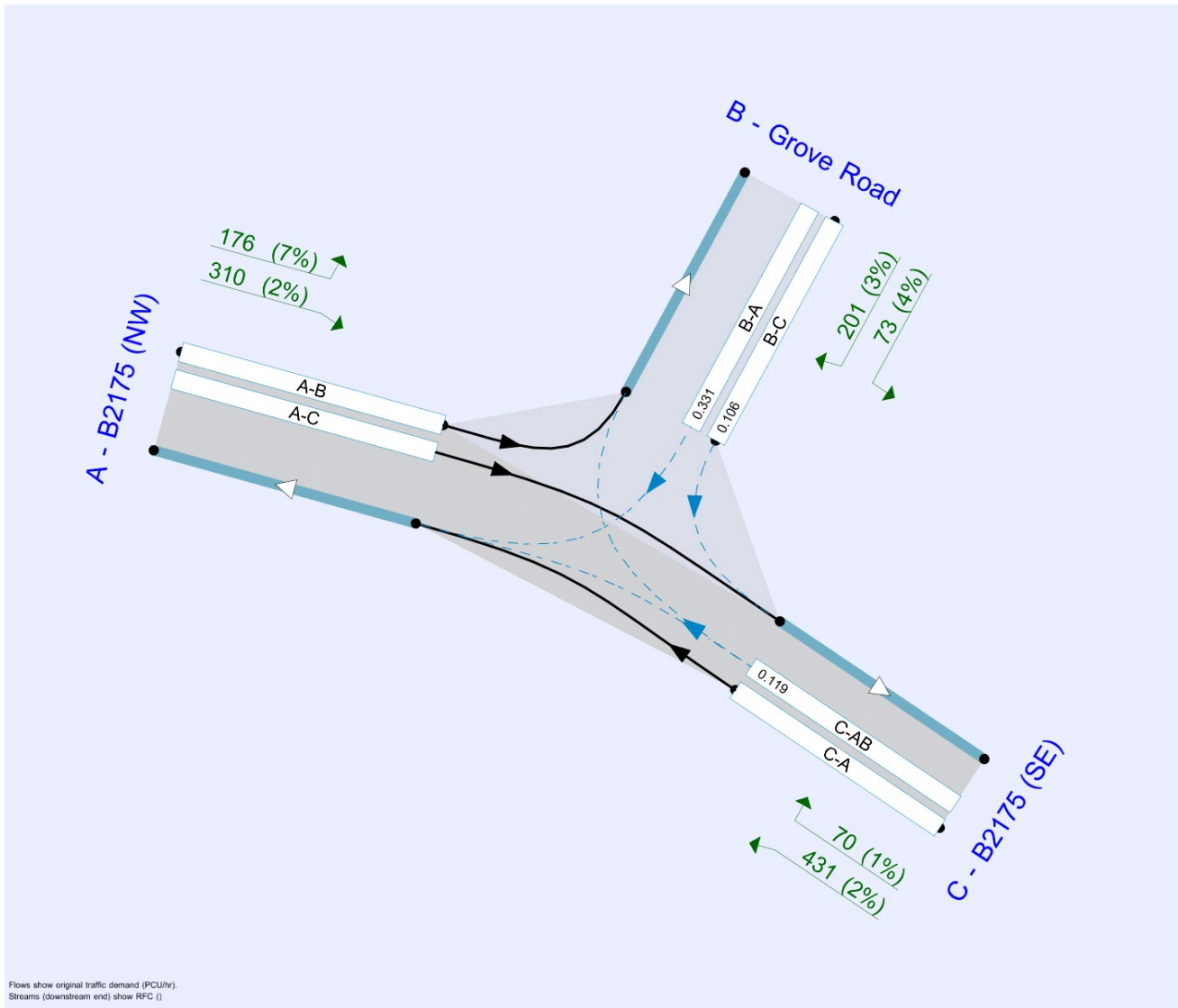
File summary

File Description

Title	Northfleet
Location	A226 / B2175 / Grove Road Junction
Site number	
Date	11/01/2024
Version	
Status	Proposed Junction - based on layout on drg. no: 226728 / PD106 Rev B
Identifier	
Client	
Jobnumber	226728
Enumerator	David Noyce
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓
D2	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	12:00	13:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2030 Adjusted Flows (Without LTC), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Grove Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Junction	T-Junction	Two-way	Two-way	Two-way		5.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.40	A

Arms

Arms

Arm	Name	Description	Arm type
A	B2175 (NW)		Major
B	Grove Road		Minor
C	B2175 (SE)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B2175 (SE)	7.82			80.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Grove Road	One lane plus flare	10.00	6.74	4.63	3.68	3.65	✓	1.00	50	72

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	612	0.104	0.264	0.166	0.377
B-C	640	0.089	0.225	-	-
C-B	620	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030 Adjusted Flows (Without LTC)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B2175 (NW)		ONE HOUR	✓	462	100.000
B - Grove Road		ONE HOUR	✓	254	100.000
C - B2175 (SE)		ONE HOUR	✓	700	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - B2175 (NW)	B - Grove Road	C - B2175 (SE)
From	A - B2175 (NW)	0	117	345
	B - Grove Road	201	0	53
	C - B2175 (SE)	662	38	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - B2175 (NW)	B - Grove Road	C - B2175 (SE)
From	A - B2175 (NW)	0	18	3
	B - Grove Road	24	0	0
	C - B2175 (SE)	2	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.16	12.16	0.2	B	49	73
B-A	0.62	32.39	1.9	D	184	277
C-AB	0.14	4.47	0.4	A	100	151
C-A					542	813
A-B					107	161
A-C					317	475

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	506	0.079	40	0.0	0.1	7.711	A
B-A	151	38	440	0.344	149	0.0	0.6	15.205	C
C-AB	65	16	891	0.073	64	0.0	0.1	4.461	A
C-A	462	116			462				
A-B	88	22			88				
A-C	260	65			260				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	12	458	0.104	48	0.1	0.1	8.768	A
B-A	181	45	406	0.445	179	0.6	1.0	19.584	C
C-AB	92	23	949	0.097	92	0.1	0.2	4.302	A
C-A	537	134			537				
A-B	105	26			105				
A-C	310	78			310				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	360	0.162	58	0.1	0.2	11.898	B
B-A	221	55	358	0.618	218	1.0	1.8	31.017	D
C-AB	144	36	1031	0.139	143	0.2	0.4	4.151	A
C-A	627	157			627				
A-B	129	32			129				
A-C	380	95			380				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	354	0.165	58	0.2	0.2	12.161	B
B-A	221	55	358	0.618	221	1.8	1.9	32.393	D
C-AB	144	36	1032	0.139	144	0.4	0.4	4.156	A
C-A	627	157			627				
A-B	129	32			129				
A-C	380	95			380				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	12	446	0.107	48	0.2	0.1	9.042	A
B-A	181	45	393	0.460	184	1.9	1.1	21.656	C
C-AB	92	23	950	0.097	93	0.4	0.2	4.307	A
C-A	537	134			537				
A-B	105	26			105				
A-C	310	78			310				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	503	0.079	40	0.1	0.1	7.783	A
B-A	151	38	440	0.344	153	1.1	0.7	15.653	C
C-AB	65	16	892	0.073	66	0.2	0.1	4.465	A
C-A	462	115			462				
A-B	88	22			88				
A-C	260	65			260				

2030 Adjusted Flows (Without LTC), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Grove Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Junction	T-Junction	Two-way	Two-way	Two-way		2.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.98	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2030 Adjusted Flows (Without LTC)	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B2175 (NW)		ONE HOUR	✓	688	100.000
B - Grove Road		ONE HOUR	✓	178	100.000
C - B2175 (SE)		ONE HOUR	✓	593	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - B2175 (NW)	B - Grove Road	C - B2175 (SE)
	From			
	A - B2175 (NW)	0	158	530
	B - Grove Road	133	0	45
	C - B2175 (SE)	533	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - B2175 (NW)	B - Grove Road	C - B2175 (SE)
	From			
	A - B2175 (NW)	0	9	2
	B - Grove Road	6	0	8
	C - B2175 (SE)	2	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.13	11.31	0.2	B	41	62
B-A	0.47	22.84	0.9	C	122	183
C-AB	0.22	5.28	0.7	A	138	207
C-A					406	609
A-B					145	217
A-C					486	730

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	8	503	0.067	34	0.0	0.1	8.275	A
B-A	100	25	408	0.246	99	0.0	0.3	12.302	B
C-AB	91	23	794	0.115	90	0.0	0.3	5.217	A
C-A	355	89			355				
A-B	119	30			119				
A-C	399	100			399				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	465	0.087	40	0.1	0.1	9.154	A
B-A	120	30	368	0.325	119	0.3	0.5	15.265	C
C-AB	128	32	834	0.153	127	0.3	0.4	5.199	A
C-A	406	101			406				
A-B	142	36			142				
A-C	476	119			476				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	12	395	0.125	49	0.1	0.2	11.225	B
B-A	146	37	313	0.467	145	0.5	0.9	22.432	C
C-AB	194	49	893	0.218	193	0.4	0.6	5.267	A
C-A	458	115			458				
A-B	174	43			174				
A-C	584	146			584				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	12	393	0.126	50	0.2	0.2	11.307	B
B-A	146	37	313	0.468	146	0.9	0.9	22.845	C
C-AB	195	49	893	0.218	195	0.6	0.7	5.280	A
C-A	458	114			458				
A-B	174	43			174				
A-C	584	146			584				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	463	0.087	41	0.2	0.1	9.210	A
B-A	120	30	368	0.325	121	0.9	0.5	15.550	C
C-AB	128	32	835	0.153	129	0.7	0.4	5.220	A
C-A	405	101			405				
A-B	142	36			142				
A-C	476	119			476				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	8	502	0.068	34	0.1	0.1	8.311	A
B-A	100	25	407	0.246	101	0.5	0.4	12.472	B
C-AB	92	23	795	0.116	93	0.4	0.3	5.241	A
C-A	354	89			354				
A-B	119	30			119				
A-C	399	100			399				

2030 With Dev Flows (Without LTC), SAT

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Grove Road - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	East Junction	T-Junction	Two-way	Two-way	Two-way		4.95	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.95	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030 With Dev Flows (Without LTC)	SAT	ONE HOUR	12:00	13:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - B2175 (NW)		ONE HOUR	✓	486	100.000
B - Grove Road		ONE HOUR	✓	274	100.000
C - B2175 (SE)		ONE HOUR	✓	501	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - B2175 (NW)	B - Grove Road	C - B2175 (SE)
	From			
	A - B2175 (NW)	0	176	310
	B - Grove Road	201	0	73
	C - B2175 (SE)	431	70	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - B2175 (NW)	B - Grove Road	C - B2175 (SE)
	From			
	A - B2175 (NW)	0	7	2
	B - Grove Road	3	0	4
	C - B2175 (SE)	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.21	12.17	0.3	B	67	100
B-A	0.58	22.78	1.4	C	184	277
C-AB	0.21	5.49	0.5	A	131	196
C-A					329	494
A-B					162	242
A-C					284	427

Main Results for each time segment

12:00 - 12:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	14	517	0.106	54	0.0	0.1	8.091	A
B-A	151	38	457	0.331	149	0.0	0.5	11.979	B
C-AB	91	23	767	0.119	90	0.0	0.2	5.398	A
C-A	286	71			286				
A-B	133	33			133				
A-C	233	58			233				

12:15 - 12:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	16	473	0.139	65	0.1	0.2	9.173	A
B-A	181	45	427	0.423	180	0.5	0.7	14.951	B
C-AB	123	31	799	0.154	122	0.2	0.3	5.408	A
C-A	328	82			328				
A-B	158	40			158				
A-C	279	70			279				

12:30 - 12:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	20	392	0.205	80	0.2	0.3	12.002	B
B-A	221	55	384	0.577	219	0.7	1.3	22.173	C
C-AB	177	44	845	0.210	176	0.3	0.5	5.477	A
C-A	375	94			375				
A-B	194	48			194				
A-C	341	85			341				

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	20	388	0.207	80	0.3	0.3	12.167	B
B-A	221	55	384	0.577	221	1.3	1.4	22.776	C
C-AB	177	44	845	0.210	177	0.5	0.5	5.491	A
C-A	374	94			374				
A-B	194	48			194				
A-C	341	85			341				

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	16	470	0.140	66	0.3	0.2	9.279	A
B-A	181	45	427	0.424	183	1.4	0.8	15.365	C
C-AB	123	31	799	0.154	124	0.5	0.3	5.427	A
C-A	327	82			327				
A-B	158	40			158				
A-C	279	70			279				

13:15 - 13:30

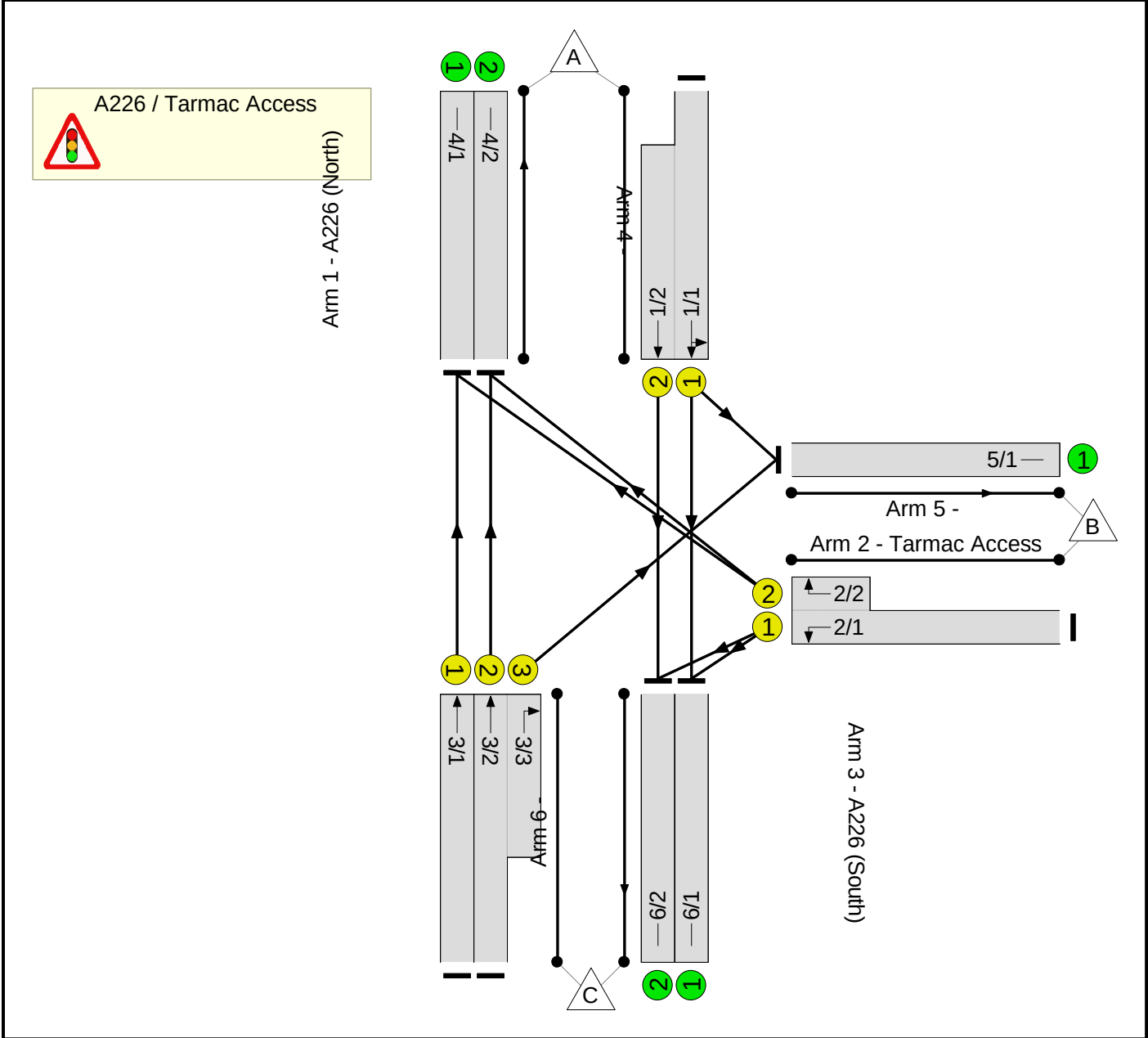
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	55	14	514	0.107	55	0.2	0.1	8.155	A
B-A	151	38	457	0.331	152	0.8	0.5	12.221	B
C-AB	92	23	767	0.120	92	0.3	0.2	5.424	A
C-A	285	71			285				
A-B	133	33			133				
A-C	233	58			233				

Appendix E

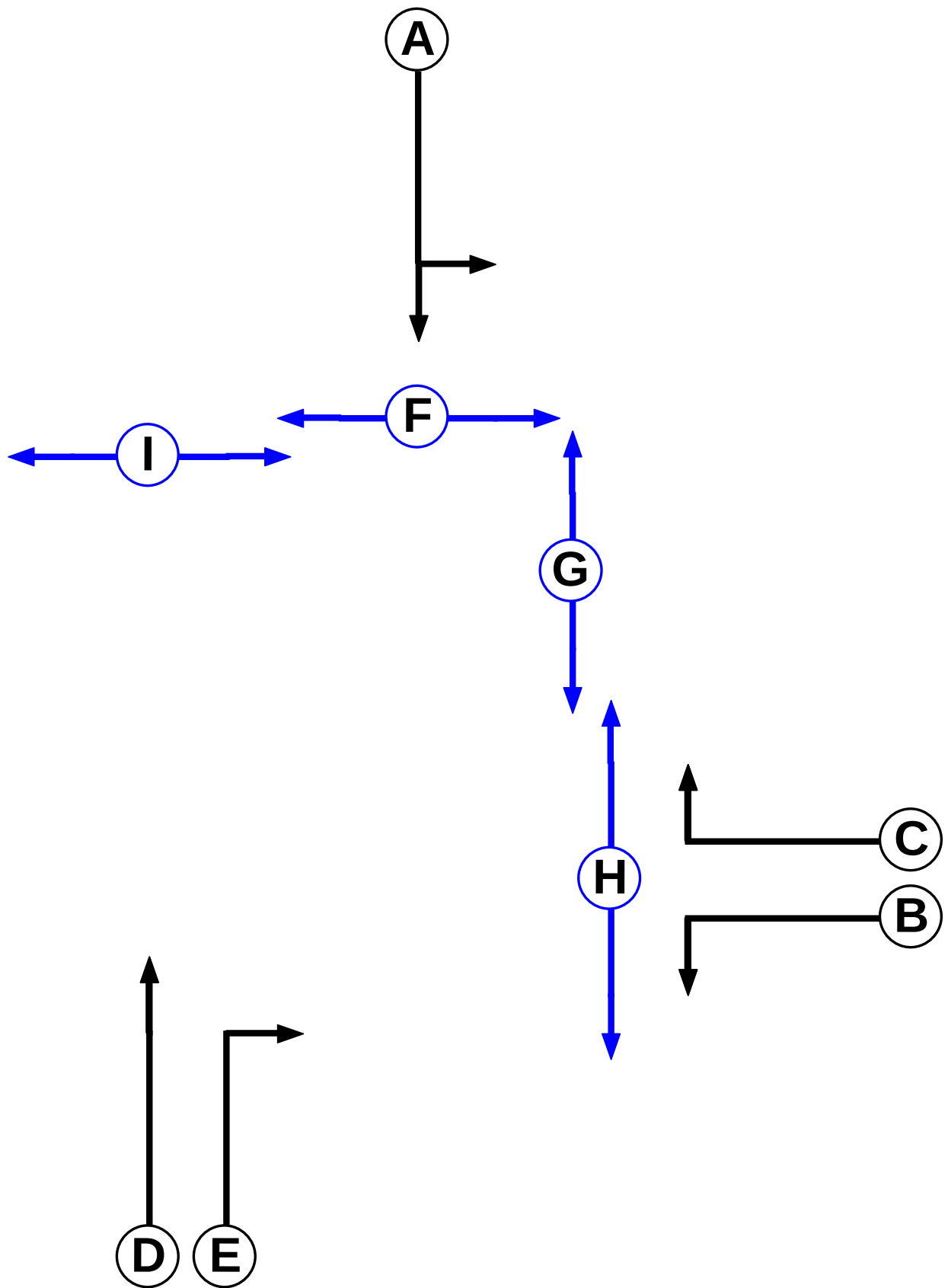
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J11 - A226_Tarmac Access (PF Proposed) v2.0.lsg3x
Author:	David Noyce
Company:	Vectos / SLR
Address:	The Cursitor, 38 Chancery Lane, London WC2A 1EN

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Traffic		-9999	7
F	Pedestrian		-9999	6
G	Pedestrian		-9999	6
H	Pedestrian		-9999	6
I	Pedestrian		-9999	6

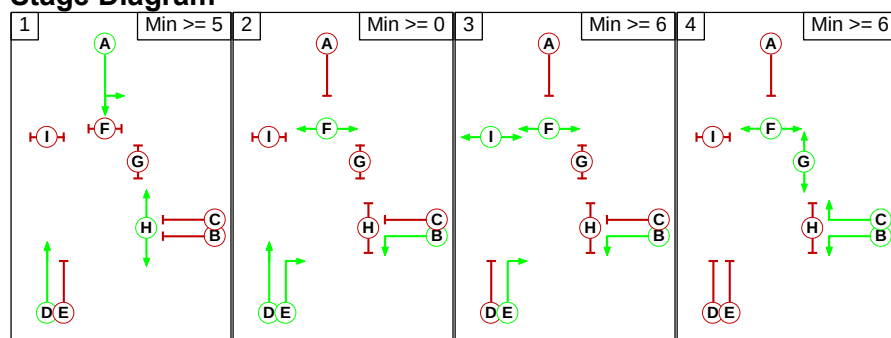
Phase Intergreens Matrix

Terminating Phase	Starting Phase									
		A	B	C	D	E	F	G	H	I
	A		6	5	-	5	5	8	-	-
	B	5		-	-	-	-	-	5	-
	C	5	-		6	5	-	-	5	9
	D	-	-	5		-	-	-	-	10
	E	6	-	5	-		-	10	-	-
	F	8	-	-	-	-		-	-	-
	G	11	-	-	-	11	-		-	-
	H	-	8	8	-	-	-	-		-
	I	-	-	10	10	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A D H
2	B D E F
3	B E F I
4	B C F G

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	A	Losing	2	2
1	4	A	Losing	2	2
1	4	D	Losing	3	3
3	1	B	Losing	3	3
3	1	E	Losing	2	2
3	4	E	Losing	5	5
4	1	B	Losing	5	5
4	1	C	Losing	5	5
4	1	F	Losing	3	3
4	3	C	Losing	5	5

Prohibited Stage Change

	To Stage				
		1	2	3	4
From Stage	1		8	10	10
	2	8		10	10
	3	10	10		15
	4	11	11	14	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A226 / Tarmac Access
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: A226 / Tarmac Access												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A226 North))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	18.00
											Arm 6 Ahead	Inf
1/2 (A226 North))	U	A	2	3	16.5	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
2/1 (Tarmac Access)	U	B	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 6 Left	24.00
2/2 (Tarmac Access)	U	C	2	3	3.5	Geom	-	3.50	0.00	Y	Arm 4 Right	20.00
3/1 (A226 South))	U	D	2	3	47.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
3/2 (A226 South))	U	D	2	3	13.9	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
3/3 (A226 South))	U	E	2	3	7.3	Geom	-	3.50	0.00	Y	Arm 5 Right	13.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2032 Base + Comm + Max Commercial, AM'	08:00	09:00	01:00	
2: '2032 Base + Comm + Max Commercial, PM'	17:00	18:00	01:00	
3: '2032 Base + Comm + Max Resi, AM'	08:00	09:00	01:00	
4: '2032 Base + Comm + Max Resi, PM'	17:00	18:00	01:00	
5: 'Proposed Development, AM'	08:00	09:00	01:00	
6: 'Proposed Development, PM'	17:00	18:00	01:00	
7: '2032 Base + Comm + Max Commercial + Dev, AM'	08:00	09:00	01:00	F1+F5
8: '2032 Base + Comm + Max Commercial + Dev, PM'	17:00	18:00	01:00	F2+F6
9: '2032 Base + Comm + Max Resi + Dev, AM'	08:00	09:00	01:00	F3+F5
10: '2032 Base + Comm + Max Resi + Dev, PM'	17:00	18:00	01:00	F4+F6

Full Input Data And Results

Scenario 1: '2032 Base + Comm + Max Commercial, AM' (FG1: '2032 Base + Comm + Max Commercial, AM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	12	531	543
	B	13	0	187	200
	C	702	191	0	893
	Tot.	715	203	718	1636

Traffic Lane Flows

Lane	Scenario 1: 2032 Base + Comm + Max Commercial, AM
Junction: A226 / Tarmac Access	
1/1 (with short)	543(In) 272(Out)
1/2 (short)	271
2/1 (with short)	200(In) 187(Out)
2/2 (short)	13
3/1	351
3/2 (with short)	542(In) 351(Out)
3/3 (short)	191
4/1	358
4/2	357
5/1	203
6/1	354
6/2	364

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	4.4 %	1958	1958
				Arm 6 Ahead	Inf	95.6 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2032 Base + Comm + Max Commercial, PM' (FG2: '2032 Base + Comm + Max Commercial, PM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	10	596	606
	B	7	0	260	267
	C	507	180	0	687
	Tot.	514	190	856	1560

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2032 Base + Comm + Max Commercial, PM
Junction: A226 / Tarmac Access	
1/1 (with short)	606(In) 303(Out)
1/2 (short)	303
2/1 (with short)	267(In) 260(Out)
2/2 (short)	7
3/1	254
3/2 (with short)	433(In) 253(Out)
3/3 (short)	180
4/1	258
4/2	256
5/1	190
6/1	423
6/2	433

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	3.3 %	1960	1960
				Arm 6 Ahead	Inf	96.7 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2032 Base + Comm + Max Resi, AM' (FG3: '2032 Base + Comm + Max Resi, AM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	12	561	573
	B	13	0	187	200
	C	659	191	0	850
	Tot.	672	203	748	1623

Traffic Lane Flows

Lane	Scenario 3: 2032 Base + Comm + Max Resi, AM
Junction: A226 / Tarmac Access	
1/1 (with short)	573(In) 287(Out)
1/2 (short)	286
2/1 (with short)	200(In) 187(Out)
2/2 (short)	13
3/1	330
3/2 (with short)	520(In) 329(Out)
3/3 (short)	191
4/1	337
4/2	335
5/1	203
6/1	369
6/2	379

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	4.2 %	1958	1958
				Arm 6 Ahead	Inf	95.8 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2032 Base + Comm + Max Resi, PM' (FG4: '2032 Base + Comm + Max Resi, PM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	10	560	570
	B	7	0	260	267
	C	534	180	0	714
	Tot.	541	190	820	1551

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2032 Base + Comm + Max Resi, PM
Junction: A226 / Tarmac Access	
1/1 (with short)	570(In) 285(Out)
1/2 (short)	285
2/1 (with short)	267(In) 260(Out)
2/2 (short)	7
3/1	267
3/2 (with short)	447(In) 267(Out)
3/3 (short)	180
4/1	271
4/2	270
5/1	190
6/1	405
6/2	415

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	3.5 %	1959	1959
				Arm 6 Ahead	Inf	96.5 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2032 Base + Comm + Max Commercial + Dev, AM' (FG7: '2032 Base + Comm + Max Commercial + Dev, AM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	12	865	877
	B	13	0	187	200
	C	975	191	0	1166
	Tot.	988	203	1052	2243

Traffic Lane Flows

Lane	Scenario 5: 2032 Base + Comm + Max Commercial + Dev, AM
Junction: A226 / Tarmac Access	
1/1 (with short)	877(In) 439(Out)
1/2 (short)	438
2/1 (with short)	200(In) 187(Out)
2/2 (short)	13
3/1	488
3/2 (with short)	678(In) 487(Out)
3/3 (short)	191
4/1	495
4/2	493
5/1	203
6/1	521
6/2	531

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	2.7 %	1961	1961
				Arm 6 Ahead	Inf	97.3 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2032 Base + Comm + Max Commercial + Dev, PM' (FG8: '2032 Base + Comm + Max Commercial + Dev, PM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	10	996	1006
	B	7	0	260	267
	C	916	180	0	1096
	Tot.	923	190	1256	2369

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2032 Base + Comm + Max Commercial + Dev, PM
Junction: A226 / Tarmac Access	
1/1 (with short)	1006(In) 503(Out)
1/2 (short)	503
2/1 (with short)	267(In) 260(Out)
2/2 (short)	7
3/1	458
3/2 (with short)	638(In) 458(Out)
3/3 (short)	180
4/1	462
4/2	461
5/1	190
6/1	623
6/2	633

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	2.0 %	1962	1962
				Arm 6 Ahead	Inf	98.0 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2032 Base + Comm + Max Resi + Dev, AM' (FG9: '2032 Base + Comm + Max Resi + Dev, AM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	12	895	907
	B	13	0	187	200
	C	932	191	0	1123
	Tot.	945	203	1082	2230

Traffic Lane Flows

Lane	Scenario 7: 2032 Base + Comm + Max Resi + Dev, AM
Junction: A226 / Tarmac Access	
1/1 (with short)	907(In) 454(Out)
1/2 (short)	453
2/1 (with short)	200(In) 187(Out)
2/2 (short)	13
3/1	466
3/2 (with short)	657(In) 466(Out)
3/3 (short)	191
4/1	473
4/2	472
5/1	203
6/1	536
6/2	546

Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	2.6 %	1961	1961
				Arm 6 Ahead	Inf	97.4 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2032 Base + Comm + Max Resi + Dev, PM' (FG10: '2032 Base + Comm + Max Resi + Dev, PM', Plan 2: 'Peds Every Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	10	960	970
	B	7	0	260	267
	C	943	180	0	1123
	Tot.	950	190	1220	2360

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2032 Base + Comm + Max Resi + Dev, PM
Junction: A226 / Tarmac Access	
1/1 (with short)	970(In) 485(Out)
1/2 (short)	485
2/1 (with short)	267(In) 260(Out)
2/2 (short)	7
3/1	472
3/2 (with short)	651(In) 471(Out)
3/3 (short)	180
4/1	476
4/2	474
5/1	190
6/1	605
6/2	615

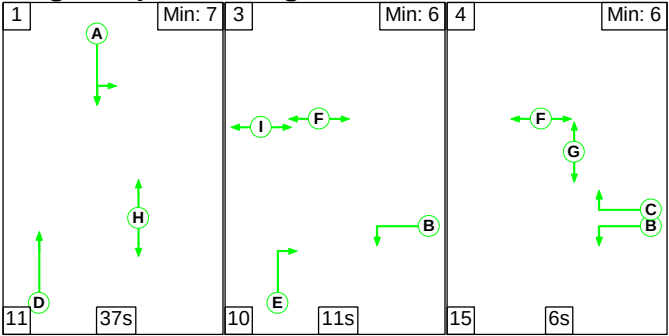
Lane Saturation Flows

Junction: A226 / Tarmac Access								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A226 (North))	3.50	0.00	Y	Arm 5 Left	18.00	2.1 %	1962	1962
				Arm 6 Ahead	Inf	97.9 %		
1/2 (A226 (North))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
2/1 (Tarmac Access)	3.20	0.00	Y	Arm 6 Left	24.00	100.0 %	1821	1821
2/2 (Tarmac Access)	3.50	0.00	Y	Arm 4 Right	20.00	100.0 %	1828	1828
3/1 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/2 (A226 (South))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
3/3 (A226 (South))	3.50	0.00	Y	Arm 5 Right	13.00	100.0 %	1762	1762
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2032 Base + Comm + Max Commercial, AM' (FG1: '2032 Base + Comm + Max Commercial, AM', Plan 2: 'Peds Every Cycle')

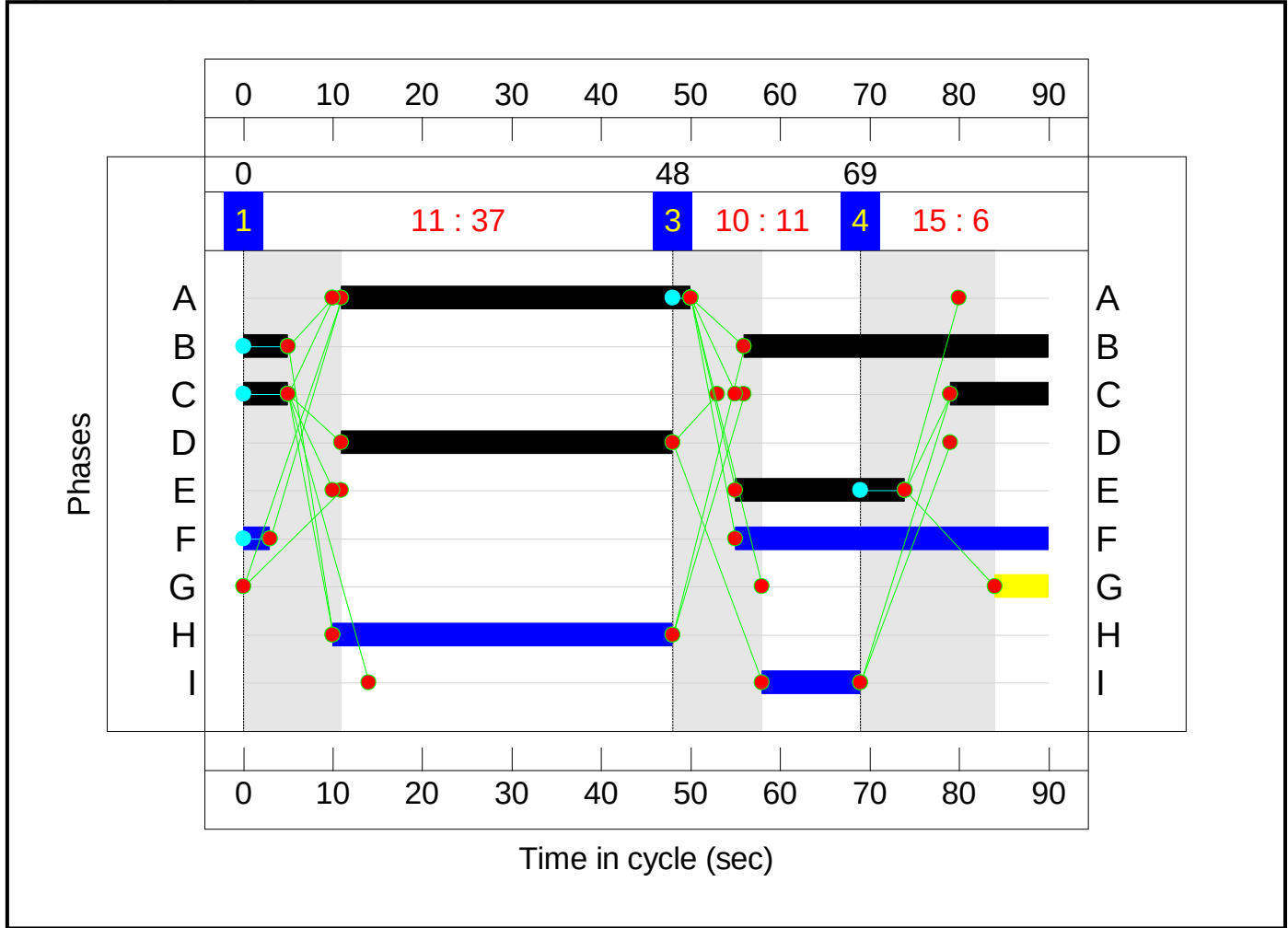
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	37	11	6
Change Point	0	48	69

Signal Timings Diagram



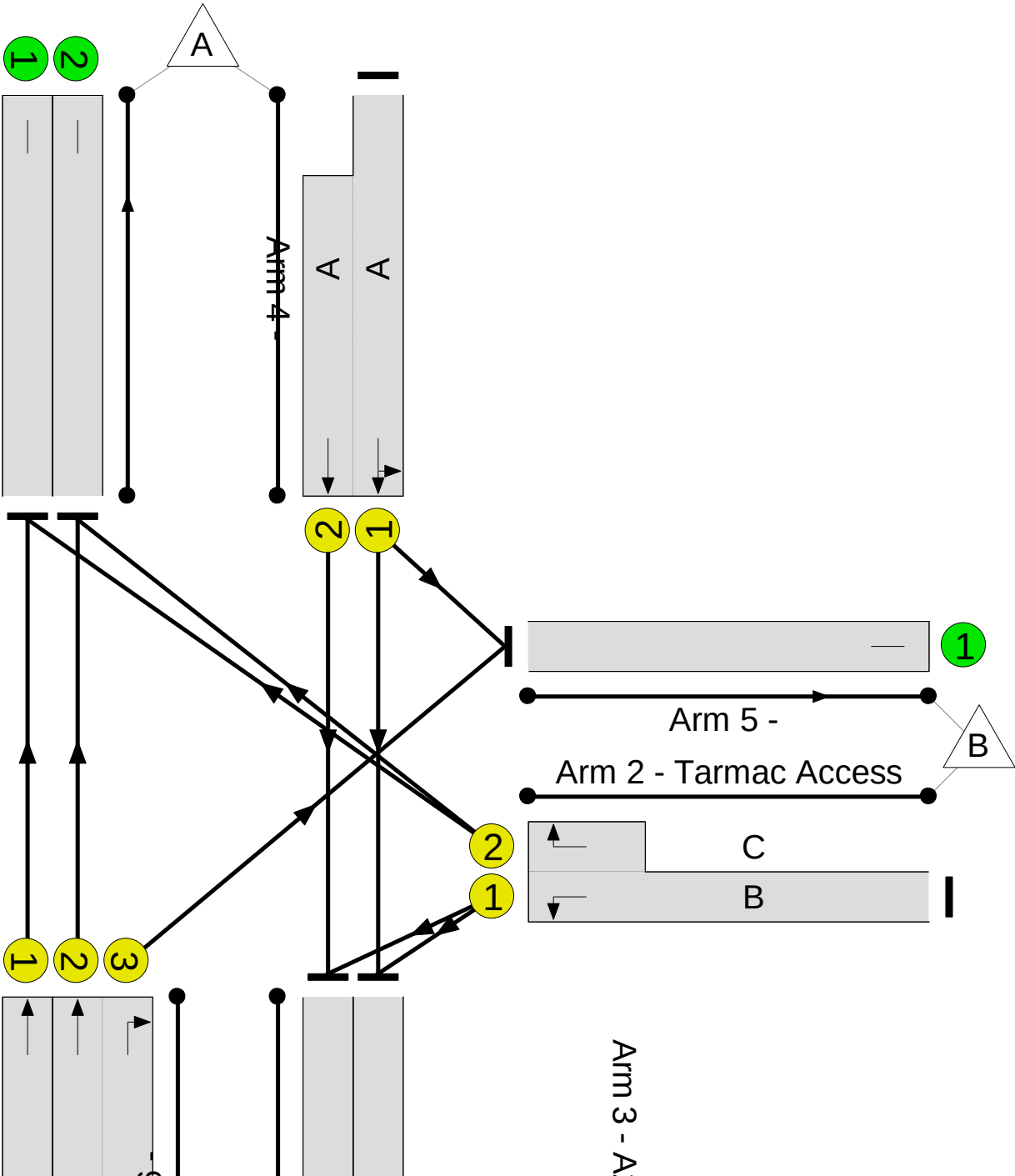


A226 / Tarmac Access

PRC: 57.9 %

Total Traffic Delay: 10.0 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	57.0%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	57.0%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	39	-	543	1958:1965	775+773	35.1 : 35.1%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	39:16	-	200	1821:1828	774+54	24.2 : 24.2%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	37	-	351	1965	830	42.3%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	37:19	-	542	1965:1762	616+335	57.0 : 57.0%
4/1		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	364	Inf	Inf	0.0%

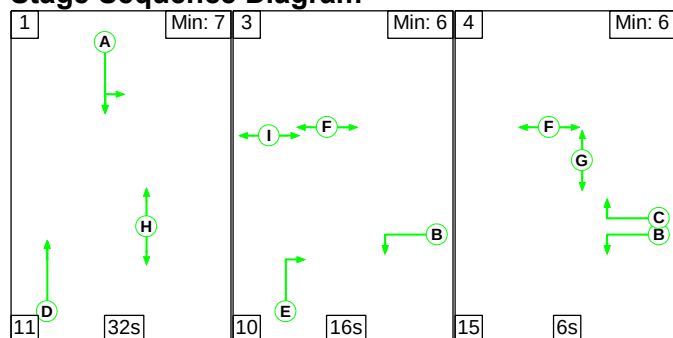
[illegible]

C1	PRC for Signalled Lanes (%):	57.9	Total Delay for Signalled Lanes (pcuHr):	9.99	Cycle Time (s): 90
	PRC Over All Lanes (%):	57.9	Total Delay Over All Lanes(pcuHr):	9.99	

Full Input Data And Results

Scenario 2: '2032 Base + Comm + Max Commercial, PM' (FG2: '2032 Base + Comm + Max Commercial, PM', Plan 2: 'Peds Every Cycle')

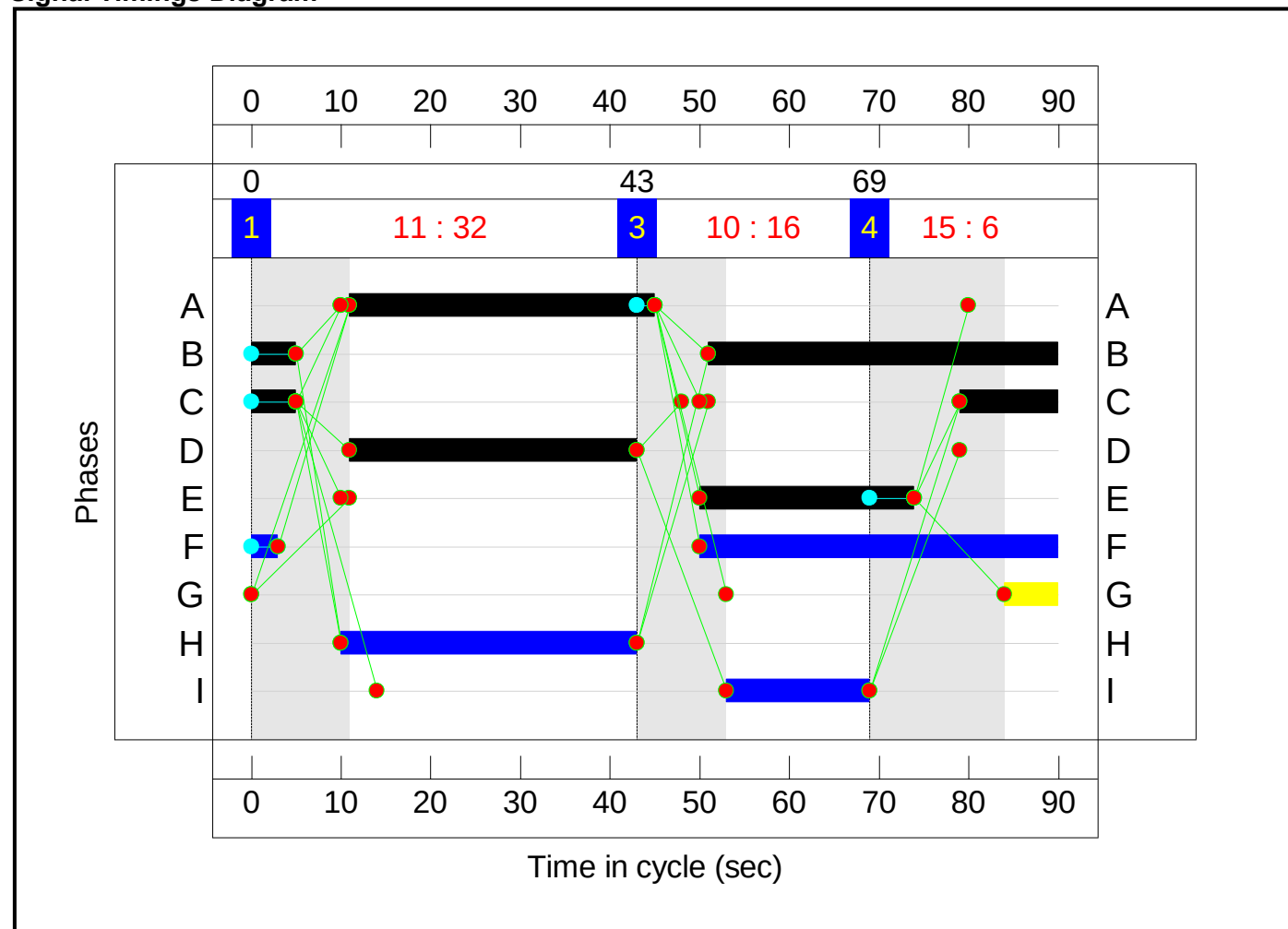
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	32	16	6
Change Point	0	43	69

Signal Timings Diagram



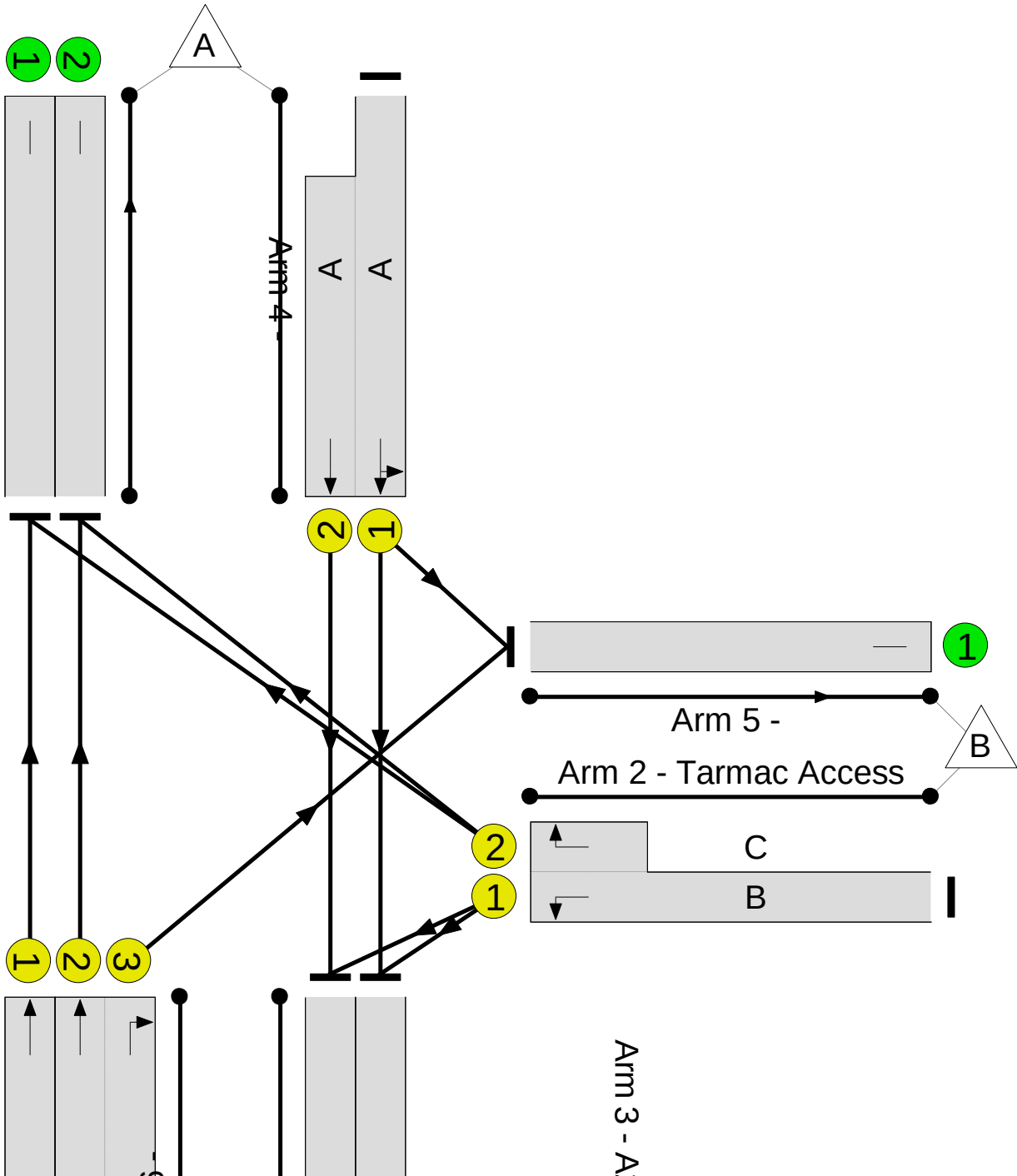


A226 / Tarmac Access

PRC: 89.7 %

Total Traffic Delay: 9.9 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	47.5%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	47.5%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	34	-	606	1960:1965	720+720	42.1 : 42.1%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	44:16	-	267	1821:1828	899+24	28.9 : 28.9%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	32	-	254	1965	721	35.3%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	32:24	-	433	1965:1762	533+386	47.5 : 46.6%
4/1		U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	256	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	433	Inf	Inf	0.0%

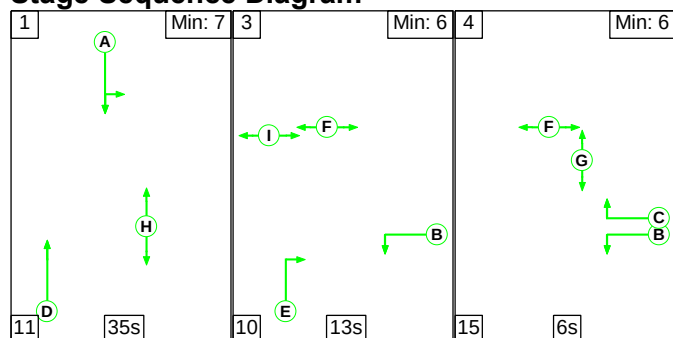
[illegible]

C1	PRC for Signalled Lanes (%):	89.7	Total Delay for Signalled Lanes (pcuHr):	9.86	Cycle Time (s): 90
	PRC Over All Lanes (%):	89.7	Total Delay Over All Lanes(pcuHr):	9.86	

Full Input Data And Results

Scenario 3: '2032 Base + Comm + Max Resi, AM' (FG3: '2032 Base + Comm + Max Resi, AM', Plan 2: 'Peds Every Cycle')

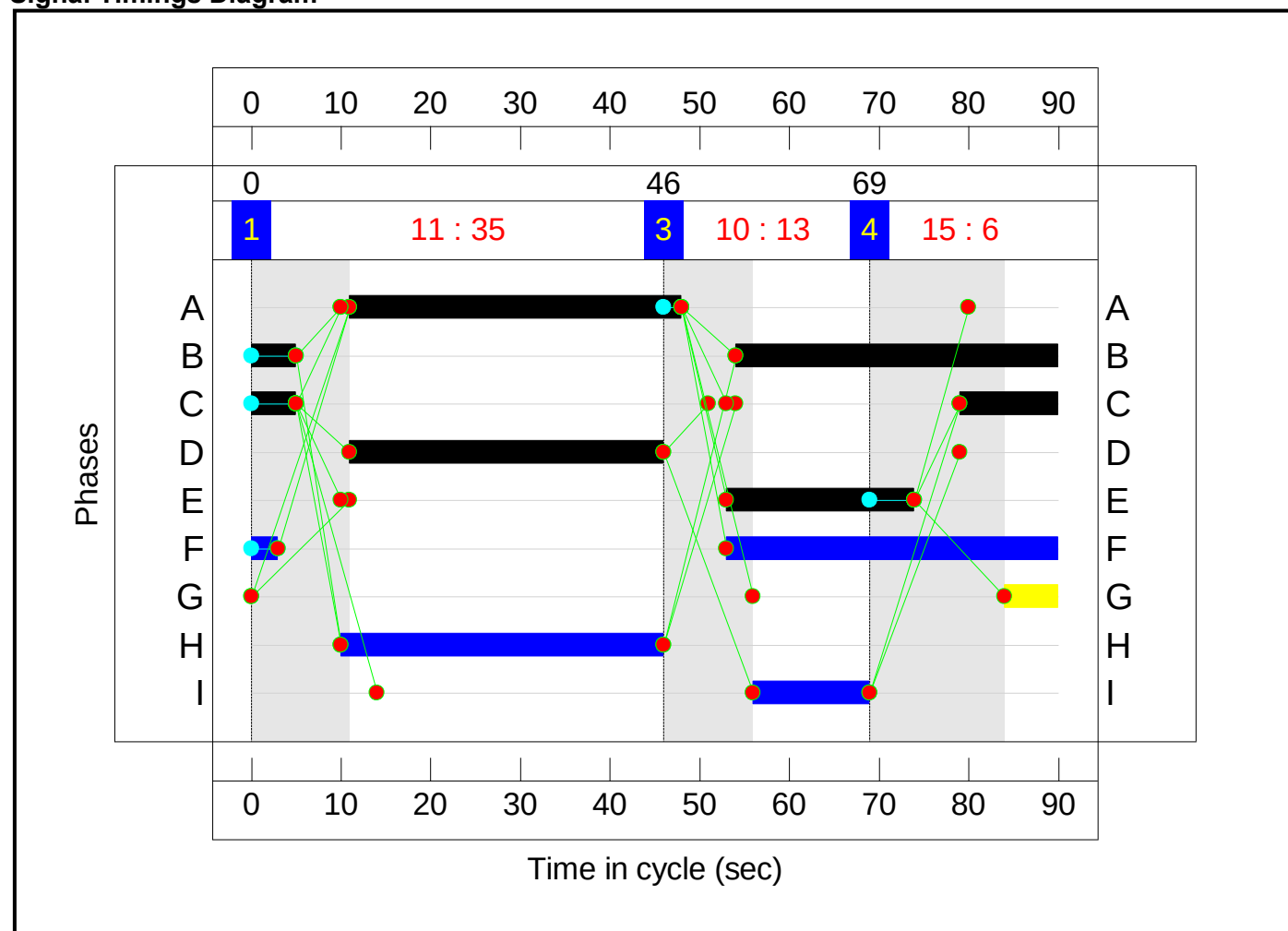
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	35	13	6
Change Point	0	46	69

Signal Timings Diagram



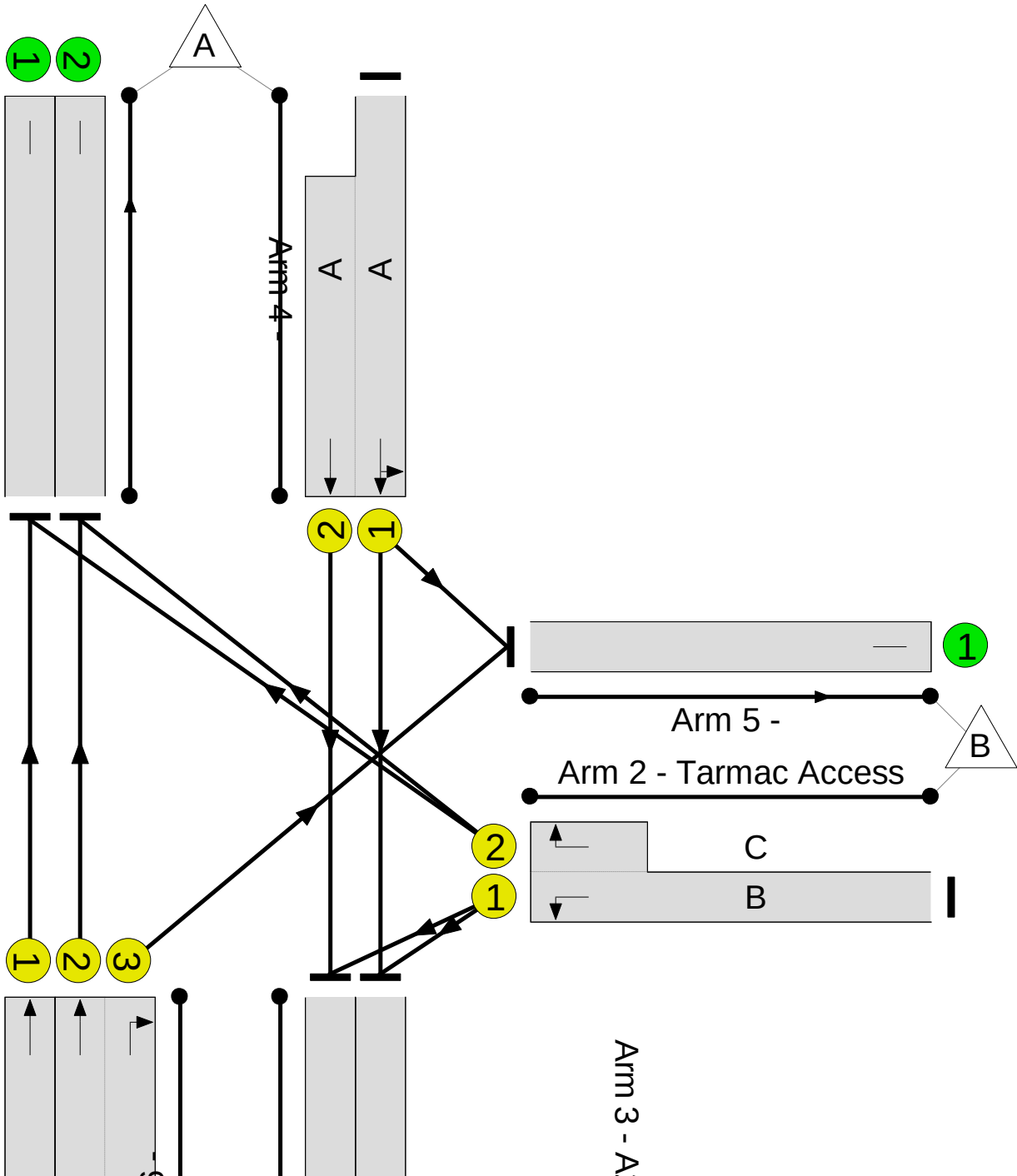


A226 / Tarmac Access

PRC: 62.5 %

Total Traffic Delay: 10.2 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	55.4%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	55.4%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	37	-	573	1958:1965	754+751	38.1 : 38.1%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	41:16	-	200	1821:1828	812+56	23.0 : 23.0%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	35	-	330	1965	786	42.0%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	35:21	-	520	1965:1762	594+352	55.4 : 54.2%
4/1		U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%

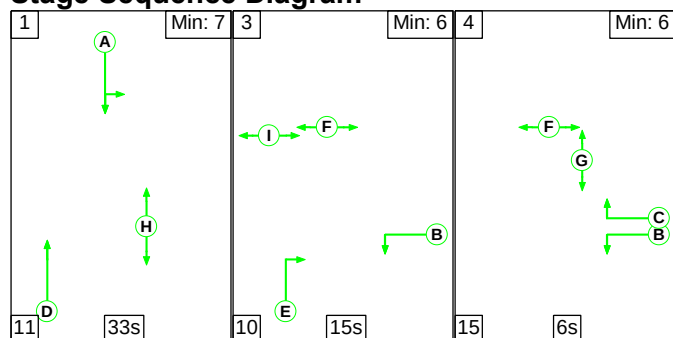
[illegible]

C1	PRC for Signalled Lanes (%):	62.5	Total Delay for Signalled Lanes (pcuHr):	10.17	Cycle Time (s):	90
	PRC Over All Lanes (%):	62.5	Total Delay Over All Lanes(pcuHr):	10.17		

Full Input Data And Results

Scenario 4: '2032 Base + Comm + Max Resi, PM' (FG4: '2032 Base + Comm + Max Resi, PM', Plan 2: 'Peds Every Cycle')

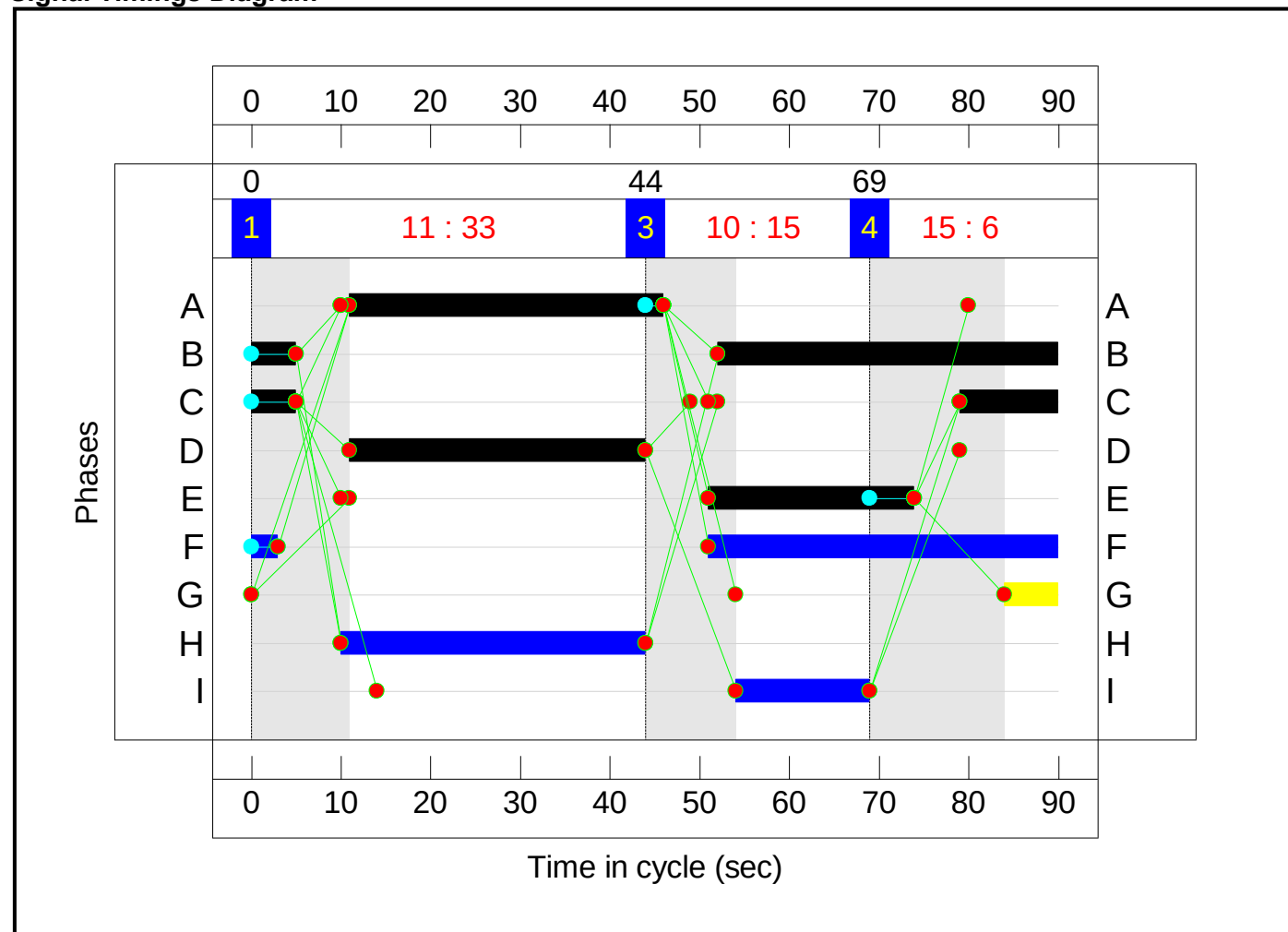
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	33	15	6
Change Point	0	44	69

Signal Timings Diagram



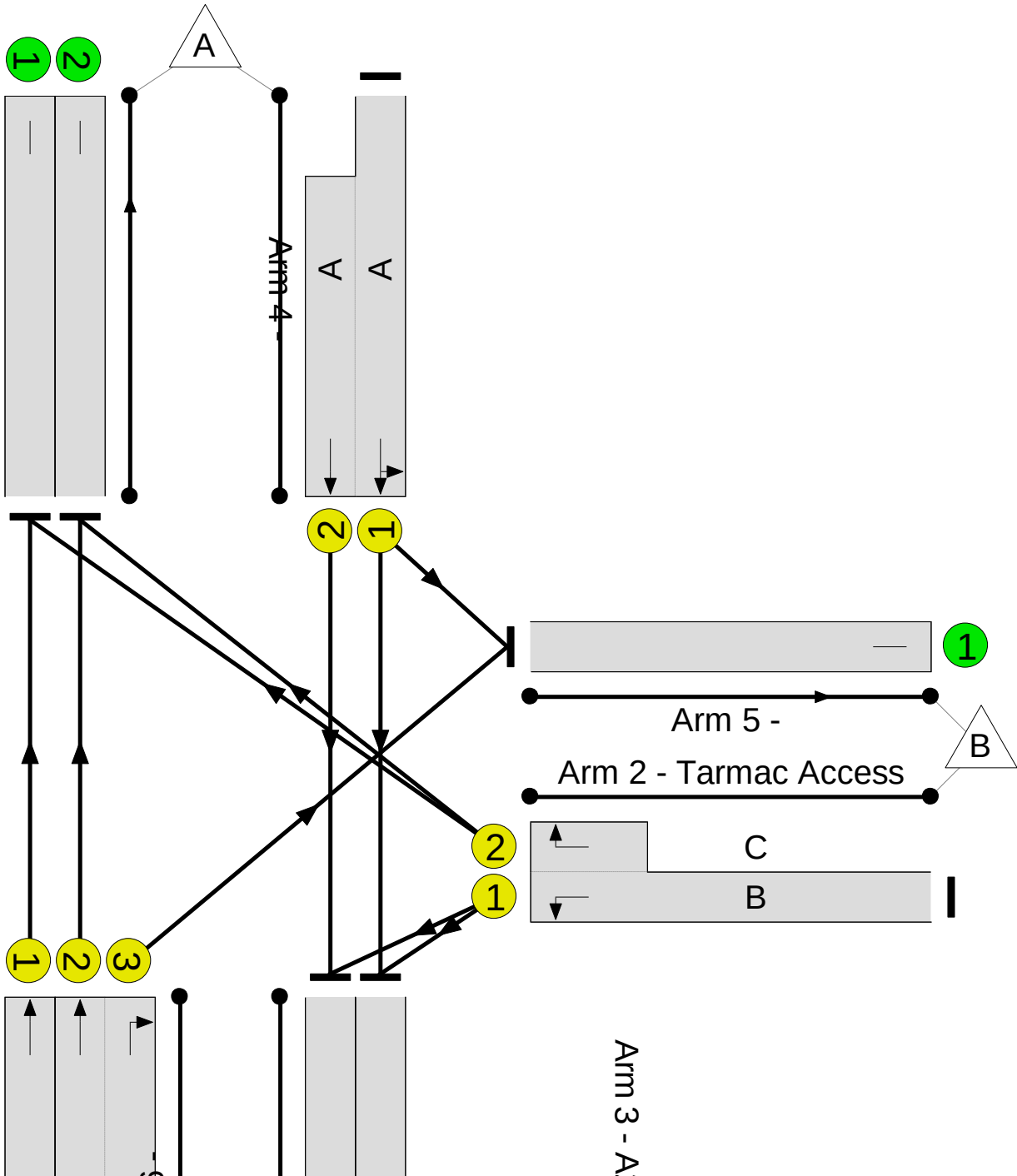


A226 / Tarmac Access

PRC: 85.5 %

Total Traffic Delay: 9.7 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	48.5%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	48.5%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	35	-	570	1959:1965	731+731	39.0 : 39.0%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	43:16	-	267	1821:1828	879+24	29.6 : 29.6%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	33	-	267	1965	742	36.0%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	33:23	-	447	1965:1762	550+375	48.5 : 48.0%
4/1		U	N/A	N/A	-		-	-	-	271	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	270	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%

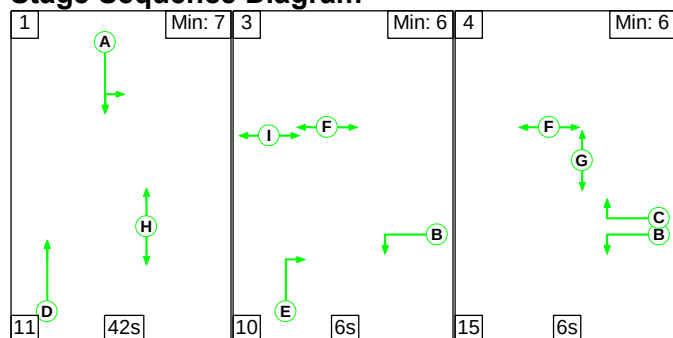
[illegible]

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	8.4	1.3	0.0	9.7	-	-	-	-
A226 / Tarmac Access	-	-	0	0	0	8.4	1.3	0.0	9.7	-	-	-	-
1/1+1/2	570	570	-	-	-	3.0	0.3	-	3.3	21.0	5.0	0.3	5.3
2/1+2/2	267	267	-	-	-	1.0	0.2	-	1.3	17.0	3.8	0.2	4.0
3/1	267	267	-	-	-	1.5	0.3	-	1.8	23.9	4.7	0.3	5.0
3/2+3/3	447	447	-	-	-	2.8	0.5	-	3.3	26.7	4.7	0.5	5.2
4/1	271	271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	270	270	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 85.5 Total Delay for Signalled Lanes (pcuHr): 9.67 Cycle Time (s): 90 PRC Over All Lanes (%): 85.5 Total Delay Over All Lanes(pcuHr): 9.67													

Full Input Data And Results

Scenario 5: '2032 Base + Comm + Max Commercial + Dev, AM' (FG7: '2032 Base + Comm + Max Commercial + Dev, AM', Plan 2: 'Peds Every Cycle')

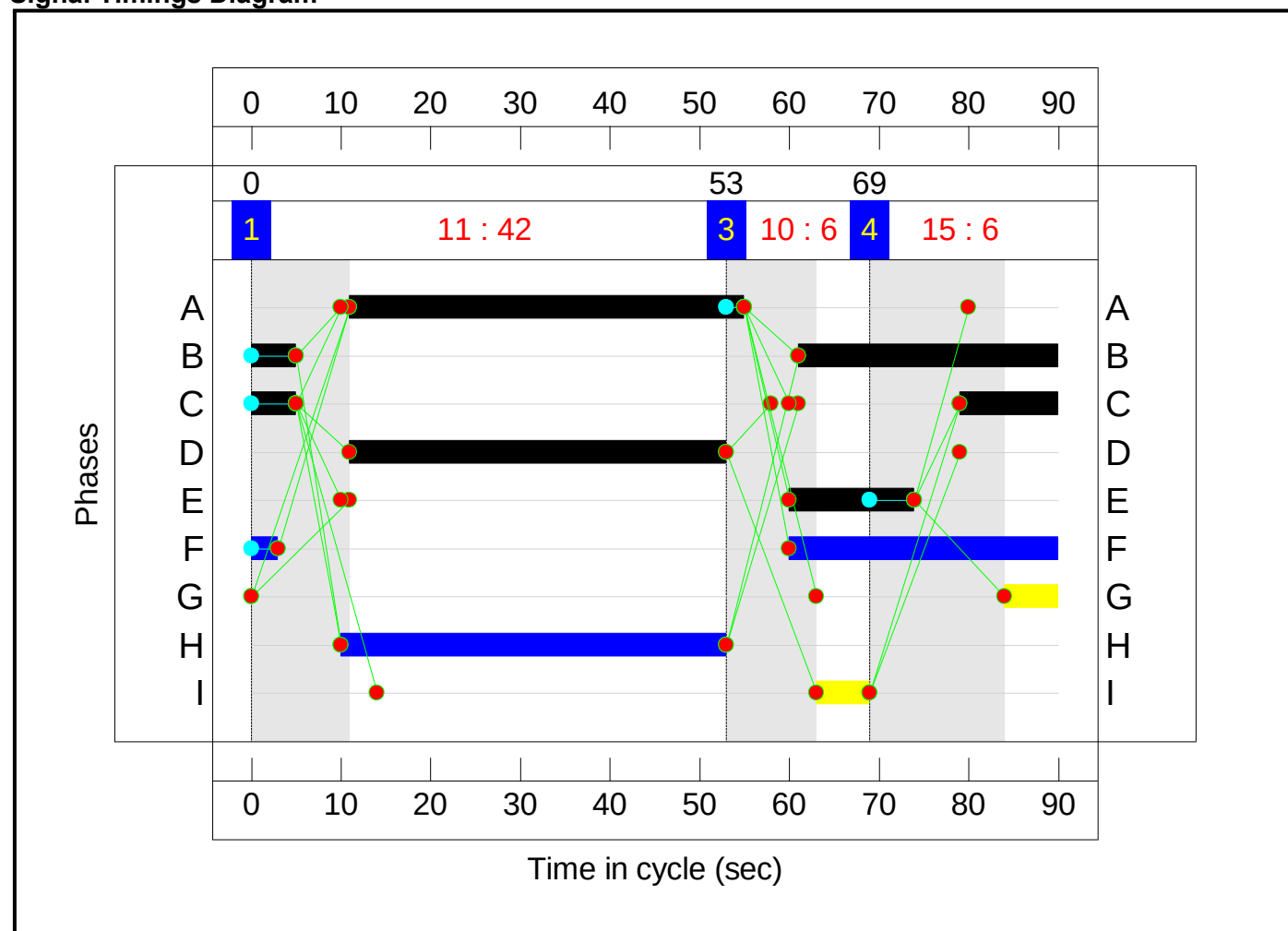
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	42	6	6
Change Point	0	53	69

Signal Timings Diagram



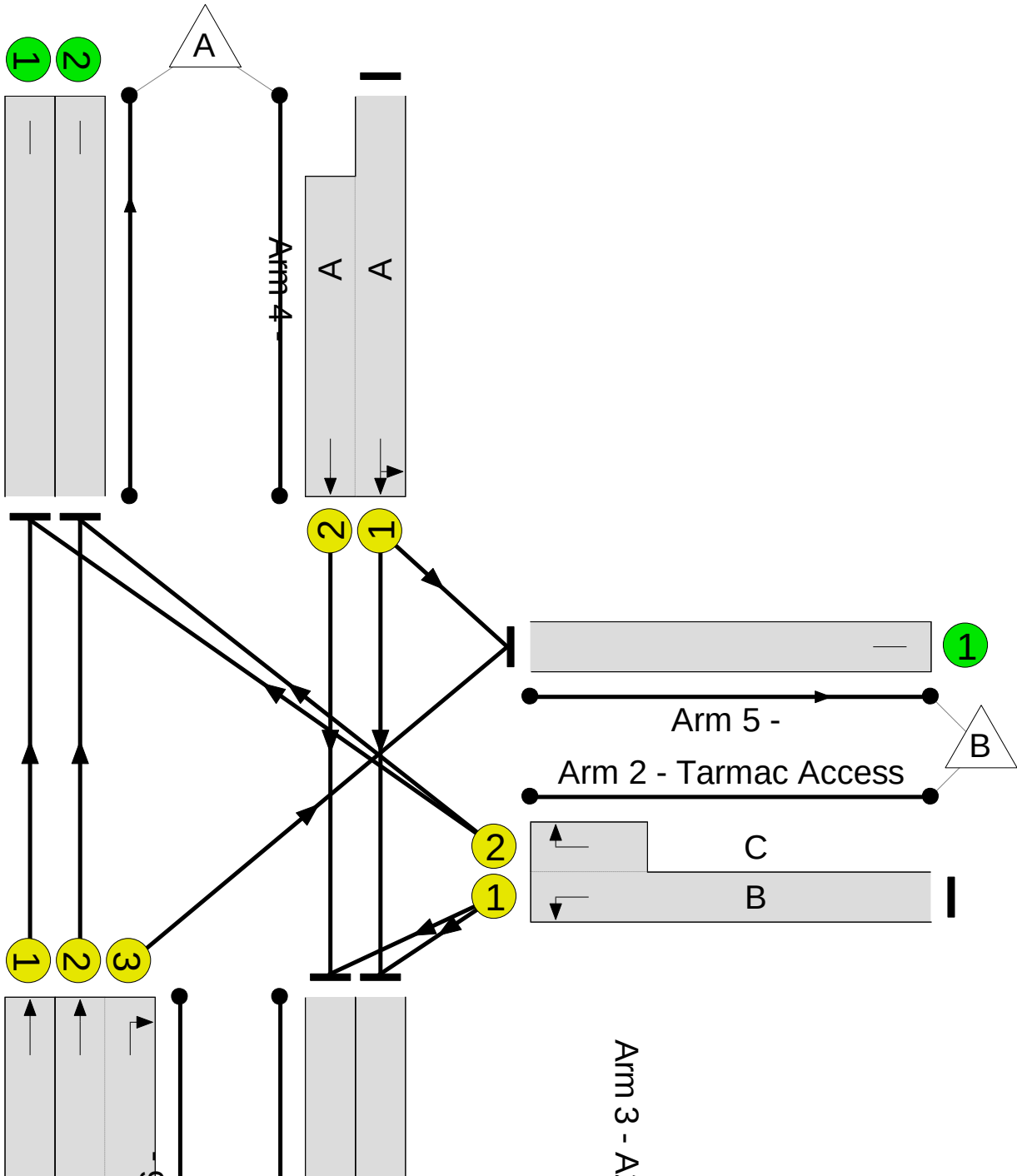


A226 / Tarmac Access

PRC: 37.2 %

Total Traffic Delay: 13.1 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	65.6%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	65.6%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	44	-	877	1961:1965	830+828	52.9 : 52.9%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	34:16	-	200	1821:1828	680+47	27.5 : 27.5%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	42	-	488	1965	939	52.0%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	42:14	-	678	1965:1762	743+294	65.6 : 65.0%
4/1		U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	521	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%

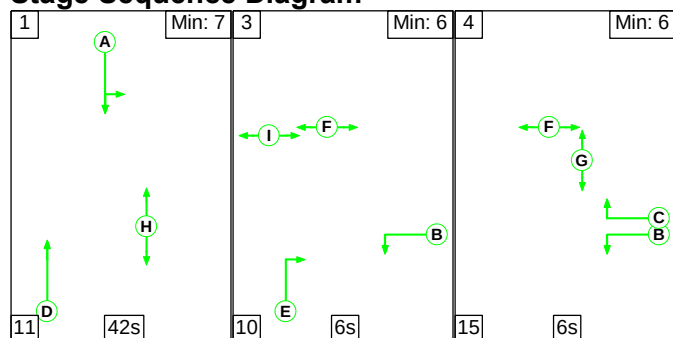
[illegible]

C1	PRC for Signalled Lanes (%):	37.2	Total Delay for Signalled Lanes (pcuHr):	13.13	Cycle Time (s): 90
	PRC Over All Lanes (%):	37.2	Total Delay Over All Lanes(pcuHr):	13.13	

Full Input Data And Results

Scenario 6: '2032 Base + Comm + Max Commercial + Dev, PM' (FG8: '2032 Base + Comm + Max Commercial + Dev, PM', Plan 2: 'Peds Every Cycle')

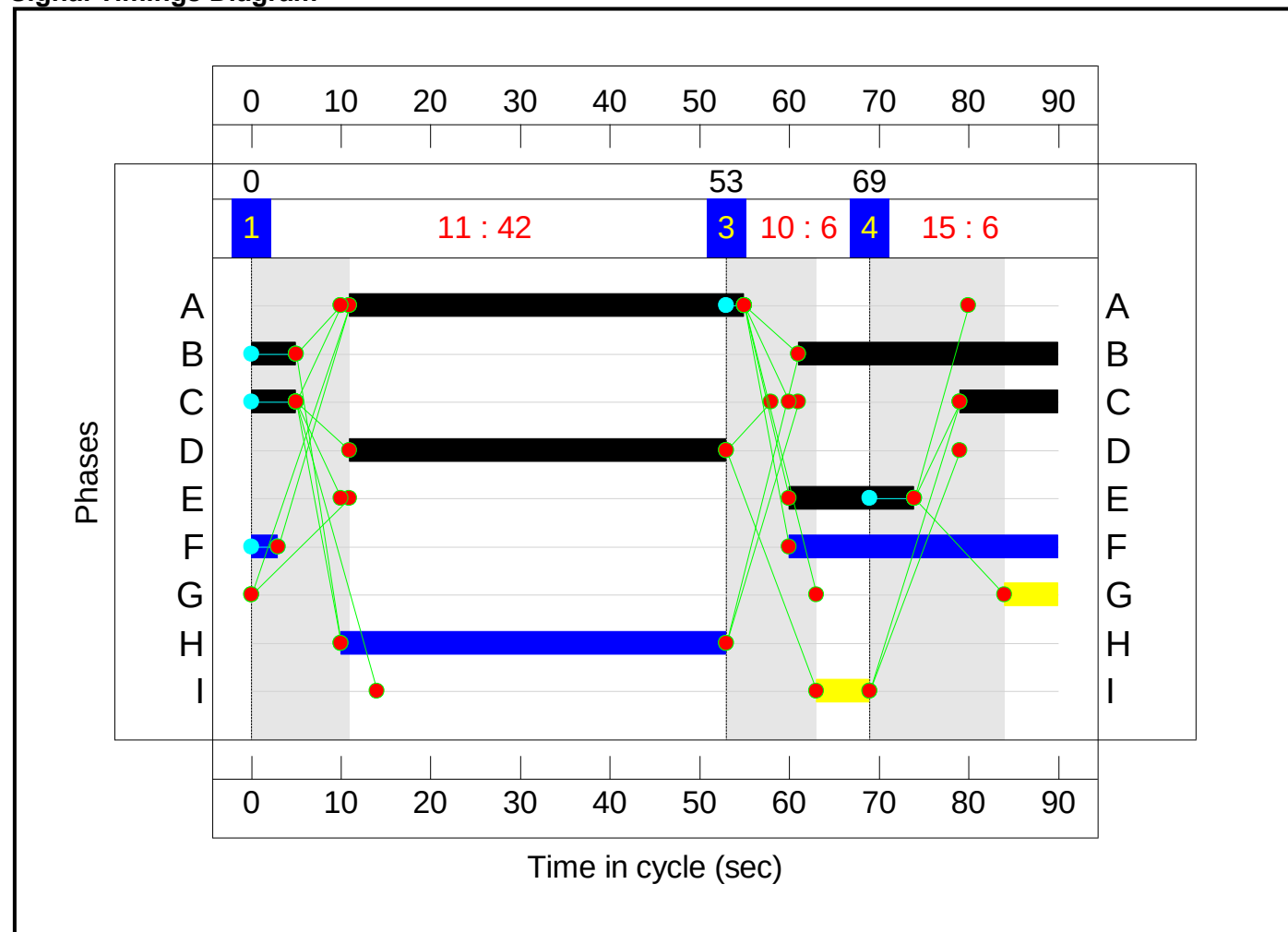
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	42	6	6
Change Point	0	53	69

Signal Timings Diagram



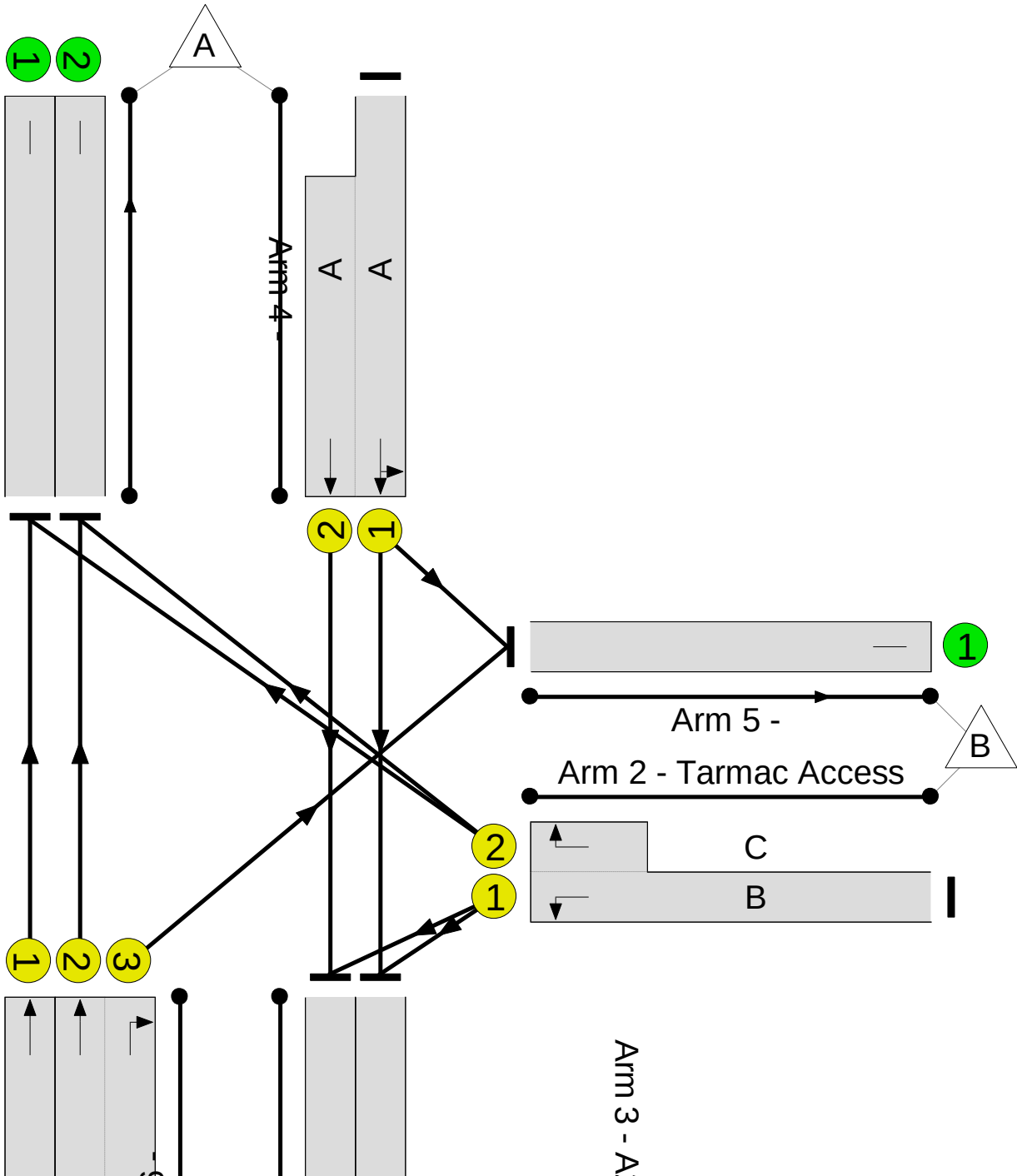


A226 / Tarmac Access

PRC: 45.8 %

Total Traffic Delay: 13.9 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	61.7%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	61.7%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	44	-	1006	1962:1965	829+829	60.7 : 60.7%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	34:16	-	267	1821:1828	702+19	37.1 : 37.1%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	42	-	458	1965	939	48.8%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	42:14	-	638	1965:1762	742+294	61.7 : 61.3%
4/1		U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%

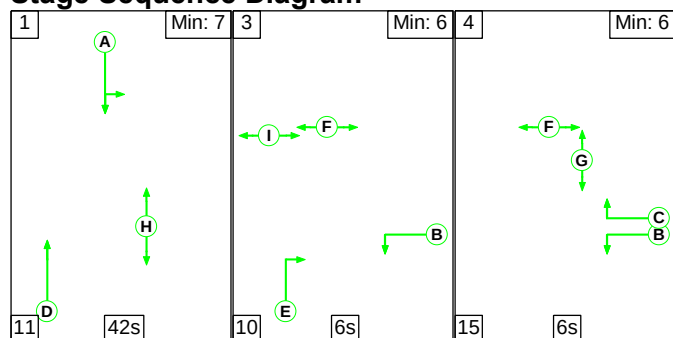
[illegible]

C1	PRC for Signalled Lanes (%):	45.8	Total Delay for Signalled Lanes (pcuHr):	13.85	Cycle Time (s):	90
	PRC Over All Lanes (%):	45.8	Total Delay Over All Lanes(pcuHr):	13.85		

Full Input Data And Results

Scenario 7: '2032 Base + Comm + Max Resi + Dev, AM' (FG9: '2032 Base + Comm + Max Resi + Dev, AM', Plan 2: 'Peds Every Cycle')

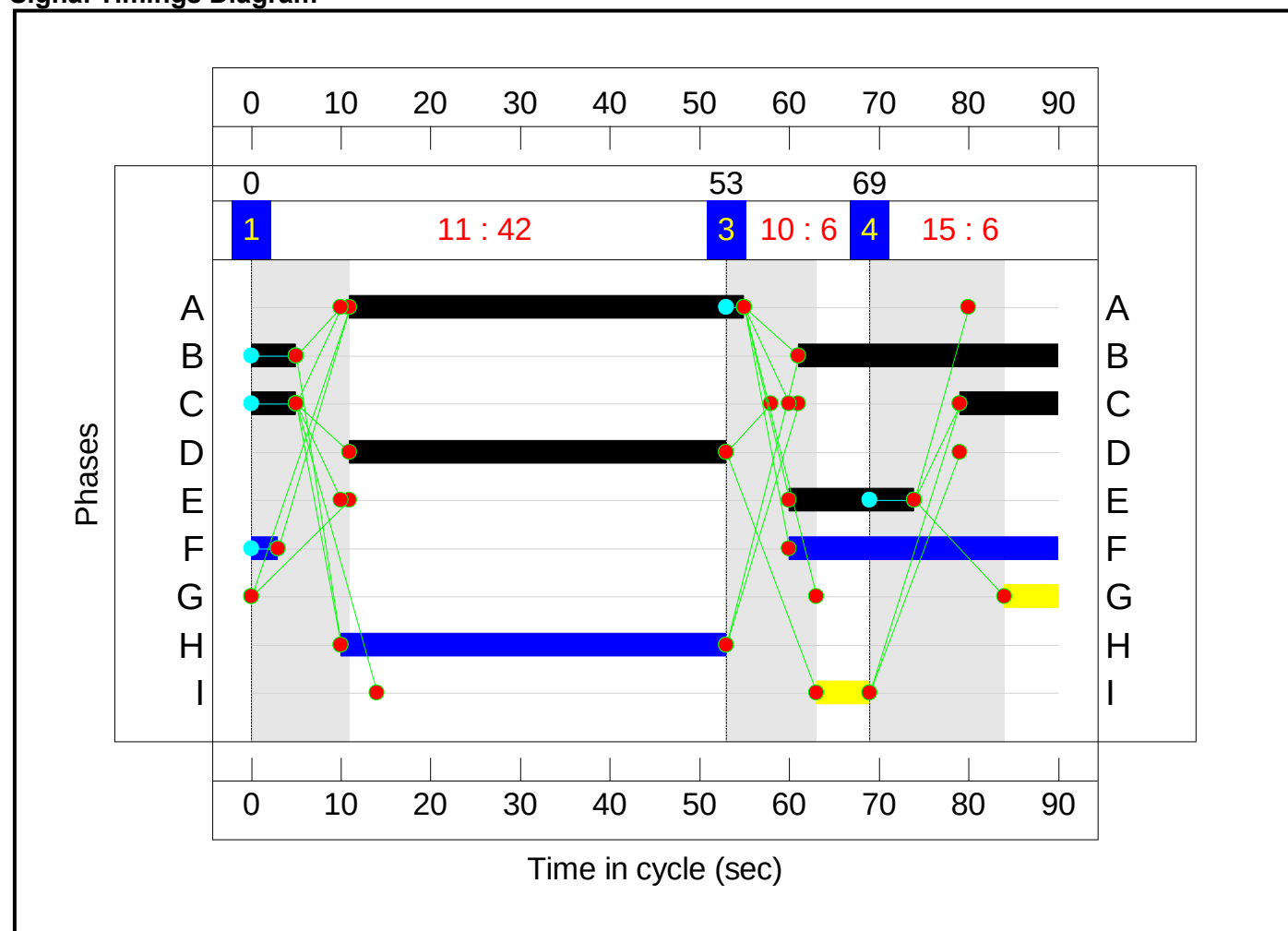
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	42	6	6
Change Point	0	53	69

Signal Timings Diagram



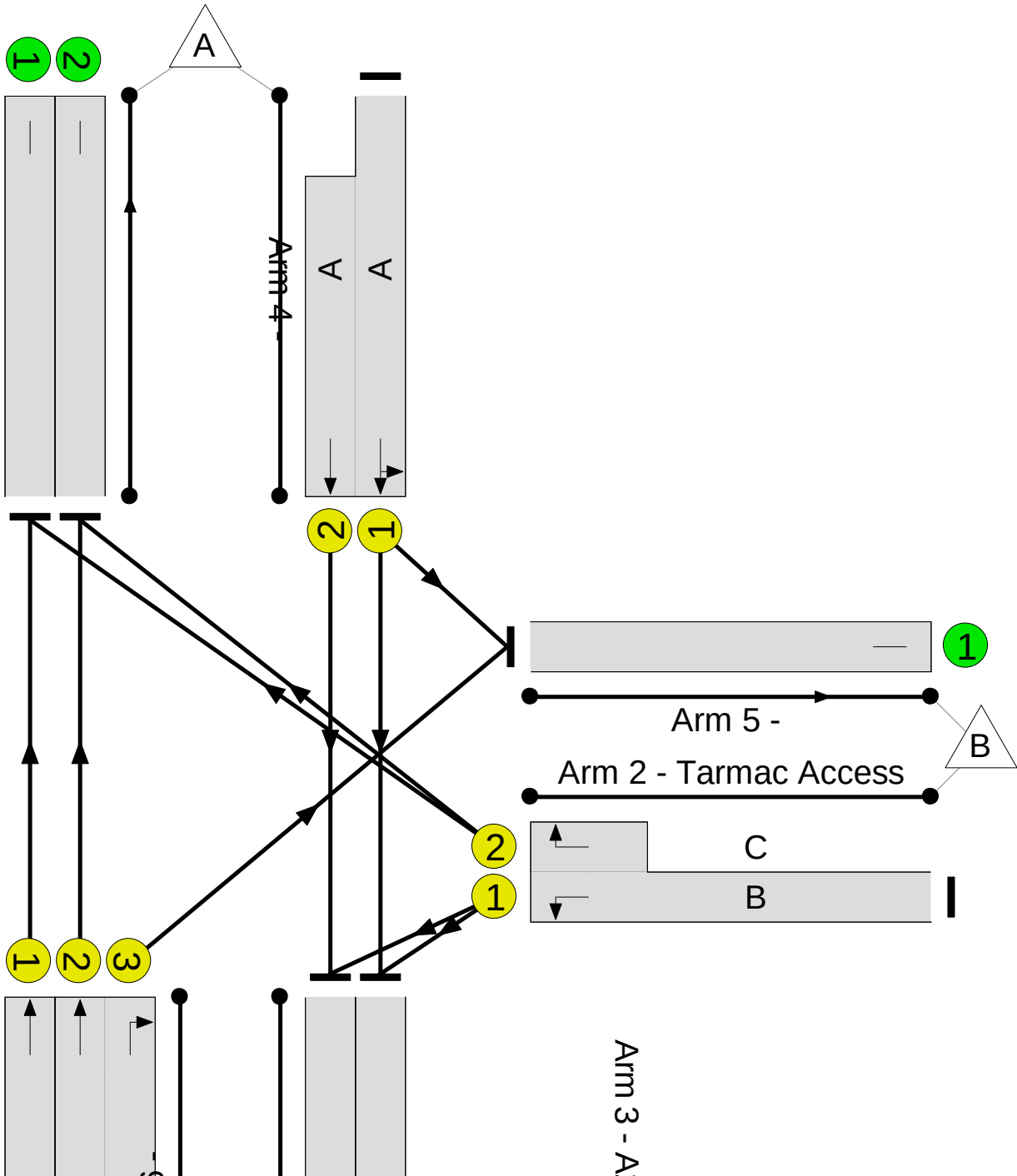


A226 / Tarmac Access

PRC: 38.4 %

Total Traffic Delay: 13.0 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	65.0%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	65.0%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	44	-	907	1961:1965	830+828	54.7 : 54.7%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	34:16	-	200	1821:1828	680+47	27.5 : 27.5%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	42	-	466	1965	939	49.6%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	42:14	-	657	1965:1762	716+294	65.0 : 65.0%
4/1		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	472	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	536	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%

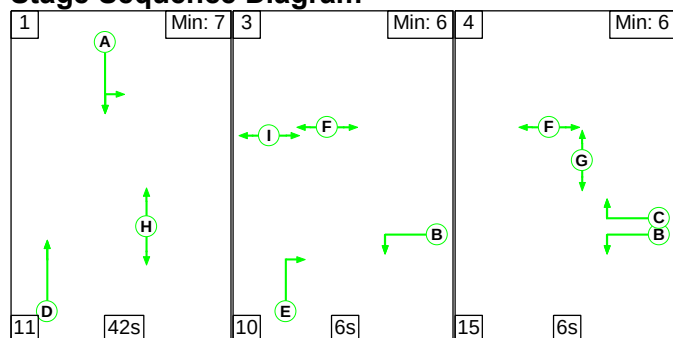
[illegible]

C1	PRC for Signalled Lanes (%):	38.4	Total Delay for Signalled Lanes (pcuHr):	13.01	Cycle Time (s): 90
	PRC Over All Lanes (%):	38.4	Total Delay Over All Lanes(pcuHr):	13.01	

Full Input Data And Results

Scenario 8: '2032 Base + Comm + Max Resi + Dev, PM' (FG10: '2032 Base + Comm + Max Resi + Dev, PM', Plan 2: 'Peds Every Cycle')

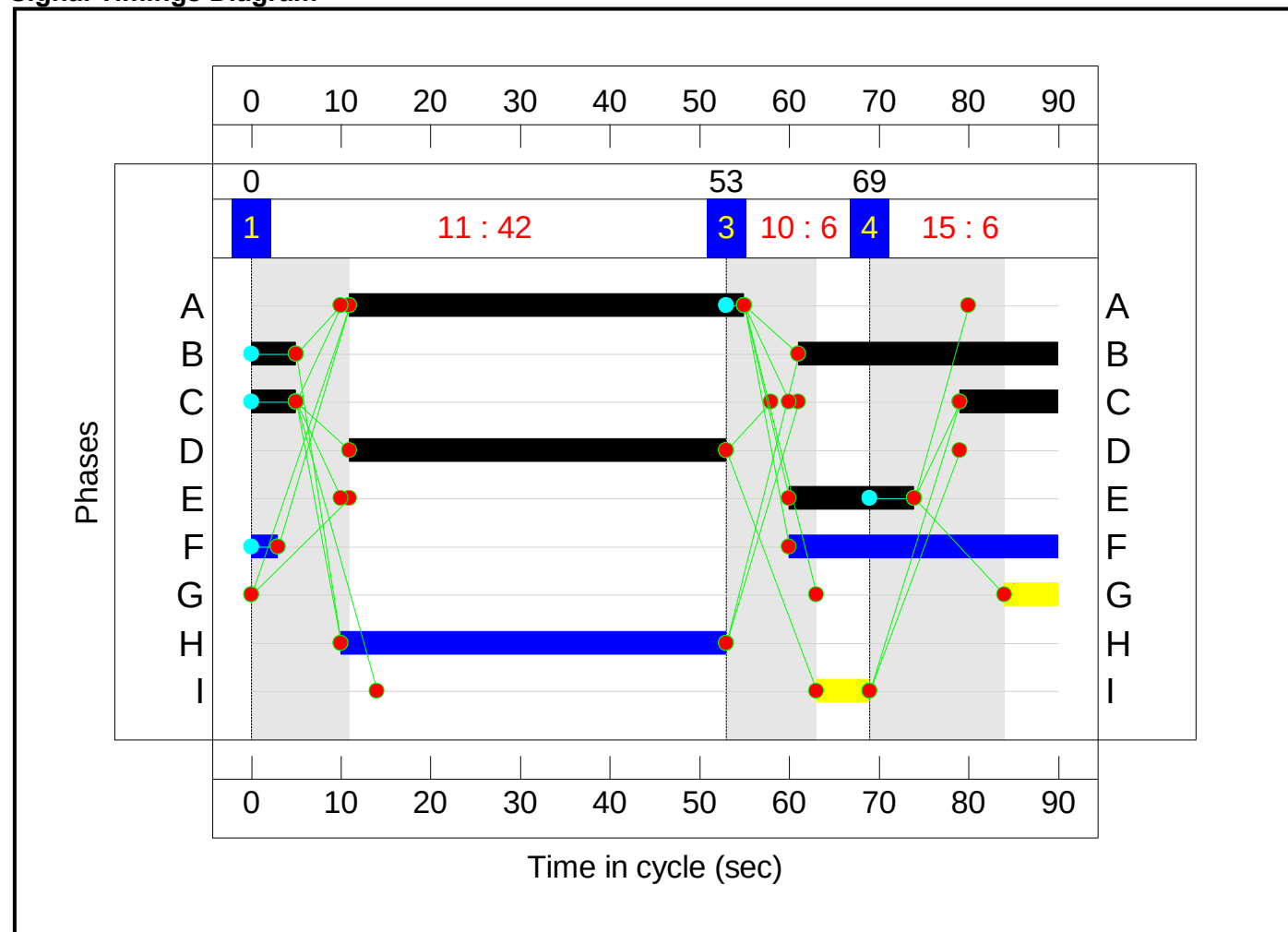
Stage Sequence Diagram



Stage Timings

Stage	1	3	4
Duration	42	6	6
Change Point	0	53	69

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

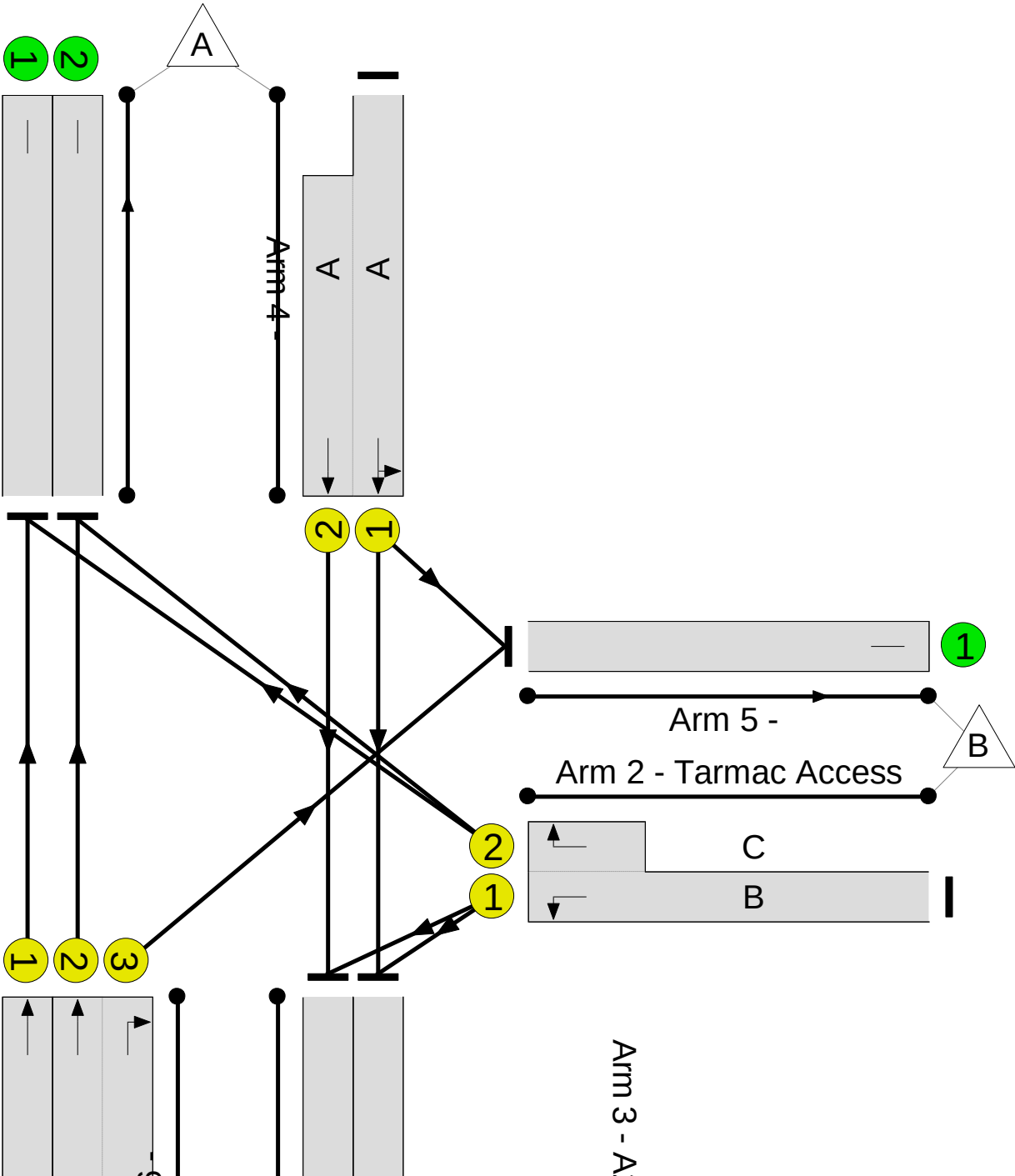


A226 / Tarmac Access

PRC: 42.9 %

Total Traffic Delay: 13.8 pcu/h

Arm 1 - A226 (North)



Full Input Data And Results

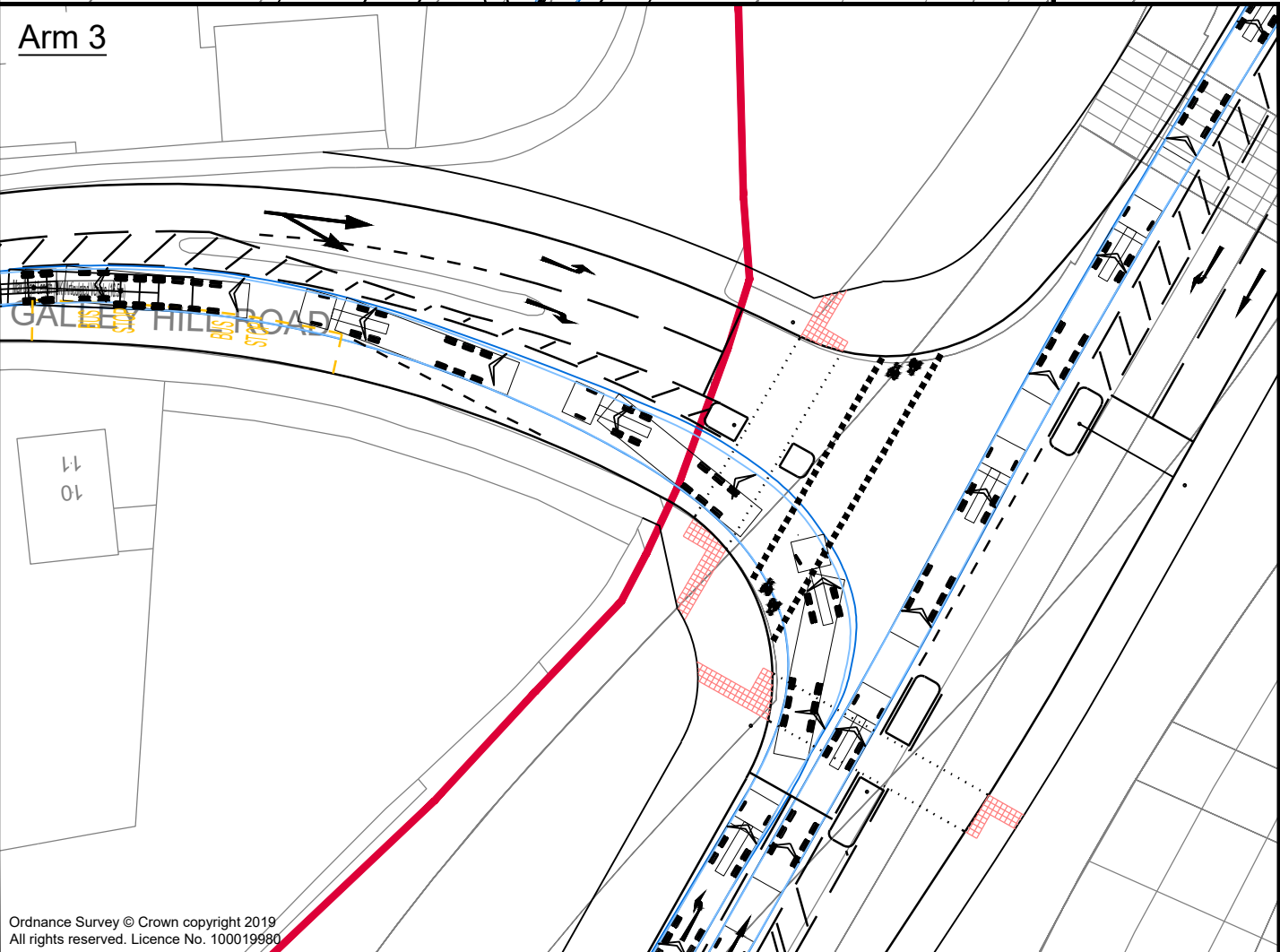
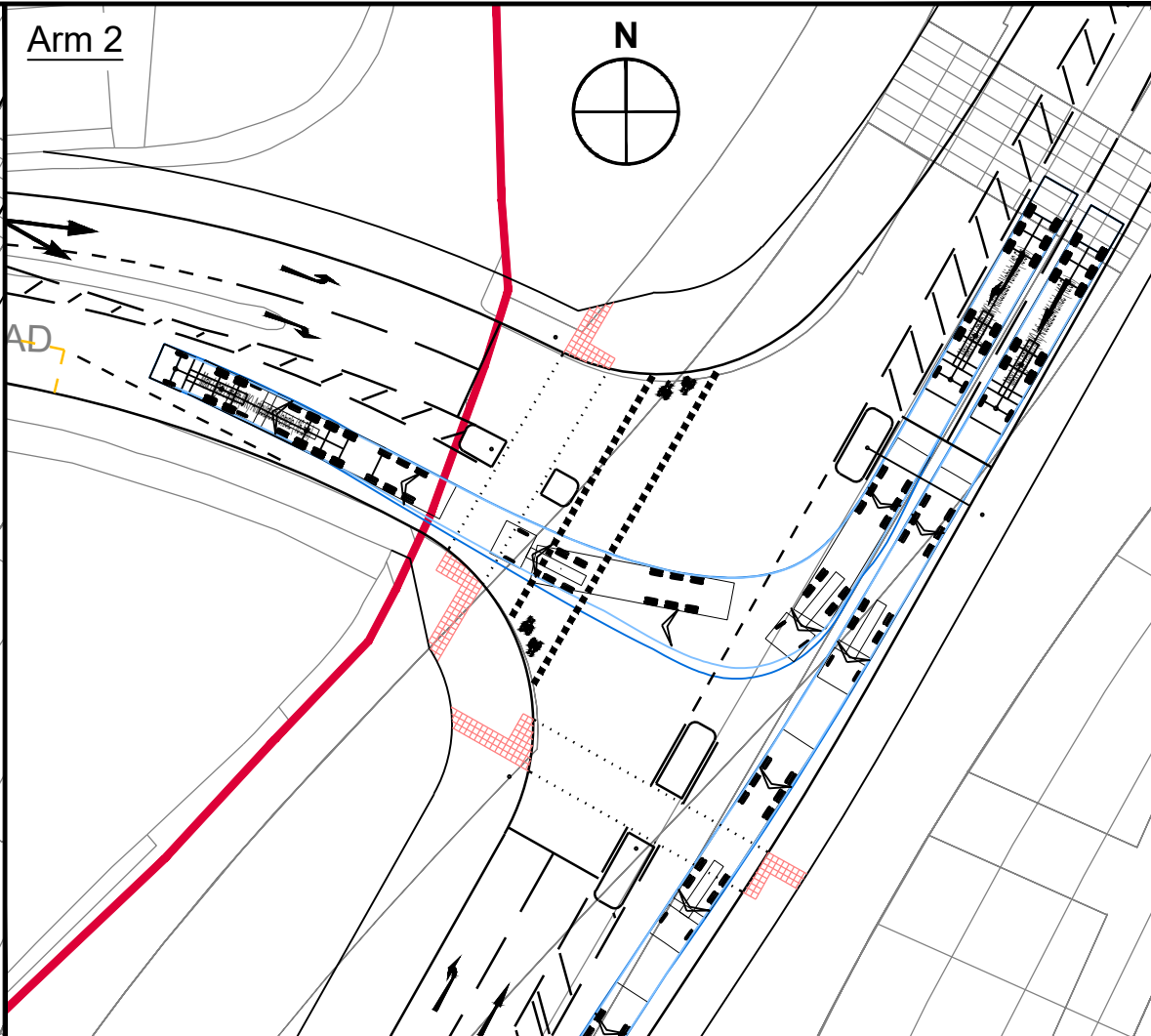
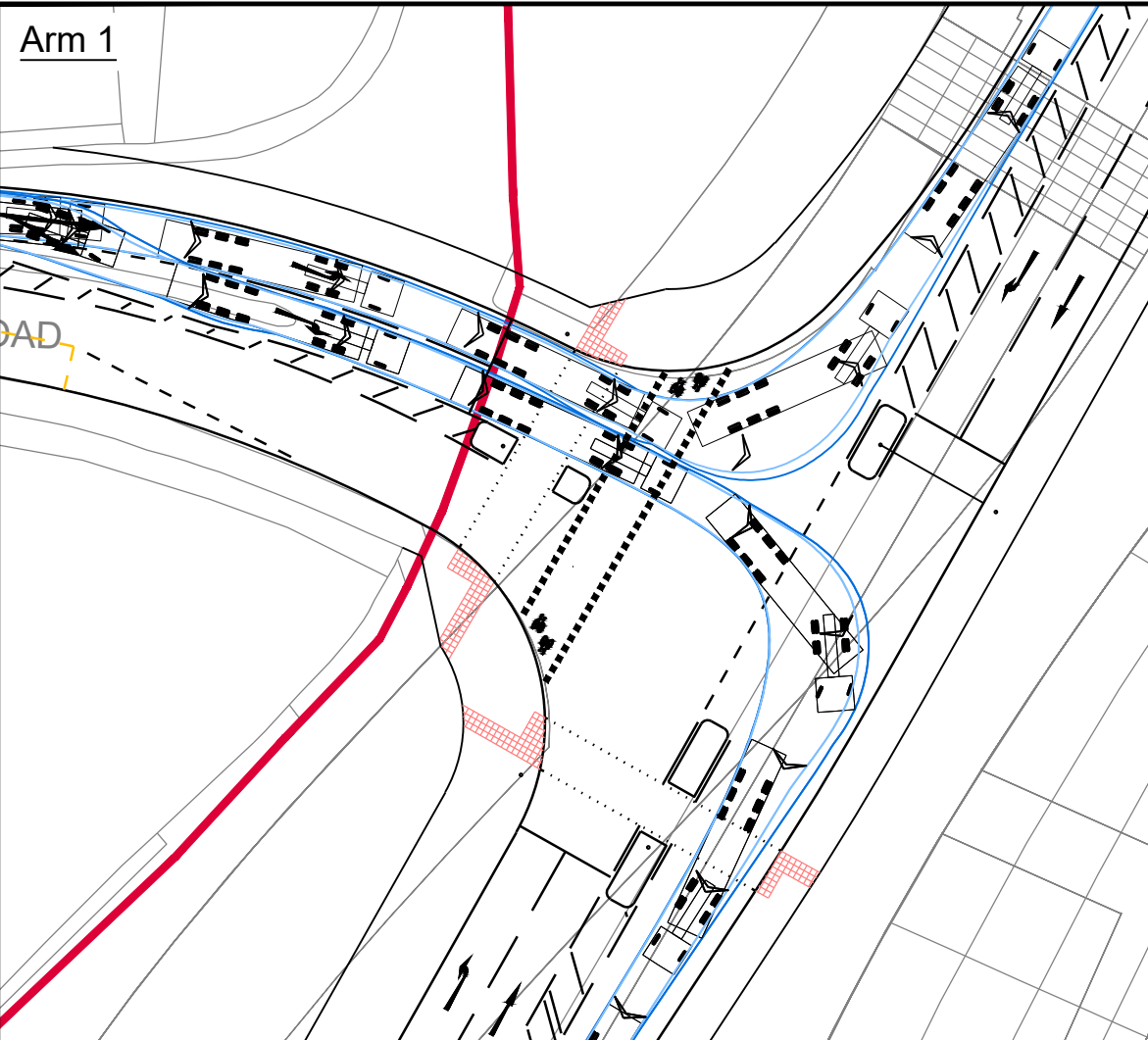
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	63.0%
A226 / Tarmac Access	-	-	N/A	-	-		-	-	-	-	-	-	63.0%
1/1+1/2	A226 (North) Left Ahead	U	N/A	N/A	A		1	44	-	970	1962:1965	829+829	58.5 : 58.5%
2/1+2/2	Tarmac Access Right Left	U	N/A	N/A	B C		1	34:16	-	267	1821:1828	702+19	37.1 : 37.1%
3/1	A226 (South) Ahead	U	N/A	N/A	D		1	42	-	472	1965	939	50.3%
3/2+3/3	A226 (South) Ahead Right	U	N/A	N/A	D E		1	42:14	-	651	1965:1762	748+294	63.0 : 61.3%
4/1		U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	605	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%

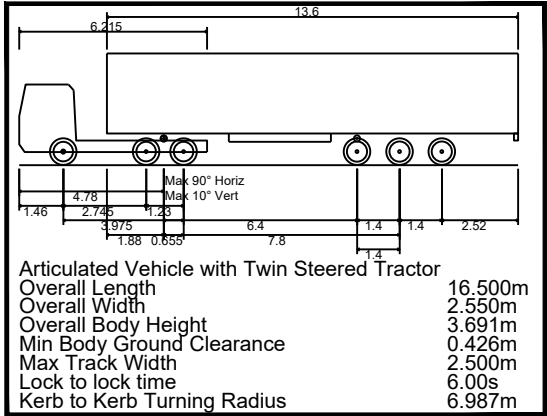
[illegible]

C1	PRC for Signalled Lanes (%):	42.9	Total Delay for Signalled Lanes (pcuHr):	13.81	Cycle Time (s): 90
	PRC Over All Lanes (%):	42.9	Total Delay Over All Lanes(pcuHr):	13.81	

Appendix F



Vehicle Profile



- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
 2. White lining is indicative only.

REV.	B	Crossing added to southern arm	NS	BH	16.01.2024
	A	Layout updated	JB	RS	19.10.2023
		DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Junction 2
16.5m Articulated Vehicle

SCALES:

1:500 at A3

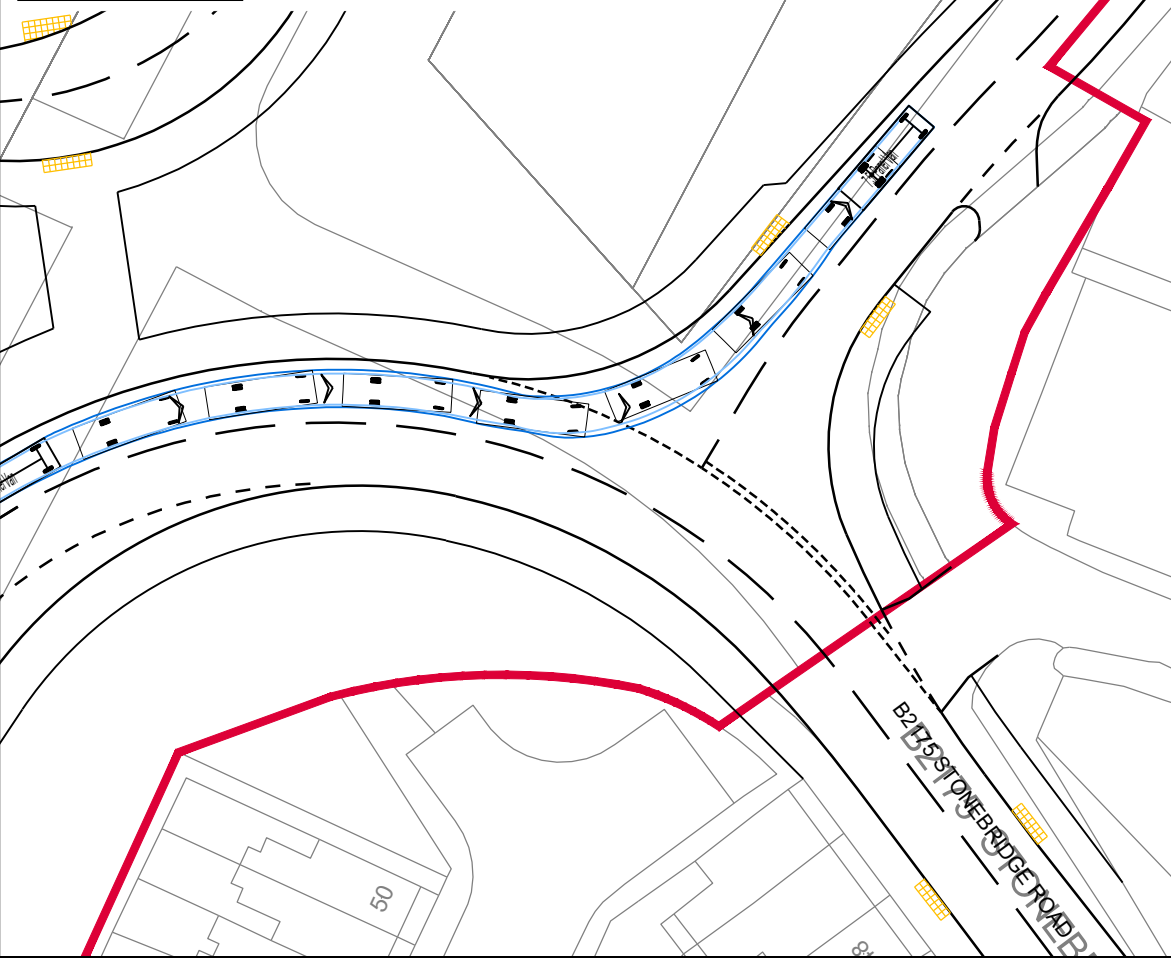
DRAWN:	NS	CHECKED:	JM	DATE:	23.08.2023
--------	----	----------	----	-------	------------

SLR

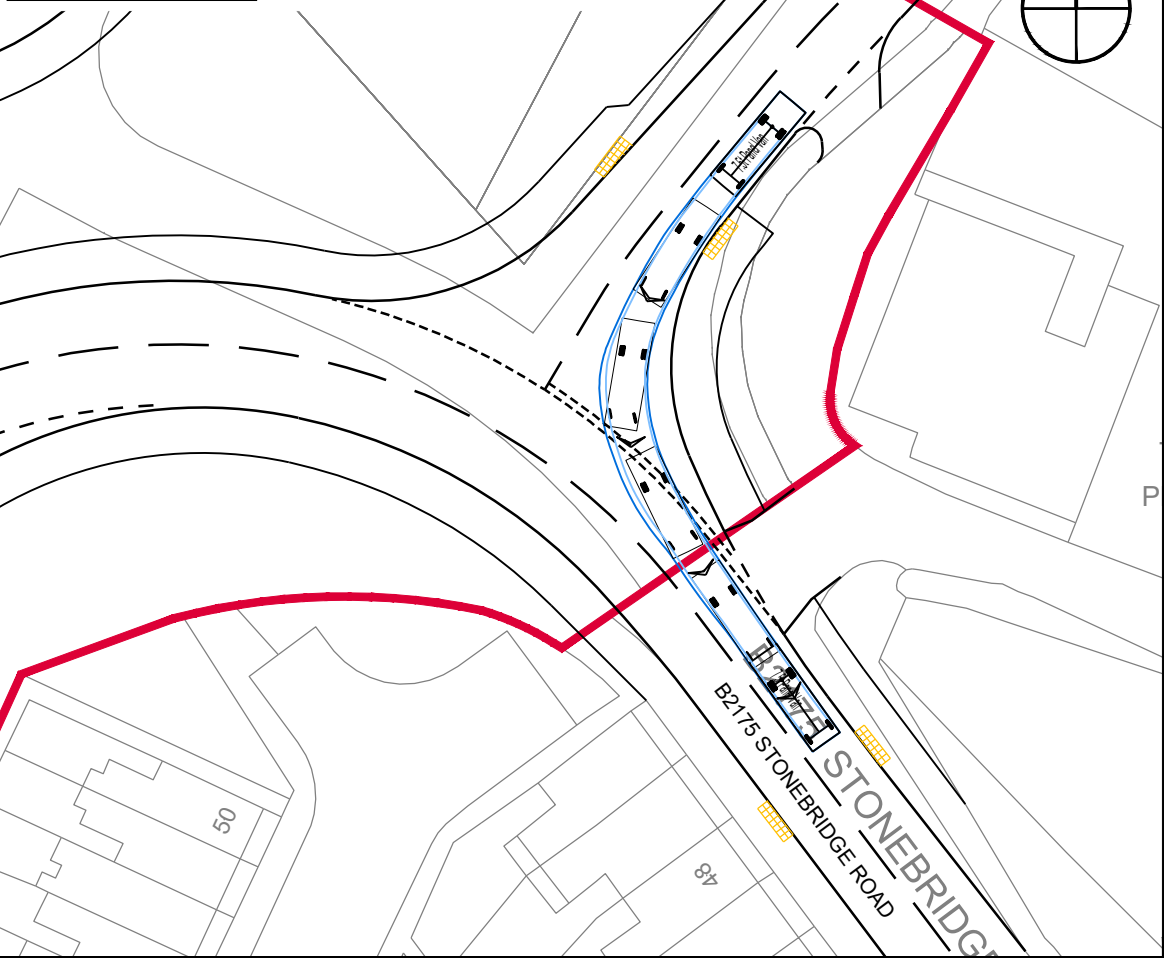
DRAWING NUMBER: 226728/PD103/AT01

REVISION: B

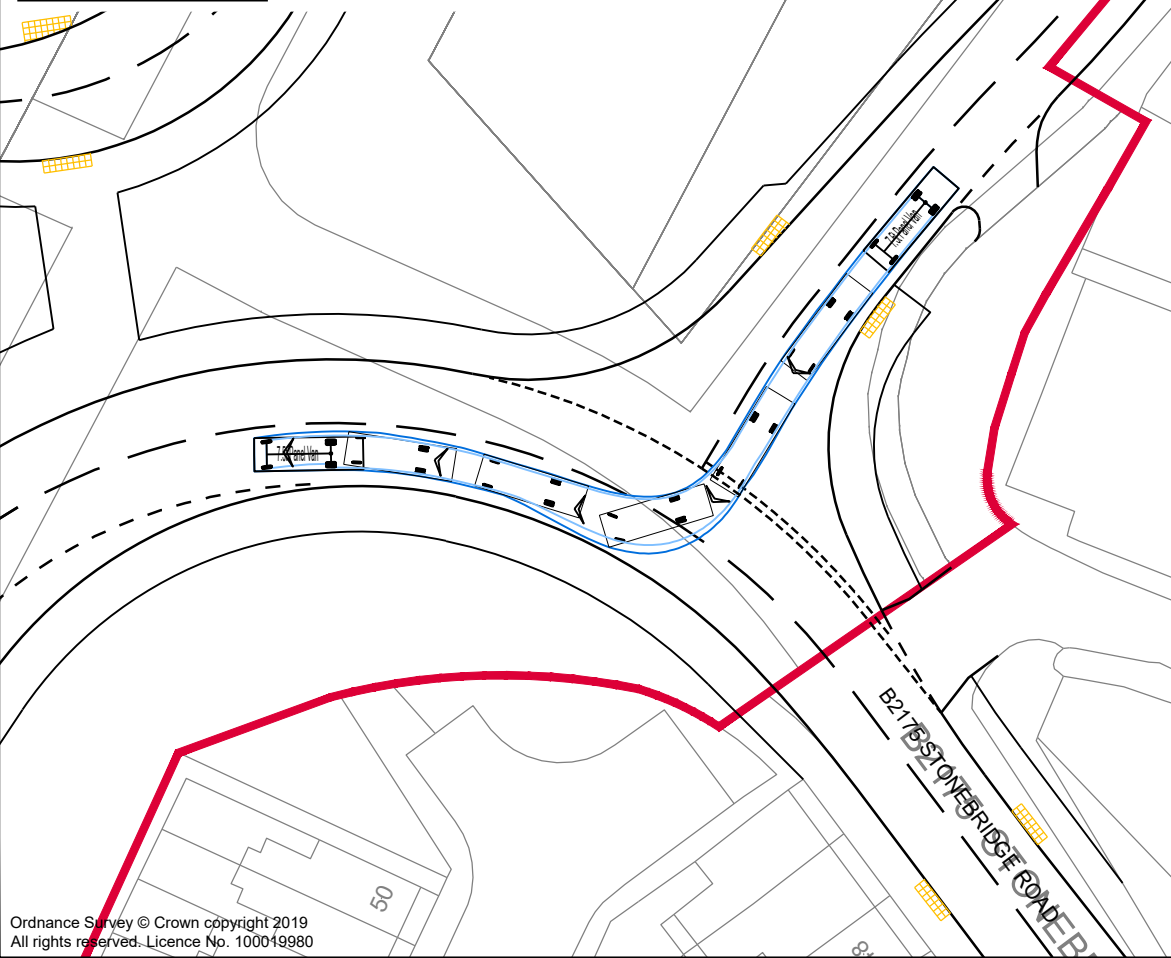
7.5T PANEL VAN TRAVELING NORTH
FROM WEST



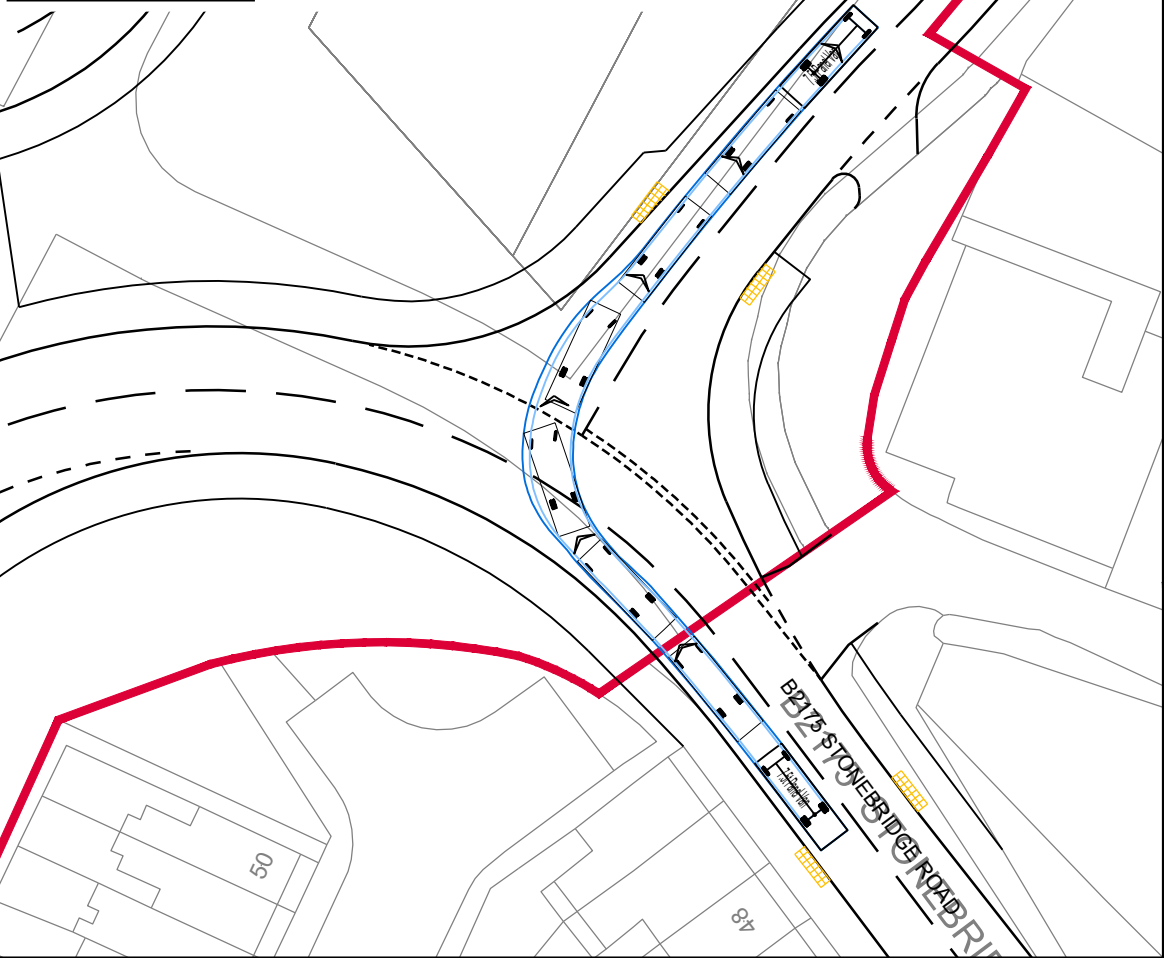
7.5T PANEL VAN TRAVELING SOUTH
FROM NORTH



7.5T PANEL VAN TRAVELING WEST
FROM NORTH

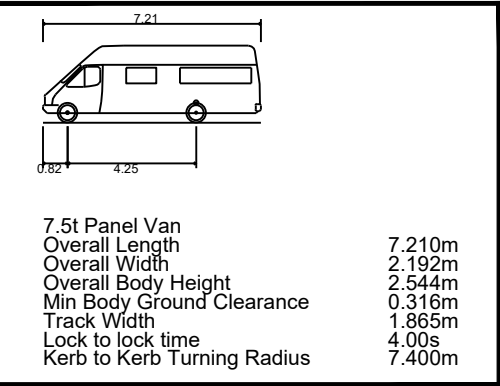


7.5T PANEL VAN TRAVELING NORTH
FROM SOUTH



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Vehicle Profile



B	J7 Widened	NS	RS	15.01.2024
A	J7 south east kerb radii amended	NS	RS	18.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Swept Path Analysis
Junction 7
Panel Van**

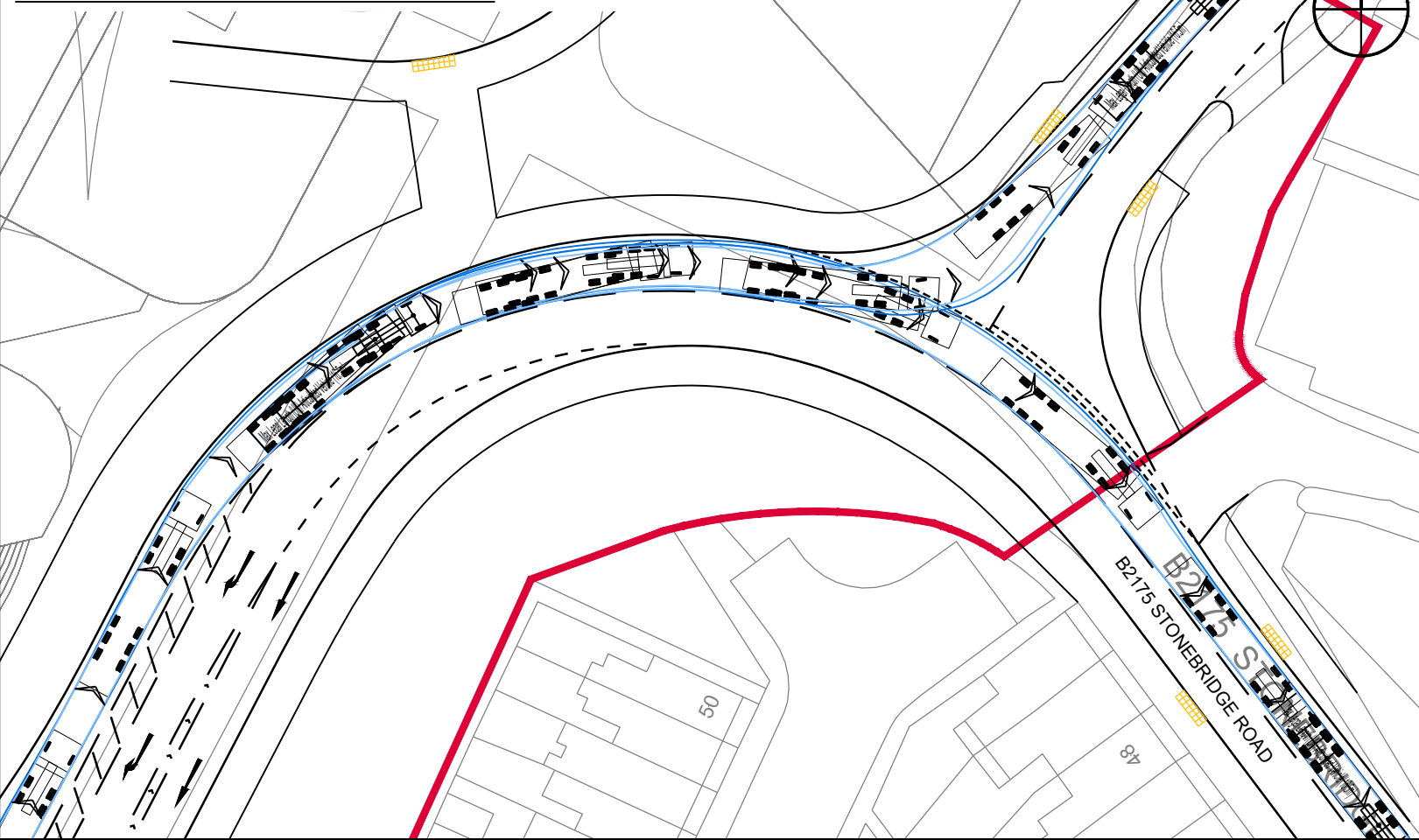
SCALES:
1:500 at A3

DRAWN: NS CHECKED: JM DATE: 24.08.2023

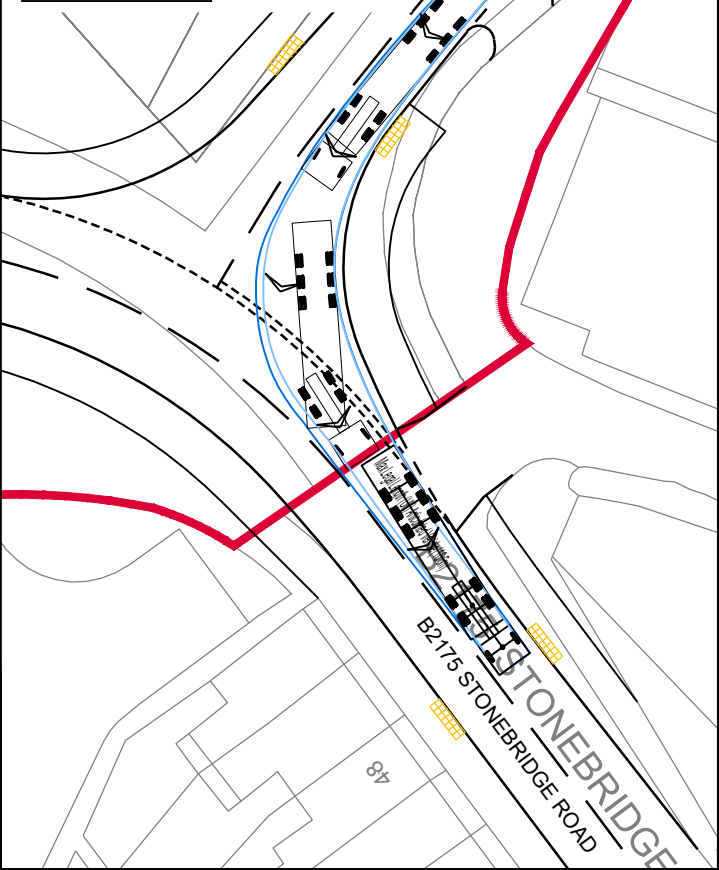


DRAWING NUMBER: 226728/PD106/AT01 REVISION: B

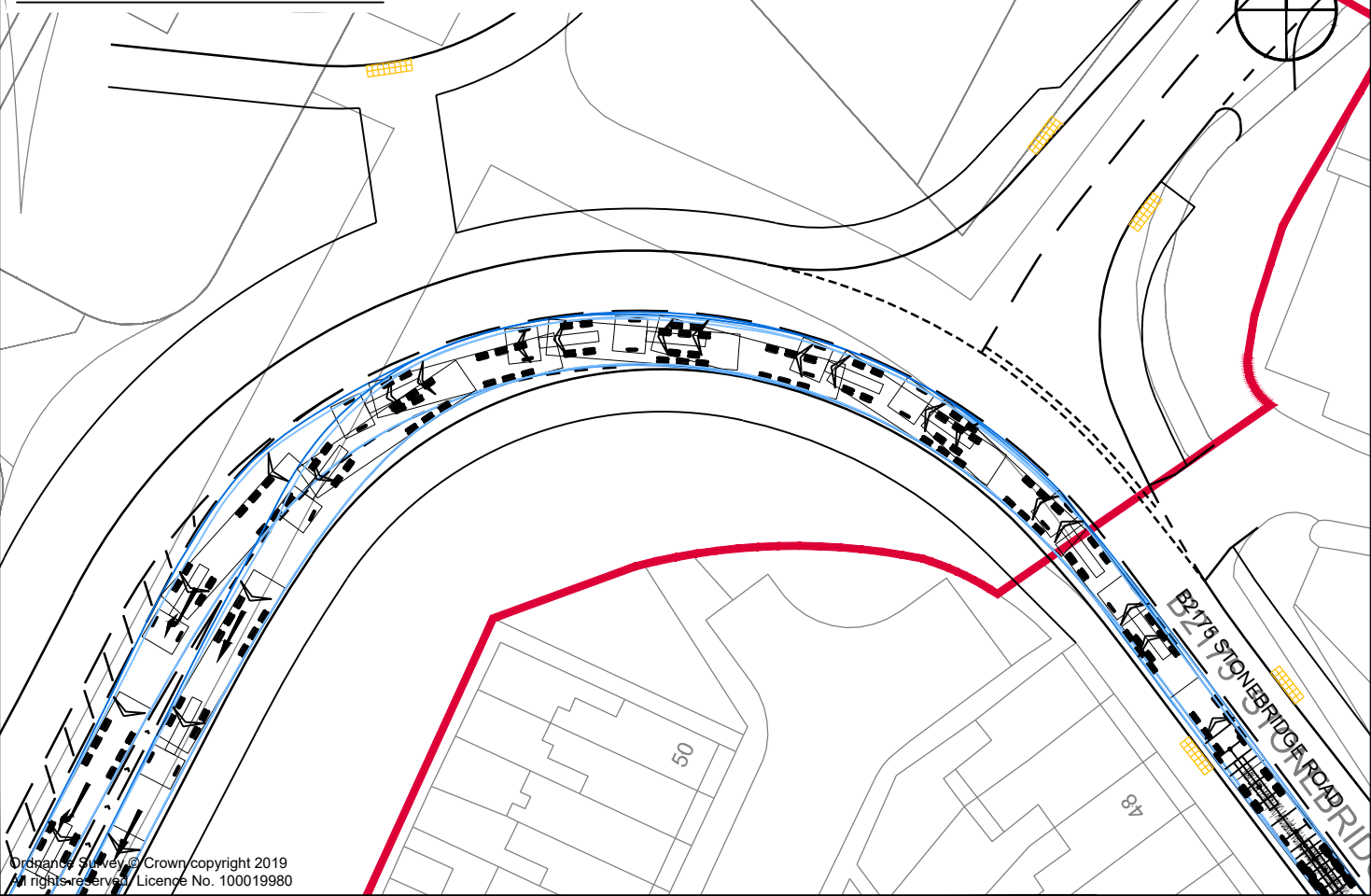
16.5M ARTICULATED VEHICLE TRAVELING
FROM WEST TO GROVE ROAD



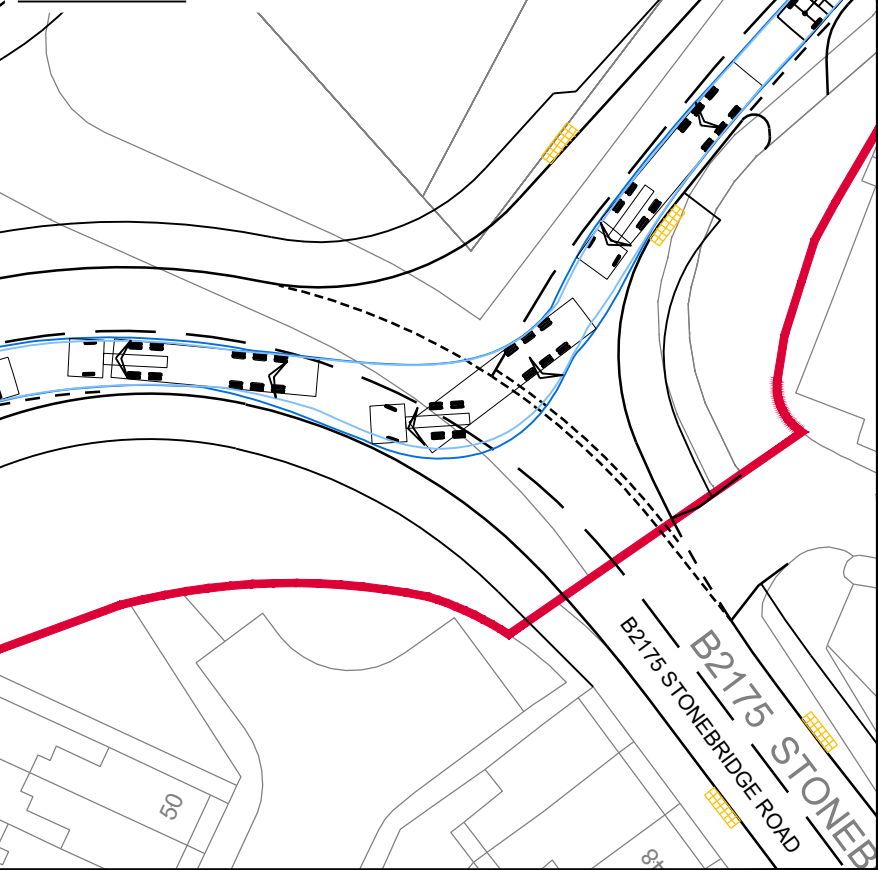
16.5M ARTICULATED
VEHICLE TRAVELING
FROM GROVE ROAD
TO SOUTH



16.5M ARTICULATED VEHICLE TRAVELING
FROM EAST TO WEST

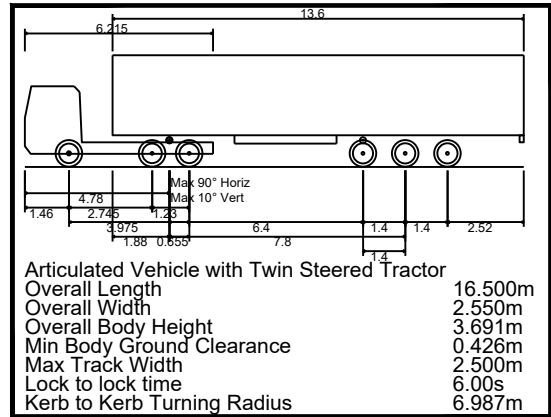


16.5M ARTICULATED
VEHICLE TRAVELING
FROM GROVE ROAD
TO WEST



- Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
 2. White lining is indicative only.

Vehicle Profile



A	J7 Widened	NS	RS	15.01.2024
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

Landmarque Property Group

PROJECT:

Northfleet Central
Gravesham

DRAWING TITLE:

Swept Path Analysis
Junction 7
16.5m Articulated Vehicle

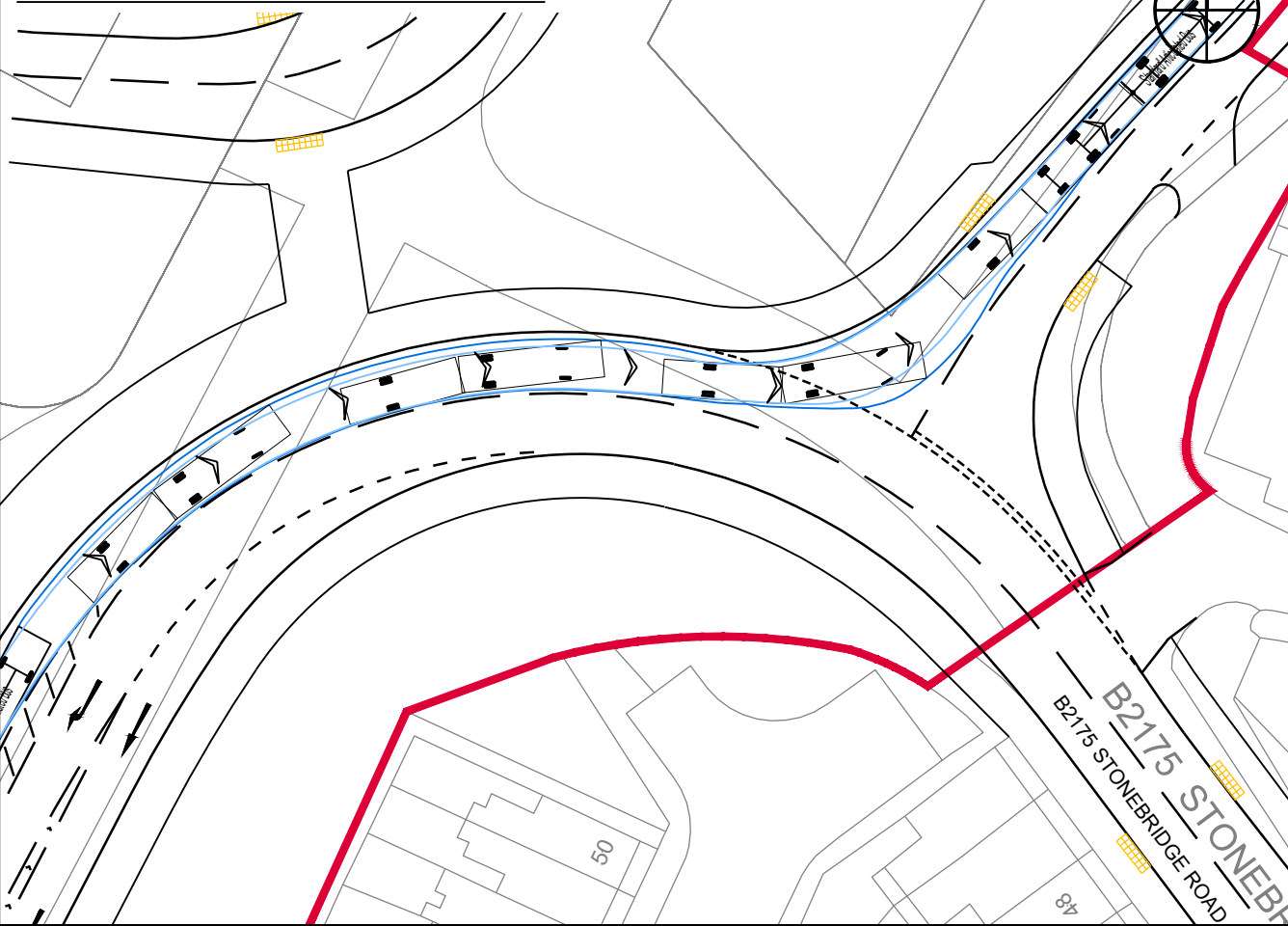
SCALES:

1:500 at A3

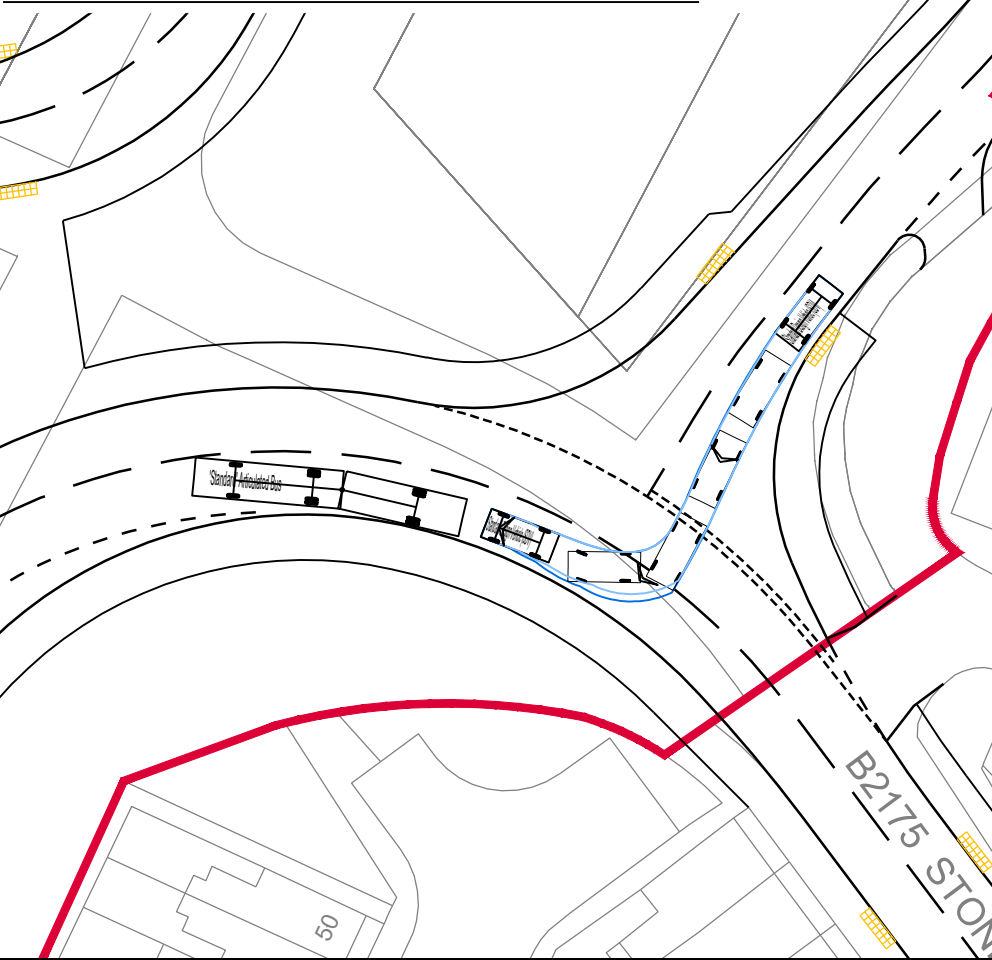
DRAWN:	NS	CHECKED:	JM	DATE:	18.10.2023
--------	----	----------	----	-------	------------

DRAWING NUMBER:	226728/PD106/AT02	REVISION:	A
-----------------	-------------------	-----------	---

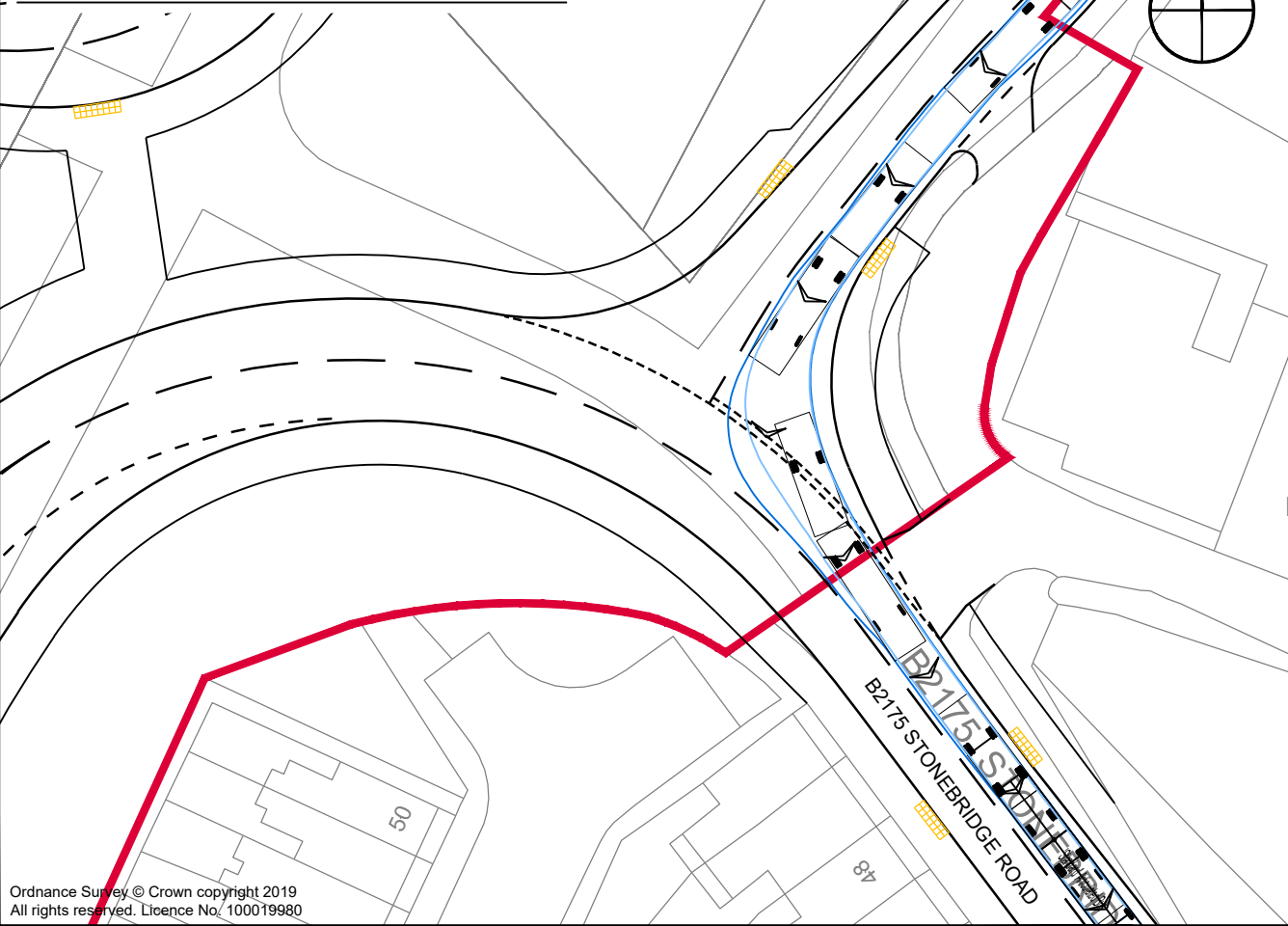
18M ARTICULATED BUS TRAVELING
FROM WEST TO GROVE ROAD



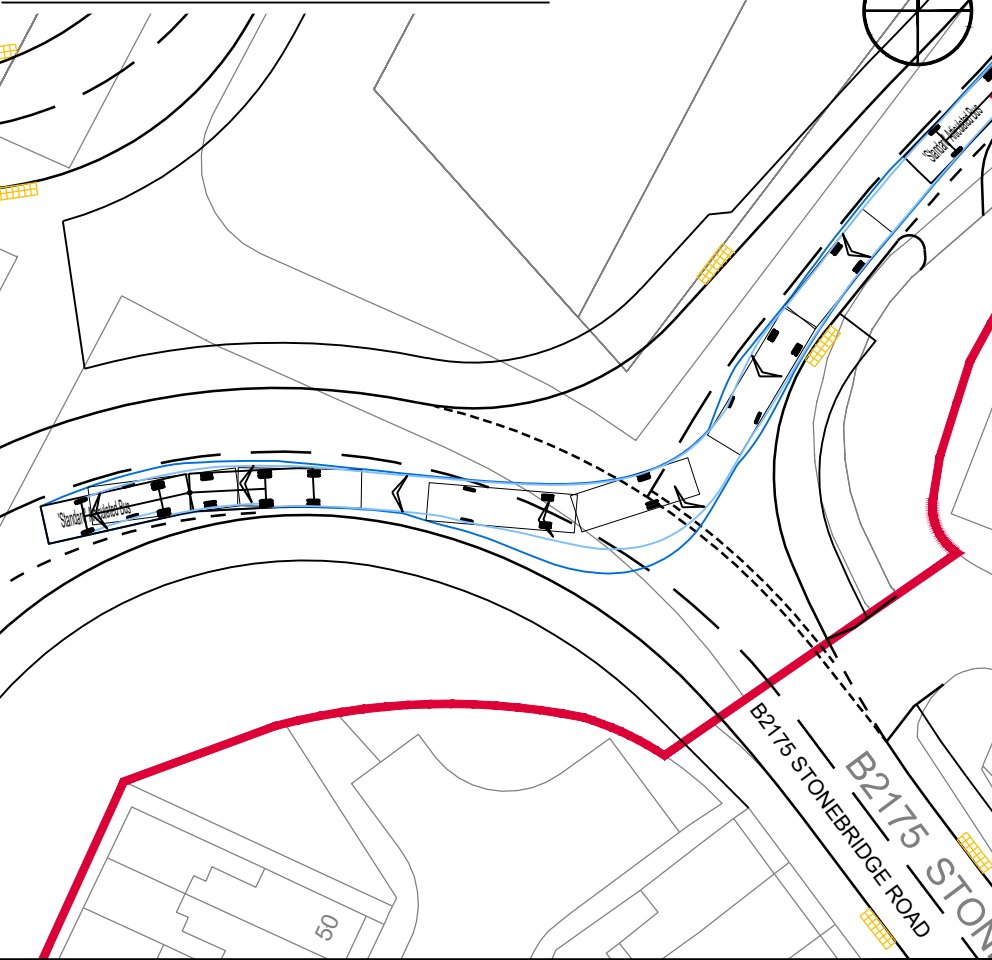
LARGE CAR TRAVELLING WEST FROM EAST
& WAITING BEHIND ARTICULATED BUS



18M ARTICULATED BUS TRAVELING
FROM GROVE ROAD TO SOUTH



18M ARTICULATED BUS TRAVELING
FROM GROVE ROAD TO WEST



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

Vehicle Profile

'Standard' Articulated Bus

Overall Length	18.020m
Overall Width	2.520m
Overall Body Height	2.714m
Min Body Ground Clearance	0.301m
Max Track Width	2.400m
Lock to lock time	4.00s
Wall to Wall Turning Radius	11.400m

Standard Design Vehicle (SDV)

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

B	J7 Widened	NS	RS	15.01.2024
A	Tracking updated	JB	RS	19.10.2023
REV.	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
Landmarque Property Group

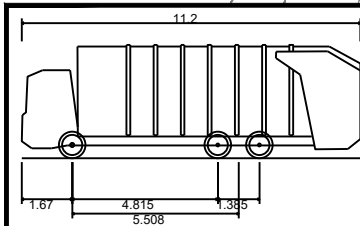
PROJECT:
Northfleet Central
Gravesham

DRAWING TITLE:
Swept Path Analysis
Junction 7
18m Articulated Bus

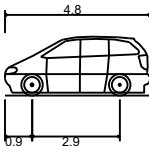
SCALES:
1:500 at A3

DRAWN:	NS	CHECKED:	JM	DATE:	18.10.2023
--------	----	----------	----	-------	------------

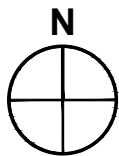
DRAWING NUMBER:	226728/PD106/AT03	REVISION:	B
-----------------	-------------------	-----------	---



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)
Overall Length 11.200m
Overall Width 2.530m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 9.500m



Standard Design Vehicle (SDV)
Overall Length 4.800m
Overall Width 2.000m
Overall Body Height 1.950m
Min Body Ground Clearance 0.100m
Track Width 2.000m
Lock to lock time 4.00s
Wall to Wall Turning Radius 6.000m



Notes:
1. This is not a construction drawing and is intended for illustrative purposes only
2. White lining is indicative only.

REV.	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:
Landmarque Property Group

PROJECT:
**Northfleet Central
Gravesham**

DRAWING TITLE:
**Swept Path Analysis
Junction 9
Refuse vehicle & Standard
design vehicle passing at bend**

SCALES:
1:200 at A3

DRAWN: NS	CHECKED: RS	DATE: 15.12.2023
-----------	-------------	------------------



DRAWING NUMBER: 226728/PD106/AT04	REVISION: -
---	----------------

Appendix G

Northfleet Harbourside, Gravesham

Vehicular Trip Generation Note

226728/N08 – 22nd February 2023

Introduction

1. Vectos is appointed by Northfleet central 1 Limited to provide transport advice in support of the proposed redevelopment of the Ebbsfleet United football ground and surrounding industrial area to provide a residential-led, mixed use scheme.
2. This note outlines the weekday vehicular trip generation associated with the proposed development, which is to be used by Kent County Council's (KCC) consultant to undertake modelling of the scheme using the Kent Transport Model (KTM). A subsequent note will provide a Saturday vehicular trip generation, which will include a fully operational stadium.
3. The information provided in this note supersedes information provided within the Transport Assessment dated 28th September 2022.

Development Proposals

4. The planning application is being made for:

“Outline planning application with all matters reserved, except for the primary means of access, for a mixed-use redevelopment involving the demolition of existing buildings and structures including site preparation / remediation works, and the development of residential units (Use Class C3), Use Class E floorspace including floorspace for retail, food and beverage, office floorspace and flexible Class E floorspace, floorspace for a new multi-use stadium with associated business and leisure facilities, floorspace for a hotel (Use Class C1), floorspace for community uses (Use Class F2) and other sui generis uses, delivery of open space and the realignment of the A226 Galley Hill Road / Stonebridge Road with hard / soft landscaping, car and cycle parking, highways works, infrastructure works, ancillary and associated works.”

5. It should be noted that the retail component cannot be brought forward as a larger supermarket. This is because this type of development would have implications regarding to the transport, for example operational trip generation and parking would be impacted.

Quantum of Development

6. The quantum of development is shown in **Table 1** (overleaf).

Table 1: Maximum Quantum of Development

Land Use	Use Class	GEA (m2) / Units
Residential	C3	3,500 units
Hotel	C1	20,000m2 / 300 bed
Stadium and Associated Facilities	Sui Generis	15,000sqm
Retail (excluding Supermarket)	E(a)	22,500sqm
Food and Beverage	E(b)	9,500sqm
Office	E(g)	18,000sqm
Non-residential Flexible Use	E(c, d, e, f)	5,000sqm
	(Local Services	(1,100sqm
	Gym / Leisure	1,200sqm
	Medical / Health (GP)	1,500sqm
	Creche / Nursery)	1,200sqm)
Local Community Use	F2	4,000sqm

7. Please note that the quantum shown above are Gross External Areas (GEA) and therefore, a factor of 0.91 will be applied to all uses except residential and hotel to determine the Gross Internal Area (GIA).

Vehicular Trip Generation

8. To determine the proposed trip generation at the site, the TRICS database has been consulted. It is important to note at this point that the TRICS Consortium Limited TRICS Good Practice Guide 2021 states that in relation to mixed development scenarios:
- ‘When compiling trip rates for individual components comprising a mixed development scenario, users should be aware that any cross-visitation activity between individual components would not be accounted for within the trip rates generated using TRICS®’.
9. To therefore ensure a robust and appropriate assessment is completed, consideration of internal and linked trips has been given to each land use presented in this note.
10. The parameters selected for each land use are shown below including information, where required, of any alternative methods used to generate the trip rates. It should be noted that for all TRICS searches, any surveys that were undertaken during Covid-19 i.e. lockdowns or when other restrictions were in place, have been excluded.

Residential (C3)

11. A total of 3,500 residential units are proposed on site with an anticipated composition comprising 90% private housing and 10% intermediate affordable housing. Based upon the ‘Socio-Economics and Health chapter of the Environmental Statement’ (Chapter 6) submitted in support of the application, the anticipated breakdown of residents is presented in **Table 2** overleaf.

Table 2: Residential Population

Age Group	Census-based Population Estimate
Pre-School Aged Children	283
Primary Aged Children	135
Secondary Aged Children	107
Tertiary Aged Children	83
Young Adult	407
Core Working	3,241
65+ Population	1,296
Total	5,552

12. To forecast the anticipated trip generation associated with this element of the site, residential trip rates per dwelling have been extracted from the TRICS database using the criteria set out below:
- Residential
 - Land Use: Residential
 - Category: Private Flats
 - Regions: England excluding Greater London
 - Floor Area / Dwelling: 6-215 dwellings
 - Date Range: 01/01/14-11/05/22
 - Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre
 - Parking Ratio: Sites with a parking ratio of greater than 1.5 have been excluded

13. The results of this search and the forecast resulting trip generation is presented in **Table 3** below.

Table 3: Residential Trip Rates and Generation

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Residential (per unit)	AM	0.056	0.175	196	613
	PM	0.161	0.085	564	298
	Daily	0.969	1.056	4367	4759

14. The trip rates extracted result in a forecast of 809 and 861 two-way trips during the AM and PM peaks, respectively, with a total of 9,126 two-way trips across a single day.

15. The maximum parking provision across the residential units is capped at 0.5 spaces per unit resulting in a maximum total of 1,750 parking spaces.

Hotel (C1)

16. The development proposal includes for a 300-bedroom hotel within the site equating to 20,000m² of gross external floor area. To forecast the anticipated trip generation associated with this element of the site, hotel trip rates per room have been extracted from the TRICS database using the criteria set out below:

— Hotel

- Land Use: Hotel, Food & Drink
- Category: Hotels
- Regions: England excluding Greater London
- Bedrooms: 50-400 beds
- Date Range: 01/01/14-10/08/22
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

17. The results of this search and the forecast resulting trip generation is presented in **Table 4**, below.

Table 4: Hotel Trip Rates and Generation

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Hotel (per bedroom)	AM	0.1	0.197	30	59
	PM	0.203	0.11	61	33
	Daily	1.796	1.76	537	526

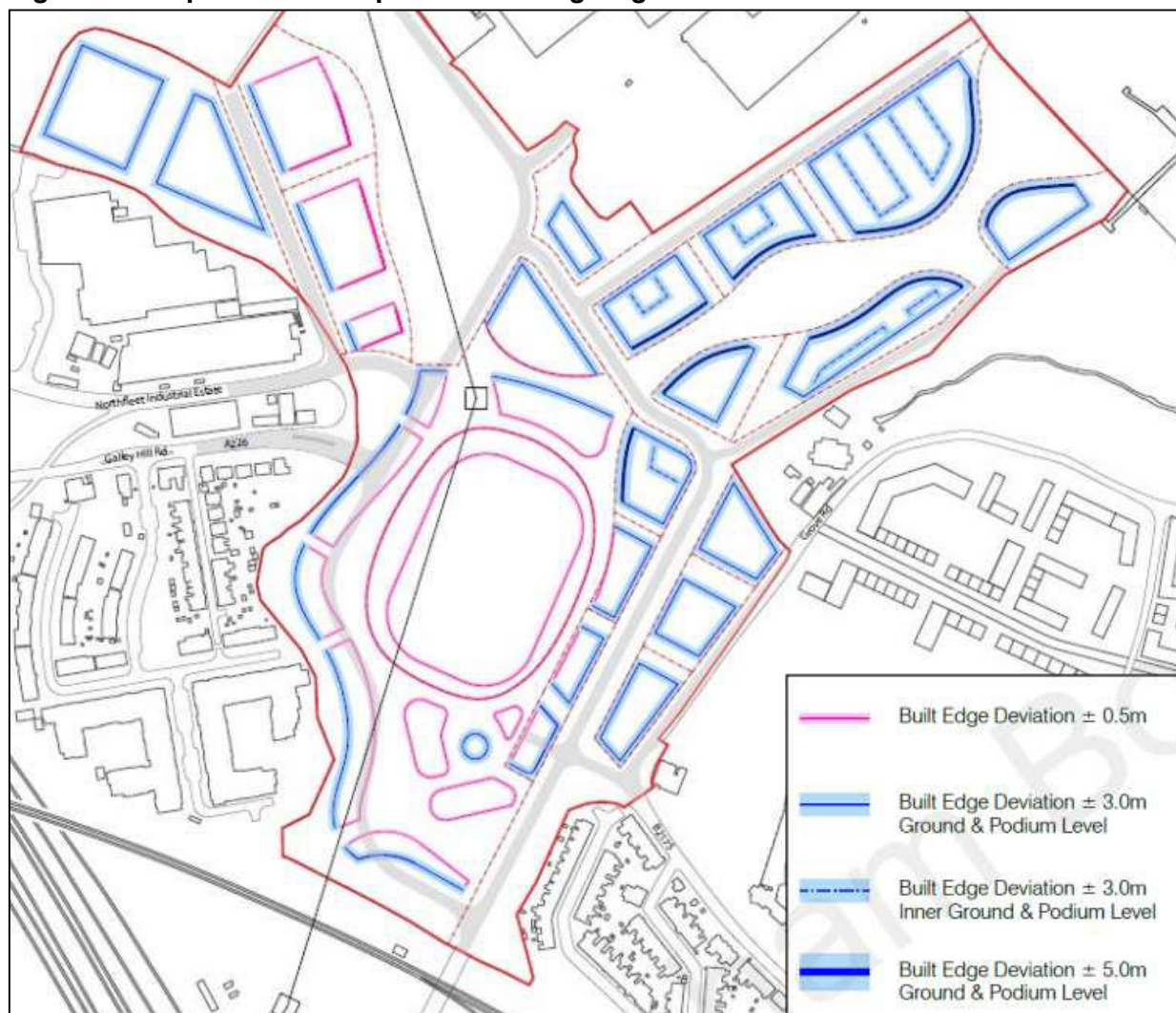
18. The trip rates extracted result in a forecast of 89 and 94 two-way trips during the AM and PM peaks, respectively, with a total of 1,063 two-way trips across a single day.

Retail (E(a))

19. A total of 22,500m² of retail floor space is proposed across the site as part of the retail village envisaged on site. This is set out by the masterplan and safeguarded by the Parameter Plans submitted in support of the application.
20. The retail units proposed as part of the retail village will be no larger than 560m², with the significant majority smaller than 375m². The location and form of these retail units is prescribed by the 'Proposed Development Building Edge Deviation Plan (Ground Floor and Podium)' which is included as Figure 4.7 in Chapter 4 of the Environmental Statement.
21. There is flexibility within the site layout, whereby routes, spaces and building boundaries are not completely fixed but are subject to limits of deviation. The limits of deviation with regards to building

edge vary from +/- 0.5m to +/- 5m of deviation, as specified on the Parameter Plans. An extract of this plan is included below in **Figure 1**.

Figure 1: Proposed Development Building Edge Deviation Plan



22. As a result of this limitation in the massing and area of the retail units, trip rates have been extracted from the TRICS database for comparable retail uses using the criteria set out overleaf. The proposed retail component of the site is expected to be a mix of open-air retail units similar to Bicester and Ashford Shopping villages. Therefore, to capture suitable mix of units the Factory Outlet Centres category has been used as typical retail would not provide for the variety of potential units without splitting the areas into specific, more defined land uses.
23. These rates have been extracted per parking space due to the fact that the proposed development has a finite supply of vehicular parking on site, and there is very limited scope for travelling visitors to park in the proximity of the retail village off site. Therefore, parking provision is a constraining factor with regards to the number of trips that can visit the retail component of the site. By using a trip rate per space, the turnover of parking will provide an accurate representation of the trip generation.

— Retail

- Land Use: Retail
- Category: Factory Outlet Centres
- Regions: England excluding Greater London
- Floor Area / Dwelling: 3,857-23,350
- Date Range: 01/01/14-07/12/14
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

24. The above selection criteria only yielded two results from the TRICS database, which were both surveyed on a Sunday. The TRICS database has a limited selection of comparable sites suitable for use within the last 10 years. However, by extending the search back to the year 2000, two sites are available from 2001 that were surveyed on a Saturday. Furthermore, the sites reside in Kent, the Ashford outlet, and Essex, the Freeport Shopping Centre in Braintree and are also located in close proximity to a train station.
25. Applying the proposed quantum of retail development to the trip rates provided a trip generation and parking accumulation for a Saturday, as shown in **Table 5**.

Table 5: Saturday Retail Trip Generation and Parking Accumulation

Time Period	Trip Rates			Trip Generation			Accumulation
	In	Out	Total	In	Out	Total	
08:00-09:00	0.097	0.026	0.123	68	18	86	50
09:00-10:00	0.258	0.047	0.305	181	33	214	197
10:00-11:00	0.382	0.112	0.494	267	78	346	386
11:00-12:00	0.420	0.229	0.649	294	160	454	520
12:00-13:00	0.320	0.318	0.638	224	223	447	522
13:00-14:00	0.463	0.385	0.848	324	270	594	576
14:00-15:00	0.506	0.465	0.971	354	326	680	605
15:00-16:00	0.395	0.472	0.867	277	330	607	551
16:00-17:00	0.274	0.529	0.803	192	370	562	372
17:00-18:00	0.109	0.427	0.536	76	299	375	150
	0.022	0.246	0.268	15	172	188	0

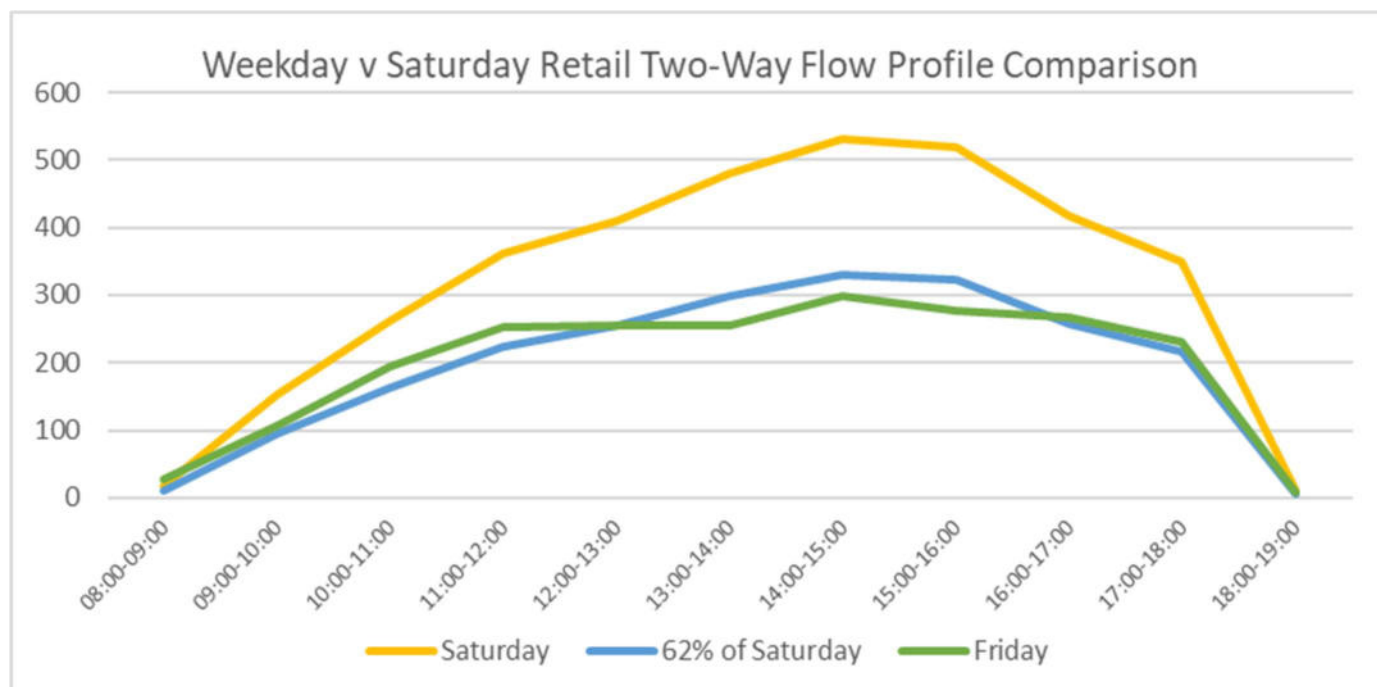
26. **Table 5** shows that the Saturday peak hour for two-way trips is between 14:00 and 15:00, with a flow of 680 vehicles. This is also when the peak parking accumulation of 605 vehicles (86% full) is expected to occur. This demonstrates that the car park is suitably sized to accommodate a typical level of demand for a Saturday, with sufficient capacity for seasonal variations.

27. To derive a weekday trip generation, TRICS has been consulted to find a site that has survey data on a weekday and a Saturday. Then the relationship between the two can be used to calculate a typical weekday trip generation.
28. There is one site within the TRICS database within the Retail - Factory Outlet Centres category that has survey data on a weekday and a Saturday. To find this site the region criteria had to be extended to cover all of the UK and it resulted in one site located in Wales.
29. **Table 6** (overleaf) shows a comparison between the weekday and Saturday trip rates and trip generation.

Table 6: Weekday and Saturday Retail Trip Rate and Trip Generation Comparison

Time Period	Weekday						Saturday					
	Trip Rates			Trip Generation			Trip Rates			Trip Generation		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
08:00-09:00	0.025	0.014	0.039	18	10	27	0.017	0.008	0.025	12	6	18
09:00-10:00	0.115	0.039	0.154	81	27	108	0.168	0.051	0.219	118	36	153
10:00-11:00	0.188	0.091	0.279	132	64	195	0.254	0.121	0.375	178	85	263
10:00-11:00	0.208	0.154	0.362	146	108	253	0.314	0.201	0.515	220	141	361
11:00-12:00	0.189	0.176	0.365	132	123	256	0.322	0.264	0.586	225	185	410
12:00-13:00	0.185	0.178	0.363	130	125	254	0.378	0.309	0.687	265	216	481
13:00-14:00	0.214	0.212	0.426	150	148	298	0.406	0.352	0.758	284	246	531
14:00-15:00	0.193	0.203	0.396	135	142	277	0.344	0.397	0.741	241	278	519
15:00-16:00	0.159	0.224	0.383	111	157	268	0.193	0.402	0.595	135	281	417
16:00-17:00	0.077	0.253	0.330	54	177	231	0.111	0.389	0.500	78	272	350
17:00-18:00	0.003	0.009	0.012	2	6	8	0.001	0.013	0.014	1	9	10
18:00-19:00	0.025	0.014	0.039	18	10	27	0.017	0.008	0.025	12	6	18
Daily	1.556	1.553	3.109	1,089	1,087	2,176	2.508	2.507	5.015	1,756	1,755	3,511

30. The data shown in **Table 6** shows that weekday retail trips are typically 62% lower than that of a Saturday. This can be demonstrated using the two-way daily flows as an example: $2,176 \div 3,511 = 0.62$. To demonstrate this graphically, the weekday and Saturday profiles have been plotted along with the Saturday profile at 62%. This chart is shown overleaf demonstrates that even on different days of the week, the distribution of trips throughout the day is largely similar and therefore, the Saturday data multiplied by a factor of 0.62 can be used as a proxy for weekday data.



31. To validate this approach, the 2015-2019 National Travel Survey (NTS) was consulted to further understand the relationship between retail trips made during the week and on a Saturday. Weekday retail trips are typically 62% of the level of retail trips made on a Saturday as demonstrated by the NTS table extract shown below. The average number of weekday trips is 24, which when divided by 39 (Saturday trips), equates to 0.62. Therefore, the weekend trip generation has been reduced to 62% to provide a weekday retail trip generation, as shown in **Table 7**.

Select years¹: 2015/19

Purpose	Trips per person per year						
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Shopping	24	23	23	24	28	39	23

Table 7: Weekday Retail Trip Generation and Parking Accumulation

Time Period	Trip Generation			
	In	Out	Total	Accumulation
08:00-09:00	42	11	53	31
09:00-10:00	112	20	132	122
10:00-11:00	166	49	214	240
11:00-12:00	182	99	282	322
12:00-13:00	139	138	277	323
13:00-14:00	201	167	368	357
14:00-15:00	220	202	421	375
15:00-16:00	171	205	376	342
16:00-17:00	119	230	349	231
17:00-18:00	47	185	233	93
18:00-19:00	10	107	116	0

32. The trip rates extracted and factored for a weekday assessment, result in a forecast of 53 and 233 two-way trips during the AM and PM peaks, respectively, with a total of 2,822 two-way trips across a single day.

Food and Beverage (E(b))

33. A total of 9,500m² of food and beverage uses are proposed across the site.
34. To forecast the anticipated trip generation associated with this element of the site, Trip rates per 100m² have been extracted from the TRICS database using the criteria set out below:

— Food and Beverage

- Land Use: Hotel, Food & Drink
 - Category: Pub/Restaurant
 - Regions: England excluding Greater London
 - Floor Area / Dwelling: 500sqm-12,000sqm
 - Date Range: 01/01/14-10/08/22
 - Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre
35. The results of this search and the forecast resulting trip generation is presented in **Table 8**, below.

Table 8: Food and Beverage Trip Rates and Generation

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
F&B (per 100 sqm)	AM	0	0	0	0
	PM	2.461	1.619	168	110
	Daily	19.878	19.535	1352	1324

36. The trip rates extracted result in a forecast of 0 and 278 two-way trips during the AM and PM peaks, respectively, with a total of 2,677 two-way trips across a single day.

Office (E(g))

37. A total of 18,500m² of office land uses are proposed across the development site. To forecast the anticipated trip generation associated with this element of the site, Trip rates per 100m² have been extracted from the TRICS database using the criteria set out below:

— Office

- Land Use: Employment
- Category: Office
- Regions: England excluding Greater London
- Floor Area / Dwelling: 178sqm-70,291sqm
- Date Range: 01/01/14-18/05/22
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

38. The results of this search and the forecast resulting trip generation is presented in **Table 9**, below

Table 9: Office Trip Rates and Generation

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Office (per 100 sqm)	AM	1.427	0.159	234	26
	PM	0.092	0.755	15	124
	Daily	4.198	4.164	688	682

39. The trip rates extracted result in a forecast of 260 and 139 two-way trips during the AM and PM peaks, respectively, with a total of 1,370 two-way trips across a single day.

Non-residential Flexible Uses (E)

40. A total of 5,000m² of non-residential, flexible land uses are proposed on site comprising a mix of class E uses. These are broken down as follows:

- 5,000m²
 - 1,100m² Local services (E(c))
 - 1,200m² Indoor Sport (E(d))
 - 1,500m² Medical services (E(f))
 - 1,200m² Nursery (E(g))

41. For the proposed indoor sport use it is noted that there is currently a fitness centre located within the red line boundary of the site (Snap Fitness 24-7) which is approximately the same size as that proposed (c. 1,000m²) As a result of this, it is considered this represent a like-for-like replacement and that there would be no net uplift in trips associated with this use.
42. To establish the forecast trip generation associated with these remaining uses, Trip rates per 100m² have been extracted from the TRICS database using the criteria set out below:

Local Services (E(c))

- Land Use: Retail
- Category: Shopping Centre – Local Shops
- Regions: England excluding Greater London
- Floor Area / Dwelling: 210sqm-8310sqm
- Date Range: 01/01/14-10/08/22
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

Medical Services (E(f))

- Land Use: Health
- Category: GP Surgeries
- Regions: England excluding Greater London
- Floor Area / Dwelling: 210sqm-8310sqm
- Date Range: 01/01/14-10/08/22
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

Nursery (E(g))

- Land Use: Education
- Category: Nursery

- Regions: England excluding Greater London
- Floor Area / Dwelling: 210sqm-8310sqm
- Date Range: 01/01/14-10/08/22
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

43. The results of this search and the forecast resulting trip generation, in consideration of the trip generating factors set out above, are presented in **Table 10**, below.

Table 10: Non-Residential Flexible Uses

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Local Services (per 100 sqm)	AM	4.465	4.01	45	40
	PM	6.031	6.321	60	63
	Daily	74.361	74.335	744	744
GP (per 100 sqm)	AM	2.587	1.531	35	21
	PM	1.226	1.907	17	26
	Daily	23.539	22.982	321	314
Nursery (per 100 sqm)	AM	1.828	1.211	20	13
	PM	1.211	1.807	13	20
	Daily	8.417	8.226	92	90

44. The local services trip rates extracted result in a forecast of 85 and 123 two-way trips during the AM and PM peaks, respectively, with a total of 1,488 two-way trips across a single day.
45. The GP trip rates extracted result in a forecast of 56 and 43 two-way trips during the AM and PM peaks, respectively, with a total of 635 two-way trips across a single day.
46. The nursery trip rates extracted result in a forecast of 33 two-way trips during the AM and PM peaks, with a total of 182 two-way trips across a single day.

Community Uses (F)

47. A total of 4,000m² of community uses are proposed across the site.
48. To forecast the anticipated trip generation associated with this element of the site, Trip rates per 100m² have been extracted from the TRICS database using the criteria set out below:
- Community Use
 - Land Use: Leisure
 - Category: Community Centre
 - Regions: England excluding Greater London

- Floor Area / Dwelling: 100sqm-2,329sqm
- Date Range: 01/01/14 – 28/04/22
- Selected Locations: Edge of Town, Suburban Area, Neighbourhood Centre

49. The results of this search and the forecast resulting trip generation is presented in **Table 11**, overleaf.

Table 11: Community Use Trip Rates and Generation

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Community Use (per 100 sqm)	AM	0.437	0.340	16	12
	PM	0.057	0.057	2	2
	Daily	7.040	6.736	256	245

50. The community use trip rates extracted result in a forecast of 28 and 4 two-way trips during the AM and PM peaks, respectively, with a total of 501 two-way trips across a single day.

51. Full TRICS outputs are shown in **Appendix A**.

Vehicular Trip Rates and Trip Generation Summary

52. **Table 12** provides a summary of the vehicular trip rates extracted from the TRICS database for each land use.

Table 12: Vehicular Trip Generation

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Residential (per unit)	AM	0.056	0.175	196	613
	PM	0.161	0.085	564	298
Retail (per parking space)	AM	0.025	0.014	18	10
	PM	0.003	0.009	2	6
Food and Beverage (per 100sqm)	AM	0	0	0	0
	PM	2.461	1.619	168	110
Office (per 100 sqm)	AM	1.427	0.159	234	26
	PM	0.092	0.755	15	124

Use	Peak Hour	Trip Rates		Trip Generation	
		Arrival	Departure	Arrival	Departure
Hotel (per room)	AM	0.1	0.197	30	59
	PM	0.203	0.11	61	33
Local Services (per 100 sqm)	AM	4.465	4.01	45	40
	PM	6.031	6.321	60	63
GP (per 100 sqm)	AM	2.587	1.531	35	21
	PM	1.226	1.907	17	26
Nursery (per 100 sqm)	AM	1.828	1.211	20	13
	PM	1.211	1.807	13	20
Community Use (per 100 sqm)	AM	0.437	0.340	16	12
	PM	0.057	0.057	2	2

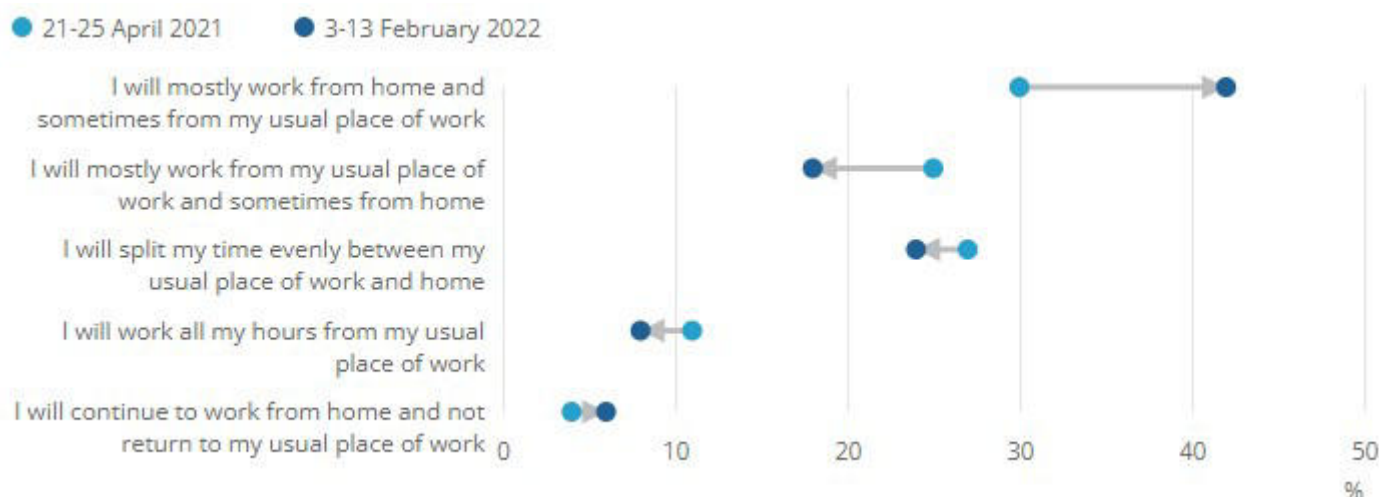
Internalisation

53. With any mixed-use size, and especially with one of the magnitude of the proposed development, there is typically a significant amount of internalisation or linked trips. For example, a person could travel to the site by car to work within the office space and at lunch, they could walk to one of the proposed food and beverage outlets within the development. This trip is considered to be an internal or linked trip rather than an entirely new trip attracted to the food and beverage outlet from outside of the site. The site has been developed to become a new neighbourhood that provides the facilities that residents and employees require, therefore, reducing their need to travel.
54. Considering the sustainable transport strategy for the site along with the permeability of the site for pedestrians and cyclists, it is expected that a large number of trips to local facilities would remain on site and be made on foot or by cycle rather than a short car trip.

Residential

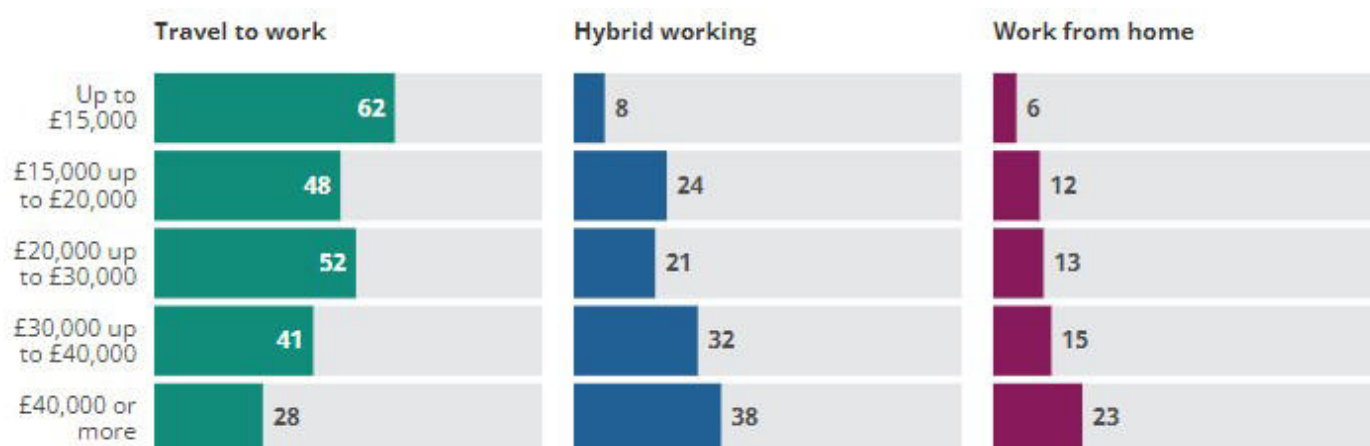
55. The pandemic forced many people to work from home and since then, working habits have changed now that many employers and employees are aware of the options available to them. Unfortunately, the 2021 Census data for 'Method of Travel to Work' is flawed as it asked people how they travelled at the time of the pandemic and not how they would normally travel. This resulted in a dataset that was not representative of non-pandemic travel habits. However, to rectify this and provide a usable dataset, the Office for National Statistics (ONS) has been undertaking an 'Opinions and Lifestyle Survey'.

56. The chart below shows the future plans of workers who worked from home because of the pandemic (opinions taken between April 2021 and February 2022). The data clearly demonstrates that a large proportion of the working population intend to spend at least some of their working hours from home.



Source: Office for National Statistics – Opinions and Lifestyle Survey

57. The chart below shows the current working arrangements of employees by income bracket. The data shows that hybrid and homeworking increases by income bracket. Across all salary bands the average proportion of those hybrid working is 21% and those always working from home is 12%.



Source: Office for National Statistics – Opinions and Lifestyle Survey

58. To forecast the extend to which working from home therefore impacts the peak hour trip generation, a review of typical journey purpose but time of day has been completed. This has been based upon data gathered from the Department for Transport National Travel Survey for the period 2013-2017 (Table NTSQ03004a).
59. This data identified that between 08:00-09:00 commuting and business trips accounted for 39% of all trips, whilst between 17:00-18:00 these accounted for 45% of all trips. We have therefore combined these percentages with the 12% referenced above to determine the % working from home for all trips made during the peak hours (12% multiplied by 39% and 45% respectively).

60. Based on the above data it is considered reasonable to assume that during the AM and PM network peak hours respectively 4.7% and 5.4% of residents forecast to travel to work using TRICS trip rates, would in fact not travel on any given day as they always work from home. Therefore, a 4.7% and 5.4% internalisation factor has been applied to the residential car driver trip generation during the AM and PM network peak hours respectively to account for this. To ensure this assessment is robust, no further reduction for those that hybrid work is being applied.

Office

61. Based on the same data as above, it is considered reasonable to assume that 12% of employees that would drive to the office component of the proposed development, forecast using TRICS trip rates, would in fact not travel on any given day as they always work from home. Therefore, a 12% internalisation factor has been applied to the residential car driver trip generation to account for this. To ensure this assessment is robust, no further reduction for those that hybrid work is being applied.

Retail

62. A 20% internalisation has been applied to Retail trips.

Hotel

63. No internalisation of hotel trips has been proposed.

Food & Beverage

64. A 20% internalisation has been applied to Food & Beverage trips.

GP

65. In consideration of the potential trip generation associated with the proposed medical services, it has been forecast that the residential population of the site (5,552 residents) would require access to 3.1 GPs, with an average of 4.4 GP's per practice (Socio-Economics and Health ES Chapter). The proposed floor space for the medical services is in line with the typical floor area of surgeries presented in TRICS and as such the on-site provision of a single practice would meet the demand created by the site.
66. With the forecast demand equating to 70% of provision of the medical services on site (3.1 GPs demanded / 4.4 GP's provided) it has been considered that an internalisation factor of just 50% for the medical services is a robust, worst case assessment to account for any local residents moving and retaining their existing GP.

Nursery

67. With regard to the proposed nursery provision on site, the population forecasts for the site set out by the Socio-Economics and Health chapter of the Environmental Statement identify demand for 105 nursery places. This is in addition to an existing local deficit of 229 places, limiting the scope of new residents to use off-site nurseries. The proposed floor area for the nursery provision is forecast to

provide approximately 200 places. As a result, it has been assumed that an internalisation factor of 50% is appropriate.

Local Services

68. A 90% internalisation factor has been applied to local services trips.

Community Use

69. The Cambourne Village TRICS Survey – Technical Report presents the results of a detailed survey of a mixed-use residential development in Cambourne, Cambridgeshire. As part of the survey, the internal and external trips made to a community centre were provided. An extract of the relevant charts is shown overleaf.
70. The data showed that almost all trips made to the community centre and of those that were external to the site, they were made by those working within the development. These trips were considered linked trips.
71. Based on this information a 20% internalisation factor has been applied to community use trips.

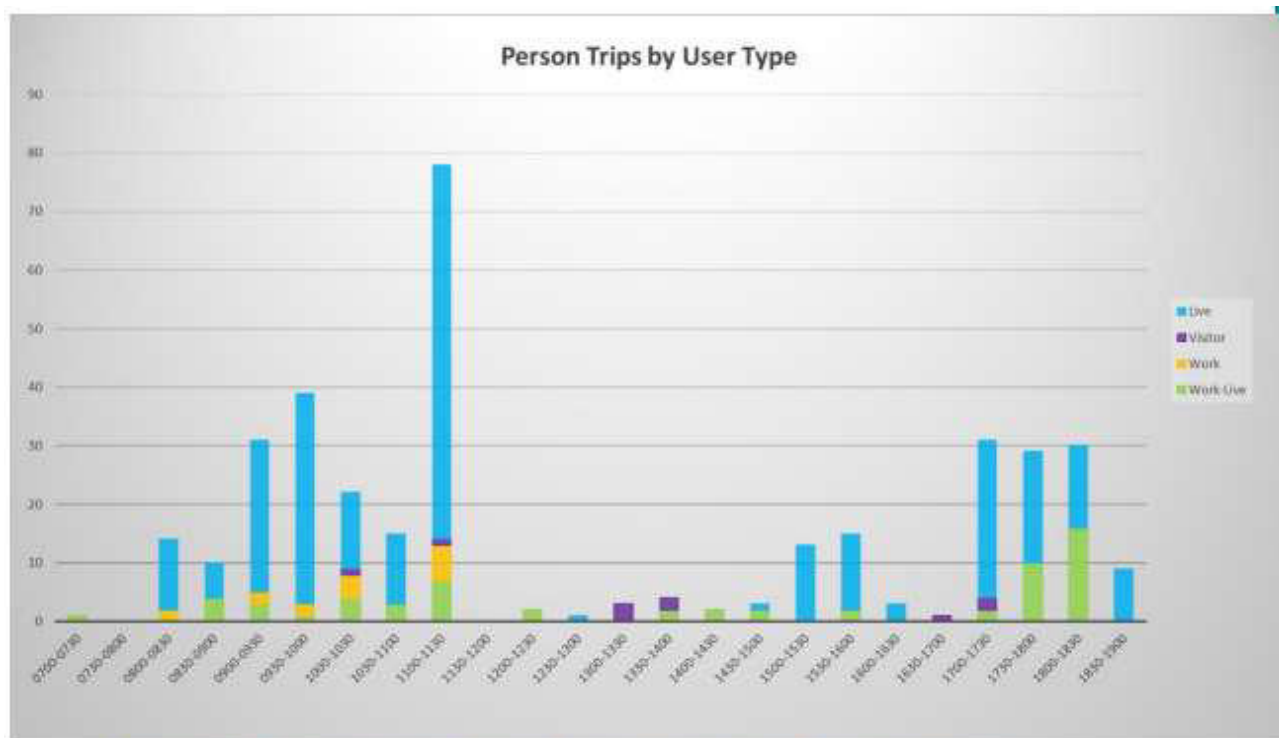


Figure 32 – Internal trips by journey type for Cambourne Community Centre

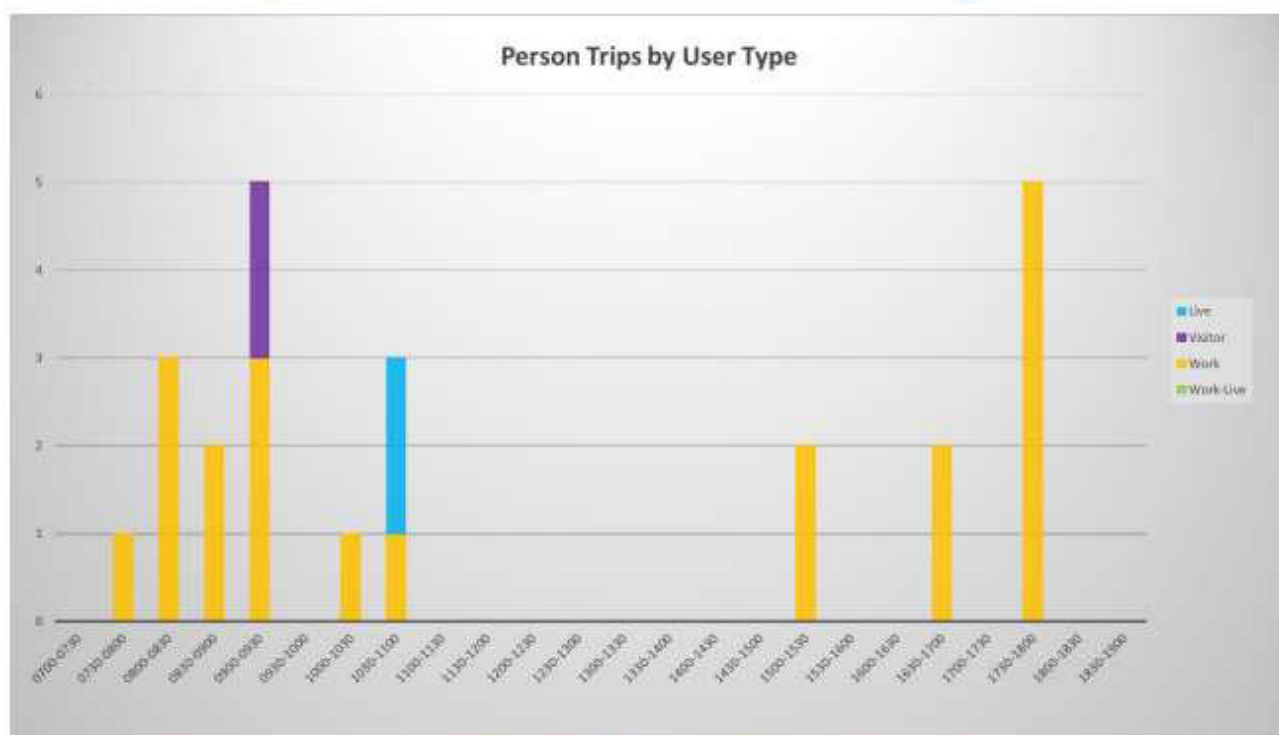


Figure 33 – External trips by journey type for Cambourne Community Centre

72. Using these internalisation discounts, the proposed weekday vehicular trip generation has been re-calculated and is shown in **Table 13** overleaf. The vehicular movements shown in this table are the flows that will be used within the traffic impact assessment.

Table 13: Proposed Vehicular Trip Generation

Use	Peak Hour	Trip Generation	
		Arrival	Departure
Residential	AM	187	584
	PM	533	281
Retail	AM	34	9
	PM	38	148
Food and Beverage	AM	-	-
	PM	134	88
Office	AM	206	23
	PM	13	109
Hotel	AM	30	59
	PM	61	33
Local Services	AM	4	4
	PM	6	6
GP	AM	18	10
	PM	8	13
Nursery	AM	10	7
	PM	7	10
Community Use	AM	13	10
	PM	2	2

APPENDIX A

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Calculation Reference: AUDIT-152301-230215-0218

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : C - FLATS PRIVATELY OWNED

TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST	
BH BRIGHTON & HOVE	1 days
04 EAST ANGLIA	
CA CAMBRIDGESHIRE	1 days
NF NORFOLK	1 days
SF SUFFOLK	1 days
05 EAST MIDLANDS	
DY DERBY	1 days
NG NOTTINGHAM	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
RI EAST RIDING OF YORKSHIRE	1 days
08 NORTH WEST	
MS MERSEYSIDE	1 days
09 NORTH	
CB CUMBRIA	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
 Actual Range: 20 to 184 (units:)
 Range Selected by User: 6 to 215 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 11/05/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	3 days
Wednesday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Development Zone	1
------------------	---

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	9 days - Selected
Servicing vehicles Excluded	11 days - Selected

Secondary Filtering selection:

Use Class:

C3	10 days
----	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	3 days
20,001 to 25,000	4 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 75,000	2 days
125,001 to 250,000	2 days
250,001 to 500,000	3 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	6 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	10 days
----	---------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	10 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	BH-03-C-01	BLOCK OF FLATS	BRIGHTON & HOVE
	OLD SHOREHAM RD		
	BRIGHTON		
	HOVE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	71	
	Survey date: TUESDAY	26/09/17	Survey Type: MANUAL
2	CA-03-C-03	BLOCKS OF FLATS	CAMBRIDGESHIRE
	CROMWELL ROAD		
	CAMBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	82	
	Survey date: MONDAY	18/09/17	Survey Type: MANUAL
3	CB-03-C-02	BLOCK OF FLATS	CUMBRIA
	BRIDGE LANE		
	PENRITH		
	Edge of Town		
	No Sub Category		
	Total No of Dwellings:	35	
	Survey date: WEDNESDAY	11/06/14	Survey Type: MANUAL
4	CB-03-C-03	FLATS & BUNGALOWS	CUMBRIA
	LOUND STREET		
	KENDAL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	33	
	Survey date: MONDAY	09/06/14	Survey Type: MANUAL
5	DY-03-C-03	BLOCKS OF FLATS	DERBY
	CAESAR STREET		
	DERBY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	30	
	Survey date: WEDNESDAY	25/09/19	Survey Type: MANUAL
6	MS-03-C-02	BLOCKS OF FLATS	MERSEYSIDE
	SOUTH FERRY QUAY		
	LIVERPOOL		
	BRUNSWICK DOCK		
	Suburban Area (PPS6 Out of Centre)		
	Development Zone		
	Total No of Dwellings:	184	
	Survey date: TUESDAY	13/11/18	Survey Type: MANUAL
7	NF-03-C-02	MIXED FLATS & HOUSES	NORFOLK
	HALL ROAD		
	NORWICH		
	LAKENHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	82	
	Survey date: MONDAY	18/11/19	Survey Type: MANUAL
8	NG-03-C-02	HOUSES (SPLIT INTO FLATS)	NOTTINGHAM
	CASTLE MARINA ROAD		
	NOTTINGHAM		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	135	
	Survey date: WEDNESDAY	09/11/16	Survey Type: MANUAL

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters (Cont.)

9	RI-03-C-01	FLATS	EAST RIDING OF YORKSHIRE
	465 PRIORY ROAD		
	HULL		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: TUESDAY	13/05/14	Survey Type: MANUAL
10	SF-03-C-03	BLOCKS OF FLATS	SUFFOLK
	TOLLGATE LANE		
	BURY ST EDMUNDS		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	30	
	Survey date: WEDNESDAY	03/12/14	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
DC-03-C-02	too small
HF-03-C-01	Covid
HF-03-C-04	Covid
HF-03-C-05	Covid
LE-03-C-01	Covid
MS-03-C-03	too small
NG-03-C-01	too small
SF-03-C-04	Covid
TW-03-C-01	Too new
WS-03-C-01	Too new

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

TOTAL VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	70	0.036	10	70	0.131	10	70	0.167
08:00 - 09:00	10	70	0.056	10	70	0.175	10	70	0.231
09:00 - 10:00	10	70	0.075	10	70	0.093	10	70	0.168
10:00 - 11:00	10	70	0.058	10	70	0.068	10	70	0.126
11:00 - 12:00	10	70	0.057	10	70	0.070	10	70	0.127
12:00 - 13:00	10	70	0.063	10	70	0.073	10	70	0.136
13:00 - 14:00	10	70	0.051	10	70	0.080	10	70	0.131
14:00 - 15:00	10	70	0.064	10	70	0.077	10	70	0.141
15:00 - 16:00	10	70	0.105	10	70	0.056	10	70	0.161
16:00 - 17:00	10	70	0.103	10	70	0.063	10	70	0.166
17:00 - 18:00	10	70	0.161	10	70	0.085	10	70	0.246
18:00 - 19:00	10	70	0.140	10	70	0.085	10	70	0.225
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.969			1.056			2.025

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	20 - 184 (units:)
Survey date range:	01/01/14 - 11/05/22
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	10

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Filtering Summary

Land Use	01/N	RETAIL/FACTORY OUTLET CENTRES
Selected Trip Rate Calculation Parameter Range	3857-23350 sqm GFA	
Actual Trip Rate Calculation Parameter Range	15000-23350 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 07/12/14
Parking Spaces Range	All Surveys Included	
Days of the week selected	Sunday	2
Main Location Types selected	Edge of Town	1
	Neighbourhood Centre (PPS6 Local Centre)	1
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000	1
	25,001 to 50,000	1
Population <5 Mile ranges selected	50,001 to 75,000	1
	125,001 to 250,000	1
Car Ownership <5 Mile ranges selected	1.1 to 1.5	2
PTAL Rating	No PTAL Present	2

Calculation Reference: AUDIT-152301-220811-0852

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : N - FACTORY OUTLET CENTRES

TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST
 EX ESSEX 1 days
06 WEST MIDLANDS
 ST STAFFORDSHIRE 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 15000 to 23350 (units: sqm)
 Range Selected by User: 3857 to 23350 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 07/12/14

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Sunday 2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 2 days
 Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town 1
 Neighbourhood Centre (PPS6 Local Centre) 1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone 1
 Village 1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:Use Class:

n/a 1 days
 E(a) 1 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):Population within 1 mile:

5,001 to 10,000	1 days
25,001 to 50,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
125,001 to 250,000	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5	2 days
------------	--------

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	2 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	2 days
----	--------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	2 days
-----------------	--------

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	EX-01-N-02	OUTLET CENTRE	ESSEX
	CHARTER WAY		
	BRAINTREE		
	CHESSING		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	23350 sqm	
	Survey date: SUNDAY	07/12/14	Survey Type: MANUAL
2	ST-01-N-02	OUTLET CENTRE	STAFFORDSHIRE
	PIT LANE		
	NEAR STOKE ON TRENT		
	TALKE PITS		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Gross floor area:	15000 sqm	
	Survey date: SUNDAY	16/11/14	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	1.763	2	19175	0.511	2	19175	2.274
11:00 - 12:00	2	19175	2.866	2	19175	1.372	2	19175	4.238
12:00 - 13:00	2	19175	2.738	2	19175	2.190	2	19175	4.928
13:00 - 14:00	2	19175	2.881	2	19175	2.488	2	19175	5.369
14:00 - 15:00	2	19175	2.441	2	19175	2.595	2	19175	5.036
15:00 - 16:00	2	19175	1.374	2	19175	2.553	2	19175	3.927
16:00 - 17:00	2	19175	0.668	2	19175	1.888	2	19175	2.556
17:00 - 18:00	2	19175	0.454	2	19175	1.330	2	19175	1.784
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			15.185			14.927			30.112

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 15000 - 23350 (units: sqm)
 Survey date range: 01/01/14 - 07/12/14
 Number of weekdays (Monday-Friday): 0
 Number of Saturdays: 0
 Number of Sundays: 2
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

TAXIS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	0.021	2	19175	0.016	2	19175	0.037
11:00 - 12:00	2	19175	0.013	2	19175	0.013	2	19175	0.026
12:00 - 13:00	2	19175	0.018	2	19175	0.018	2	19175	0.036
13:00 - 14:00	2	19175	0.018	2	19175	0.021	2	19175	0.039
14:00 - 15:00	2	19175	0.010	2	19175	0.010	2	19175	0.020
15:00 - 16:00	2	19175	0.010	2	19175	0.013	2	19175	0.023
16:00 - 17:00	2	19175	0.010	2	19175	0.010	2	19175	0.020
17:00 - 18:00	2	19175	0.018	2	19175	0.018	2	19175	0.036
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.118			0.119			0.237

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

OGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	0.005	2	19175	0.003	2	19175	0.008
11:00 - 12:00	2	19175	0.013	2	19175	0.005	2	19175	0.018
12:00 - 13:00	2	19175	0.003	2	19175	0.010	2	19175	0.013
13:00 - 14:00	2	19175	0.008	2	19175	0.005	2	19175	0.013
14:00 - 15:00	2	19175	0.003	2	19175	0.008	2	19175	0.011
15:00 - 16:00	2	19175	0.010	2	19175	0.003	2	19175	0.013
16:00 - 17:00	2	19175	0.000	2	19175	0.005	2	19175	0.005
17:00 - 18:00	2	19175	0.000	2	19175	0.003	2	19175	0.003
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.042			0.042			0.084

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

PSVS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	0.021	2	19175	0.016	2	19175	0.037
11:00 - 12:00	2	19175	0.023	2	19175	0.021	2	19175	0.044
12:00 - 13:00	2	19175	0.018	2	19175	0.016	2	19175	0.034
13:00 - 14:00	2	19175	0.018	2	19175	0.018	2	19175	0.036
14:00 - 15:00	2	19175	0.016	2	19175	0.016	2	19175	0.032
15:00 - 16:00	2	19175	0.018	2	19175	0.016	2	19175	0.034
16:00 - 17:00	2	19175	0.016	2	19175	0.021	2	19175	0.037
17:00 - 18:00	2	19175	0.010	2	19175	0.018	2	19175	0.028
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.140			0.142			0.282

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

CYCLISTS**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	0.005	2	19175	0.008	2	19175	0.013
11:00 - 12:00	2	19175	0.005	2	19175	0.008	2	19175	0.013
12:00 - 13:00	2	19175	0.013	2	19175	0.008	2	19175	0.021
13:00 - 14:00	2	19175	0.010	2	19175	0.013	2	19175	0.023
14:00 - 15:00	2	19175	0.008	2	19175	0.008	2	19175	0.016
15:00 - 16:00	2	19175	0.013	2	19175	0.010	2	19175	0.023
16:00 - 17:00	2	19175	0.016	2	19175	0.013	2	19175	0.029
17:00 - 18:00	2	19175	0.005	2	19175	0.013	2	19175	0.018
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.075			0.081			0.156

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

CARS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	1.648	2	19175	0.441	2	19175	2.089
11:00 - 12:00	2	19175	2.707	2	19175	1.270	2	19175	3.977
12:00 - 13:00	2	19175	2.610	2	19175	2.086	2	19175	4.696
13:00 - 14:00	2	19175	2.772	2	19175	2.381	2	19175	5.153
14:00 - 15:00	2	19175	2.310	2	19175	2.506	2	19175	4.816
15:00 - 16:00	2	19175	1.278	2	19175	2.428	2	19175	3.706
16:00 - 17:00	2	19175	0.621	2	19175	1.799	2	19175	2.420
17:00 - 18:00	2	19175	0.425	2	19175	1.246	2	19175	1.671
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			14.371			14.157			28.528

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

LGVS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	0.052	2	19175	0.026	2	19175	0.078
11:00 - 12:00	2	19175	0.094	2	19175	0.057	2	19175	0.151
12:00 - 13:00	2	19175	0.076	2	19175	0.055	2	19175	0.131
13:00 - 14:00	2	19175	0.055	2	19175	0.052	2	19175	0.107
14:00 - 15:00	2	19175	0.089	2	19175	0.050	2	19175	0.139
15:00 - 16:00	2	19175	0.052	2	19175	0.078	2	19175	0.130
16:00 - 17:00	2	19175	0.016	2	19175	0.039	2	19175	0.055
17:00 - 18:00	2	19175	0.000	2	19175	0.031	2	19175	0.031
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.434			0.388			0.822

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

MOTOR CYCLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	2	19175	0.016	2	19175	0.010	2	19175	0.026
11:00 - 12:00	2	19175	0.016	2	19175	0.005	2	19175	0.021
12:00 - 13:00	2	19175	0.013	2	19175	0.005	2	19175	0.018
13:00 - 14:00	2	19175	0.010	2	19175	0.010	2	19175	0.020
14:00 - 15:00	2	19175	0.013	2	19175	0.005	2	19175	0.018
15:00 - 16:00	2	19175	0.005	2	19175	0.016	2	19175	0.021
16:00 - 17:00	2	19175	0.005	2	19175	0.013	2	19175	0.018
17:00 - 18:00	2	19175	0.000	2	19175	0.013	2	19175	0.013
18:00 - 19:00									
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.078			0.077			0.155

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Site Reference: BL-01-N-01

SATURDAY

TRICS 7.9.4

Trip Rate Paramete Parking spaces

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

Calculation Factor: 1 PARKING

Count Type: TOTAL VEHICLES

Time Range	ARRIVALS		DEPARTURES		TOTALS		
	No. Days	Trip Rate	Trip Gen	Trip Rate	Trip Gen	Trip Rate	Trip Gen
00:00-01:00							
01:00-02:00							
02:00-03:00							
03:00-04:00							
04:00-05:00							
05:00-06:00							
06:00-07:00							
07:00-08:00							
08:00-09:00	1	0.017	12	0.008	6	0.025	18
09:00-10:00	1	0.168	118	0.051	36	0.219	153
10:00-11:00	1	0.254	178	0.121	85	0.375	263
11:00-12:00	1	0.314	220	0.201	141	0.515	361
12:00-13:00	1	0.322	225	0.264	185	0.586	410
13:00-14:00	1	0.378	265	0.309	216	0.687	481
14:00-15:00	1	0.406	284	0.352	246	0.758	531
15:00-16:00	1	0.344	241	0.397	278	0.741	519
16:00-17:00	1	0.193	135	0.402	281	0.595	417
17:00-18:00	1	0.111	78	0.389	272	0.5	350
18:00-19:00	1	0.001	1	0.013	9	0.014	10
19:00-20:00							
20:00-21:00							
21:00-22:00							
22:00-23:00							
23:00-24:00							
Daily Trip Rates:		2.508	1756	2.507	1755	5.015	3511

FRIDAY

TRICS 7.9.4

Trip Rate Paramete Parking spaces

TRIP RATE for Land Use 01 - RETAIL/N - FACTORY OUTLET CENTRES

Calculation Factor: 1 PARKING

Count Type: TOTAL VEHICLES

Time Range	ARRIVALS		DEPARTURES		TOTALS		
	No. Days	Trip Rate	No. Days	Trip Rate	Trip Gen	Trip Rate	Trip Gen
00:00-01:00							
01:00-02:00							
02:00-03:00							
03:00-04:00							
04:00-05:00							
05:00-06:00							
06:00-07:00							
07:00-08:00							
08:00-09:00	1	0.025	18	0.014	10	0.039	27
09:00-10:00	1	0.115	81	0.039	27	0.154	108
10:00-11:00	1	0.188	132	0.091	64	0.279	195
11:00-12:00	1	0.208	146	0.154	108	0.362	253
12:00-13:00	1	0.189	132	0.176	123	0.365	256
13:00-14:00	1	0.185	130	0.178	125	0.363	254
14:00-15:00	1	0.214	150	0.212	148	0.426	298
15:00-16:00	1	0.193	135	0.203	142	0.396	277
16:00-17:00	1	0.159	111	0.224	157	0.383	268
17:00-18:00	1	0.077	54	0.253	177	0.33	231
18:00-19:00	1	0.003	2	0.009	6	0.012	8
19:00-20:00							
20:00-21:00							
21:00-22:00							
22:00-23:00							
23:00-24:00							
Daily Trip Rates:		1.556	1089	1.553	1087	3.109	2176

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Filtering Summary

Land Use	06/C	HOTEL, FOOD & DRINK/PUB/RESTAURANT
Selected Trip Rate Calculation Parameter Range	500-12000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	525-2000 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 10/08/22
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	1
	Tuesday	3
	Thursday	1
	Friday	3
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	3
	Edge of Town	4
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	4 - Selected
	Servicing vehicles Excluded	4 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	5,001 to 10,000	2
	15,001 to 20,000	3
	25,001 to 50,000	2
Population <5 Mile ranges selected	100,001 to 125,000	1
	125,001 to 250,000	4
	250,001 to 500,000	3
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	2
	1.1 to 1.5	4
	1.6 to 2.0	1
PTAL Rating	No PTAL Present	8

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Calculation Reference: AUDIT-152301-230203-0210

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
 Category : C - PUB/RESTAURANT

TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	HC HAMPSHIRE	2 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NM WEST NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 525 to 2000 (units: sqm)
 Range Selected by User: 500 to 12000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 10/08/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	3 days
Thursday	1 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3
Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
Commercial Zone	1
Residential Zone	2
Retail Zone	1
Village	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection:Use Class:

Sui Generis 8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
15,001 to 20,000	3 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

100,001 to 125,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	2 days
1.1 to 1.5	4 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 8 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 8 days

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	GM-06-C-04 HELSMAN LANE ROCHDALE	HUNGRY HORSE	GREATER MANCHESTER
	Edge of Town Residential Zone Total Gross floor area:	525 sqm	
	Survey date: TUESDAY	20/10/15	Survey Type: MANUAL
2	HC-06-C-04 APOLLO RISE FARNBOROUGH COVE	PUB/RESTAURANT	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area:	615 sqm	
	Survey date: TUESDAY	11/06/19	Survey Type: MANUAL
3	HC-06-C-06 SHETLAND ROAD BASINGSTOKE	PUB/RESTAURANT	HAMPSHIRE
	Edge of Town Residential Zone Total Gross floor area:	652 sqm	
	Survey date: FRIDAY	10/09/21	Survey Type: MANUAL
4	LN-06-C-01 CRUSADER ROAD LINCOLN NEW BOULTHAM	FLAMING GRILL	LINCOLNSHIRE
	Edge of Town Retail Zone Total Gross floor area:	760 sqm	
	Survey date: TUESDAY	10/10/17	Survey Type: MANUAL
5	NM-06-C-01 BEDFORD ROAD NORTHAMPTON BRACKMILLS	PUB/RESTAURANT	WEST NORTHAMPTONSHIRE
	Edge of Town Commercial Zone Total Gross floor area:	620 sqm	
	Survey date: FRIDAY	11/11/16	Survey Type: MANUAL
6	SF-06-C-02 CLIFF ROAD IPSWICH	PUB/RESTAURANT	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Industrial Zone Total Gross floor area:	875 sqm	
	Survey date: FRIDAY	18/09/15	Survey Type: MANUAL
7	SY-06-C-01 HERTEN WAY DONCASTER	BREWERS FAYRE	SOUTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) No Sub Category Total Gross floor area:	2000 sqm	
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL
8	WY-06-C-04 GELDERD ROAD NEAR LEEDS GILDERSOME	FAYRE & SQUARE	WEST YORKSHIRE
	Neighbourhood Centre (PPS6 Local Centre) Village Total Gross floor area:	1550 sqm	
	Survey date: MONDAY	19/10/15	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	1	1550	0.065	1	1550	0.129	1	1550	0.194
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	6	824	0.667	6	824	0.384	6	824	1.051
11:00 - 12:00	8	950	1.343	8	950	0.606	8	950	1.949
12:00 - 13:00	8	950	2.619	8	950	0.908	8	950	3.527
13:00 - 14:00	8	950	1.856	8	950	1.803	8	950	3.659
14:00 - 15:00	8	950	1.014	8	950	2.093	8	950	3.107
15:00 - 16:00	8	950	1.027	8	950	0.882	8	950	1.909
16:00 - 17:00	8	950	2.093	8	950	0.974	8	950	3.067
17:00 - 18:00	8	950	2.461	8	950	1.619	8	950	4.080
18:00 - 19:00	8	950	2.435	8	950	2.027	8	950	4.462
19:00 - 20:00	8	950	1.935	8	950	2.659	8	950	4.594
20:00 - 21:00	8	950	1.290	8	950	2.527	8	950	3.817
21:00 - 22:00	8	950	0.579	8	950	1.448	8	950	2.027
22:00 - 23:00	8	950	0.355	8	950	1.106	8	950	1.461
23:00 - 24:00	5	865	0.139	5	865	0.370	5	865	0.509
Total Rates:			19.878			19.535			39.413

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	525 - 2000 (units: sqm)
Survey date range:	01/01/14 - 10/08/22
Number of weekdays (Monday-Friday):	8
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-152301-230217-0240

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT

Category : A - OFFICE

MULTI-MODAL TOTAL VEHICLESSelected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	WS WEST SUSSEX	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 186 to 5700 (units: sqm)
 Range Selected by User: 178 to 70291 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 18/05/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	2 days
Wednesday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	3 days - Selected
Servicing vehicles Excluded	3 days - Selected

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection:Use Class:

Not Known

4 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000

1 days

20,001 to 25,000

1 days

25,001 to 50,000

2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000

1 days

125,001 to 250,000

2 days

500,001 or More

1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0

3 days

1.1 to 1.5

1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes

1 days

No

3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present

4 days

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	ES-02-A-11	HOUSING COMPANY	EAST SUSSEX
	THE SIDINGS		
	HASTINGS		
	ORE VALLEY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	186 sqm	
	Survey date: TUESDAY	17/11/15	Survey Type: MANUAL
2	TW-02-A-08	HOUSING ASSOCIATION OFFICE	TYNE & WEAR
	BENTON PARK ROAD		
	NEWCASTLE UPON TYNE		
	Longbenton		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	4800 sqm	
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL
3	WS-02-A-06	SOUTHERN WATER OFFICES	WEST SUSSEX
	YEOMAN ROAD		
	WORTHING		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	5700 sqm	
	Survey date: WEDNESDAY	18/05/22	Survey Type: MANUAL
4	WY-02-A-05	OFFICES	WEST YORKSHIRE
	PIONEER WAY		
	CASTLEFORD		
	WHITWOOD		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	1230 sqm	
	Survey date: TUESDAY	23/05/17	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
GM-02-A-10	Covid
NF-02-A-04	Covid

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE

MULTI-MODAL TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Total People to Total Vehicles ratio (all time periods and directions): 1.55

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	4	2979	0.218	4	2979	0.042	4	2979	0.260
07:30 - 08:00	4	2979	0.445	4	2979	0.034	4	2979	0.479
08:00 - 08:30	4	2979	0.739	4	2979	0.059	4	2979	0.798
08:30 - 09:00	4	2979	0.688	4	2979	0.101	4	2979	0.789
09:00 - 09:30	4	2979	0.294	4	2979	0.067	4	2979	0.361
09:30 - 10:00	4	2979	0.218	4	2979	0.076	4	2979	0.294
10:00 - 10:30	4	2979	0.076	4	2979	0.109	4	2979	0.185
10:30 - 11:00	4	2979	0.092	4	2979	0.042	4	2979	0.134
11:00 - 11:30	4	2979	0.101	4	2979	0.101	4	2979	0.202
11:30 - 12:00	4	2979	0.050	4	2979	0.084	4	2979	0.134
12:00 - 12:30	4	2979	0.092	4	2979	0.201	4	2979	0.293
12:30 - 13:00	4	2979	0.193	4	2979	0.269	4	2979	0.462
13:00 - 13:30	4	2979	0.168	4	2979	0.134	4	2979	0.302
13:30 - 14:00	4	2979	0.235	4	2979	0.126	4	2979	0.361
14:00 - 14:30	4	2979	0.025	4	2979	0.126	4	2979	0.151
14:30 - 15:00	4	2979	0.076	4	2979	0.076	4	2979	0.152
15:00 - 15:30	4	2979	0.117	4	2979	0.277	4	2979	0.394
15:30 - 16:00	4	2979	0.025	4	2979	0.168	4	2979	0.193
16:00 - 16:30	4	2979	0.067	4	2979	0.453	4	2979	0.520
16:30 - 17:00	4	2979	0.092	4	2979	0.613	4	2979	0.705
17:00 - 17:30	4	2979	0.034	4	2979	0.436	4	2979	0.470
17:30 - 18:00	4	2979	0.059	4	2979	0.319	4	2979	0.378
18:00 - 18:30	3	3562	0.056	3	3562	0.112	3	3562	0.168
18:30 - 19:00	3	3562	0.037	3	3562	0.140	3	3562	0.177
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			4.197			4.165			8.362

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	186 - 5700 (units: sqm)
Survey date range:	01/01/14 - 18/05/22
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Filtering Summary

Land Use	06/A	HOTEL, FOOD & DRINK/HOTELS
Selected Trip Rate Calculation Parameter Range	50-400 BEDRMS	
Actual Trip Rate Calculation Parameter Range	60-157 BEDRMS	
Date Range	Minimum: 01/01/14	Maximum: 10/08/22
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	1
	Wednesday	1
	Thursday	1
	Friday	3
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	2
	Edge of Town	4
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	2 - Selected
	Servicing vehicles Excluded	9 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000	2
	10,001 to 15,000	2
	15,001 to 20,000	1
	20,001 to 25,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	100,001 to 125,000	1
	125,001 to 250,000	2
	250,001 to 500,000	2
Car Ownership <5 Mile ranges selected	0.6 to 1.0	3
	1.1 to 1.5	3
PTAL Rating	No PTAL Present	6

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Calculation Reference: AUDIT-152301-230206-0211

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
 Category : A - HOTELS

TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST	
BU BUCKINGHAMSHIRE	1 days
HC HAMPSHIRE	1 days
03 SOUTH WEST	
SG SOUTH GLOUCESTERSHIRE	1 days
05 EAST MIDLANDS	
DS DERBYSHIRE	1 days
06 WEST MIDLANDS	
WO WORCESTERSHIRE	1 days
09 NORTH	
TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of bedrooms
 Actual Range: 60 to 157 (units:)
 Range Selected by User: 50 to 400 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 10/08/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Wednesday	1 days
Thursday	1 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	4

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Industrial Zone	2
Development Zone	1
Residential Zone	1
Out of Town	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection:Use Class:

C1 6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	3 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 6 days

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	BU-06-A-02	HOLIDAY INN		BUCKINGHAMSHIRE
	NEW ROAD			
	AYLESBURY			
	WESTON TURVILLE			
	Edge of Town			
	Out of Town			
	Total Number of bedrooms:	139		
	Survey date: WEDNESDAY	01/10/14		Survey Type: MANUAL
2	DS-06-A-04	HOLIDAY INN		DERBYSHIRE
	CARTER LANE EAST			
	SOUTH NORMANTON			
	Edge of Town			
	Residential Zone			
	Total Number of bedrooms:	157		
	Survey date: FRIDAY	15/10/21		Survey Type: MANUAL
3	HC-06-A-08	HOLIDAY INN		HAMPSHIRE
	CARTWRIGHT DRIVE			
	PARK GATE			
	Edge of Town			
	Industrial Zone			
	Total Number of bedrooms:	124		
	Survey date: MONDAY	18/10/21		Survey Type: MANUAL
4	SG-06-A-02	HOLIDAY INN EXPRESS		SOUTH GLOUCESTERSHIRE
	NEW ROAD			
	BRISTOL			
	STOKE GIFFORD			
	Suburban Area (PPS6 Out of Centre)			
	No Sub Category			
	Total Number of bedrooms:	157		
	Survey date: THURSDAY	04/11/21		Survey Type: MANUAL
5	TW-06-A-02	TRAVELODGE		TYNE & WEAR
	CASPER WAY			
	GATESHEAD			
	SWALWELL			
	Suburban Area (PPS6 Out of Centre)			
	Development Zone			
	Total Number of bedrooms:	60		
	Survey date: FRIDAY	13/11/15		Survey Type: MANUAL
6	WO-06-A-04	PREMIER INN		WORCESTERSHIRE
	GROVEWOOD ROAD			
	MALVERN			
	Edge of Town			
	Industrial Zone			
	Total Number of bedrooms:	64		
	Survey date: FRIDAY	12/11/21		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
GS-06-A-03	Covid
LE-06-A-01	Site location and surroundings not representative
WK-06-A-01	Site location and surroundings not representative
WL-06-A-03	Site location and surroundings not representative
WM-06-A-05	Site location and surroundings not representative

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS

TOTAL VEHICLES**Calculation factor: 1 BEDRMS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate	No. Days	Ave. BEDRMS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	117	0.066	6	117	0.190	6	117	0.256
08:00 - 09:00	6	117	0.100	6	117	0.197	6	117	0.297
09:00 - 10:00	6	117	0.167	6	117	0.147	6	117	0.314
10:00 - 11:00	6	117	0.107	6	117	0.127	6	117	0.234
11:00 - 12:00	6	117	0.083	6	117	0.141	6	117	0.224
12:00 - 13:00	6	117	0.053	6	117	0.087	6	117	0.140
13:00 - 14:00	6	117	0.101	6	117	0.070	6	117	0.171
14:00 - 15:00	6	117	0.136	6	117	0.107	6	117	0.243
15:00 - 16:00	6	117	0.127	6	117	0.118	6	117	0.245
16:00 - 17:00	6	117	0.150	6	117	0.086	6	117	0.236
17:00 - 18:00	6	117	0.203	6	117	0.110	6	117	0.313
18:00 - 19:00	6	117	0.203	6	117	0.117	6	117	0.320
19:00 - 20:00	6	117	0.140	6	117	0.113	6	117	0.253
20:00 - 21:00	6	117	0.101	6	117	0.076	6	117	0.177
21:00 - 22:00	6	117	0.053	6	117	0.068	6	117	0.121
22:00 - 23:00	1	157	0.000	1	157	0.006	1	157	0.006
23:00 - 24:00	1	157	0.006	1	157	0.000	1	157	0.006
Total Rates:			1.796			1.760			3.556

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	60 - 157 (units:)
Survey date range:	01/01/14 - 10/08/22
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	5

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Filtering Summary

Land Use	05/G	HEALTH/GP SURGERIES
Selected Trip Rate Calculation Parameter Range	500-2500 sqm GFA	
Actual Trip Rate Calculation Parameter Range	550-1400 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 25/05/22
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	1
	Tuesday	1
	Wednesday	3
	Thursday	3
	Friday	5
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	2
	Edge of Town	2
	Neighbourhood Centre (PPS6 Local Centre)	9
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	6 - Selected
	Servicing vehicles Excluded	7 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	10,001 to 15,000	1
	15,001 to 20,000	2
	20,001 to 25,000	3
	25,001 to 50,000	6
Population <5 Mile ranges selected	50,001 to 75,000	2
	125,001 to 250,000	4
	250,001 to 500,000	4
	500,001 or More	3
Car Ownership <5 Mile ranges selected	0.6 to 1.0	4
	1.1 to 1.5	8
	2.1 to 2.5	1
PTAL Rating	No PTAL Present	13

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Calculation Reference: AUDIT-152301-230203-0245

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
 Category : G - GP SURGERIES

TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST		
HF	HERTFORDSHIRE	1 days
IW	ISLE OF WIGHT	1 days
04 EAST ANGLIA		
NF	NORFOLK	1 days
05 EAST MIDLANDS		
DY	DERBY	1 days
LE	LEICESTERSHIRE	1 days
06 WEST MIDLANDS		
WM	WEST MIDLANDS	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE		
SY	SOUTH YORKSHIRE	1 days
08 NORTH WEST		
AC	CHESHIRE WEST & CHESTER	1 days
GM	GREATER MANCHESTER	1 days
LC	LANCASHIRE	1 days
09 NORTH		
TW	TYNE & WEAR	3 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 550 to 1400 (units: sqm)
 Range Selected by User: 500 to 2500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 25/05/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	3 days
Thursday	3 days
Friday	5 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	13 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	9

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	10
------------------	----

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	6 days - Selected
Servicing vehicles Excluded	7 days - Selected

Secondary Filtering selection:

Use Class:

E(e)	13 days
------	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	2 days
20,001 to 25,000	3 days
25,001 to 50,000	6 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	4 days
500,001 or More	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	8 days
2.1 to 2.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Not Known	1 days
No	12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	13 days
-----------------	---------

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	AC-05-G-04	GP SURGERY	CHESHIRE WEST & CHESTER
	KINGSMEAD SQUARE		
	NORTHWICH		
	KINGSMEAD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	650 sqm	
	Survey date: FRIDAY	07/06/19	Survey Type: MANUAL
2	DY-05-G-01	GP SURGERY	DERBY
	OSMASTON ROAD		
	DERBY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Gross floor area:	676 sqm	
	Survey date: WEDNESDAY	25/09/19	Survey Type: MANUAL
3	GM-05-G-02	GP SURGERY	GREATER MANCHESTER
	MOORSIDE ROAD		
	SALFORD		
	SWINTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	1160 sqm	
	Survey date: FRIDAY	21/06/19	Survey Type: MANUAL
4	HF-05-G-01	GP SURGERY	HERTFORDSHIRE
	CHELLS WAY		
	STEVENAGE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	830 sqm	
	Survey date: FRIDAY	28/06/19	Survey Type: MANUAL
5	IW-05-G-01	GP SURGERY	ISLE OF WIGHT
	NEWPORT ROAD		
	COWES		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	1400 sqm	
	Survey date: WEDNESDAY	26/06/19	Survey Type: MANUAL
6	LC-05-G-01	GP SURGERY	LANCASHIRE
	DOCTORS LANE		
	ECCLESTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Gross floor area:	700 sqm	
	Survey date: WEDNESDAY	20/04/22	Survey Type: MANUAL
7	LE-05-G-01	GP SURGERY	LEICESTERSHIRE
	GLEN ROAD		
	LEICESTER		
	OADBY		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	550 sqm	
	Survey date: THURSDAY	30/10/14	Survey Type: MANUAL
8	NF-05-G-03	GP SURGERY	NORFOLK
	MILE END ROAD		
	NORWICH		
	MOUNT PLEASANT		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	600 sqm	
	Survey date: FRIDAY	08/11/19	Survey Type: MANUAL

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters (Cont.)

9	SY-05-G-01	GP SURGERY	SOUTH YORKSHIRE
	GOODISON BOULEVARD		
	DONCASTER		
	CANTLEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	1050 sqm	
	Survey date: THURSDAY	23/09/21	Survey Type: MANUAL
10	TW-05-G-02	GP SURGERY	TYNE & WEAR
	BIDDLESTONE ROAD		
	NEWCASTLE		
	HEATON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	878 sqm	
	Survey date: FRIDAY	13/11/15	Survey Type: MANUAL
11	TW-05-G-03	GP SURGERY	TYNE & WEAR
	CHURCH ROAD		
	NEWCASTLE		
	GOSFORTH		
	Neighbourhood Centre (PPS6 Local Centre)		
	High Street		
	Total Gross floor area:	678 sqm	
	Survey date: MONDAY	29/04/19	Survey Type: MANUAL
12	TW-05-G-04	GP SURGERY	TYNE & WEAR
	MANOR WALK		
	NEWCASTLE UPON TYNE		
	BENTON		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	1400 sqm	
	Survey date: THURSDAY	18/10/18	Survey Type: MANUAL
13	WM-05-G-04	GP SURGERY	WEST MIDLANDS
	STOURBRIDGE ROAD		
	DUDLEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	600 sqm	
	Survey date: TUESDAY	21/11/17	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 05 - HEALTH/G - GP SURGERIES

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	2	1115	0.538	2	1115	0.000	2	1115	0.538
07:00 - 08:00	13	859	1.065	13	859	0.286	13	859	1.351
08:00 - 09:00	13	859	2.587	13	859	1.531	13	859	4.118
09:00 - 10:00	13	859	2.730	13	859	2.542	13	859	5.272
10:00 - 11:00	13	859	2.748	13	859	2.506	13	859	5.254
11:00 - 12:00	13	859	2.059	13	859	2.327	13	859	4.386
12:00 - 13:00	13	859	1.862	13	859	2.103	13	859	3.965
13:00 - 14:00	13	859	1.683	13	859	1.763	13	859	3.446
14:00 - 15:00	13	859	2.265	13	859	2.077	13	859	4.342
15:00 - 16:00	13	859	2.274	13	859	2.274	13	859	4.548
16:00 - 17:00	13	859	1.969	13	859	2.265	13	859	4.234
17:00 - 18:00	13	859	1.226	13	859	1.907	13	859	3.133
18:00 - 19:00	12	877	0.437	12	877	1.064	12	877	1.501
19:00 - 20:00	2	1039	0.096	2	1039	0.337	2	1039	0.433
20:00 - 21:00	1	1400	0.000	1	1400	0.000	1	1400	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			23.539			22.982			46.521

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 550 - 1400 (units: sqm)
 Survey date range: 01/01/14 - 25/05/22
 Number of weekdays (Monday-Friday): 13
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Filtering Summary

Land Use	04/D	EDUCATION/NURSERY
Selected Trip Rate Calculation Parameter Range	500-2000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	500-1250 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 07/06/22
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	3
	Thursday	1
	Friday	2
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	5
	Neighbourhood Centre (PPS6 Local Centre)	1
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	4 - Selected
	Servicing vehicles Excluded	2 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	10,001 to 15,000	1
	15,001 to 20,000	2
	25,001 to 50,000	3
Population <5 Mile ranges selected	25,001 to 50,000	1
	75,001 to 100,000	1
	125,001 to 250,000	2
	250,001 to 500,000	1
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	2
	1.1 to 1.5	2
	2.1 to 2.5	1
PTAL Rating	No PTAL Present	6

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Calculation Reference: AUDIT-152301-230203-0227

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : D - NURSERY

TOTAL VEHICLESSelected regions and areas:

03 SOUTH WEST	
SD SWINDON	1 days
05 EAST MIDLANDS	
LN LINCOLNSHIRE	1 days
NN NORTH NORTHAMPTONSHIRE	1 days
06 WEST MIDLANDS	
WM WEST MIDLANDS	1 days
07 YORKSHIRE & NORTH LINCOLNSHIRE	
SY SOUTH YORKSHIRE	1 days
09 NORTH	
TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 500 to 1250 (units: sqm)
 Range Selected by User: 500 to 2000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 07/06/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	3 days
Thursday	1 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	5
Neighbourhood Centre (PPS6 Local Centre)	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	6
------------------	---

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected
Servicing vehicles Excluded	2 days - Selected

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection:Use Class:

E(f) 6 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000 1 days

15,001 to 20,000 2 days

25,001 to 50,000 3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000 1 days

75,001 to 100,000 1 days

125,001 to 250,000 2 days

250,001 to 500,000 1 days

500,001 or More 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less 1 days

0.6 to 1.0 2 days

1.1 to 1.5 2 days

2.1 to 2.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 6 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 6 days

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	LN-04-D-01	NURSERY	LINCOLNSHIRE
	NEWARK ROAD		
	LINCOLN		
	SWALLOW BECK		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	600 sqm	
	Survey date: TUESDAY	31/10/17	Survey Type: MANUAL
2	NN-04-D-01	NURSERY	NORTH NORTHAMPTONSHIRE
	ROCKINGHAM ROAD		
	KETTERING		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	850 sqm	
	Survey date: TUESDAY	07/06/22	Survey Type: MANUAL
3	SD-04-D-01	NURSERY	SWINDON
	SHREWSBURY ROAD		
	SWINDON		
	WALCOT		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	500 sqm	
	Survey date: THURSDAY	22/09/16	Survey Type: MANUAL
4	SY-04-D-01	NURSERY	SOUTH YORKSHIRE
	BAWTRY ROAD		
	DONCASTER		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	1250 sqm	
	Survey date: FRIDAY	13/05/22	Survey Type: MANUAL
5	TW-04-D-03	NURSERY	TYNE & WEAR
	JUBILEE ROAD		
	NEWCASTLE UPON TYNE		
	GOSFORTH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	725 sqm	
	Survey date: TUESDAY	21/05/19	Survey Type: MANUAL
6	WM-04-D-02	NURSERY	WEST MIDLANDS
	BERTRAM ROAD		
	BIRMINGHAM		
	SMALL HEATH		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	880 sqm	
	Survey date: FRIDAY	19/11/21	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	784	1.530	6	784	0.680	6	784	2.210
08:00 - 09:00	6	784	1.828	6	784	1.211	6	784	3.039
09:00 - 10:00	6	784	0.595	6	784	0.510	6	784	1.105
10:00 - 11:00	6	784	0.149	6	784	0.064	6	784	0.213
11:00 - 12:00	6	784	0.128	6	784	0.106	6	784	0.234
12:00 - 13:00	6	784	0.808	6	784	0.893	6	784	1.701
13:00 - 14:00	6	784	0.723	6	784	0.978	6	784	1.701
14:00 - 15:00	6	784	0.128	6	784	0.234	6	784	0.362
15:00 - 16:00	6	784	0.446	6	784	0.361	6	784	0.807
16:00 - 17:00	6	784	0.701	6	784	0.808	6	784	1.509
17:00 - 18:00	6	784	1.211	6	784	1.807	6	784	3.018
18:00 - 19:00	6	784	0.170	6	784	0.574	6	784	0.744
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.417			8.226			16.643

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	500 - 1250 (units: sqm)
Survey date range:	01/01/14 - 07/06/22
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Calculation Reference: AUDIT-152301-230215-0201

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 07 - LEISURE
 Category : Q - COMMUNITY CENTRE

TOTAL VEHICLESSelected regions and areas:

07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	EC CHESHIRE EAST	1 days
	GM GREATER MANCHESTER	1 days
09	NORTH	
	TW TYNE & WEAR	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Gross floor area
 Actual Range: 100 to 750 (units: sqm)
 Range Selected by User: 100 to 2329 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 28/04/22

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	1 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	3

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
Retail Zone	1
Village	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 1 days - Selected

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

Secondary Filtering selection:Use Class:

F2(b) 5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	3 days
125,001 to 250,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 5 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 5 days

This data displays the number of selected surveys with PTAL Ratings.

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

LIST OF SITES relevant to selection parameters

1	EC-07-Q-01	COMMUNITY CENTRE	CHESHIRE EAST
	WARRINGTON ROAD		
	MERE		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total Gross floor area:	100 sqm	
	Survey date: TUESDAY	07/11/17	Survey Type: MANUAL
2	GM-07-Q-01	COMMUNITY CENTRE	GREATER MANCHESTER
	MOODY STREET		
	STANDISH		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	270 sqm	
	Survey date: THURSDAY	28/04/22	Survey Type: MANUAL
3	NY-07-Q-01	COMMUNITY CENTRE	NORTH YORKSHIRE
	SHUTE ROAD		
	CATTERICK GARRISON		
	Neighbourhood Centre (PPS6 Local Centre)		
	No Sub Category		
	Total Gross floor area:	316 sqm	
	Survey date: WEDNESDAY	10/05/17	Survey Type: MANUAL
4	TW-07-Q-03	COMMUNITY CENTRE	TYNE & WEAR
	ASKEW ROAD W		
	GATESHEAD		
	TEAMS		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	750 sqm	
	Survey date: FRIDAY	24/05/19	Survey Type: MANUAL
5	WY-07-Q-01	COMMUNITY CENTRE	WEST YORKSHIRE
	WATERLOO LANE		
	LEEDS		
	BRAMLEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Retail Zone		
	Total Gross floor area:	625 sqm	
	Survey date: MONDAY	19/10/15	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
TW-07-Q-02	facilities

VECTOS 97 TOTTENHAM COURT ROAD LONDON

Licence No: 152301

TRIP RATE for Land Use 07 - LEISURE/Q - COMMUNITY CENTRE

TOTAL VEHICLES**Calculation factor: 100 sqm****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	270	0.000	1	270	0.000	1	270	0.000
07:00 - 08:00	4	328	0.458	4	328	0.000	4	328	0.458
08:00 - 09:00	5	412	0.437	5	412	0.340	5	412	0.777
09:00 - 10:00	5	412	0.388	5	412	0.340	5	412	0.728
10:00 - 11:00	5	412	0.437	5	412	0.534	5	412	0.971
11:00 - 12:00	5	412	0.388	5	412	0.291	5	412	0.679
12:00 - 13:00	5	412	0.388	5	412	0.291	5	412	0.679
13:00 - 14:00	5	412	0.534	5	412	0.485	5	412	1.019
14:00 - 15:00	5	412	0.146	5	412	0.243	5	412	0.389
15:00 - 16:00	5	412	0.146	5	412	0.340	5	412	0.486
16:00 - 17:00	4	436	0.344	4	436	0.516	4	436	0.860
17:00 - 18:00	4	436	0.057	4	436	0.057	4	436	0.114
18:00 - 19:00	3	332	0.905	3	332	0.402	3	332	1.307
19:00 - 20:00	3	332	2.412	3	332	0.000	3	332	2.412
20:00 - 21:00	2	363	0.000	2	363	0.000	2	363	0.000
21:00 - 22:00	2	363	0.000	2	363	2.897	2	363	2.897
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.040			6.736			13.776

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected:	100 - 750 (units: sqm)
Survey date range:	01/01/14 - 28/04/22
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix H



Key

-  Pedestrian Access Points
-  Pedestrian Routes
-  Realigned England Coastal Path (ECP)
-  Realigned England Coastal Path (ECP) – Robins Creek Alternative Route
-  Realigned 0328/NU1/1 Footpath
-  Realigned 0328/NU2/2 Footpath
-  Realigned 0328/DS27/1(NU44/1) Footpath
-  Existing England Coastal Path (ECP)

Northfleet Central 1 Ltd

Northfleet Harbourside,
Gravesham

PROW Plan

SCALES:

NTS

DRAWN: BH	CHECKED: ID	DATE: 15/01/24	REVISION: --
--------------	----------------	-------------------	-----------------



DRAWING REFERENCE:

Key

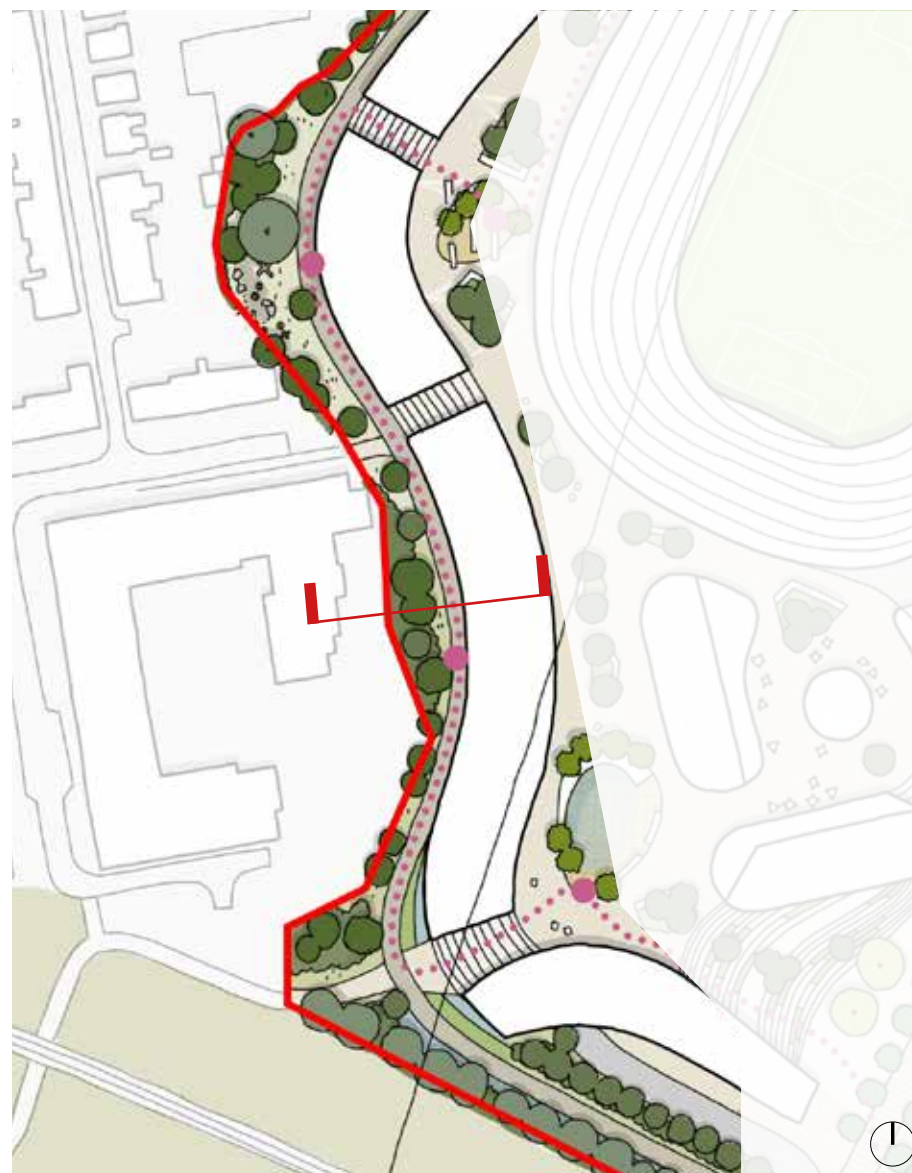
-  Pedestrian Access Points
-  Pedestrian Routes
-  Realigned England Coastal Path (ECP)
-  Realigned England Coastal Path (ECP) – Robins Creek Alternative Route
-  Realigned 0328/NU1/1 Footpath
-  Realigned 0328/NU2/2 Footpath
-  Realigned 0328/DS27/1(NU44/1) Footpath
-  Existing England Coastal Path (ECP)

Appendix I

Part C Character Areas

7.0 Character Area 4 - Marketplace

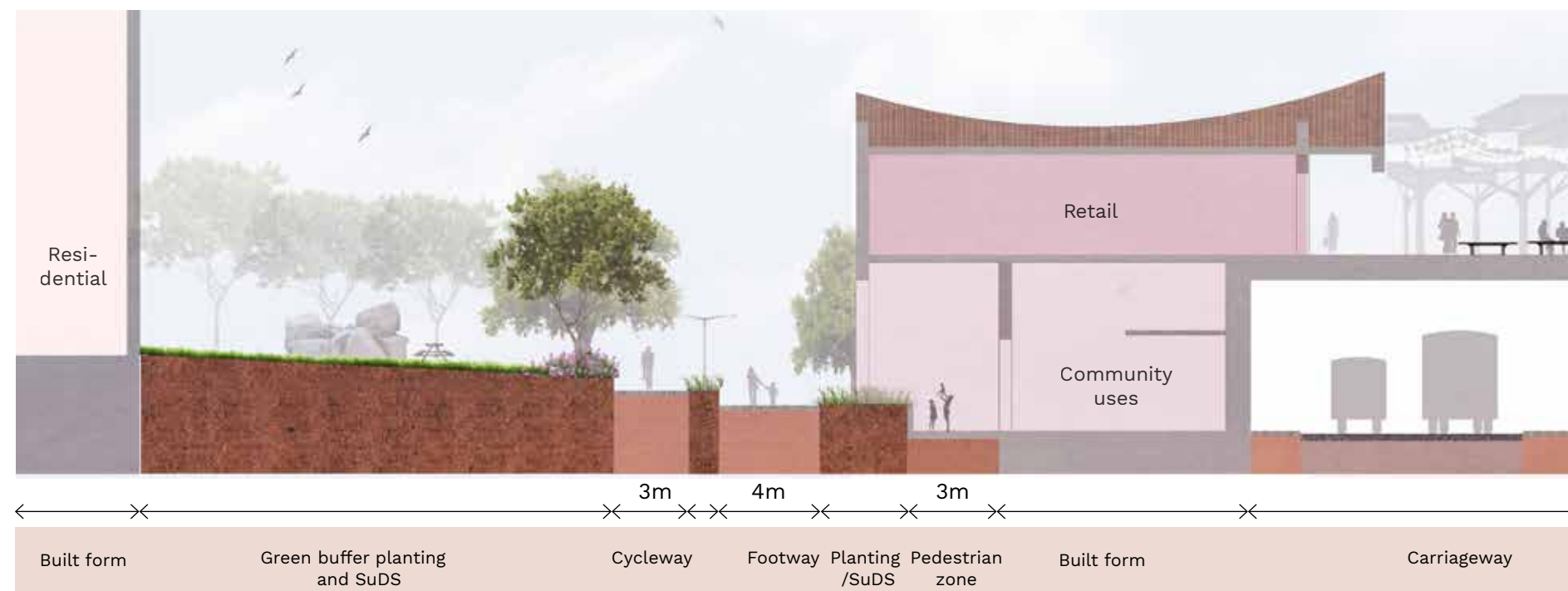
7.3 Key Streets and Spaces: Green Buffer



Objectives:

The green buffer will consist of existing broadleaved trees and proposed woodland understorey planting providing mitigation of any visual impacts perceived from surrounding residential neighbourhoods. Providing a continuous habitat corridor which links existing landscape features.

The green buffer along with the dynamic built form should establish an attractive 'green' outlook and appearance for the development as a whole. Performing a role in filtering particulates from the atmosphere and reducing the perception of noise, lighting and other road traffic impacts on residents.



Typical section through the Green Buffer

The Green Buffer is to include the following features:

- Native species planting;
- Habitat enhancement measures such as bird, bat and bee boxes, deadwood. For further information refer to Detailing the Landscape section;
- Paths constructed from self-binding gravel, hoggin, crushed brick or similar aggregate materials;
- Future selective thinning of small trees and shrubs once established in dense areas to encourage natural regeneration and more diverse ground flora once approved by an arboriculturist to promote the growth and future establishment of the existing woodland understorey and newly planted native stock;
- Evergreen species to provide year round green screening; and
- SuDS to manage surface water drainage.



Pedestrian and cycle connections into the Marketplace through the Green Buffer

Footway	3m minimum
Cycleway	3m two-way cycleway
Landscape Character	A green buffer of native planting incorporating walking and accessibility routes

Appendix B



Key

-  Pedestrian Access Points
-  Pedestrian Routes
-  Realigned England Coastal Path (ECP)
-  Realigned England Coastal Path (ECP) – Robins Creek Alternative Route
-  Realigned 0328/NU1/1 Footpath
-  Realigned 0328/NU2/2 Footpath
-  Realigned 0328/DS27/1(NU44/1) Footpath
-  Existing England Coastal Path (ECP)
-  Existing 0263/DS27/1 Footpath
-  Existing 0263/DS17/2 Footpath

Northfleet Central 1 Ltd

Northfleet Harbourside,
Gravesham

PROW Plan

SCALES:

NTS

DRAWN:
BH

CHECKED:
ID

DATE:
08/02/24

REVISION:
--



DRAWING REFERENCE:

Contact

London

Network Building,
97 Tottenham Court Road,
London W1T 4TP.
Tel: 020 7580 7373

Bristol

5th Floor, 4 Colston Avenue,
Bristol BS1 4ST
Tel: 0117 203 5240

Cardiff

Helmont House, Churchill Way,
Cardiff CF10 2HE
Tel: 029 2072 0860

Exeter

6 Victory House,
Dean Clarke Gardens,
Exeter EX2 4AA
Tel: 01392 422 315

Birmingham

Great Charles Street,
Birmingham B3 3JY
Tel: 0121 2895 624

Manchester

Oxford Place, 61 Oxford Street,
Manchester M1 6EQ.
Tel: 0161 228 1008

Leeds

7 Park Row, Leeds LS1 5HD
Tel: 0113 512 0293

Bonn

Stockenstrasse 5, 53113,
Bonn, Germany
Tel: +49 176 8609 1360
www.vectos.eu

Registered Office

Vectos (South) Limited
Network Building,
97 Tottenham Court Road,
London W1T 4TP
Company no. 7591661