EASTLEIGH SGO

ALLBROOK APPRAISAL

October 2018

The Highwood Group and Galliford Try Partnerships

EASTLEIGH STRATEGIC GROWTH OPTION

ALLBROOK APPRAISAL

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Contents

Figures

Tables

Appendices

1. INTRODUCTION

1.1 This Allbrook Appraisal (AA) has been prepared by Paul Basham Associates (PBA) on behalf of the Highwood Group and Galliford Try to provide an updated appraisal to the highways elements at Allbrook (in the vicinity of the rail bridge and bridge over the River Itchen) to support Eastleigh Borough Council's (EBC) Local Plan and more specifically the allocation of the Eastleigh Strategic Growth Option (SGO) at North Bishopstoke and Fair Oak.

1.2 This appraisal is split into an assessment of two specific elements, including existing and proposed conditions for Non-Motorised Users at Allbrook but also considering demand from the SGO (**Chapter 2**) and matters relating to alignment and clearances at Allbrook Rail Bridge and the road bridge over the Itchen Navigation (**Chapter 3**). This appraisal builds upon previous submissions made in representation to the draft EBC Local Plan in November 2017 and June 2018.

1.3 The focus of the study area is demonstrated in **Figure 1**, but consideration is given to the wider context and link road alignments.

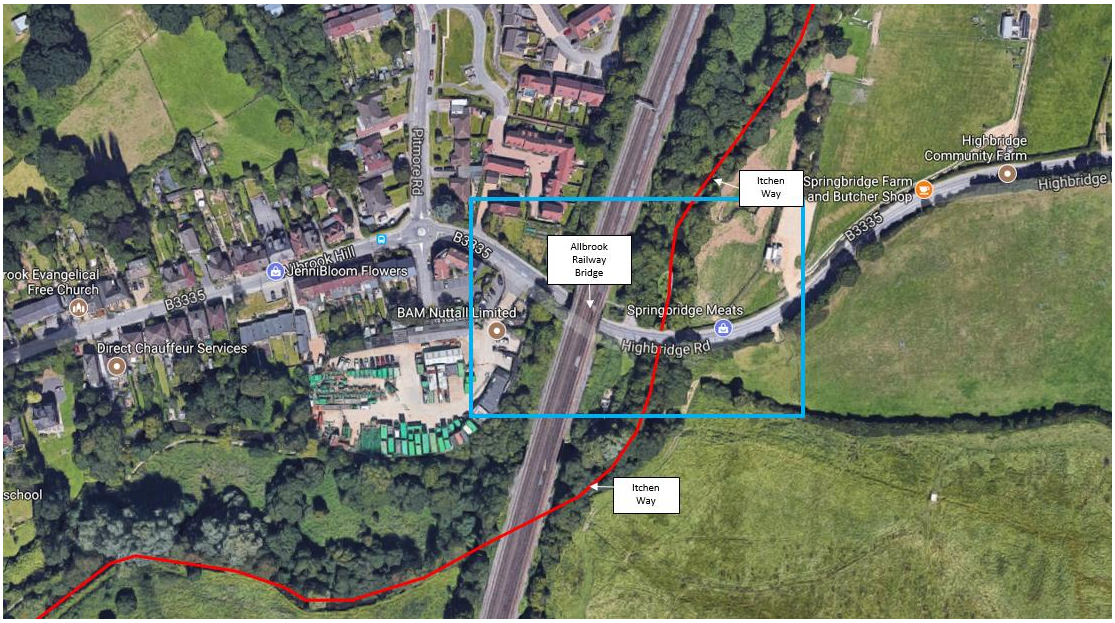


Figure 1: Allbrook Appraisal Study Area Focus

2. NON-MOTORISED USER TRANSPORT REVIEW

Non-Motorised User (NMU) Survey Methodology

2.1 Pedestrian and cycle count surveys were undertaken by an external consultant; GM Traffic Ltd, over seven-day, 12 hour periods between 07:00 Thursday 19th October 2017 and 19:00 Wednesday 25th October 2017.

2.2 The month of October was chosen as a suitable month to survey as it is a 'neutral' month (as described in DMRB Volume 13, Section 1, Part 4) with average weather conditions and no significant variations in traffic volumes.

2.3 As part of the surveys it was felt important to ensure that all potential variations in pedestrian and cycle movements (where possible) were captured. Therefore, the surveys were undertaken to capture school term time, school half term (with Monday 23rd- Wednesday 25th falling within Hampshire's school half term break) and a weekend.

2.4 The surveys were undertaken via video camera to ensure that a full 12 hours was recorded daily with the video surveys able to capture all-way movements from each route.

2.5 The remainder of this Chapter provides a summary and analysis of the survey data, including the number and type of flows using each route (under Allbrook Railway Bridge and on the Itchen Way), pedestrian and cycle desire lines, daily fluctuations, weather fluctuations and a Peak Hour flow assessment. It will then provide an overview of the likely route of pedestrian and cycle flows from EBC's Local Plan SGO and assess the potential increase in pedestrian and cycle movements through this particular area. Finally, it will assess whether the existing pedestrian and cycle infrastructure is sufficient to support existing and future pedestrian and cycle flows, and identify NMU enhancements that could be made.

Analysis of Survey Data

2.6 **Table 1** provides a summary of the daily number of pedestrians and cyclists using the Itchen Way across a 12 hour period, whilst **Table 2** provides a summary of the daily number of pedestrians and cyclists passing under Allbrook Railway Bridge across a 12 hour period. An element of double-counting is experienced where pedestrians either travel from the bridge to the Itchen Way or vice-versa. The full data outputs are included as **Appendix A.**

	Pedestrians Using Itchen Way	Cyclists Using Itchen Way
Thursday 19th October	47	9
Friday 20th October	121	7
Saturday 21st October	99	10
Sunday 22nd October	243	10
Monday 23rd October	71	12
Tuesday 24th October	62	5
Wednesday 25th October	128	9
TOTAL	771	62
Average Daily	110	9
Average Hourly	**9**	**>1**

Table 1: Summary of Pedestrians and Cyclists Using Itchen Way at Allbrook

	Pedestrians Using Allbrook Railway Bridge	Cyclists Using Allbrook Railway Bridge
Thursday 19th October	40	45
Friday 20th October	44	47
Saturday 21st October	62	25
Sunday 22nd October	122	52
Monday 23rd October	61	35
Tuesday 24th October	54	47
Wednesday 25th October	89	53
TOTAL	472	304
Average Daily	67	43
Average Hourly	**6**	**4**

Table 2: Summary of Pedestrians and Cyclists passing under Allbrook Railway Bridge

2.7 As demonstrated in **Table 1** and **Table 2**, the highest volume of pedestrian traffic occurred on Sunday 22nd October, with the lowest volume of pedestrian traffic occurring on Thursday 19th October. The average number of pedestrians using the Itchen Way is far greater than those travelling under Allbrook Railway Bridge, with an average of 110 daily movements compared to 67. In comparison, the number of cyclists travelling on the Itchen Way is much lower in comparison to those using the bridge, which is expected given the Itchen Way is a footpath rather than a bridleway.

2.8 It should be noted that during the survey period, no wheelchairs or mobility scooters passed either under Allbrook Railway Bridge or the Itchen Way.

Pedestrian and Cycle Desire Lines (Average Daily Flows)

2.9 As previously described the video survey was undertaken over a 7-day period to capture the term time flows, the weekend flows and the half term flows. When assessing in more detail at specific routes taken by pedestrians and cycles it has been established that the majority of pedestrian traffic occurs north/ south on the Itchen Way, with the majority of cycle traffic occurring east/west on Highbridge Road and under the bridge. However to assess more closely the pedestrian and cycle desire lines, a series of flow maps have been produced, as demonstrated in **Figure 2** to **4** (pedestrians) and **Figure 5** to **7** (cyclists).

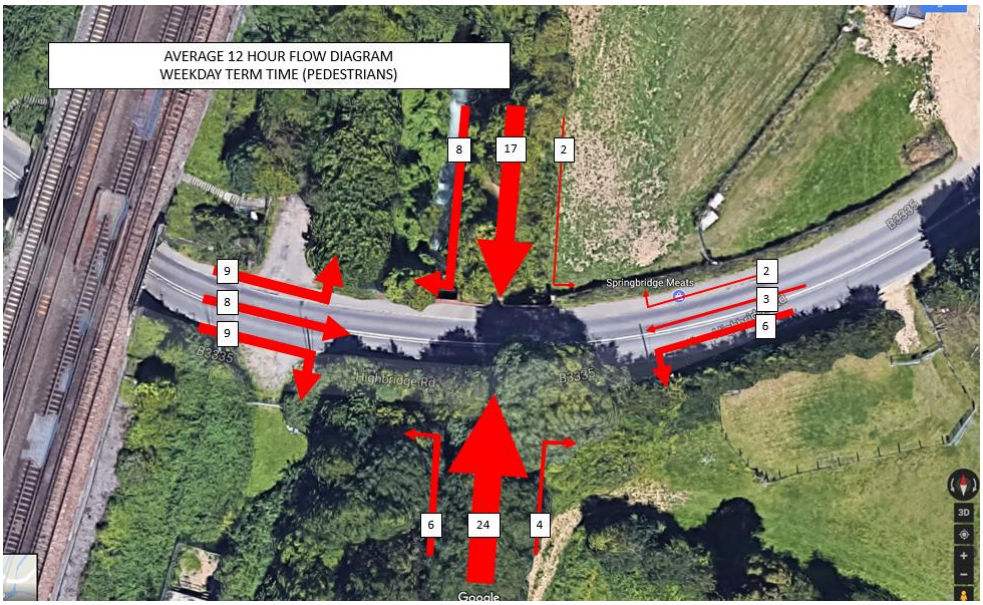


Figure 2: Average 12 Hour Flow Diagram – Weekday Term Time (Pedestrians)

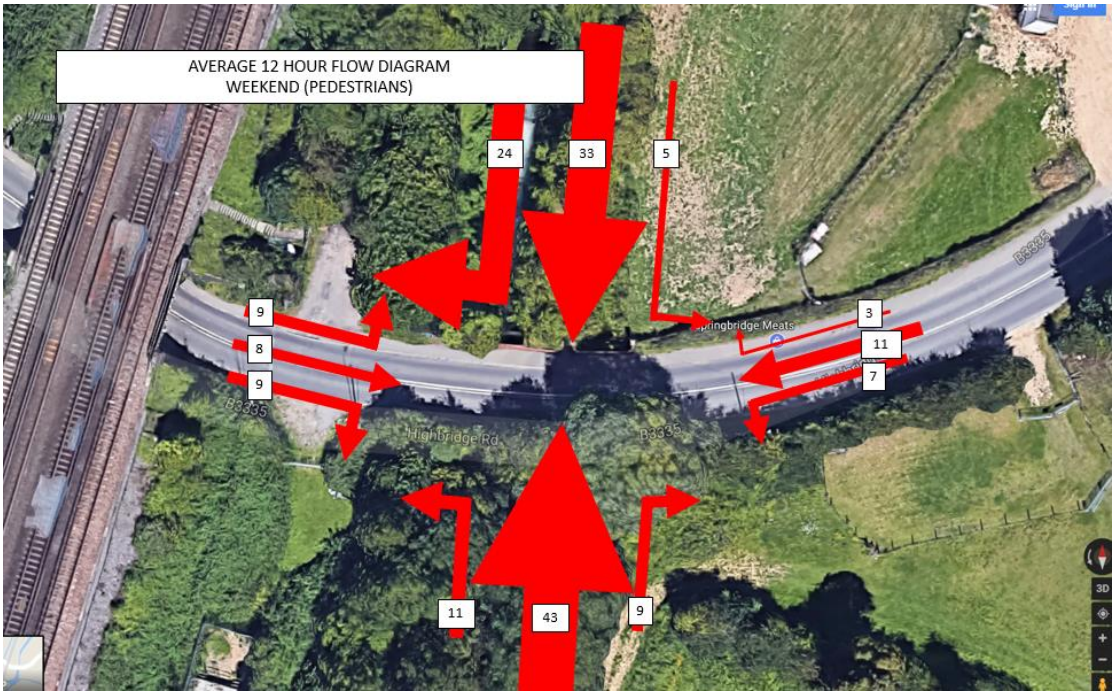


Figure 3: Average 12 Hour Flow Diagram – Weekend (Pedestrians)

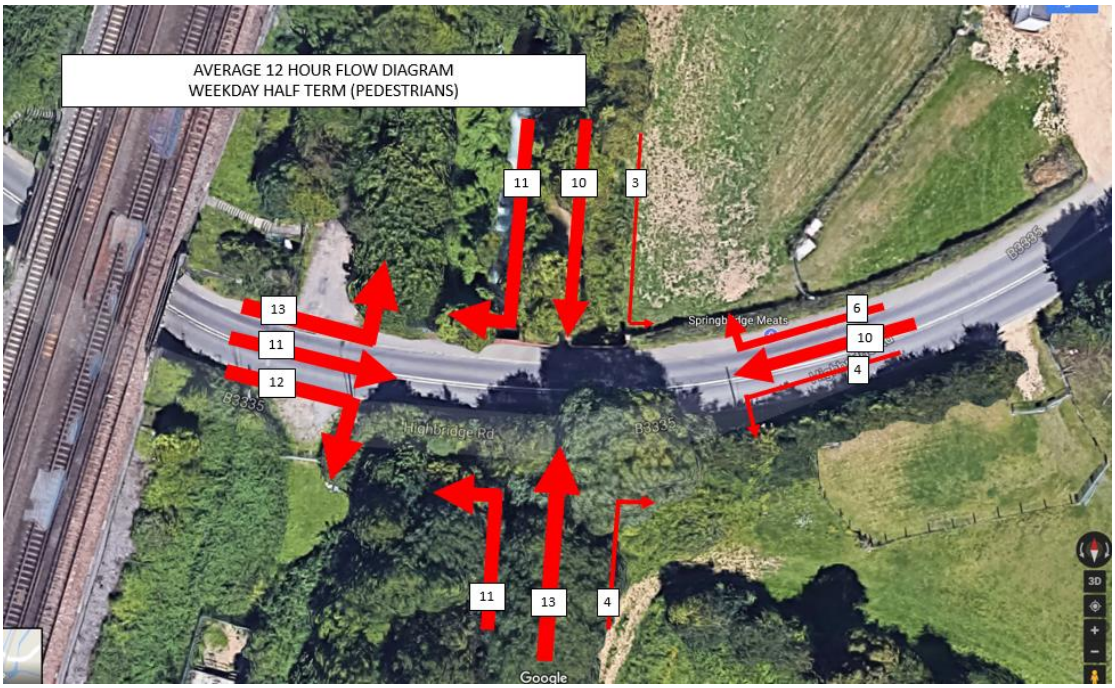


Figure 4: Average 12 Hour Flow Diagram – Weekday Half Term (Pedestrians)

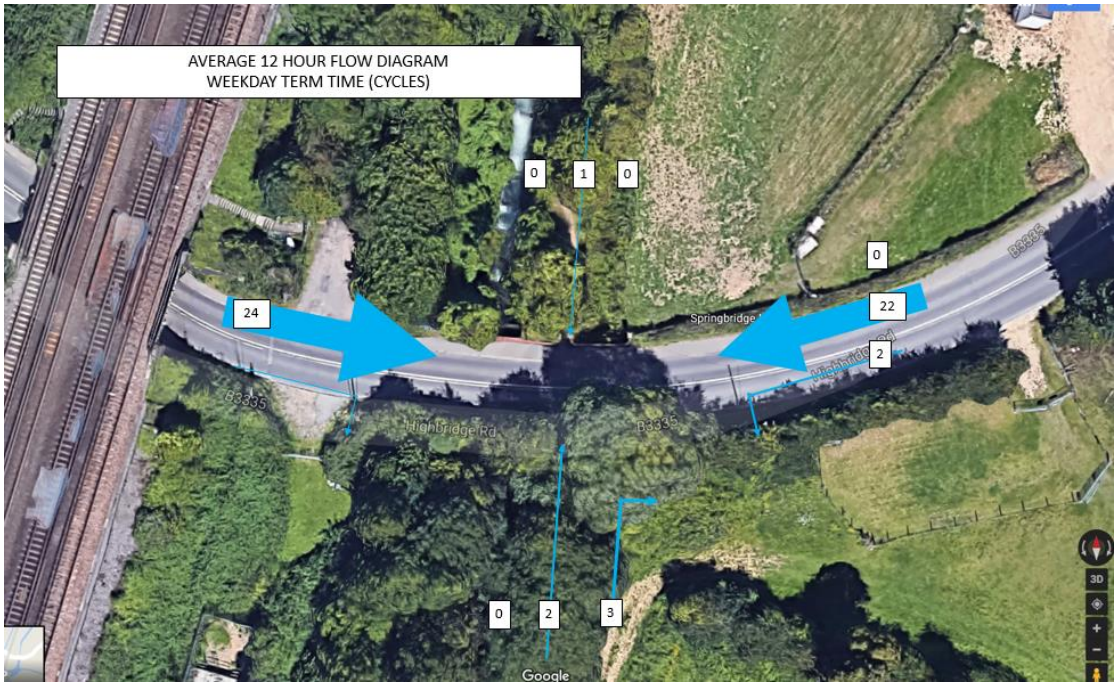


Figure 5: Average 12 Hour Flow Diagram – Weekday Term Time (Cyclists)

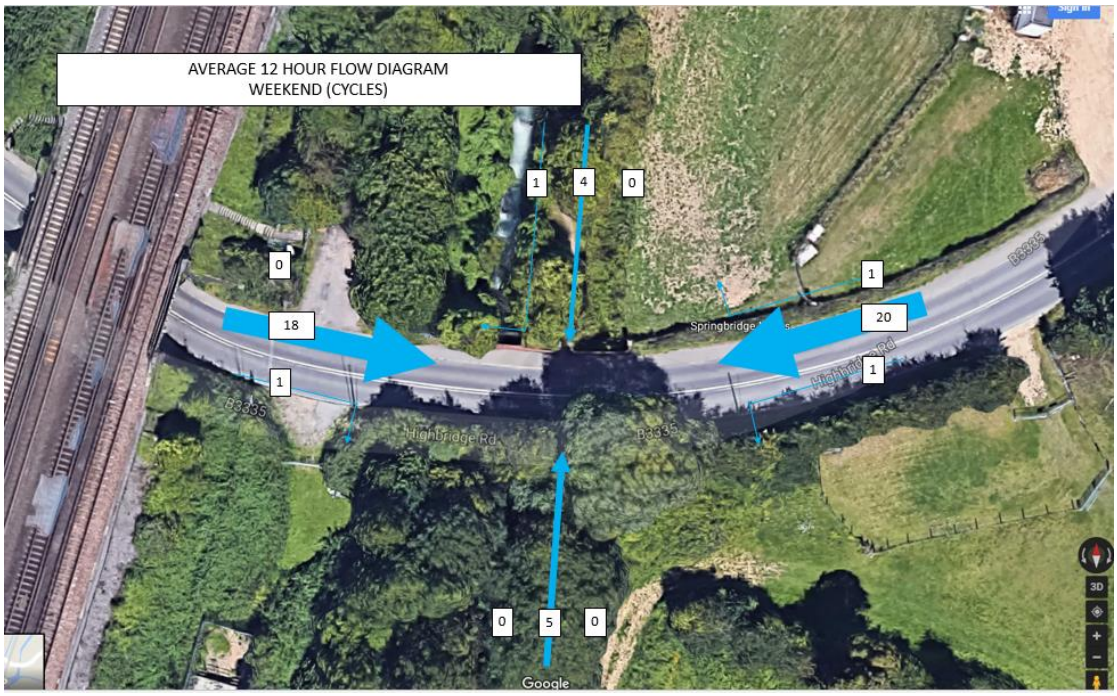


Figure 6: Average 12 Hour Flow Diagram – Weekend (Cyclists)

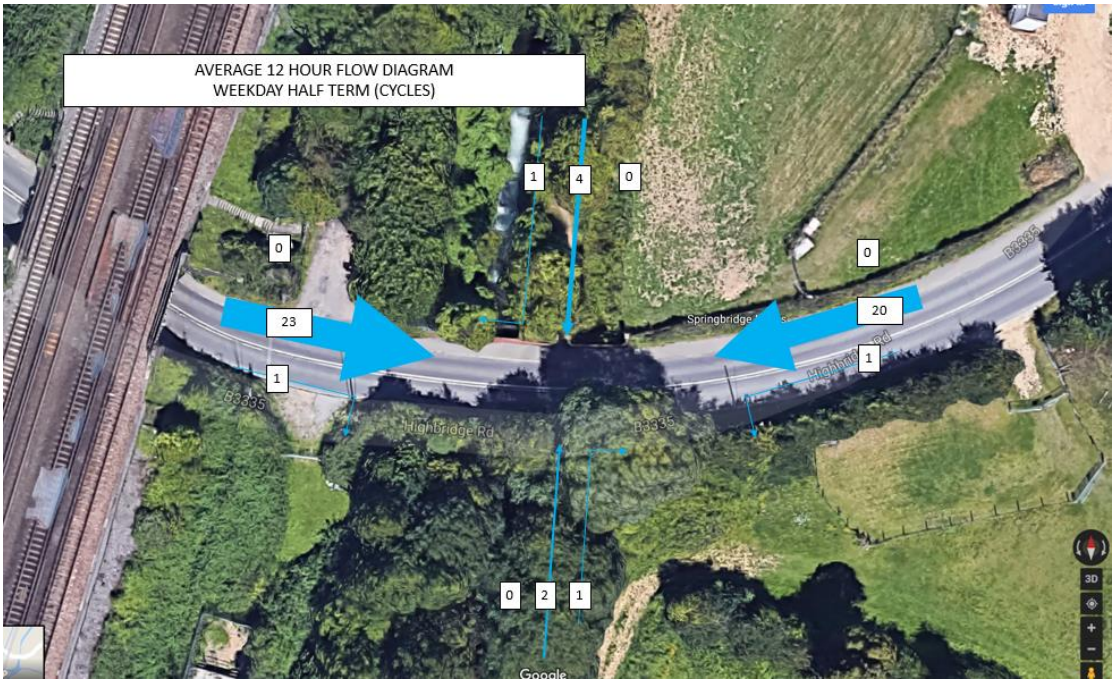


Figure 7: Average 12 Hour Flow Diagram – Weekday Half Term (Cycles)

2.10 **Figure 2** to **4** demonstrate that there is generally a higher flow of pedestrian traffic from the west (under the bridge), and from the Itchen Way (both north and south) than there is from the east in all scenarios. This is expected given the distance to Colden Common and few origins/destinations between this location and Colden Common on Highbridge Road. The volume of foot traffic from the west is generally lower than that using the Itchen Way except for in the half term scenario. The highest volumes of pedestrian traffic are experienced at the weekend, with the majority of

pedestrians travelling north/ south along the Itchen Way (i.e. across Highbridge Road). This is expected due to the primarily leisure walk use of the Itchen Way route.

2.11 In terms of cyclists, **Figure 5** to **7** show a fairly even split of westbound/ eastbound traffic along Highbridge Road, with higher volumes than experienced along the Itchen Way. In contrast to pedestrians, the highest volumes of cyclists on Highbridge Road are experienced during the term time scenario, with the route purpose therefore anticipated to be for commuting purposes.

Weather

2.12 As part of the survey, daily weather fluctuations were recorded as weather can have a significant impact on the level of pedestrian and cycle traffic. As the survey was undertaken over a 7-day period, varying weather conditions were captured and therefore the results can be considered representative of an average week.

2.13 A summary of the average daily flows with weather conditions is summarised in **Figure 8**.

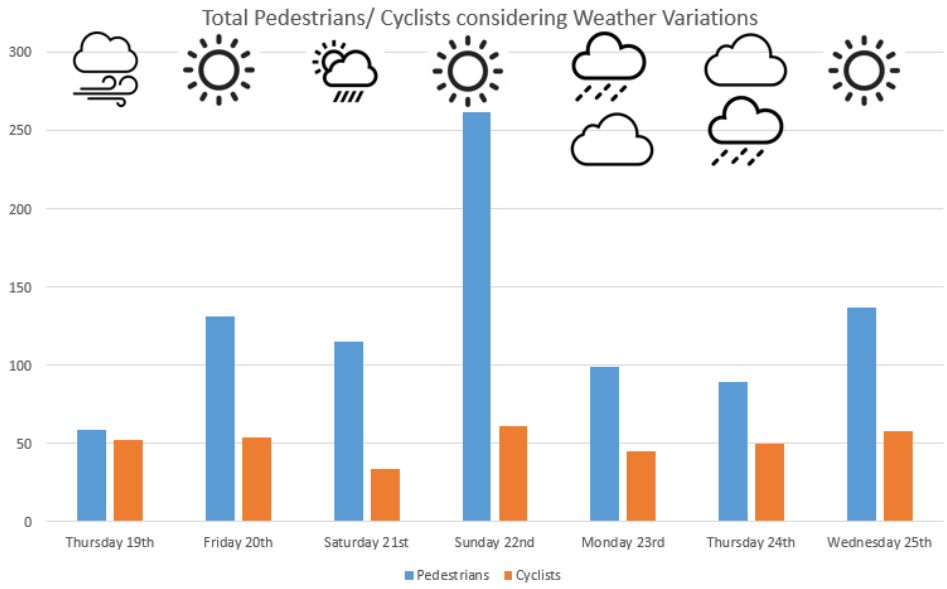


Figure 8: Total Pedestrians/ Cyclists considering Weather Variations

2.14 **Figure 8** demonstrates that three of the seven survey days were sunny (Friday 20th, Sunday 22nd and Wednesday 25th) and on these days the highest volume of both pedestrian and cycle traffic was experienced. In contrast, the lowest level of pedestrian traffic was experienced on Thursday 19th when the weather was recorded as 'dry/ overcast/ windy'. The lowest level of cycle traffic was experienced on Saturday 21st when the weather was recorded as 'sunny intervals/ showers'.

2.15 As the highest level of both pedestrian and cycle traffic occurred on days when sunny weather was recorded it is clear that there is a correlation between weather and volume of traffic. However it is

also clear that weather is not the only factor which influences NMU traffic volumes, as it would be expected that higher volumes of pedestrian traffic would occur on a Sunday regardless of weather factors as the route of the Itchen Way is a primarily leisure route.

Pedestrian and Cycle Desire Lines (Weekday Average AM and PM Flows)

2.16 Whilst this Chapter has so far assessed average flows across a 12-hour period, an assessment of hourly flows and peak hour flow volumes is important to establish the highest potential level of demand by pedestrians and cyclists.

2.17 **Figure 9** and **10** demonstrate the weekday term-time peak periods for pedestrian and cycle traffic as 0700-1000 and 0800-0900 in the AM Peak period and 1600-1900 and 1700-1800 in the PM Peak period. The weekend peak for vehicular traffic varies, with the peak period for pedestrians shown to be 1000-1300 and more specifically 1200-1300 (as demonstrated in **Figure 11**), whilst the peak period for weekday half-term traffic (**Figure 12**) is 1200-1500 and in particular 1400-1500.

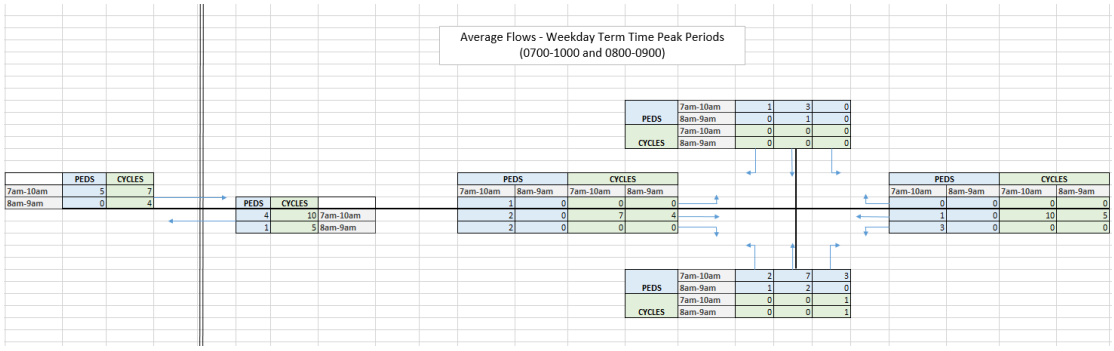


Figure 9: Average Flows – Weekday Term Time AM Peak Periods (0700-1000 and 0800-0900)

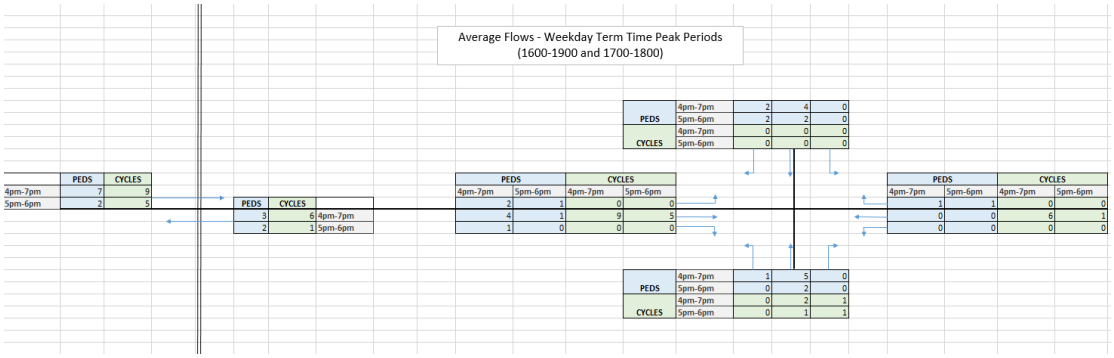


Figure 10: Average Flows – Weekday Term Time PM Peak Periods (1600-1900 and 1700-1800)

2.18 As demonstrated in **Figure 9** and **Figure 10**, low volumes of pedestrian and cycle traffic have been recorded in the AM and PM weekday peak periods. In the 0800-0900 AM Peak a total of 1 pedestrian is recorded to have walked under Allbrook Railway Bridge, with a total of 4 pedestrians using the

Itchen Way. In terms of cyclists, a total of 9 cyclists were recorded as passing under the bridge in the 0800-0900 AM Peak, with 1 cyclist using the Itchen Way.

2.19 In the 1700-1800 PM Peak 4 pedestrians were recorded to have walked under the bridge, with 8 pedestrians using the Itchen Way. 6 cyclists were also recorded to have travelled under the bridge, with 2 cyclists using the Itchen Way.

2.20 With a maximum of 4 pedestrians walking under the bridge during the weekday peak periods (1 pedestrian every 15 minutes) the level of pedestrian traffic using the bridge is considered low. During the weekday peak periods the number of pedestrians using the Itchen Way is also low, with a maximum of 8 pedestrians in the PM Peak hour (1 pedestrian every 7-8 minutes).

2.21 Whilst cycle trips under the bridge are slightly higher than pedestrian traffic, a total of 9 cyclists were recorded in the AM Peak period with a total of 6 cyclists recorded in the PM Peak period which is still considered to be low.

2.22 It should be noted that no pedestrians with pushchairs were recorded between 0700-1000 in the AM Peak period or between 1600-1900 in the PM Peak period.

Pedestrian and Cycle Desire Lines (Weekend Average Peak Flows)

2.23 As demonstrated in **Figure 11**, higher volumes of pedestrian and cycle traffic are anticipated in the weekend peak period (1000-1300 and 12-00-1300). In the 1200-1300 peak a total of 12 pedestrian were recorded to have walked under the bridge, with a total of 31 pedestrians using the Itchen Way. In terms of cyclists, a total of 4 cyclists were recorded as passing under the bridge in the 1200-1300 weekend, with 3 cyclists using the Itchen Way.

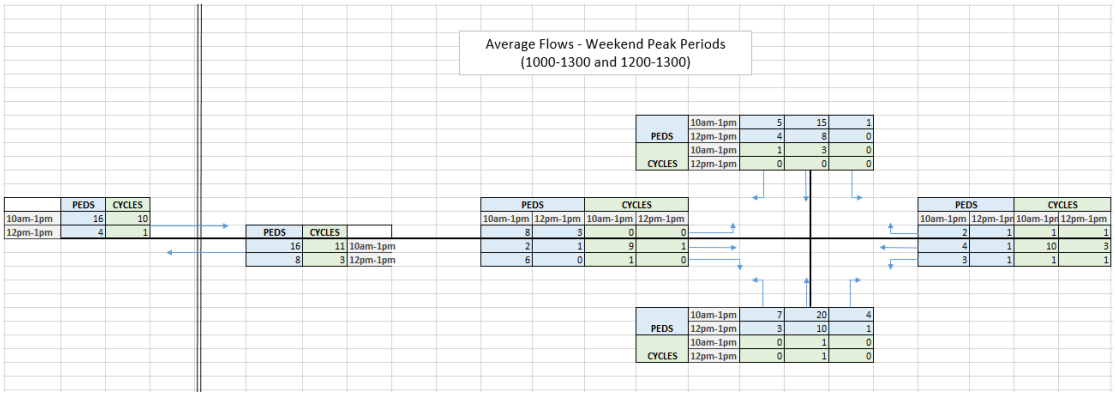


Figure 11: Average Flows – Weekend Peak Periods (1000-1300 and 1200-1300)

2.24 With a maximum of 12 pedestrians walking under the bridge during the weekend peak hour (1 pedestrian every 5 minutes) the level of pedestrian traffic using the bridge is still considered fairly low.

During the weekend peak periods the number of pedestrians using the Itchen Way is much higher than the weekday term time peak, with a maximum of 1 pedestrian every 2 minutes.

2.25 In contrast to the weekday term time peak, cycle traffic is demonstrated to be lower at the weekend, and it is therefore considered that most cyclists using this route along Highbridge Road are commuters rather than leisure cyclists.

2.26 It should be noted that there were a total of 4 pedestrians with pushchairs recorded between 1000-1300 across a two-day period, with 3 of these passing under the bridge and 2 using the Itchen Way (one from under the bridge).

Pedestrian and Cycle Desire Lines (Half Term Average Peak Flows)

2.27 **Figure 12** demonstrates that the half term peak period (1200-1500 and 1400-1500) experience slightly higher volumes of pedestrian traffic than in the weekday term-time peak and slightly lower volumes than the weekend peak. In the 1400-1500 Peak a total of 10 pedestrians were recorded to have walked under the bridge, with a total of 15 pedestrians using the Itchen Way. In terms of cyclists, a total of 3 cyclists were recorded as passing under the bridge in the 1400-1500 peak, with 0 cyclists using the Itchen Way.

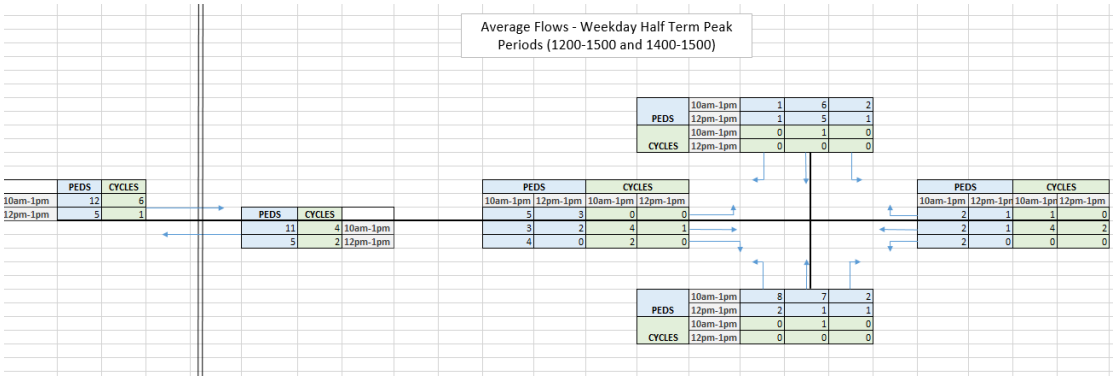


Figure 12: Average Flows – Weekday Half Term Peak Periods (1200-1500 and 1400-1500)

2.28 With a maximum of 10 pedestrians walking under the bridge over the half term weekday peak hour (1 pedestrian every 6 minutes) the level of pedestrian traffic under the bridge is considered low. During the half term peak periods the number of pedestrians using the Itchen Way is again low, with a maximum of 1 pedestrian every 4 minutes.

2.29 As per the weekend peak, cycle traffic is demonstrated to be low at half term, however whilst **Figure 12** shows the pedestrian peak periods, it should be noted that there were more recorded cyclists in the 0700-1000 period, which are expected to be commuter trips.

2.30 It should be noted that there were a total of 6 pedestrians with pushchairs recorded between 1200-1500 across three days, with 4 of these passing under the bridge and 4 using the Itchen Way (2 from under the bridge).

2.31 The following bullet points summarise the results of the pedestrian and cycle count data:

- The highest volume of pedestrian traffic occurs north/ south on Itchen Way, with the highest volume of cycle traffic east/west on Highbridge Road.
- During the survey period, no wheelchairs or mobility scooters were recorded.
- The highest volume of both pedestrian and cycle traffic was recorded on Sunday 22nd October (a sunny day).
- The highest volume of pedestrian traffic is experienced at the weekend (and using the Itchen Way) with the highest volume of cycle traffic experienced during term-time.
- During the peak periods low numbers of both pedestrians and cyclists are experienced across all scenarios under Allbrook Railway Bridge, with a maximum of 4 pedestrians and 9 cyclists in the peak weekday term-time hour, a maximum of 12 pedestrians and 3 cyclists in the peak weekend hour and a maximum of 10 pedestrians and 3 cyclists in the peak weekday half-term hour.
- The number of pedestrians using the Itchen Way in the peak periods is higher than that experienced on Highbridge Road, however the number of cyclists is demonstrated to be lower; with a maximum of 8 pedestrians and 2 cyclists in the peak weekday term-time hour, a maximum of 31 pedestrians and 3 cyclists in the peak weekend hour and a maximum of 15 pedestrians and 0 cyclists in the peak weekday half-term hour.
- Of the pedestrian trips, a maximum of 3 trips occur from the east on Highbridge Road (in the weekend peak hour (1200-1300)), with just 1 of these travelling under Allbrook Railway Bridge and the remaining 2 using the Itchen Way (1 north, 1 south), indicating little to no demand to/ from this direction.
- During the whole survey period, no conflict of pedestrian movement was recorded under Allbrook Railway Bridge, indicating two-way pedestrian movement under the bridge is not currently required.

Future Pedestrian and Cycle Desire Lines

2.32 When assessing the likely origins and destinations of pedestrians (and cyclists) from the east, Colden Common is the nearest built-up destination from which pedestrians may travel, with Eastleigh and Chandlers Ford the nearest destination for employment (as well as other shops and services). With Colden Common located 4km from Eastleigh Town Centre and 6m from Chandlers Ford centre, both existing destinations are outside of the 'preferred maximum' distance as considered by the CIHT 'Guidelines for Providing for Journeys on Foot' (2000).

2.33 Whilst the Eastleigh SGO is a mixed-use development including employment/ retail/ schools etc., if pedestrians or cyclists from the site were to travel to employment in Eastleigh, **Figure 13** and **Figure 14** demonstrate the difference between walking/cycling times from the most direct route (through Bishopstoke) and the Allbrook Railway Bridge route from the northern edge of the SGO and the District Centre of the SGO respectively (including some images of the routes).

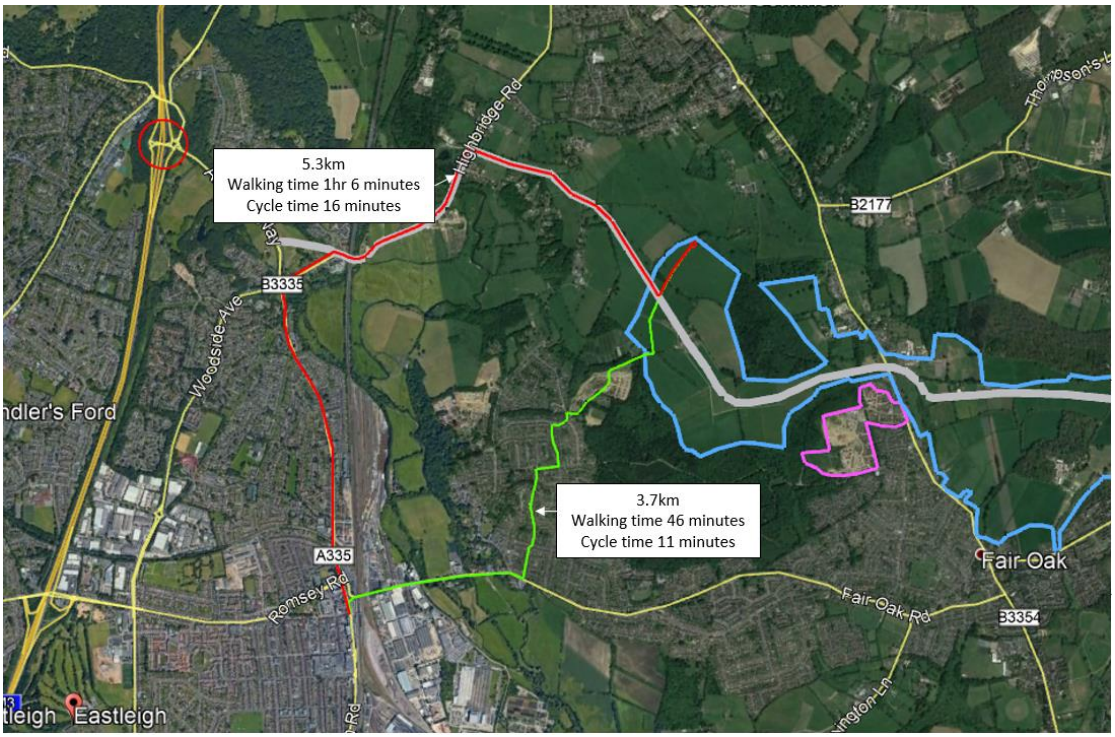


Figure 13: Difference in Travel Times from SGO into Eastleigh (Northern Edge)

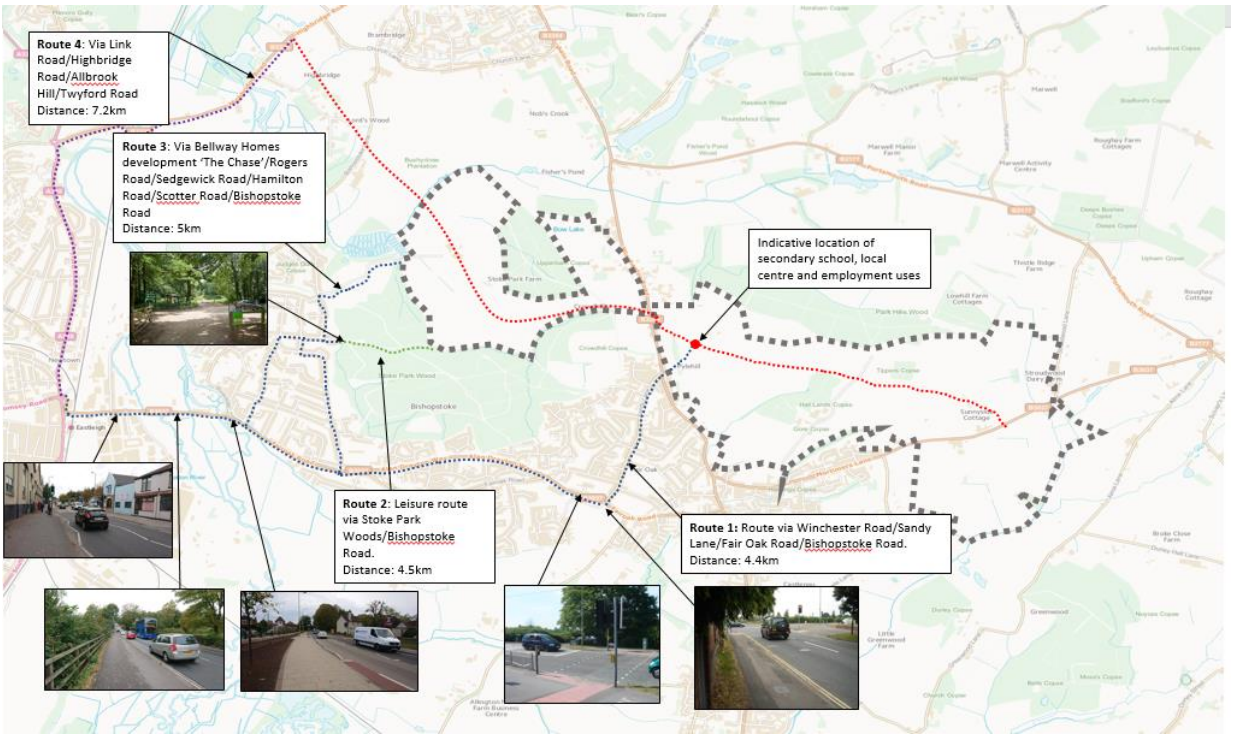


Figure 14: Difference in Travel Times from SGO into Eastleigh (District Centre Location)

2.34 As demonstrated in **Figure 13 and 14**, pedestrians and cyclists from the point furthest north in which housing may be provided would need to travel 5.3km from the northern-most part of the site (closest to the bridge) to Eastleigh Railway Station and High Street, whereas pedestrians and cyclists travelling from the northern-most-part of the site (furthest away from Bishopstoke Road) would need to travel 3.7km to Eastleigh Railway Station and High Street. From locations within the proposed District Centre east of Winchester Road, travel distances further demonstrate the attractiveness of alternative routes over the Allbrook route.

2.35 Bishopstoke Road currently benefits from on and off-road cycle lanes, as well as signalised crossings and refuge islands (some of which are highlighted within Figure 14). Routes through "The Chase" development (Sewall Drive) or Stoke Park Wood through Old Bishopstoke to Bishopstoke Road benefit from extensive footway networks, whilst Sandy Lane offers a direct route towards Fair Oak Road from the District Centre.

2.36 It is therefore considered very unlikely that pedestrians in particular will choose the longer route under the railway bridge if travelling from the SGO, as there are shorter, quieter and more attractive routes through Bishopstoke.

2.37 In summary:

- Of the pedestrian trips on Highbridge Road, very low volumes travel from the east, with Colden Common (the nearest residential area) located 4km from Eastleigh Town Centre.
- It is anticipated that there will be very low NMU demand from the SGO to travel under the bridge due to the length of route from the nearest possible house compared with quicker and more attractive alternative routes through Bishopstoke.
- It is therefore anticipated that future demand for pedestrians and cyclists travelling under Allbrook Railway Bridge from the SGO will not dramatically change.

Existing Pedestrian and Cycle Conditions and Options for Future Improvement at Allbrook

2.38 At present, continuous footways of varied width (between c.1.3m wide and 1.7m wide) are in place on the northern side of the Highbridge Road carriageway from Allbrook Hill to 90m south of its junction with Wardle Road, after which the footway continues on the southern side of Highbridge Road into Colden Common, as demonstrated in Photograph 1.

Photograph 1: Footways on Highbridge Road

2.39 To the west of Allbrook Railway Bridge continuous footways measuring 1.3m in width are in place on both sides of the carriageway to Allbrook Hill, after which they continue on the southern side of Allbrook Hill only to the Allbrook Hill/ Allbrook Way/ Woodside Avenue roundabout or up Pitmore Road where footways measure between 1.5m and 1.8m in width. The footways on Allbrook Hill and Pitmore Road are demonstrated in Photograph 2 and 3.

Photograph 2: Footways on Allbrook Hill

Photograph 3: Footways on Pitmore Road

2.40 Allbrook Railway Bridge itself is 17m in length and the current footway varies in width between 1.28m and 1.43m on just the northern side, with the narrowest point of 1.28m on the eastern side of the bridge. Allbrook Railway Bridge conditions are demonstrated in **Photograph 4** and **5**.

Photograph 4: Conditions under Allbrook Railway Bridge (view from the East)

Photograph 5: Conditions under Allbrook Railway Bridge (view from the West)

2.41 Manual for Streets (MfS) guidance (Figure 6.8) suggests that footway widths should take into account pedestrian volumes and that designers should ensure that footway widths are sufficient to accommodate all potential pedestrian movement (including wheelchairs and buggies). Their guidance states that a minimum of 0.9m is required to accommodate a wheelchair, with 1.2m of width sufficient to accommodate a parent and child walking side-by-side and 1.5m width accommodating two adults passing with a pushchair, as demonstrated in **Figure 15**.

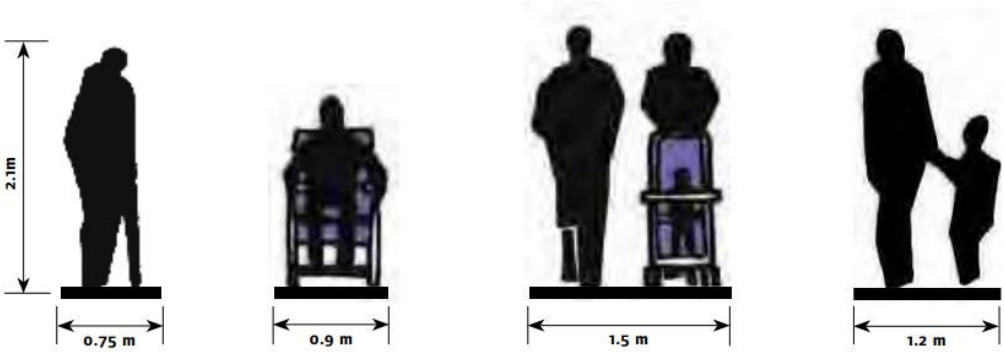


Figure 15: Widths required to accommodate pedestrian movement (taken from Manual for Streets Figure 6.8)

Personal Injury Accident (PIA) Data

2.42 To understand any existing accident or safety concerns with the current footway provision, a Personal Injury Accident (PIA) Data request was issued to Hampshire Constabulary in October 2017 to obtain any details of recorded incidents over the latest available 5-year period (July 2012- June 2017).

2.43 The data was obtained for the area demonstrated in **Figure 16** outlined in red; from the Allbrook Hill/ Allbrook Way/ Twyford Road roundabout (including the approaches to the roundabout), along the length of Allbrook Hill, 100m up Pitmore Road and c.400m along Highbridge Road, including under Allbrook Railway Bridge and the Itchen Way crossing.

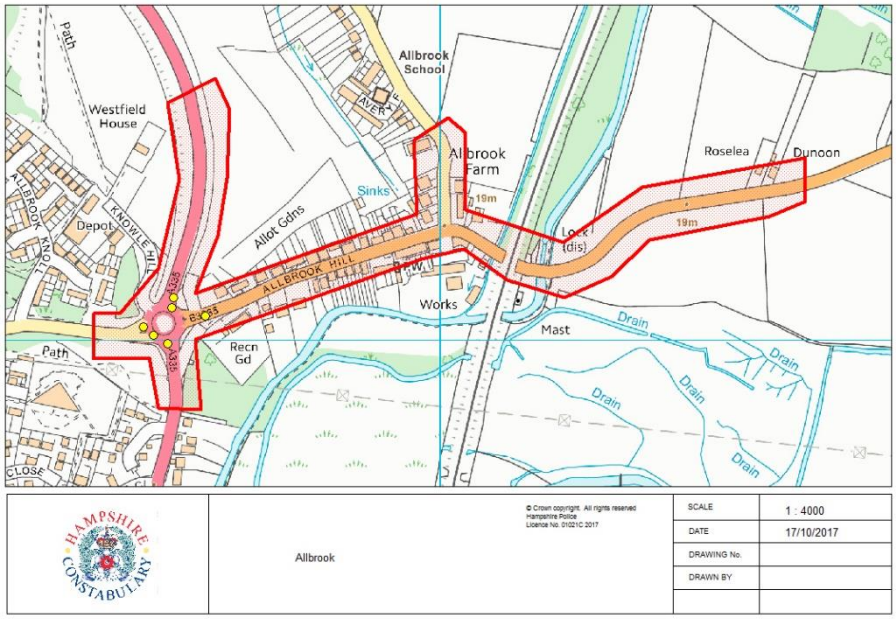


Figure 15: Extent of PIA Data (July 2012-June 2017)

2.44 The recorded PIAs over this five-year period are demonstrated in **Figure 16** using yellow dots. As shown, the only recorded PIA incidents which have occurred are at the Allbrook Hill/ Allbrook Way/ Twyford Road roundabout. The full PIA report is contained in **Appendix B**, which demonstrates that a total of 6 PIAs have occurred at the roundabout over a 5-year period, with all incidents recorded as 'slight' in nature. Of these, two incidents involved cyclists, with none involving pedestrians.

Existing and Future HGV Traffic Volumes at Allbrook

2.45 To inform this assessment, consideration has been given to the existing/future baseline and future year plus SGO development volumes of HGV traffic using this route. Surveys completed in 2015 identified 273 HGVs per day (two-way) on this link, whilst the 2036 baseline model scenario from the SRTM identifies 299 HGVs (two- way). The addition of the SGO with link road and associated "do more" infrastructure improvements (model scenario DS3) has identified an increase of HGV traffic to 354 two-way movements (an 18% increase).

Future Improvements Opportunities at Allbrook

2.46 As part of the SGO proposals, the existing road alignment would be straightened to the east of the Allbrook Railway Bridge, which would allow for a continuous carriageway width of 6m and the widening of the eastbound lane from 2.6m to 2.9m. With a typical large vehicle measuring circa 2.55m in width, the increase in lane width would provide an improved offset from pedestrians using the footway. The straightening of the road would also allow for improved visibility along Highbridge Road, as the current alignment restricts visibility through the bridge.

2.47 At present, cyclists from under the bridge continue along Allbrook Hill to the Allbrook Hill/ Allbrook Way/ Twyford Road roundabout, after which off-road cycle lanes are in place. The implementation of the bypass would allow for cyclists to divert down Allbrook Hill, which is to be reinstated as a cul-de-sac with a pedestrian/ cycle connection through to the roundabout. Cyclists would also be able to continue along the bypass from the bridge and join with a proposed 2.5m shared footway/ cycleway to the north of Allbrook Hill to the proposed residential allocation at Allbrook.

2.48 Improvements would also be made to the crossing of the Itchen Way with Highbridge Road; most notably the existing visibility to the west (from both the north and south) is poor, with 1.5m x 30.5m achievable from the north in the primary direction and 1.5m x 5.7m achievable from the south in the secondary direction. The straightening of the road and the provision of a 2m wide margin on the southern side would allow for a full 1.5m x 43m to be provided in both directions as per Manual for Streets guidance.

2.49 The route itself would also be improved on the approach to the bypass, including the gradient on approach to the bypass from Itchen Way south and the crossing itself.

2.50 An opportunities plan is provided as Appendix C.

2.51 As previously described, the existing pedestrian demand under Allbrook Railway Bridge is low, with a maximum of 12 pedestrians in any one hour (in the weekend peak hour) using this route, equating to one pedestrian every 5 minutes.

2.52 Future development of Eastleigh SGO would be very unlikely to increase pedestrian movement under the bridge, as the nearest dwelling to the bridge would be located 2.3km away, with shorter distances along more attractive and well-established route and there is no particular desire line using this route.

2.53 Dialogue with HCC has confirmed that there have been previous studies to consider accommodating cyclists on an upgraded Itchen Way, but that this has been discounted in part due to the environmental impact. For pedestrians however, the Itchen Way does offer an attractive traffic-free

route between Allbrook Rail Bridge and Ham Farm, avoiding Allbrook Hill and the northern section of Twyford Road. This route still remains a longer travel time for pedestrians from the SGO than alternative routes through Bishopstoke.

2.54 However, it has been requested by EBC and Hampshire County Council (HCC) that further potential options are considered in addition to those outlined above which would come forward with the implementation of the link road, which would ensure that any future increase in pedestrians through the bridge or increased vehicular traffic using the route under the bridge would be accommodated to ensure that the existing PIA trend (of no incidents under the bridge) is maintained.

Pedestrian Tunnel Option at Allbrook Railway Bridge

2.55 Discussions with EBC and HCC have considered the potential opportunities and constraints for providing a pedestrian tunnel through the bridge, segregated from the carriageway.

2.56 This option would ensure that pedestrians have no potential of conflict with vehicles under the bridge, whilst also creating an opportunity to increase the existing carriageway width under the bridge if the footway were removed.

2.57 However it should be noted that the existing carriageway width is 6m either side of the bridge, and a short section of wider carriageway under the bridge should the footway be removed would have the potential to confuse drivers. Similarly, the existing footways either side of the bridge are c.1.3m in width (similar to under the bridge) and even if a 2m wide tunnel were provided, the footways would remain narrow either side and so would not resolve any width constraints.

2.58 A footway tunnel on the southern side of Highbridge Road would be impractical for pedestrians due to the requirement to cross the road twice (with the footways either side of the bridge available on the northern side only).

2.59 In terms of cyclists, they are unlikely to dismount and use the tunnel for a short 17m stretch, whether on the northern or southern side of the bridge.

2.60 The main constraint to the implementation of a tunnel on the northern side is that limited land is available either side of the bridge to construct a tunnel, with existing Network Rail maintenance step access to the railway line required to be retained, the proximity of the railway bridge to the riverbank to the west and the extent of offset required so as not to affect the structural integrity of the bridge.

2.61 A further issue relates to safety concerns of providing a tunnel which is lightly trafficked and separated from the carriageway. A maximum of 1 pedestrian every 5 minutes would mean that the use of the

tunnel would be limited and there is therefore more opportunity for criminal behaviour, particularly as the entrance and exit would need to be sharp bends and therefore pedestrians would not be able to see the exit from the entrance.

2.62 When consulting national guidance on the implementation of pedestrian tunnels and subways, the BRE Briefing Paper 'Reducing Crime Hotspots in City Centres' and Sustrans Design Manual Chapter 8 'Bridges and other structures' (draft February 2015) provide guidance for subways and underpasses in particular (which in design terms can be compared to a segregated pedestrian tunnel). The main points to consider from both documents can be summarised as:

- Wherever possible, pedestrians and vehicles should be kept on the same level and underpasses removed;
- Many underpasses are poorly designed and have inadequate lighting, poor sightlines and no surveillance;
- Many underpasses show signs of neglect such as graffiti, dirt and litter and can therefore become crime hotspots;
- If an underpass is considered necessary, ambiguous spaces such as gaps and corners should be avoided;
- Underpass approaches should be straight or nearly straight; exit must be visible on entering the subway.

2.63 To demonstrate each of the potential constraints which would need to be carefully considered should a tunnel be required, a constraints plan has been prepared which is included as Appendix D.

Alternative Options

2.64 Appendix E demonstrates a number of different options which could be delivered to improve pedestrian safety and experience when walking under Allbrook Railway Bridge. The Options considered are further detailed as:

Option 1: Addition of Pedestrian Guardrail with minimum carriageway clearance

2.65 Pedestrian guardrail could be provided to give pedestrians a physical barrier from the road under the Allbrook Railway Bridge. The guardrail would be 900mm in height and would be positioned against the back of the kerbline and would therefore have minimum achievable clearance from the carriageway.

2.66 This position would allow for a minimum width of 1.09m (at the eastern end of the bridge) with a width of 1.2m along the majority of its' length which would allow for a wheelchair or mobility scooter to be accommodated along the length of the bridge, with two-way pedestrian movement also achievable for the majority of its' length in accordance with MfS guidance.

Option 2: Addition of Pedestrian Guardrail with 450mm carriageway clearance

2.67 Option 2 would provide 900mm guardrail which is positioned 450mm from the carriageway edge in accordance with HCC's standard requirements. Whilst providing more of a buffer from the carriageway and in turn moving pedestrians further from the carriageway edge, this position would provide less room for pedestrians than Option 1, with a minimum width of 0.76m.

2.68 As a width of 0.76m would not suitably accommodate wheelchair movement in accordance with MfS guidance, this option is not considered to be as desirable, albeit no mobility scooter or wheelchair movements were recorded across the 7 day surveys.

Option 3: Double Stacked Kerbs

2.69 Option 3 would see the implementation of double-stacked kerbs along the length of the footway under the bridge, which would allow for a buffer for pedestrians from the carriageway. Whilst not a physical barrier, this option would allow for a minimum of 1.16m wide footways, with the footways measuring 1.27m in width along the majority of its' length. A double stack kerb also links with improved vertical clearances if the double stack was provided via 150mm lowering of the existing surface course as considered in greater detail in the next Chapter of this report. Double stack kerbs have been used by HCC in locations elsewhere in the Borough, including sections of Hamble Lane and on the Bishopstoke Road Rail Bridge in combination with guard railing.

2.70 As demonstrated in **Appendix E**, there are other options which could be further investigated, such as providing a visual buffer by way of white lining along the edge of the footway, reflective bollards along the length of the footway to provide an intermittent buffer (but retain the full width for the majority of its' length) or pedestrian guardrail on a low height brick wall to provide a physical barrier between vehicles and pedestrians.

2.71 Of the options outlined above, the preferred solution at this stage which is incorporated into the design within **Appendix E** includes a double height kerb (which the potential for guard rail at the back of the second kerb).

Pedestrian Tunnel Option for Itchen Way

2.72 Consideration has also been given to improve pedestrian conditions for those using the Itchen Way footpath, who currently are required to cross Highbridge Road in the vicinity of the existing bridge. As outlined in more detail within the next chapter of this report, the SGO proposals have considered design parameters for a new bridge over the Itchen Navigation which result in a raised road level at the location of the footpath, and in doing so may provide an opportunity to provide a continuous traffic-free route under the new bridge so north/south movement on the Itchen Way is not impeded. The achievability of this would be assessed at the more detailed design stage.

Chapter Summary and Conclusions

2.73 This Chapter has considered location specific survey data in the context of the wider Eastleigh SGO proposals and confirmed the highest volume of pedestrian traffic occurs north/ south on Itchen Way at the weekend, with the highest volume of cycle traffic east/west on Highbridge Road during term-time. The highest volume of both pedestrian and cycle traffic was recorded on Sunday 22nd October (a sunny day).

2.74 During the road network peak hour periods low numbers of both pedestrians and cyclists are experienced across all scenarios using Allbrook Railway Bridge, with a maximum of 4 pedestrians and 9 cyclists in the peak weekday term-time hour, a maximum of 12 pedestrians and 3 cyclists in the peak weekend hour and a maximum of 10 pedestrians and 3 cyclists in the peak weekday half-term hour.

2.75 Of the pedestrian trips on Highbridge Road, very low volumes travel to/from the east, with Colden Common (the nearest origin/ destination) located 4km from Eastleigh Town Centre and 2km from Allbrook Railway Bridge.

2.76 There will be very low demand for pedestrians and cycles from the SGO to travel under the bridge due to the length of route from the nearest potential SGO house to Eastleigh Town Centre and much shorter and more scenic alternative routes are available via Bishopstoke. Future demand for pedestrians and cyclists travelling under Allbrook Railway Bridge will therefore not dramatically change from 2017 recorded levels.

2.77 Allbrook Railway Bridge currently has footways varying in width between 1.28m and 1.43m on just the northern side, with the narrowest point of 1.28m on the eastern side of the bridge. Over a five-year period, no recorded PIA incidents have occurred under the bridge, with only 6 incidents recorded at the Allbrook Hill/ Allbrook Way/ Twyford Road roundabout.

2.78 As part of Eastleigh SGO and associated North Bishopstoke bypass, the existing road alignment would be straightened which would allow for a continuous carriageway width of 6m, increased eastbound lane width adjacent to the footway and a continuous footway width of 1.3m along the length of the bridge which would be suitable to accommodate two pedestrians passing, as well as wheelchairs and buggies. The straightened road alignment would also allow for better car/pedestrian inter-visibility from the Itchen Way when crossing Highbridge Road.

2.79 Options to further improve pedestrian safety/ experience under the bridge have been considered, including a pedestrian tunnel separated from the carriageway. A number of practical and safety concerns have been raised over the suitability of a tunnel, particularly considering the low frequency of pedestrian movement (both existing and predicted for the future).

2.80 Other potential improvement options include the provision of guard railing, double stacked kerbs and reflective bollards. The extent of options implemented should be determined through further dialogue with EBC and HCC and independent Road Safety Audits should be undertaken, but the double stack kerb option (accompanied by guard railing if needed) links well with opportunities to improve vertical clearances under Allbrook Railway Bridge.

3. ROAD ALIGNMENT AND VERTICAL CLEARANCES

3.1 This Chapter provides an account of the existing and proposed vertical clearances achievable at Allbrook Railway Bridge. The existing arrangement is demonstrated in **Photographs 6** and **7**.

Photograph 6: Western Approach to Railway Bridge

Photograph 7: Eastern Approach to Railway Bridge

3.2 The aim of this Chapter is to provide an account of the existing constraints which have led to the advised height restriction of 3.7m and in turn the size of vehicles which currently are and are not able to pass under this bridge. This report then outlines proposed improvements to the horizontal and vertical alignments of the road under the bridge which could be delivered as part of the Eastleigh SGO.

Analysis of Existing Arrangement

3.3 A topographical survey of this area has been completed to provide a very detailed account of the existing profile of the road and bridge, which has allowed PBA to prepare existing cross sections and long sections of the area, which are included as **Appendix F**.

3.4 The existing bridge has a vertical clearance of 4.10m (minimum) and 4.15m (maximum) from the central camber of the road (i.e. the highest point of the carriageway), and until 4 years ago the previous signage advised that the clearance at the bridge was 4.0m.

3.5 Discussions with HCC have confirmed that they hold no record as to the specific reason why the height restriction signage was amended to this reduced level, but expect this was linked to an increase in HGVs unsuccessfully trying to navigate the route. Dialogue with Network Rail has confirmed that despite the change in signage, there have been a total of 5 bridge strikes in the last 3 years (1 in 2015, 2 in 2016 and 2 in 2017).

3.6 The cross-section drawing included in **Appendix F** demonstrates that large articulated vehicles with a height of 3.87m would be able to clear the bridge with a height of 4.10m. However, it is known that some bridge strikes have occurred in this location by articulated vehicles/large rigid trucks and as the long section drawing (also **Appendix F**) demonstrates, this is linked to the vertical alignment of Highbridge Road on approach to the Railway Bridge. Where the road at this location forms a dip beneath the bridge, the length of these larger vehicles increases the risk of striking through the angle of approach. This appears consistent with bridge strikes tending to be vehicles "stuck" under rather than striking the face of the bridge.

3.7 The practical clearances are therefore not as great as the 4.0m previously advertised, which no doubt led to the reduction in advertised clearance to 3.7m. **Figure 17** and **Appendix F** demonstrates a range of vehicle types, and highlights those which are and are not able to pass under the bridge, and those that are marginal.

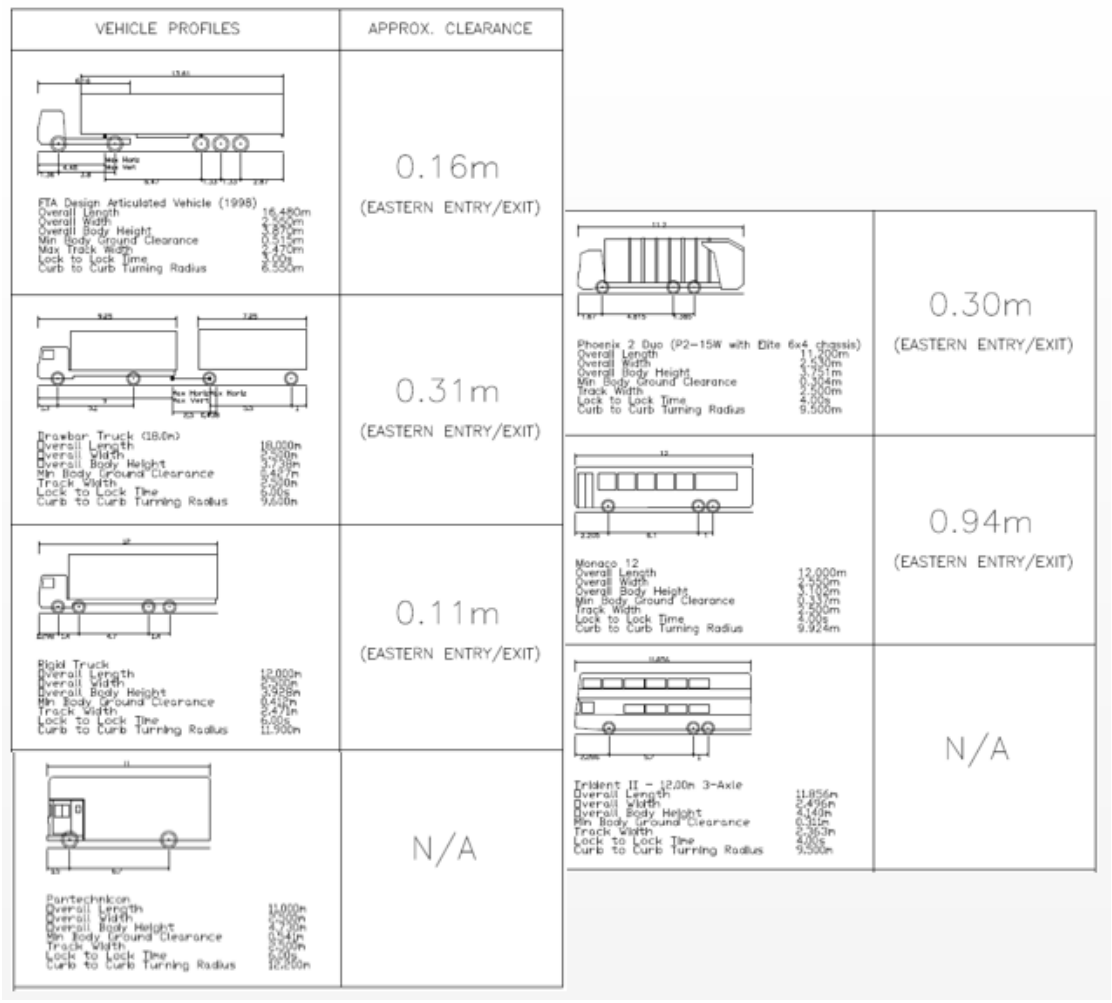


Figure 17: Range of Large Vehicles than can and cannot pass under Allbrook Railway Bridge
(where clearances are marked as N/A, these vehicles currently strike – more detail in Appendix F)

Guidance regarding Height Restricted Bridges and Existing Advanced Signage

3.8 There are legal signage requirements regarding bridges, in accordance with the Traffic Signs Manual (which sets out the codes to be followed in the use, siting and illumination of signs on all-purpose roads and motorways). These include red circle 'prohibit' signs and red triangle 'warning' signs, which legally require a vehicle over the identified dimensions not to pass.

3.9 The Traffic Signs Manual identifies that "*signs must give road users their message clearly and at the correct time. The message mush be unambiguous and speedily understood…and not too late for the safe performance of consequent manoeuvres*" (para 1.2).

3.10 Furthermore, Network Rail's *"Prevention of strikes on Bridges over Highways: A Protocol for Highway Managers and Bridge Owners"* (Issue 2, July 2014) states:

"It is essential that adequate advance warning of a height restriction is given to drivers. This is to avoid abortive travel to the bridge in the first place, and the possibility that having arrived at a low bridge,

drivers may be tempted to drive under the bridge. Therefore, advance signing at the last feasible turning point/junction before the bridge should be provided to enable drivers to reroute without having to turn around. Where practical, signs should be positioned away from junctions, roundabouts or other complex situations and large light sources or distractions to improve their likelihood of being seen." (para 2.05)

"Signs further away from the last junction may also be beneficial to give drivers the earliest opportunity to choose a different route. Joint working between neighbouring authorities will be required where such signs are required to be located beyond a Highway Authority's boundary." (para 2.06)

"From the above, the recommended system for signing a bridge at risk of bridge strikes is therefore as follows:
a) Signs attached to each elevation of the bridge accompanied by appropriate reflectorised hazard markings covering the width of carriageway to which the limit applies.
b) Post mounted signs on the road an appropriate distance in advance of the bridge on each approach to the bridge (it is essential that these signs are provided in advance of skew bridges to prevent vehicles striking a low skew bridge before passing any sign). It should be noted however that mandatory signs must be located to avoid restricting vehicular access to any adjacent entrance.
c) Advance signs advising of the restriction and the distance to it at the last junction on each approach to the bridge and on each leg of that junction.
d) Advance signs at the nearest major junction and on the related direction flag signs. Advance signing should make sense to drivers unfamiliar with the area. White on black signs (diagrams 2805, 2806 or 2806.1) to indicate routes for goods vehicles to high use sites are also a useful aid."(para 2.07)

3.11 A review of the existing signage on approach to the low bridge has identified the following existing provision:

Western Approach (from Allbrook Way)	
Signage on Immediate Approach	

Signage on Allbrook Way/ Allbrook Hill Roundabout	
Signage on Pitmore Road	

Eastern Approach (from Highbridge Road)	
Signage on Immediate Approach	 
Signage south of Brambridge junction	

3.12 Whilst there is advanced signage advising of the restricted height, there are opportunities to increase clarity, location and specification of the signage in accordance with Network Rail's guidance, which should help reduce the risk of overly large vehicles approaching the bridge, and these are assessed subsequently in this report.

Proposed Highway Alternations and Advanced Warning Opportunities

3.13 As previously described, the existing road under the bridge forms a dip whereby the road is lower in the middle of the bridge but higher at each end. As part of the bypass works, the road approaches to the bridge will be straightened and gradients altered, so that the existing dip is removed and large vehicles will have a more consistent clearance through the bridge.

3.14 Proposed long sections and horizontal alignments are included as Appendix G, which document in detail the increased clearances through the long section over the existing arrangement, achieved through realignment and regrading Highbridge Road approach to Allbrook Railway Bridge, as well as reduction in the level under the Railway Bridge by 150mm (linked with the double stack footway proposal).

3.15 The proposed changes would allow for larger vehicles to pass under the bridge more comfortably without striking, and allow alterations to the advanced signage to increase the height restriction above the 3.7m currently posted. The difference in clearances achievable through the proposed alteration works are summarised in Table 3.

Vehicle Type	Existing Vertical Clearance	Proposed Vertical Clearance
Articulated Vehicle (3.87m)	0.16m	0.33m
Drawbar Truck (3.73m)	0.31m	0.47m
Rigid Truck (3.93m)	0.11m	0.27m
Super Large Refuse Vehicle (3.75m)	0.30m	0.46m
Single Deck Bus (3.01m)	0.94m	1.11m
Double Deck Bus (4.14m)	n/a	n/a
Pantechnicon (4.73m)	n/a	n/a

Table 3: Summary of Clearances between Existing and Proposed Scenarios at Allbrook Railway Bridge (clearances measured through the profile of the vehicle track through the long section of road)

3.16 The vehicles observed as attempting the manoeuvre and becoming stuck under the bridge are primarily articulated vehicles, and the additional clearance provided by these improvement works would better accommodate the articulated vehicle movement (vertically as well as avoiding over-running oncoming lane) and overcome this current constraint.

Bridge over the Itchen Navigation

3.17 Options for the alignment of the new Highbridge Road across the Itchen Navigation have been reviewed, which include the potential for a new bridge over the Navigation, with the existing bridge to be demolished.

3.18 Engineering solutions for a new bridge across the Navigation has been considered with input by WYG from both an ecological and structural design perspective and JBA Consulting with regards to the Itchen Navigation flood levels. Criteria considered in the evolution of the options have included:

- The Itchen Navigation 1 in 100 year + climate change flood level of 15.6 AOD, and therefore it is necessary to achieve adequate clearance under the bridge structure to satisfy this criteria
- The 2'0" dia. main pipe to the north of the existing bridge is structurally independent of the bridge other than being built off the same abutments. Part of the existing abutments would therefore need to remain following removal of the existing bridge
- Shadowing under the bridge should be minimised to reduce the ecological impact
- Ensure pedestrian access to the Itchen Way from Highbridge Road is maintained for north and south movements
- Road profile appropriate to meet necessary highway design standards in the approach to Allbrook Railway Bridge to the east

3.19 A summary of the proposed bridge parameters relative to the existing bridge is provided in **Table 4**.

Design Criteria	Existing	Proposed
Materials	Reinforced concrete deck between brickwork abutments and wing walls. Deck was cast in-situ in two sections, reinforced with mild steel bars	Options being reviewed include reinforced concrete deck similar to existing, open truss deck and half-through bridge with two primary girders
Observed Clearance between Water Level and Bridge Soffit	0.9m	Proposed road surface level not to be lower than the existing
Loading	No load restrictions marked, so assumed to have a full 40/44T loading	Full 44T loading
Vehicle Restraint System (VRS)	Masonry parapet (in poor state of repair and not to modern requirements)	Masonry parapet with supporting steel could be feasible but alternative metallic "Armco" style barrier preferred to result in less shadowing

Table 4: Existing and Proposed Itchen Navigation Bridge Comparison

3.20 Based on the above parameters, the proposed carriageway surface over the Itchen Navigation would be the same level as the existing carriageway surface level at the equivalent position of the western extent of the new bridge (16.964m AOD) but with greater clearances in the central position (17.112m, c. 100mm higher) the eastern extent (17.313m AOD, c. 300mm higher), as demonstrated in the proposed long sections within **Appendix G**. A general arrangement of this area is provided within **Appendix H** along with indicative bridge structure cross section/long sections.

3.21 A review of the options has demonstrated that a bridge in this location would be feasible and could meet the objectives outlined in paragraph 3.18 and be considered an overall benefit compared to the existing situation. Further work is needed to advance detailed proposals at the appropriate stage of the project.

3.22 With regards to the impact on the Itchen Navigation and consultation with the Environment Agency (EA), the need for like for like floodplain compensatory storage is identified as a further design factor to assess as the detailed design progresses. There is sufficient landholding adjacent to the Itchen Navigation under control of the SGO to ensure that like for like compensatory storage is deliverable (including land on the current alignment of Highbridge Road), and once the detail of the quantum required is established through the detail design the locations for this storage can be assessed.

Further Advanced Signage

3.23 As **Table 3** highlights, the proposed alterations would not permit all large vehicles to pass under Allbrook Railway Bridge, with the two identified vehicles being greater in height than the vertical clearances in the horizontal plane of 4.10m. The following further options should also be considered, to provide clarity to these taller vehicles as to their ability to pass under Allbrook Railway Bridge safely in advance of their approach to allow alternative routes to be taken.

3.24 The existing signage is present on the last junction to each approach of the bridge, the approach to the bridge and on the bridge itself. However, at the junction of Brambridge with Highbridge Road, no advanced signage is in place from the Brambridge arm of the junction, and where signage is in place, it is potentially cited too late for vehicles to turn around.

3.25 To avoid abortive travel to the bridge, it would be beneficial to provide additional road signage at existing locations where it is not currently present, with the existing signage moved further away from the bridge to allow vehicles to turn around if required.

3.26 Signage could also be made clearer in line with Network Rail's 2014 guidance, including measures such as:

- Illumination of signage at Pitmore Road and Brambridge junctions
- Advanced signage on Allbrook Way, away from the existing 5 arm roundabout where drivers more likely to be distracted
- Enhanced signage at the relevant locations on the proposed North Bishopstoke and Allbrook Bypass

Infra-red Sensors

3.27 A second option would be to install infra-red sensors on the new bypass route at the height restriction of the bridge, so as if the vehicle passes through the beam (i.e. the beam is 'broken'), warning systems are triggered. The warning systems could include either visual (VAS) or audible warnings. An example of an infra-red sensor is demonstrated in **Photograph 8**, with this photograph taken at Malmesbury Road in Romsey on approach to the Greatbridge Road Railway Bridge.

Photograph 8: Infra-red Sensor at Malmesbury Road, Romsey

3.28 The proposed bypass route and adjoining side roads provide opportunities to successfully implement such a feature, locating these advanced sensors on the Allbrook Hill bypass with the ability for oversized HGVs to divert onto Pitmore Road. On the eastern approach, there is currently no opportunity for larger vehicles to turn, but an HGV turning route is proposed as part of the realigned Highbridge Road design, connecting back to the current Highbridge Road alignment as shown in **Appendix G**.

Physical Systems

3.29 Furthermore, protective beams could also be used to protect the structure of the bridge. There are different types of beam ranging from a full reinforced concrete 'steel box girder' to a smaller protective beam to absorb the energy of the impact. Alternatively, similar beams can be constructed away from the bridge, so that if a high vehicle strikes this structure the bridge itself is not impacted. An example of a protective beam is demonstrated in **Photograph 9**, with this photograph taken from the railway bridge at Greatbridge Road, Romsey.

Photograph 9: Protective beam at Greatbridge Road, Romsey

Bus Servicing of the Eastleigh SGO

3.30 As part of the sustainability appraisal on the SGO, consideration has been given to how the site could be served by public transport, including a review of existing bus services in the vicinity of the site and opportunities for diversion and enhancement of services.

3.31 There are currently 4 bus services which currently operate in the vicinity of the SGO, including the Bluestar 2 and Stagecoach 69 services (both double decker) and Xelabus X9 and X15 services (both single decker). Details of the routes and the frequency of these services are identified within **Appendix I.**

3.32 When assessing where these existing services may naturally offer opportunities for extension and enhancement, several options have been identified. These could include extension of Bluestar 2 (already a 15min frequency service) into the new District Centre and/or further extension into the eastern parcel of the SGO and routing back via Mortimers Lane. Stagecoach 69 could become a more regular service (half-hourly as opposed to hourly) with every other service routed through the whole of the SGO, whilst Xelabus could be increased and serve the western parcel of the SGO. These opportunities are highlighted on plan within **Appendix I**.

3.33 Ultimately there are multiple options available to serve the SGO via bus to popular local destinations (including Eastleigh, Winchester and Fareham) without the need for double decker buses to utilise the Allbrook link.

Chapter Summary and Conclusions from Network Rail

3.34 This Chapter provides an account of the existing and proposed vertical clearances achievable at Allbrook Railway Bridge.

3.35 The proposed changes to the road alignment on the eastern approach to the bridge (including vertical and horizontal alignment) and modest excavation works under the bridge (circa 150mm) would allow for larger vehicles to pass under the bridge more comfortably without striking (in particular articulated vehicles which have been observed to get stuck in the past), and allow alterations to the advanced signage to increase the height restriction above the 3.7m currently posted.

3.36 Existing and proposed signage, as well as other potential advanced warning measures, has been considered as part of a package of improvements that would assist larger vehicles travelling on the proposed North Bishopstoke bypass, and reduce the risk of bridge strikes at Allbrook Railway Bridge.

3.37 Network Rail have been consulted as part of the Local Plan consultation process and confirmed to EBC that:

"Network Rail is broadly supportive of the scheme. We understand that the developments are likely to increase road traffic but we are satisfied that with improved road alignments, it may reduce the frequency of damaging impacts to the railway structure. We also understand that if you were able to improve the highway sag curve then there may be an opportunity to change the maximum clearance height warning signs on the bridge. Whilst these proposals are shown diagrammatically on Drg 024/0036/001 it would be helpful (in due course) to clarify the proposed height restriction".

4. SUMMARY AND CONCLUSIONS

4.1 This Allbrook Appraisal has assessed two specific highway elements, including existing and proposed conditions for Non-Motorised Users (Chapter 2) and matters relating to alignment and clearances at Allbrook Rail Bridge and the road bridge over the Itchen Navigation (Chapter 3). This appraisal builds upon previous submissions made in representation to the draft EBC Local Plan in November 2017.

4.2 A number of opportunities and constraints have been identified through this report, which have informed the recommendations and options presented.

4.3 A number of measures to improve conditions for Non-Motorised Users in the vicinity of Allbrook Railway Bridge (in addition to considering opportunities to serve the SGO by bus), considering the current and future demands in this location by pedestrians and cyclists. These will continue to be assessed in more detail through close discussions with EBC and Hampshire County Council as the highway authority.

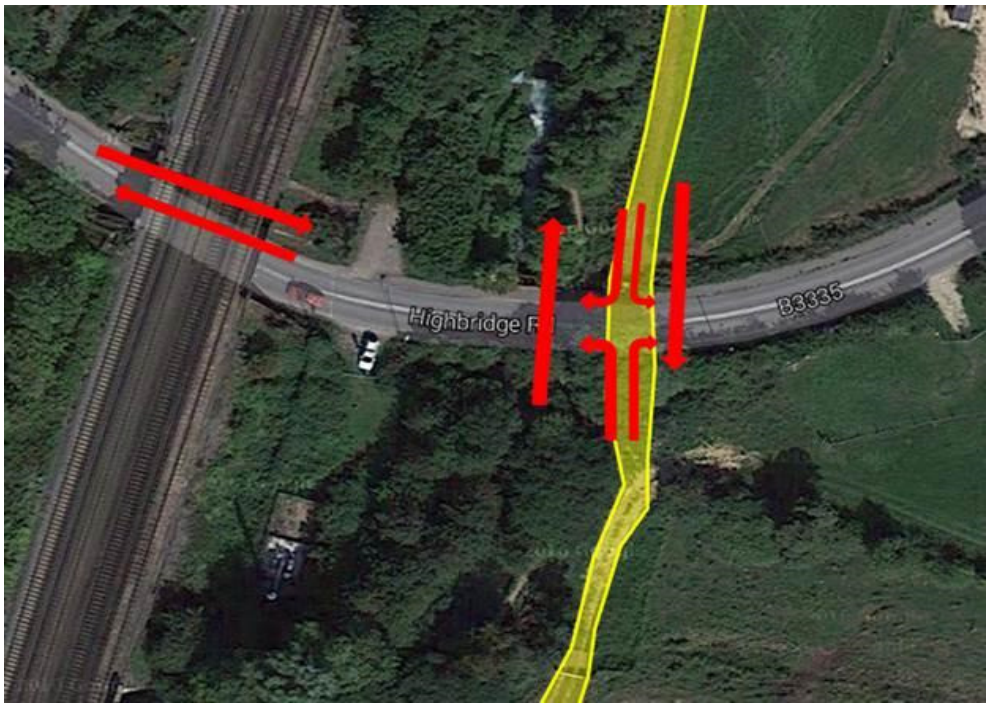
4.4 Horizontal alignment on the eastern side of Allbrook Railway Bridge will be significantly enhanced through the provision of a bridge over the Itchen Navigation, removing constraints to both vehicular and NMU movement through this section due to the current curved alignment.

4.5 Vertical alignment and in turn vertical clearance under Allbrook Railway Bridge will also be enhanced through modest lowering of the carriageway surface in combination with a new road profile over a new/replacement Itchen Navigation bridge. This will ease movement for some HGV traffic through this section of highway, but will also be supported by improved advanced warning measures and diversion route to the east of Allbrook Railway Bridge for those vehicles which remain overly tall to pass under the Railway Bridge.

4.6 This Allbrook Appraisal presents the continued direction of travel for the design, which will continue to evolve and develop in detail through the Local Plan process.

Appendix A

HIGHBRIDGE RD, ALLBROOK BRIDGE, ITCHEN WAY FOOTPATH, ALLBROOK
19 OCT TO 25 OCT 2017



PEDESTRIAN/CYCLE SURVEY

DATE THURS 19 OCT 2017
WEATHER DRY /OVERCAST/WINDY

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	3	0	0	0	0	1	0	0				4
8:00:00 AM	0	3	0	0	0	0	0	0	0				3
9:00:00 AM	0	0	0	0	0	0	0	1	0				1
10:00:00 AM	0	0	0	0	0	0	0	1	0				1
11:00:00 AM	0	1	0	0	1	0	0	0	0				2
12:00:00 PM	0	1	0	0	1	0	2	0	0				4
1:00:00 PM	0	1	0	0	0	0	0	0	2				3
2:00:00 PM	0	1	0	0	0	1	2	0	2				6
3:00:00 PM	0	1	0	0	0	0	0	0	5				6
4:00:00 PM	0	0	0	0	1	0	1	3	0				5
5:00:00 PM	0	5	0	0	0	0	0	2	0				7
6:00:00 PM	0	2	0	0	0	0	0	2	0				4

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	3
8:00:00 AM	0	4	0	0	1	0	0	0	0	0	0	0	5
9:00:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
10:00:00 AM	0	1	0	0	1	0	0	1	0	0	0	0	3
11:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
2:00:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
3:00:00 PM	0	2	0	1	1	0	0	0	0	0	0	0	4
4:00:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
5:00:00 PM	0	1	0	0	0	0	0	0	1	0	0	0	2
6:00:00 PM	0	3	0	0	1	0	0	0	0	0	0	0	4

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	1	1	0	0	0	0	2
8:00:00 AM	0	0	0	0	0	2	1	0	0	0	0	3
9:00:00 AM	0	0	0	0	1	0	1	0	0	0	0	2
10:00:00 AM	0	0	0	0	0	0	3	0	0	0	0	3
11:00:00 AM	0	0	0	0	1	0	1	0	0	0	0	2
12:00:00 PM	0	0	0	0	0	2	0	0	0	0	0	2
1:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:00:00 PM	0	0	0	0	0	1	0	0	0	0	0	1
3:00:00 PM	0	0	0	0	0	2	2	1	0	0	0	5
4:00:00 PM	0	0	0	0	1	0	1	0	0	0	0	2
5:00:00 PM	0	0	0	0	1	0	1	0	0	0	0	2
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	1
8:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
11:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
12:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00:00 PM	0	0	0	1	0	0	1	0	0	0	0	2
2:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:00:00 PM	0	0	0	0	0	0	0	4	0	0	0	4
4:00:00 PM	0	0	0	0	0	1	0	0	0	0	0	1
5:00:00 PM	0	0	0	0	0	0	0	1	0	0	0	1
6:00:00 PM	0	0	0	0	0	0	2	0	0	0	0	2

DATE FRI 20 OCT 2017
WEATHER DRY AND SUNNY

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	2	0	0	1	0	1	1	0	0	0	0	5
8:00:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
9:00:00 AM	0	1	0	0	0	0	0	1	3	0	0	0	5
10:00:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
11:00:00 AM	0	2	0	0	0	0	1	0	2	0	0	0	5
12:00:00 PM	0	2	0	0	0	0	5	0	0	0	0	0	7
1:00:00 PM	0	2	0	0	0	0	0	0	1	0	0	0	3
2:00:00 PM	0	3	0	0	1	0	2	3	0	0	0	0	9
3:00:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:00:00 PM	0	1	0	0	3	0	2	0	1	0	0	0	7
5:00:00 PM	0	4	0	0	1	0	1	0	0	0	0	0	6
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:00:00 AM	0	3	0	0	1	0	0	0	0	0	0	0	4
9:00:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
10:00:00 AM	0	1	0	0	0	0	5	1	0	0	0	0	7
11:00:00 AM	0	1	0	0	0	0	2	3	0	0	0	0	6
12:00:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
1:00:00 PM	0	0	0	1	0	0	5	0	1	0	0	0	7
2:00:00 PM	0	2	0	0	0	0	0	0	1	0	0	0	3
3:00:00 PM	0	2	0	1	2	0	0	0	0	0	0	0	5
4:00:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
5:00:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	1	0	1	0	0	0	2
8:00:00 AM	0	1	0	0	0	0	2	0	0	0	0	3
9:00:00 AM	0	0	0	0	0	0	0	4	0	0	0	4
10:00:00 AM	0	0	0	0	0	0	5	1	0	0	0	6
11:00:00 AM	0	0	0	0	0	0	2	0	0	0	0	2
12:00:00 PM	0	0	0	0	0	0	7	0	0	0	0	7
1:00:00 PM	0	0	0	0	0	0	2	0	0	0	0	2
2:00:00 PM	0	0	0	0	0	1	8	0	0	0	0	9
3:00:00 PM	0	0	0	0	0	1	4	0	0	0	0	5
4:00:00 PM	0	0	0	2	0	1	4	0	0	0	0	7
5:00:00 PM	0	0	0	1	0	0	3	0	0	0	0	4
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	1
8:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
9:00:00 AM	0	0	0	0	0	0	3	0	0	0	0	3
10:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
11:00:00 AM	0	0	0	0	0	2	3	0	0	0	0	5
12:00:00 PM	0	0	0	0	0	0	3	0	0	0	0	3
1:00:00 PM	0	0	0	1	0	0	0	3	0	0	0	4
2:00:00 PM	0	0	0	0	0	0	4	3	0	0	0	7
3:00:00 PM	0	0	0	0	0	0	7	0	0	0	0	7
4:00:00 PM	0	0	0	0	0	0	4	1	0	0	0	5
5:00:00 PM	0	0	0	0	0	0	2	2	0	0	0	4
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

DATE SAT 21 OCT 2017
WEATHER SUNNY INTERVALS/ SHOWERS

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	1
8:00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
9:00:00 AM	0	0	0	0	2	0	0	4	1	0	0	0	7
10:00:00 AM	0	1	0	0	0	0	2	0	1	0	0	0	4
11:00:00 AM	0	0	0	0	2	0	0	1	2	0	0	0	5
12:00:00 PM	0	1	0	0	0	0	3	1	0	0	0	0	5
1:00:00 PM	0	2	1	0	0	0	2	0	2	0	0	0	7
2:00:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
3:00:00 PM	0	1	0	0	0	0	1	0	2	0	0	0	4
4:00:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	3
5:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
6:00:00 PM	0	0	0	0	0	0	2	1	0	0	0	0	3

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	3
9:00:00 AM	0	1	0	0	0	0	0	2	1	0	0	0	4
10:00:00 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
11:00:00 AM	0	1	0	0	2	0	3	0	0	0	1	0	7
12:00:00 PM	0	1	0	1	1	0	1	0	0	0	1	0	5
1:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
4:00:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	1	0	0	0	0	0	1
8:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
9:00:00 AM	0	0	0	0	0	2	2	4	0	0	0	8
10:00:00 AM	0	0	0	0	0	1	4	4	0	0	0	9
11:00:00 AM	0	0	0	0	0	2	1	1	0	0	0	4
12:00:00 PM	0	0	0	0	0	5	1	0	0	0	0	6
1:00:00 PM	0	0	0	0	0	0	4	0	0	0	0	4
2:00:00 PM	0	0	0	5	0	0	0	0	0	0	0	5
3:00:00 PM	0	0	0	0	0	0	3	0	0	0	0	3
4:00:00 PM	0	0	0	0	0	0	2	1	0	0	0	3
5:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	1	0	2	0	0	0	3
8:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
10:00:00 AM	0	0	0	0	0	0	2	0	0	0	0	2
11:00:00 AM	0	0	0	0	0	1	2	0	0	0	0	3
12:00:00 PM	0	0	0	0	0	0	3	0	0	0	0	3
1:00:00 PM	0	0	0	3	0	0	2	2	0	0	1	8
2:00:00 PM	0	0	0	0	0	0	1	2	0	0	0	3
3:00:00 PM	0	0	0	0	0	0	0	2	0	0	0	2
4:00:00 PM	0	0	0	0	0	1	4	2	0	0	0	7
5:00:00 PM	0	0	0	0	0	0	0	2	0	0	0	2
6:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	1

DATE SUN 22 OCT 2017
WEATHER SUNNY

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	3
8:00:00 AM	0	4	0	0	0	0	1	0	2	0	0	0	7
9:00:00 AM	0	0	0	0	0	0	1	3	0	0	0	0	4
10:00:00 AM	0	1	0	0	0	0	4	1	4	0	0	0	10
11:00:00 AM	0	4	0	0	0	0	4	1	4	0	0	1	14
12:00:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	2
1:00:00 PM	0	4	0	0	2	0	7	1	2	0	0	0	16
2:00:00 PM	0	4	0	0	1	0	2	0	0	0	0	0	7
3:00:00 PM	0	1	0	0	1	0	13	0	1	0	0	0	16
4:00:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
5:00:00 PM	0	2	0	0	0	0	0	1	2	0	0	0	5
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	2
9:00:00 AM	0	2	0	0	0	0	2	2	1	0	0	0	7
10:00:00 AM	0	4	0	0	0	0	0	4	1	0	0	0	9
11:00:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
12:00:00 PM	0	3	0	0	0	0	1	0	2	0	0	0	6
1:00:00 PM	0	3	0	0	0	1	1	3	0	0	0	0	8
2:00:00 PM	0	1	0	0	0	0	0	3	0	0	0	0	4
3:00:00 PM	0	2	0	0	0	0	3	1	0	0	0	0	6
4:00:00 PM	0	6	0	0	0	0	0	2	0	0	0	0	8
5:00:00 PM	0	0	0	0	1	0	2	0	0	0	0	0	3
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	1	0	0	0	0	0	1
8:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
9:00:00 AM	0	0	0	0	0	1	7	1	0	0	0	9
10:00:00 AM	0	0	0	0	0	3	9	0	1	0	0	13
11:00:00 AM	0	0	0	2	0	2	6	0	0	0	0	10
12:00:00 PM	0	0	0	0	0	0	19	2	0	0	0	21
1:00:00 PM	0	0	0	0	0	1	9	2	0	0	0	12
2:00:00 PM	0	0	0	1	0	1	4	0	0	0	0	6
3:00:00 PM	0	0	0	1	0	0	7	3	0	0	0	11
4:00:00 PM	0	0	0	0	0	1	3	0	0	0	0	4
5:00:00 PM	0	0	0	0	0	0	2	0	0	0	0	2
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	0	0	0	0	1	1	0	0	0	0	2
9:00:00 AM	0	0	0	0	0	0	3	0	0	0	0	3
10:00:00 AM	0	0	0	3	0	1	7	1	0	0	0	12
11:00:00 AM	0	0	0	0	0	0	4	1	0	0	0	5
12:00:00 PM	0	0	0	0	0	0	12	8	0	0	0	20
1:00:00 PM	0	0	0	0	1	2	3	0	0	0	1	7
2:00:00 PM	0	0	0	0	0	0	8	11	0	0	0	19
3:00:00 PM	0	0	0	0	0	0	5	1	0	0	0	6
4:00:00 PM	0	0	0	0	0	2	4	9	0	0	0	15
5:00:00 PM	0	0	0	0	0	0	2	1	0	0	0	3
6:00:00 PM	0	0	0	1	0	0	0	1	0	0	0	2

DATE MON 23 OCT 2017
WEATHER RAIN IN THE MORNING/DRY PM

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	2
8:00:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	4
9:00:00 AM	0	1	0	0	0	0	0	3	0	0	0	0	4
10:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
11:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
12:00:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
1:00:00 PM	0	0	0	0	3	2	3	0	0	0	0	0	8
2:00:00 PM	0	0	0	0	0	0	1	3	0	0	0	0	4
3:00:00 PM	0	1	0	0	0	0	2	0	1	0	0	0	4
4:00:00 PM	0	3	0	0	0	0	2	1	1	0	0	0	7
5:00:00 PM	0	2	0	0	2	0	1	3	0	0	0	0	8
6:00:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
9:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
10:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
12:00:00 PM	0	0	0	0	0	0	4	1	0	0	0	0	5
1:00:00 PM	0	0	0	0	0	1	0	2	0	0	0	0	3
2:00:00 PM	0	1	0	0	3	0	0	1	1	0	0	0	6
3:00:00 PM	0	3	0	0	0	0	0	5	0	0	0	0	8
4:00:00 PM	0	3	0	0	0	0	0	1	0	0	0	0	4
5:00:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
6:00:00 PM	0	2	0	0	0	0	2	0	0	0	0	0	4

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	0	0	2	0	1	1	0	0	0	0	4
9:00:00 AM	0	0	0	1	0	0	2	1	0	0	0	4
10:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	1
12:00:00 PM	0	0	0	0	0	2	5	2	0	0	0	9
1:00:00 PM	0	0	0	2	0	3	3	2	0	0	0	10
2:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
3:00:00 PM	0	0	0	0	0	0	0	3	0	0	0	3
4:00:00 PM	0	0	0	0	2	0	0	0	0	0	0	2
5:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00:00 PM	0	0	0	0	0	2	0	0	0	0	0	2

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	0	0	1	0	0	0	0	0	0	0	1
9:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	1
11:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00:00 PM	0	0	0	0	0	1	2	0	0	0	0	3
2:00:00 PM	0	0	0	0	0	0	2	1	0	0	0	3
3:00:00 PM	0	0	0	0	0	1	3	5	0	0	0	9
4:00:00 PM	0	0	0	1	0	0	1	0	0	0	0	2
5:00:00 PM	0	0	0	0	0	0	0	4	0	0	0	4
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

DATE TUES 24 OCT 2017
WEATHER OVERCAST/ SHOWERS FROM APPROX 15:00

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	4	0	0	1	0	1	1	0	0	0	0	7
8:00:00 AM	0	2	0	0	0	0	1	1	1	0	0	0	5
9:00:00 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
10:00:00 AM	0	2	0	0	0	0	2	1	0	0	0	0	5
11:00:00 AM	0	0	1	0	0	0	0	1	2	0	0	1	5
12:00:00 PM	0	1	0	0	1	0	3	0	0	0	0	0	5
1:00:00 PM	0	2	0	0	1	0	0	2	0	0	0	0	5
2:00:00 PM	0	1	0	0	0	0	1	3	0	0	0	0	5
3:00:00 PM	0	4	0	0	0	0	1	2	1	0	0	0	8
4:00:00 PM	0	1	0	0	0	0	0	2	1	0	0	0	4
5:00:00 PM	0	3	0	0	0	0	1	0	1	0	0	0	5
6:00:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
8:00:00 AM	1	3	0	0	0	0	0	1	0	0	0	0	5
9:00:00 AM	0	2	0	0	0	0	0	1	0	0	0	0	3
10:00:00 AM	0	0	0	0	0	0	0	3	2	0	0	0	5
11:00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
12:00:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
1:00:00 PM	0	0	0	0	0	0	3	0	0	0	0	0	3
2:00:00 PM	0	2	0	0	0	0	0	2	0	0	0	0	4
3:00:00 PM	0	2	0	0	0	0	1	3	1	0	0	0	7
4:00:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:00:00 PM	0	2	0	0	0	0	1	2	0	0	0	0	5
6:00:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	1	0	0	0	0	0	1
8:00:00 AM	0	0	0	0	0	0	1	1	0	0	0	2
9:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00 AM	0	0	0	0	0	0	2	2	0	0	0	4
11:00:00 AM	0	0	0	0	0	1	2	1	0	0	0	4
12:00:00 PM	0	0	0	1	0	1	3	0	0	0	0	5
1:00:00 PM	0	0	0	0	0	3	1	0	0	0	0	4
2:00:00 PM	0	0	0	0	0	0	1	1	0	0	0	2
3:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
4:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	1	1	0	0	0	2
8:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00 AM	0	0	0	0	0	0	0	1	0	0	0	1
11:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00:00 PM	0	0	0	1	0	0	0	0	0	0	0	1
1:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
2:00:00 PM	0	0	0	0	0	4	3	0	0	0	0	7
3:00:00 PM	0	0	0	0	0	0	1	1	0	0	0	2
4:00:00 PM	0	0	0	0	1	1	0	0	0	0	0	2
5:00:00 PM	0	0	0	0	0	1	0	0	0	0	0	1
6:00:00 PM	0	0	0	0	0	1	0	0	0	0	0	1

DATE WEDS 25 OCT 2017
WEATHER SUNNY

FROM BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	2	0	0	1	0	0	1	2	0	0	0	6
8:00:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	4
9:00:00 AM	0	3	0	0	0	0	2	0	0	0	0	0	5
10:00:00 AM	0	2	0	0	1	0	4	0	2	0	0	0	9
11:00:00 AM	0	2	0	0	0	0	0	1	1	0	0	0	4
12:00:00 PM	0	2	0	0	0	0	0	0	7	0	0	0	9
1:00:00 PM	0	2	0	0	0	0	1	0	3	0	0	0	6
2:00:00 PM	0	0	0	0	0	0	7	0	0	0	1	0	8
3:00:00 PM	0	2	0	0	0	0	2	0	4	0	0	0	8
4:00:00 PM	0	1	0	0	0	0	1	1	2	0	0	0	5
5:00:00 PM	0	3	0	0	0	0	1	0	3	0	0	0	7
6:00:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	3

TO BRIDGE

TIME	CYCLISTS ON ROAD			CYCLISTS ON FWAY			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
8:00:00 AM	0	4	0	0	0	0	0	1	0	0	0	0	5
9:00:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
10:00:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	2
11:00:00 AM	0	2	0	0	0	0	0	2	0	0	0	0	4
12:00:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
1:00:00 PM	0	0	0	0	0	0	0	0	3	0	0	0	3
2:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
3:00:00 PM	0	1	0	0	1	0	0	0	4	0	0	0	6
4:00:00 PM	0	5	0	0	0	0	0	1	2	0	0	0	8
5:00:00 PM	0	2	0	0	0	0	0	0	3	0	0	0	5
6:00:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2

FROM ITCHEN WAY SOUTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	2	0	0	0	0	0	2
8:00:00 AM	0	0	0	0	1	0	1	0	0	0	0	2
9:00:00 AM	0	0	0	0	1	0	0	0	0	0	0	1
10:00:00 AM	0	0	0	0	0	1	1	0	0	0	0	2
11:00:00 AM	0	0	0	0	0	0	2	0	0	0	0	2
12:00:00 PM	0	0	0	1	0	1	4	0	0	0	0	6
1:00:00 PM	0	0	0	0	0	6	2	0	1	0	0	9
2:00:00 PM	0	0	0	0	0	5	0	0	1	0	0	6
3:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00:00 PM	0	0	0	0	0	0	4	0	0	0	0	4
5:00:00 PM	1	0	0	0	0	1	0	0	0	0	0	2
6:00:00 PM	0	0	0	0	0	1	0	0	0	0	0	1

FROM ITCHEN WAY NORTH

TIME	CYCLISTS THEN JOIN ROAD		CYCLISTS STAY ON FWAY THEN TURN			PEDESTRIANS			PEDS WITH BUGGIES			TOTALS
	LEFT	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	LEFT	AHEAD	RIGHT	
7:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00 AM	0	0	0	1	0	0	0	0	0	0	0	1
9:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00:00 AM	0	0	0	0	2	0	2	0	0	0	0	4
12:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
2:00:00 PM	0	0	0	0	0	0	9	1	0	1	1	12
3:00:00 PM	0	0	0	0	0	1	1	1	0	0	0	3
4:00:00 PM	0	0	0	0	1	0	0	10	0	0	0	11
5:00:00 PM	0	0	0	0	0	1	4	5	0	0	0	10
6:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0

Appendix B

Accidents between dates **01/07/2012 and 30/06/2017** (60) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

Notes:

Selected Polygon:NS CHQSR1017078 - ALLBROOK

120462059 27/11/2012 Time 1730 Vehicles 2 Casualties 1 Slight
E:445662 N: 121053 First Road: A 335 Road Type Single carriageway
Speed limit: 40 Junction Detail: Roundabout Give way or controlled B 3335
Crossing: Control None Facilities: None within 50m Road surface Dry
Darkness: street lights present and lit Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 2	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 2	Very Likely
3rd:	Sudden braking	Vehicle 2	
4th:			
5th:			
6th:			

VEH 1 (CAR) TRAVELLING S ALONG A335 ALLBROOK WAY IN HEAVY TRAFFIC BRAKED. VEH 2 (CAR) FAILED TO STOP IN TIME AND COLLIDED WITH THE REAR OF VEH 1.
Occurred on A335 ALLBROOK WAY AT JUNCTION WITH B3335 ALLBROOK HILL, EASTLEIGH, HAMPSHIRE

Vehicle Reference 1 Car Stopping
Vehicle movement from N to S No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 71 Female
Not hit and run Breath test Negative
Left hand drive: No

Vehicle Reference 2 Car Stopping
Vehicle movement from N to S No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 51 Female
Not hit and run Breath test Negative
Left hand drive: No

Casualty Reference: 1 Vehicle: 2 Age: 51 Female Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Accidents between dates **01/07/2012 and 30/06/2017** (60) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

Notes:

140037104 31/01/2014 Time 1720 Vehicles 2 Casualties 1 Slight
E: 445637 N: 121006 First Road: A 335 Road Type 1
Speed limit: 30 Junction Detail: Roundabout Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Wet/Damp
Darkness: street lights present and lit Raining without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

VEH 1 (CAR) TRAVELLING N ALONG A335 TWYFORD ROAD AROUND RBT, COLLIDES WITH VEH 2 (P/CYCLE) TRAVELLING IN THE SAME DIRECTION, CAUSING THE RIDER TO FALL OFF AND VEH 1 RAN OVER RIDERS FOOT
Occurred on A335 TWYFORD ROAD AT JUNCTION WITH WOODSIDE AVENUE, EASTLEIGH, HAMPSHIRE

Vehicle Reference 1 Car Going ahead other
Vehicle movement from S to N No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Nearside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver Female
Not hit and run Breath test Driver not contacted
Left hand drive: No

Vehicle Reference 2 Pedal Cycle Going ahead other
Vehicle movement from S to N No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 40 Male
Not hit and run Breath test Not applicable
Left hand drive: No

Casualty Reference: 1 Vehicle: 2 Age: 40 Male Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not known

Accidents between dates **01/07/2012 and 30/06/2017** (60) months

Selection: **Notes:**

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

160275169 23/07/2016 Time 1148 Vehicles 2 Casualties 1 Slight
E: 445702 N: 121030 First Road: B 3335 Road Type Single carriageway
Speed limit: 30 Junction Detail: Not within 20m of junction

Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None

Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to judge other persons path or speed	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 2	Possible
3rd:	Loss of control	Vehicle 1	Possible
4th:	Travelling too fast for conditions	Vehicle 2	Possible
5th:			
6th:			

VEH 1 (M/CYCLE) WAS TRAV W ON B3335 ALLBROOK HILL WHEN IT WAS CONFRONTED WITH VEH 2 (CAR) APPROACHING FROM THE OPPOSITE DIRECTION. DUE TO VEHICLES PARKED ON BOTH SIDES OF THE ROAD, THE RIDER OF VEH 1 HAD NOWHERE TO GO AND FELL FROM THE MACHINE.
Occurred on B3335 ALLBROOK HILL 27 METRES EAST OF A335 TWYFORD ROAD, EASTLEIGH, HAMPSHIRE

Vehicle Reference 1 Motorcycle over 500cc Going ahead other
Vehicle movement from E to W No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Did not impact Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 55 Male
Not hit and run Breath test Driver not contacted
Left hand drive: No

Casualty Reference: 1 Vehicle: 1 Age: 55 Male Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Vehicle Reference 2 Car Going ahead other
Vehicle movement from W to E No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Not at, or within 20M of Jct First impact Did not impact Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver Not traced
Not hit and run Breath test Driver not contacted
Left hand drive: No

Accidents between dates **01/07/2012 and 30/06/2017** (60) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

Notes:

44170043009 03/02/2017 Time 0810 Vehicles 2 Casualties 1 Slight
E: 445660 N: 121040 First Road: A 335 Road Type 1
Speed limit: 40 Junction Detail: Roundabout Give way or controlled B 3335
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

VEH 1 (CAR) TRAVELLING SE ALONG A335 ALLBROOK WAY ENTERS THE RBT ACROSS THE PATH OF VEH 2 (P/CYCLE) TRAVELLING NE AROUND A335 ALLBROOK RBT INTENDING TO EXIT ONTO B3335 ALLBROOK HILL AND COLLIDES, KNOCKING THE RIDER OFF.
Occurred on A335 ALLBROOK WAY AT JUNCTION WITH B3335 ALLBROOK HILL, EASTLEIGH, HAMPSHIRE

Vehicle Reference 1 Car Going ahead other
Vehicle movement from NW to SE No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Offside Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 49 Female
Not hit and run Breath test Negative
Left hand drive: No

Vehicle Reference 2 Pedal Cycle Going ahead other
Vehicle movement from SW to NE No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 43 Male
Not hit and run Breath test Not applicable
Left hand drive: No

Casualty Reference: 1 Vehicle: 2 Age: 43 Male Driver/rider Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Yes

Accidents between dates **01/07/2012 and 30/06/2017** (60) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

Notes:

44170112968 26/03/2017 Time 1650 Vehicles 2 Casualties 1 Slight
E:445655 N: 120995 First Road: A 335 Road Type Single carriageway
Speed limit: 30 Junction Detail: Roundabout Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: Elsewhere DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Following too close	Vehicle 2	Possible
2nd:	Sudden braking	Vehicle 1	Possible
3rd:	Failed to look properly	Vehicle 2	
4th:			
5th:			
6th:			

VH1 (CAR) TRAVELLING N ON A335 TYWFORD ROAD SLOWS AND STOPS AT ROUNDABOUT. VH2 (CAR0 TRAVELLING BEHIND VH1 FAILS TO SEE THAT VH1 HAS STOPPED AND COLLIDES WITH REAR OF VH1.
Occurred on A335 TYWFORD ROAD AT JUNCTION WITH ALLBROOK HILL, EASTLEIGH, HAMPSHIRE

Vehicle Reference 1 Car Stopping
Vehicle movement from S to N No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 50 Male
Not hit and run Breath test Driver not contacted
Left hand drive: No

Casualty Reference: 1 Vehicle: 1 Age: 6 Female Passenger Severity: Slight
Not a pupil
Seatbelt Not Applicable Cycle helmet: Not a cyclist

Back seat

Vehicle Reference 2 Car Stopping
Vehicle movement from S to N No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Jct Approach First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver Unknown
Not hit and run Breath test Driver not contacted
Left hand drive: No

Accidents between dates **01/07/2012 and 30/06/2017** (60) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

Notes:

120444198 14/11/2012 Time 1200 Vehicles 2 Casualties 1 Slight
E: 445624 N: 121016 First Road: A 335 Road Type Single carriageway
Speed limit: 40 Junction Detail: Roundabout Give way or controlled Unclassified
Crossing: Control None Facilities: None within 50m Road surface Dry
Daylight Fine without high winds
Special Conditions at Site None Carriageway Hazards: None
Place accident reported: At scene DfT Special Projects:

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 2	Possible
3rd:	Following too close	Vehicle 2	Very Likely
4th:	Failed to judge other persons path or speed	Vehicle 1	Very Likely
5th:			
6th:			

VEH 1 (CAR) TRAVELLING E ALONG WOODSIDE AVE, GOES TO ENTER RBT BUT AT LAST MOMENT BRAKES FOR VEH APPROACHING FROM RIGHT AT SPEED, RESULTING IN VEH 2 (CAR) BEHIND TO COLLIDE INTO REAR OF VEH 1.
Occurred on A335 TYWFORD ROAD AT JUNCTION WITH WOODSIDE AVENUE, EASTLEIGH, HAMPSHIRE

Vehicle Reference 1 Car Stopping
Vehicle movement from W to E No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Back Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 37 Female
Not hit and run Breath test Negative
Left hand drive: No

Casualty Reference: 1 Vehicle: 1 Age: 37 Female Driver/rider Severity: Slight
Not a pupil
Seatbelt Unknown Cycle helmet: Not a cyclist

Vehicle Reference 2 Car Going ahead other
Vehicle movement from W to E No tow / articulation Leaving the main road
On main carriageway No skidding, jack-knifing or overturning
Location at impact Mid Junction - on roundabout or r First impact Front Hit vehicle:
Hit object in road None Off road: None
Did not leave carr Age of Driver 30 Male
Not hit and run Breath test Negative
Left hand drive: No

Accidents between dates **01/07/2012** **and** **30/06/2017** (60) months

Selection:

Selected using Pre-defined Query : ; Refined using Accidents within selected Polygons -HC - RPU Statistics Request ("NS CHQSR1017078 - ALLBROOK")

Notes:

Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	0	0	3	3
2-wheeled motor vehicles	0	0	1	1
Pedal cycles	0	0	2	2
Horses & other	0	0	0	0
Total	0	0	6	6

Casualties:

	Fatal	Serious	Slight	Total
Vehicle driver	0	0	2	2
Passenger	0	0	1	1
Motorcycle rider	0	0	1	1
Cyclist	0	0	2	2
Pedestrian	0	0	0	0
Other	0	0	0	0
Total	0	0	6	6

Appendix C

NORTH

NORTHERN LAND PARCEL FOOTWAY ACCESS

SHARED USE FOOTWAY/CYCLEWAY

REALIGNMENT OF PITMORE ROAD

FORMAL CROSSING POINT WITH REFUGE ISLAND

PROPOSED RIGHT TURN LANE ARRANGEMENT TO IMPROVE TRAFFIC FLOWS ALONG PROPOSED BYPASS ROUTE

SHARED USE LINK FROM ALLBROOK HILL TO PROPOSED BYPASS

FOOTWAY WIDTH FROM SOUTH RETAINED THROUGH HERE BEFORE INCREASING TO 2.0m WIDTH AT PITMORE ROAD JUNCTION

EXISTING ALLBROOK HILL CLOSED OFF AND TURNED INTO CUL-DE-SAC

SHARED USE LINK FROM PROPOSED BYPASS TO ALLBROOK HILL

FOOTWAY REMOVED ON SOUTHERN SIDE BUT ALL POINTS OF ACCESS RETAINED

EXISTING DIMENSIONS AND ARRANGEMENT RETAINED UNDER ALLBROOK RAILWAY BRIDGE

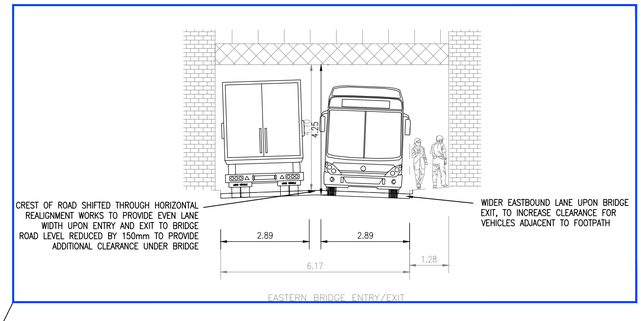
ALTERATIONS TO HORIZONTAL AND VERTICAL ALIGNMENT TO IMPROVE VEHICULAR ACCESS/EGRESS UNDER ALLBROOK RAILWAY BRIDGE

PROPOSED BRIDGE OVER RIVER ITCHEN, INDICATIVELY SHOWN

IMPROVED PEDESTRIAN VISIBILITY (1.5m x 43m) FOR WALKERS CROSSING ROAD

ITCHEN WAY TO TIE IN TO NEW BRIDGE LEVELS

REALIGNMENT OF B3335 HIGHBRIDGE ROAD



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3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
5. THIS DRAWING SHOULD ONLY BE USED FOR CONSTRUCTION IF THE PROJECT PHASE IN THE TITLE FRAME BELOW IS SHOWN AS "CONSTRUCTION". PAUL BASHAM ASSOCIATES TAKE NO RESPONSIBILITY FOR CONSTRUCTION WORKS UNDERTAKEN TO DRAWINGS WHICH ARE NOT MARKED UNDER THIS PHASE.

LEGEND

EARTHWORKS/BANKING (1:3 SLOPE U.N.O)

125.00 EXISTING LEVELS

125.00 PROPOSED LEVELS

PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT' YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev	Description	Date	By	Chkd
B	MINOR AMENDMENTS	26.06.18	RW	MS
B	BRIDGE SECTION REVISED, ADDITIONAL DETAIL SHOWN	22.06.18	RW	MS
A	ALLBROOK HILL ANNOTATION REVISED	24.11.17	CL	MS

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info@paulbashamassociates.com www.paulbashamassociates.com

Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

Title: ALLBROOK RAILWAY BRIDGE - OPPORTUNITIES PLAN

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
MS	20.11.17	CL	20.11.17

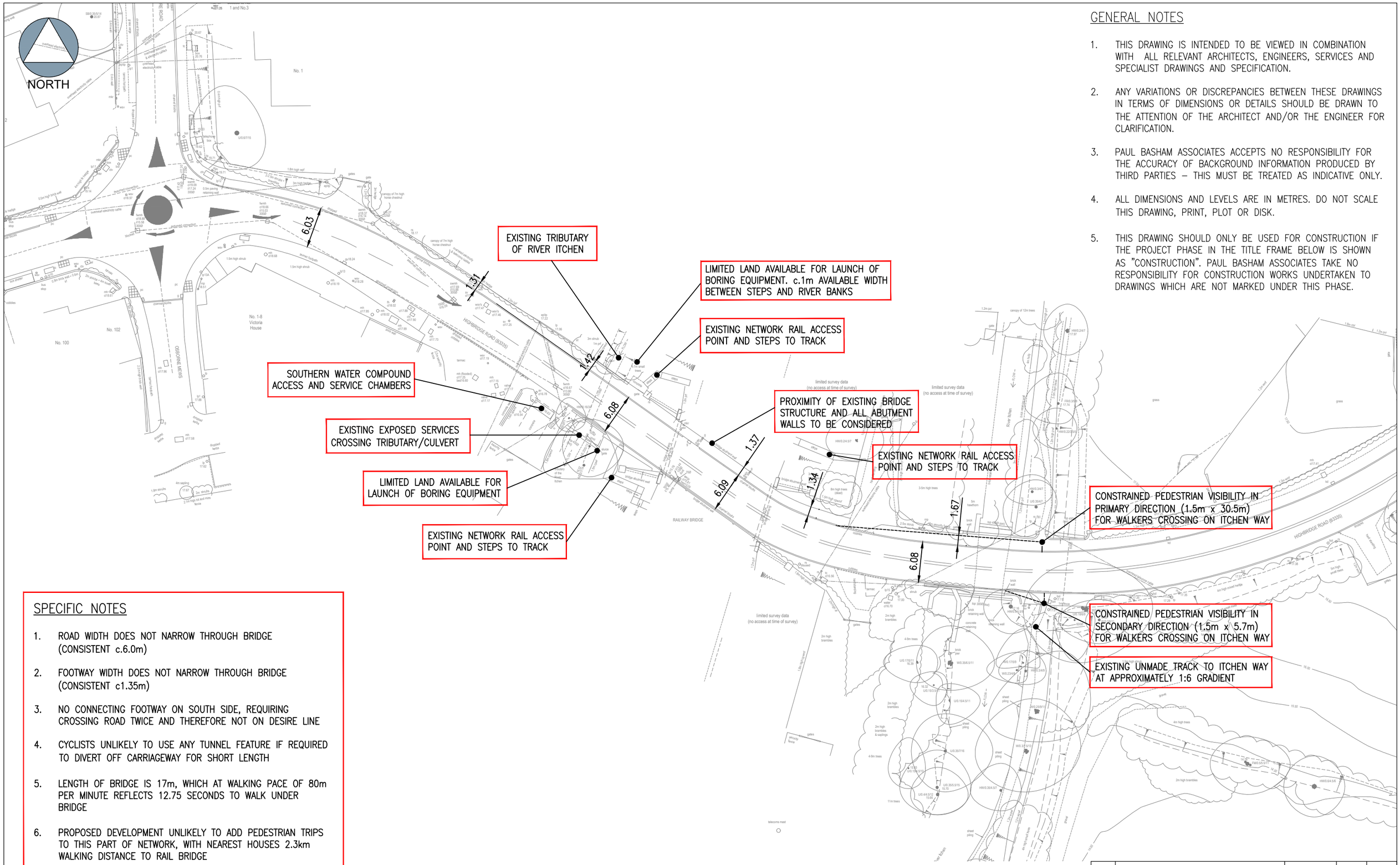
Client Drawing No.: -

Scale: NOT TO SCALE(AT A1 SIZE)

PBA Drawing No.: 024.0036.005

Revision: C

Appendix D



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2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
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SPECIFIC NOTES

1. ROAD WIDTH DOES NOT NARROW THROUGH BRIDGE (CONSISTENT c.6.0m)
2. FOOTWAY WIDTH DOES NOT NARROW THROUGH BRIDGE (CONSISTENT c1.35m)
3. NO CONNECTING FOOTWAY ON SOUTH SIDE, REQUIRING CROSSING ROAD TWICE AND THEREFORE NOT ON DESIRE LINE
4. CYCLISTS UNLIKELY TO USE ANY TUNNEL FEATURE IF REQUIRED TO DIVERT OFF CARRIAGEWAY FOR SHORT LENGTH
5. LENGTH OF BRIDGE IS 17m, WHICH AT WALKING PACE OF 80m PER MINUTE REFLECTS 12.75 SECONDS TO WALK UNDER BRIDGE
6. PROPOSED DEVELOPMENT UNLIKELY TO ADD PEDESTRIAN TRIPS TO THIS PART OF NETWORK, WITH NEAREST HOUSES 2.3km WALKING DISTANCE TO RAIL BRIDGE

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

Project Name: NORTH BISHOPSTOKE SGO	Title: ALLBROOK RAILWAY BRIDGE - PEDESTRIAN FOOTPATH CONSTRAINTS PLAN	Client: HIGHWOOD / GallifordTry Partnerships	Checked By: MS	Checked Date: 20.11.17
Project Phase: INFORMATION			Drawn By: CL	Drawn Date: 01.11.17

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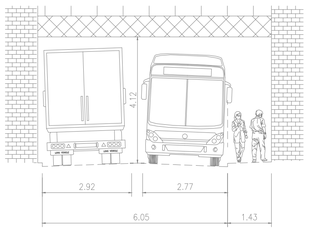
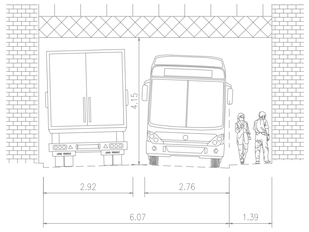
Scale			
1:500 (AT A3 SIZE)			
Client Drawing No.	PBA Drawing No.	Revision
-	024.0036.003	-

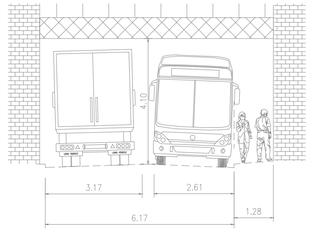
Appendix E



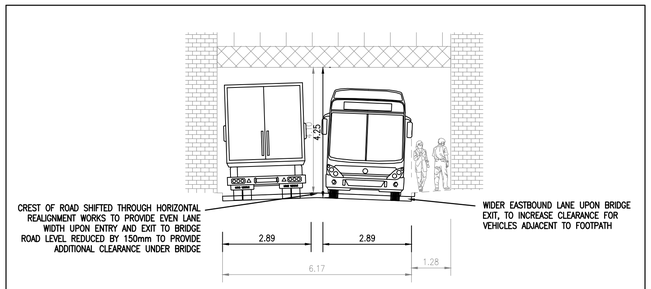
WESTERN BRIDGE ENTRY/EXIT



EXISTING ALLBROOK BRIDGE PROFILES

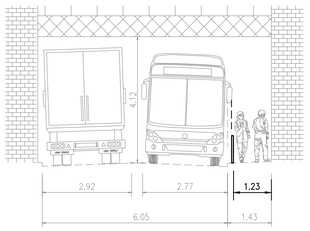


EASTERN BRIDGE ENTRY/EXIT



EASTERN BRIDGE ENTRY/EXIT

HORIZONTAL REALIGNMENT WORKS ON EASTERN ENTRY/EXIT
PRIOR TO ANY PROPOSED PEDESTRIAN FOOTWAY IMPROVEMENTS



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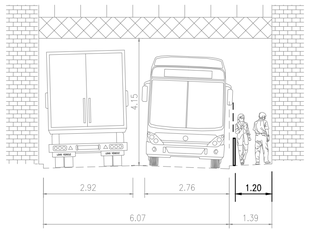
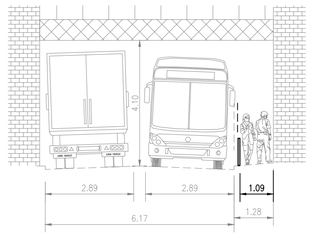


CENTRE OF BRIDGE



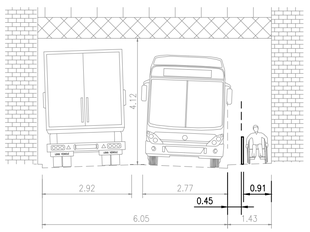
EASTERN BRIDGE ENTRY/EXIT

OPTION 1
ADDITION OF PEDESTRIAN GUARDRAIL (900mm HEIGHT) WITH MINIMAL CARRIAGEWAY CLEARANCE AND RAILING ABUTTING BACK OF KERBLINE

VISUAL IMAGERY OF PEDESTRIAN IMPROVEMENT OPTIONS

OPTION 1/2 – PEDESTRIAN GUARDRAIL

OPTION 3 – DOUBLE STACKED KERBS



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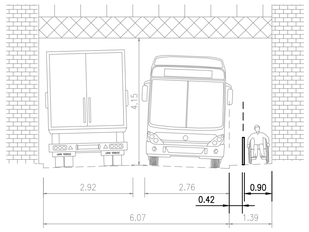
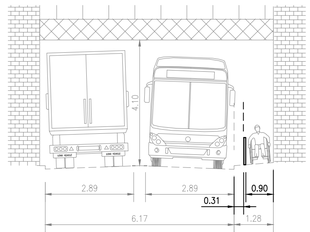
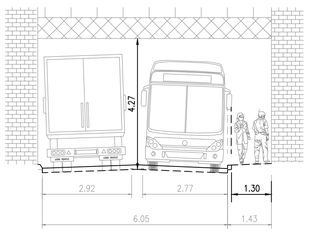


CENTRE OF BRIDGE



EASTERN BRIDGE ENTRY/EXIT

OPTION 2
ADDITION OF PEDESTRIAN GUARDRAIL (900mm HEIGHT) WITH MAXIMUM OFFSET FROM CARRIAGEWAY EDGE, BUT RETAINING MINIMUM 0.9m WIDTH SUITABLE FOR MOBILITY BUGGY/WHEELCHAIRS AS PER MANUAL FOR STREETS FIGURE 6.8



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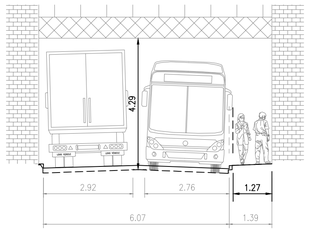

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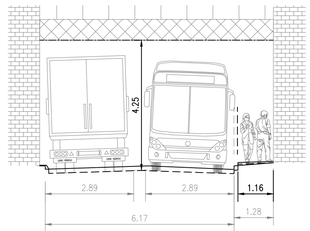
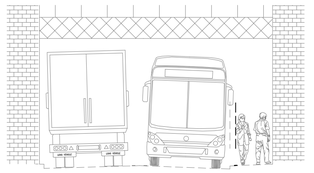


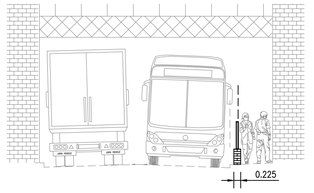
EASTERN BRIDGE ENTRY/EXIT

OPTION 3 PREFERRED
DOUBLE STACKED KERBS WITH ROAD LEVELS REDUCED

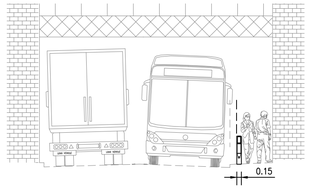
OTHER POTENTIAL IMPROVEMENT OPTIONS



WHITE LINE ON FOOTWAY TO PROVIDE VISUAL MARGIN



PEDESTRIAN GUARDRAIL ON LOW HEIGHT BRICK WALL



REFLECTIVE HAZARD MARKERS SPACED AS REQUIRED

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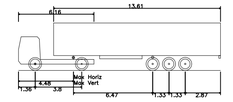
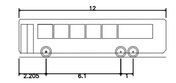
VEHICLE PROFILE



FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to Lock Time	5.00s
Curb to Curb Turning Radius	6.550m



Monaco 12

Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	3.102m
Min Body Ground Clearance	0.337m
Track Width	2.500m
Lock to Lock Time	4.00s
Curb to Curb Turning Radius	9.924m

SPECIFIC NOTES

1. LENGTH OF BRIDGE IS 17m, WHICH AT WALKING PACE OF 80m PER MINUTE REFLECTS 12.75 SECONDS TO WALK UNDER BRIDGE.
2. PROPOSED DEVELOPMENT UNLIKELY TO ADD PEDESTRIAN TRIPS TO THIS PART OF NETWORK, WITH NEAREST HOUSES 2.3km WALKING DISTANCE TO RAIL BRIDGE.
3. PEDESTRIAN SURVEYS SHOW THAT THE PEAK PEDESTRIAN FLOW AT THE BUSIEST HOUR ACROSS A 7 DAY WEEK, RECORDED 12 PEDESTRIANS (1 PER 5 MINUTES) WITH NO CONFLICT IN MOVEMENT AND NO OBSERVED DISABLED PEDESTRIAN MOVEMENT.

PRELIMINARY
DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev.	Description	Date	By	Chkd
B	OPTION 3 NOTED AS PREFERRED	26-06-18	RW	MS
A	SECTIONS UPDATED	22-06-18	RW	MS

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Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

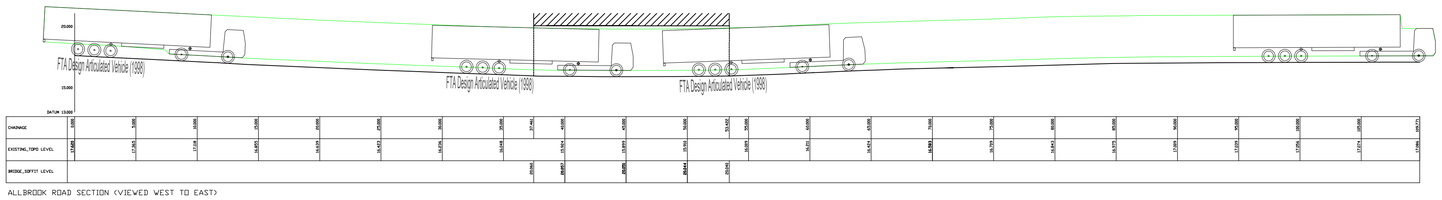
Title: ALLBROOK RAILWAY BRIDGE - PEDESTRIAN FOOTWAY IMPROVEMENT OPTIONS

Project Phase: PRELIMINARY

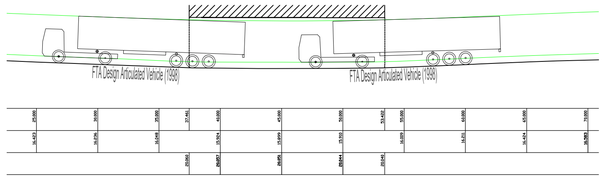
Checked By	Checked Date	Drawn By	Drawn Date
MS	20.11.17	CL	09.11.17

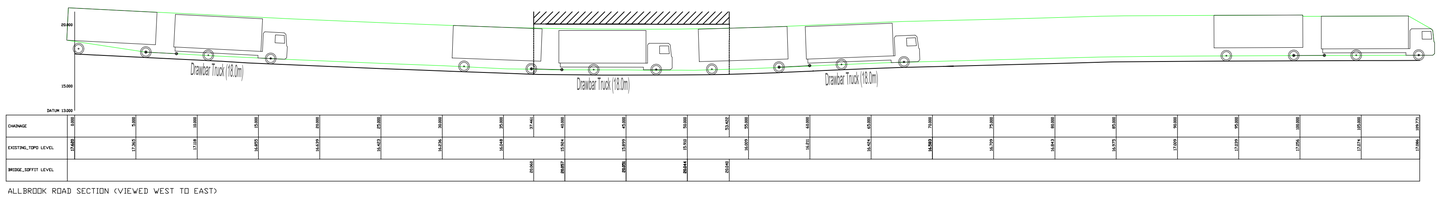
Client Drawing No.: -
Scale: 1:250 (AT A1 SIZE)
PBA Drawing No.: 024.0036.004
Revision: B

Appendix F



ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)





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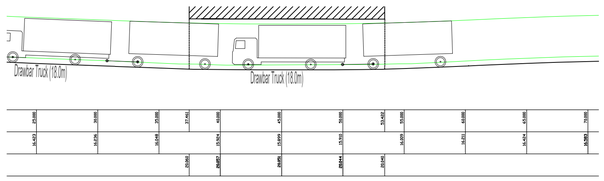
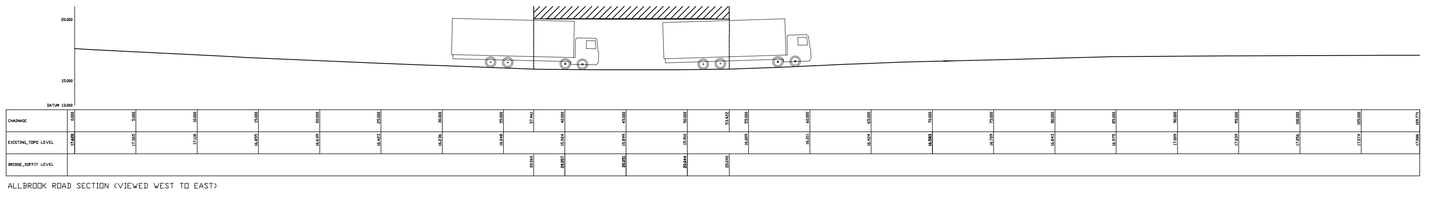
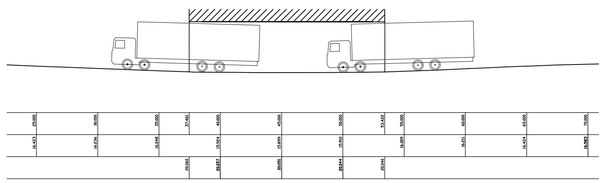
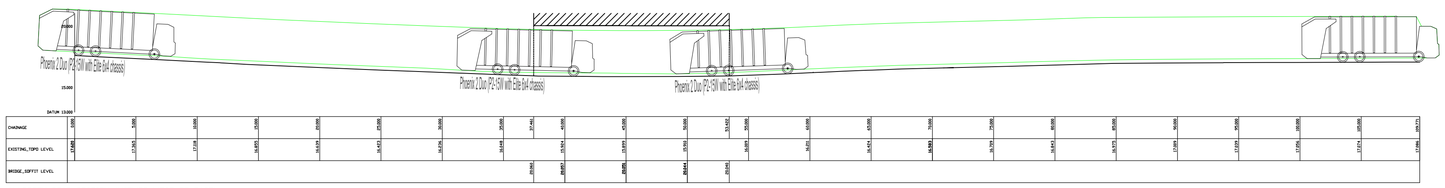


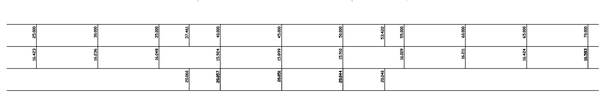


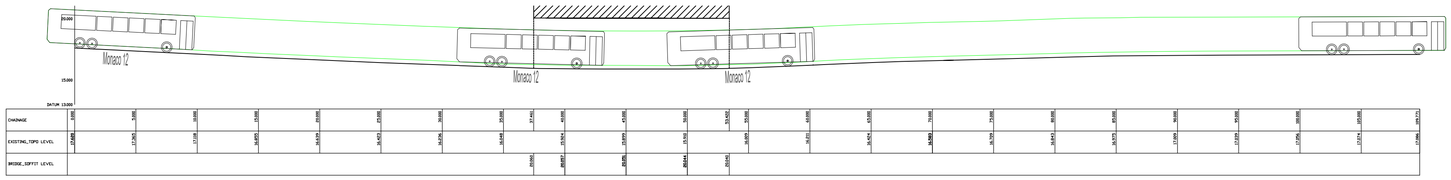
ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



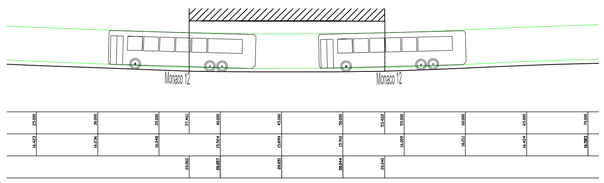


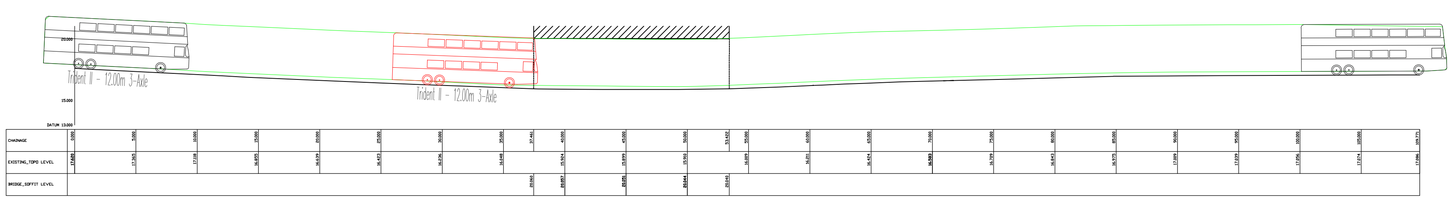
ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



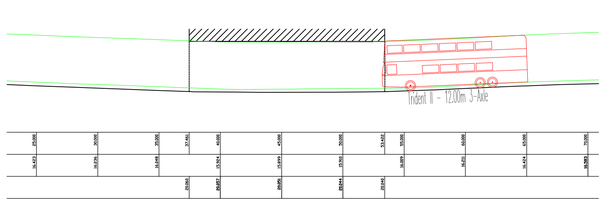


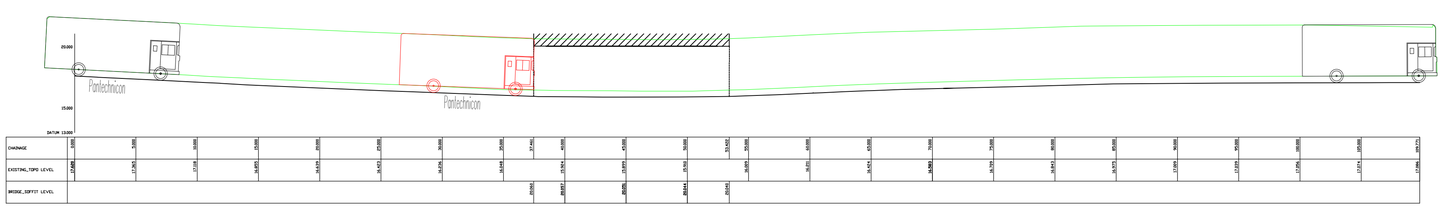
ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



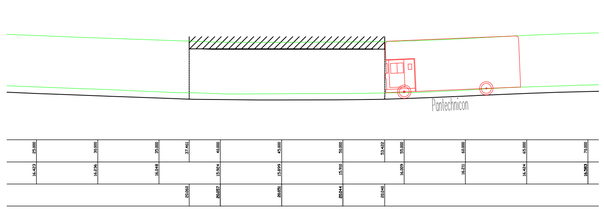


ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)





ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



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6. ALL LEVELS SHOWN IN THESE SECTIONS ARE BASED ON THE TOPOGRAPHICAL SURVEY. BY "SITELINE" THE LEVELS REFER TO THE ROAD CENTRE LINE

VEHICLE PROFILES	APPROX. CLEARANCE
FTA Design Articulated Vehicle (1998) Overall Length 24.480m Overall Width 2.500m Kerb Body Height 0.150m Kerb Body Ground Clearance 0.215m Min Track Width 2.750m Kerb to Kerb Turning Radius 9.000m	0.18m (WESTERN ENTRY/EXIT) 0.26m (BRIDGE CENTRE) 0.16m (EASTERN ENTRY/EXIT)
Drawbar Truck (18.0m) Overall Length 18.000m Overall Width 2.500m Kerb Body Ground Clearance 0.215m Min Track Width 2.750m Kerb to Kerb Turning Radius 9.000m	0.32m (WESTERN ENTRY/EXIT) 0.40m (BRIDGE CENTRE) 0.31m (EASTERN ENTRY/EXIT)
Rigid Truck Overall Length 8.000m Overall Width 2.500m Kerb Body Ground Clearance 0.215m Track Width - Tow 2.750m Kerb to Kerb Turning Radius 9.000m	0.12m (WESTERN ENTRY/EXIT) TBC (BRIDGE CENTRE) 0.11m (EASTERN ENTRY/EXIT)
Phoenix 2 Duo (P2-15W with Elite 6x4 chassis) Overall Length 13.000m Overall Width 2.500m Kerb Body Ground Clearance 0.215m Min Track Width 2.750m Kerb to Kerb Turning Radius 9.000m	0.31m (WESTERN ENTRY/EXIT) 0.38m (BRIDGE CENTRE) 0.30m (EASTERN ENTRY/EXIT)
Monaco 12 Overall Length 12.000m Overall Width 2.500m Kerb Body Ground Clearance 0.215m Track Width - Tow 2.750m Kerb to Kerb Turning Radius 9.924m	0.96m (WESTERN ENTRY/EXIT) 1.04m (BRIDGE CENTRE) 0.94m (EASTERN ENTRY/EXIT)
Trident II - 12.00m 3-Axle Overall Length 12.000m Overall Width 2.500m Kerb Body Ground Clearance 0.215m Track Width - Tow 2.750m Kerb to Kerb Turning Radius 9.000m	N/A
Pantechnicon Overall Length 11.000m Overall Width 2.500m Kerb Body Ground Clearance 0.215m Track Width - Tow 2.750m Kerb to Kerb Turning Radius 9.000m	N/A

PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT' YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev.	Description	Date	By	Chkd
B	REVISED DRAWING	25.04.18	EK	RW
A	ADDITIONAL CLEARANCE LEVELS ADDED	03.04.18	CL	MS

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Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

Title: LONGITUDINAL SECTIONS AND VEHICLE TRACKING OF EXISTING ALLBROOK BRIDGE ARRANGEMENT

Project Phase: PRELIMINARY

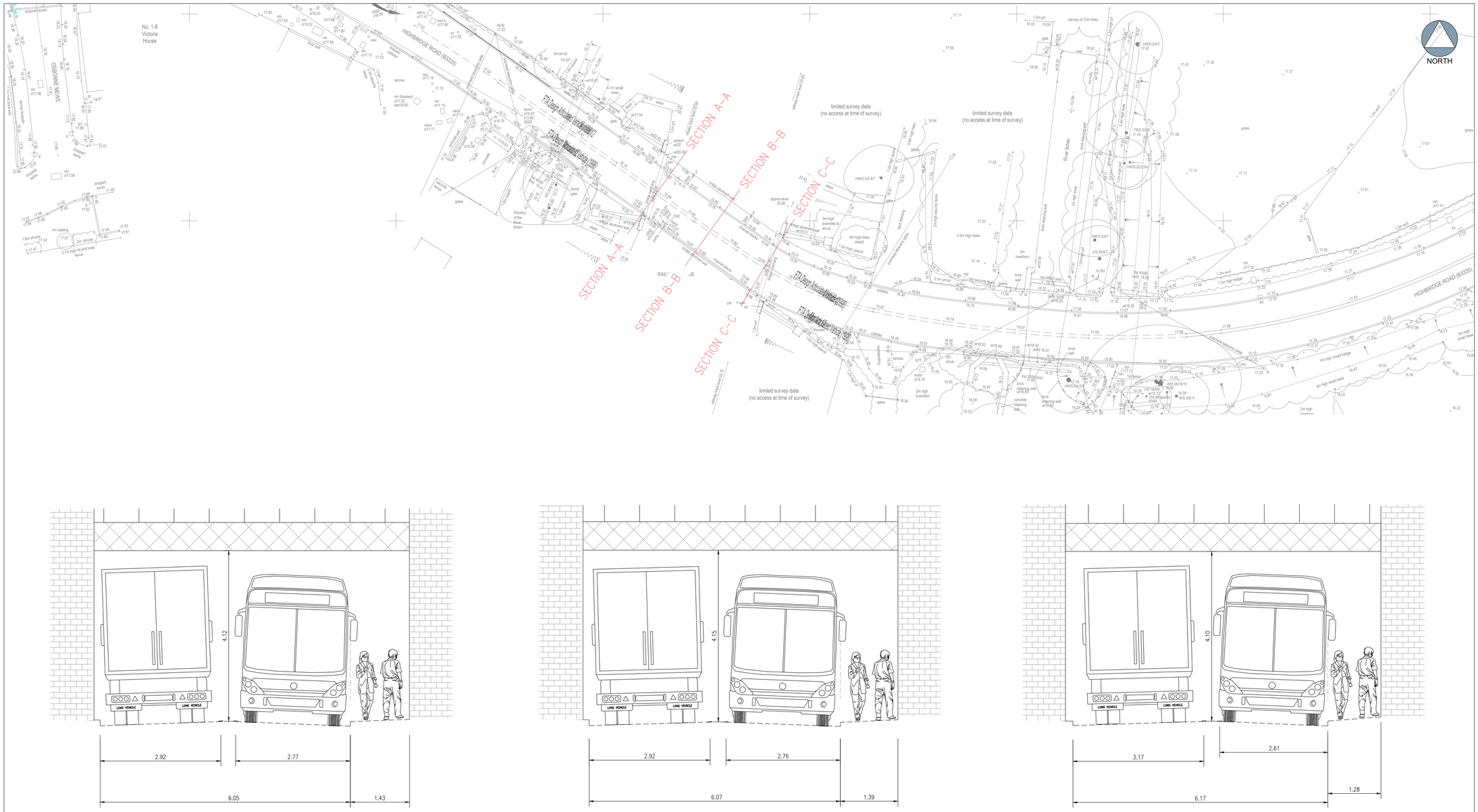
Checked By	Checked Date	Drawn By	Drawn Date
MS	19.10.17	CL	12.10.17

Client Drawing No.: -

Scale: 1:250 (AT A1 SIZE)

PBA Drawing No.: 024.0036.001

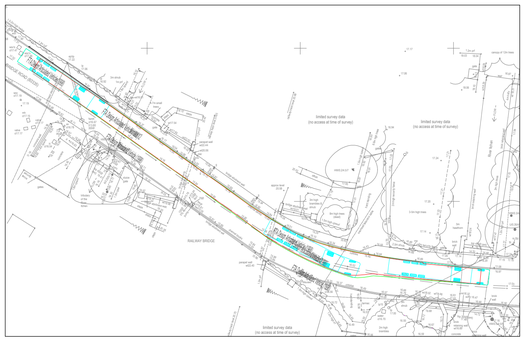
Revision: B



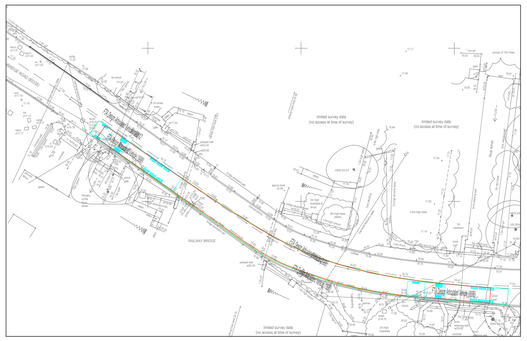
SECTION A–A (SCALE 1:50)

SECTION B–B (SCALE 1:50)

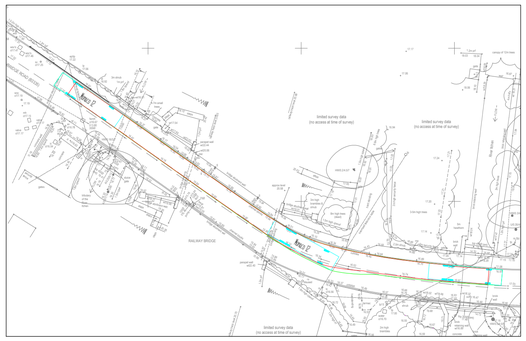
SECTION C–C (SCALE 1:50)



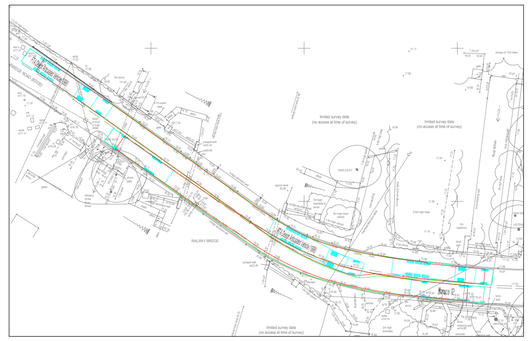
ARTICULATED VEHICLE EAST BOUND (SCALE 1:500)



ARTICULATED VEHICLE WEST BOUND (SCALE 1:500)



BUS EAST BOUND (SCALE 1:500)



BUS WEST BOUND (SCALE 1:500)

GENERAL NOTES

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4. ALL DIMENSIONS AND LEVELS ARE IN METRES. DO NOT SCALE THIS DRAWING, PRINT, PLOT OR DISK.
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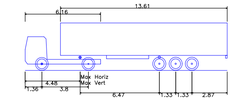
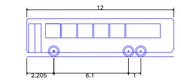
VEHICLE PROFILE



FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.857m
Min Body Ground Clearance	0.515m
Max Track Width	2.470m
Lock to Lock Time	3.00s
Curb to Curb Turning Radius	6.550m



Monaco 12

Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	3.110m
Min Body Ground Clearance	0.337m
Track Width	2.500m
Lock to Lock Time	4.00s
Curb to Curb Turning Radius	9.924m

PRELIMINARY
DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

Title: CROSS SECTIONS AND VEHICLE TRACKING OF EXISTING ALLBROOK BRIDGE ARRANGEMENT

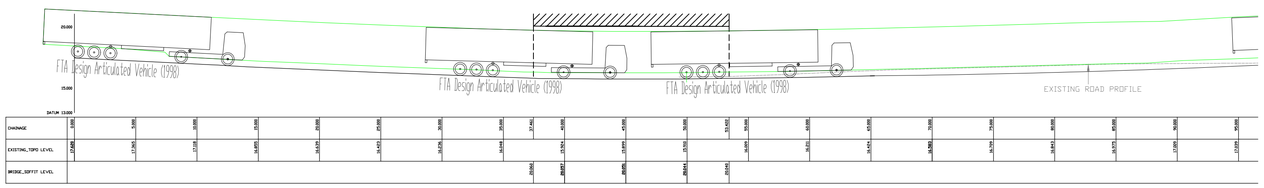
Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
MS	19.10.17	CL	12.10.17

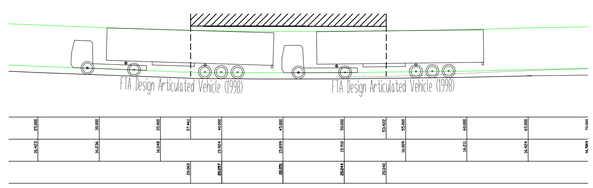
Client Drawing No.	Scale	
-	1:250	(AT A1 SIZE)

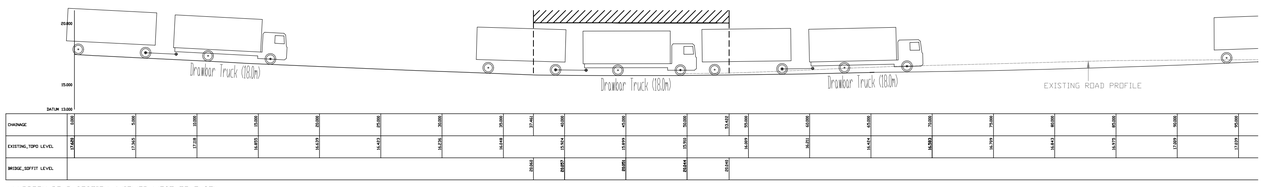
PBA Drawing No.: 024.0036.002
Revision: -

Appendix G

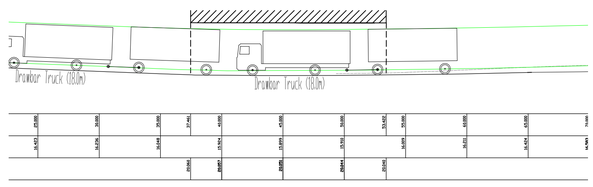


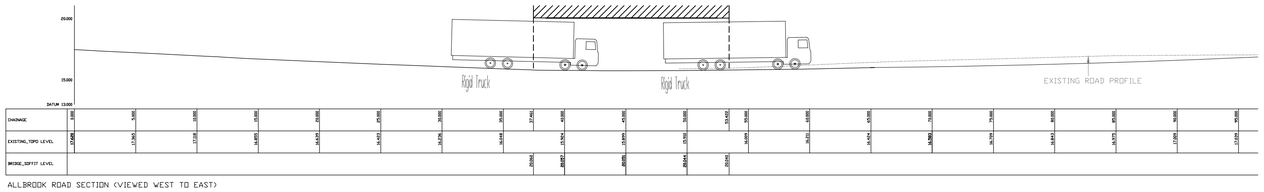
ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



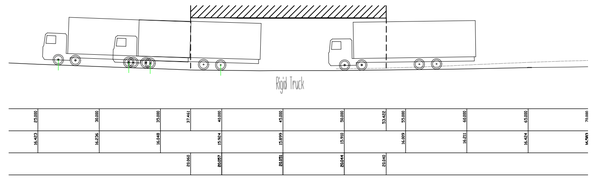


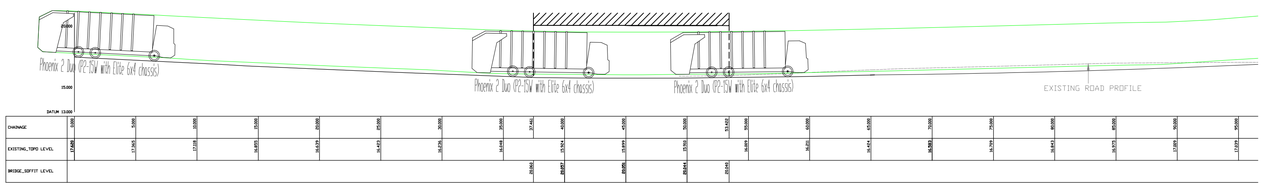
ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



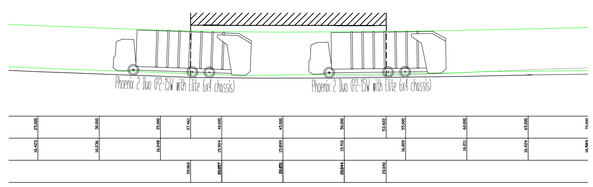


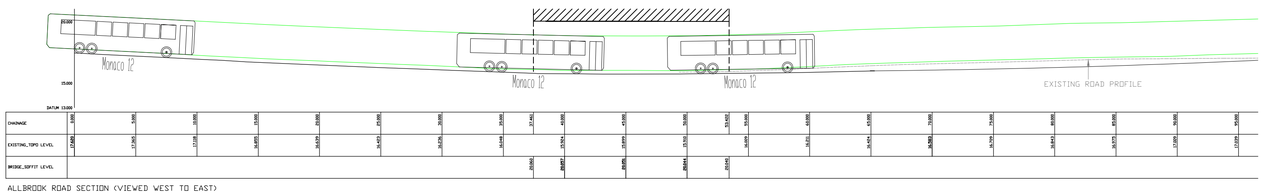
ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



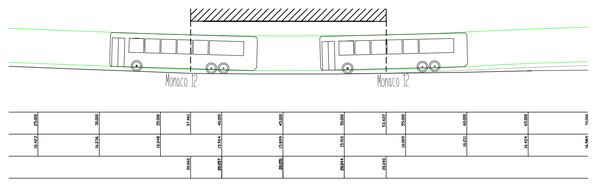


ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)





ALLBROOK ROAD SECTION (VIEWED WEST TO EAST)



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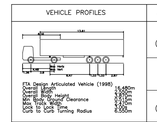
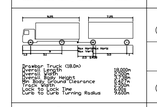
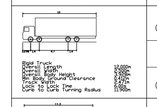
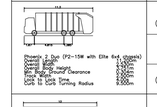
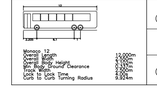
VEHICLE PROFILES	APPROX. CLEARANCE
 FTA Design Articulated Vehicle (1998)	0.33m (WESTERN ENTRY/EXIT) (0.15m INCREASE)
	0.42m (BRIDGE CENTRE) (0.15m INCREASE)
	0.36m (EASTERN ENTRY/EXIT) (0.20m INCREASE)
 Drawbar Truck (18.0m)	0.47m (WESTERN ENTRY/EXIT) (0.15m INCREASE)
	0.55m (BRIDGE CENTRE) (0.15m INCREASE)
	0.50m (EASTERN ENTRY/EXIT) (0.24m INCREASE)
 Rigid Truck	0.27m (WESTERN ENTRY/EXIT) (0.15m INCREASE)
	TBC (BRIDGE CENTRE)
	0.30m (EASTERN ENTRY/EXIT) (0.19m INCREASE)
 Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)	0.46m (WESTERN ENTRY/EXIT) (0.15m INCREASE)
	0.53m (BRIDGE CENTRE) (0.15m INCREASE)
	0.45m (EASTERN ENTRY/EXIT) (0.18m INCREASE)
 Monaco 12	1.11m (WESTERN ENTRY/EXIT) (0.15m INCREASE)
	1.19m (BRIDGE CENTRE) (0.15m INCREASE)
	1.13m (EASTERN ENTRY/EXIT) (0.19m INCREASE)

PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT' YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev	Description	Date	By	Chkd
C	ROAD LEVEL EAST OF BRIDGE AMENDED	26.06.18	RW	MS
B	ROAD LEVEL UNDER BRIDGE REDUCED	22.06.18	RW	MS
A	ADDITIONAL CLEARANCE LEVELS ADDED	03.04.18	CL	MS

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Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

Title: LONGITUDINAL SECTIONS AND VEHICLE TRACKING OF PROPOSED ALLBROOK BRIDGE ARRANGEMENT

Project Phase: PRELIMINARY

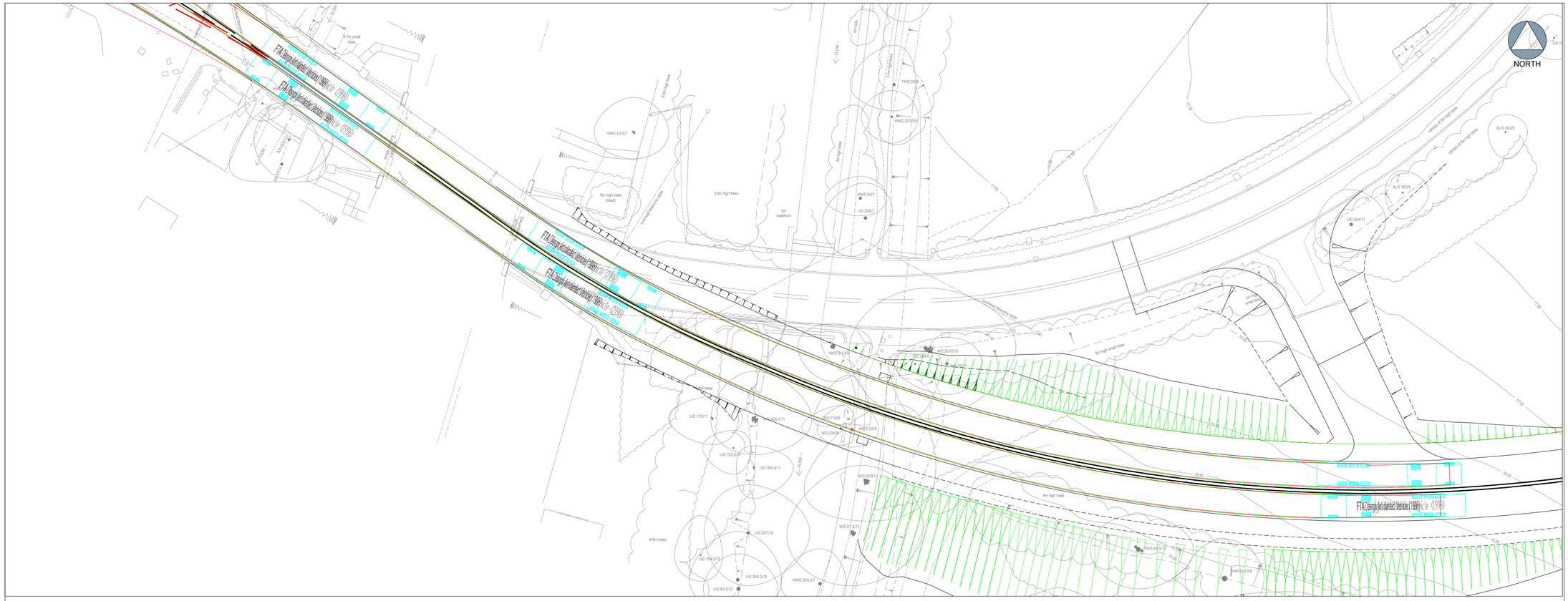
Checked By	Checked Date	Drawn By	Drawn Date
MS	21.11.17	CL	21.11.17

Client Drawing No.	Scale
-	1:250 (AT A1 SIZE)

PBA Drawing No.: 024.0036.008

Revision: C

ARTICULATED VEHICLE TRACKING



BUS TRACKING

GENERAL NOTES

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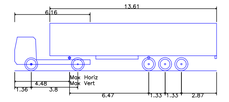
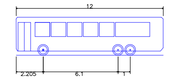
VEHICLE PROFILE



FTA Design Articulated Vehicle (1998)

Overall Length	16.480m
Overall Width	2.550m
Overall Body Height	3.870m
Min Body Ground Clearance	0.511m
Max Track Width	2.470m
Lock to Lock Time	3.00s
Curb to Curb Turning Radius	6.550m



Monaco 12

Overall Length	12.000m
Overall Width	2.550m
Overall Body Height	3.102m
Min Body Ground Clearance	0.337m
Track Width	2.500m
Lock to Lock Time	4.00s
Curb to Curb Turning Radius	9.924m

PRELIMINARY

DRAWING/DESIGN IS STILL "IN DEVELOPMENT" YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev.	Description	Date	By	Chkd
B	BACKROUND INFORMATION AMENDED	26.06.18	RW	MS
A	ADDITIONAL BACKROUND INFORMATION	22.06.18	RW	MS

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Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

Title: VEHICLE TRACKING OF PROPOSED ALLBROOK BYPASS ARRANGEMENT

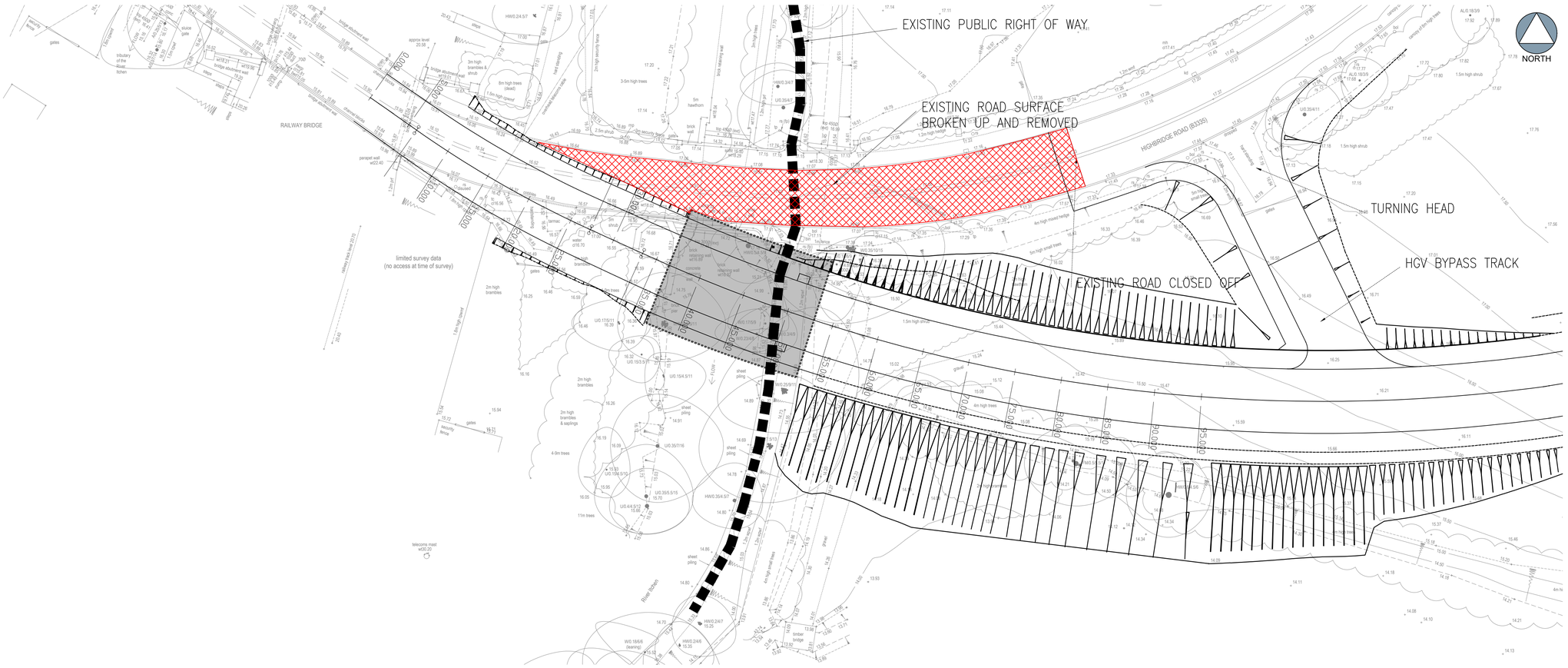
Project Phase: PRELIMINARY

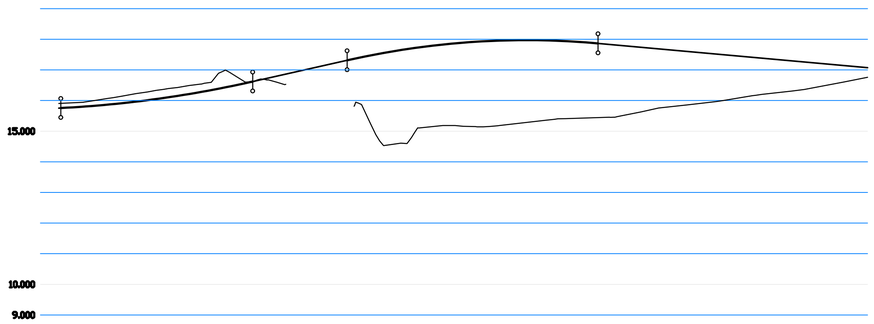
Checked By	Checked Date	Drawn By	Drawn Date
MS	21.11.17	CL	21.11.17

Client Drawing No.	Scale	
-	1:250	(AT A1 SIZE)

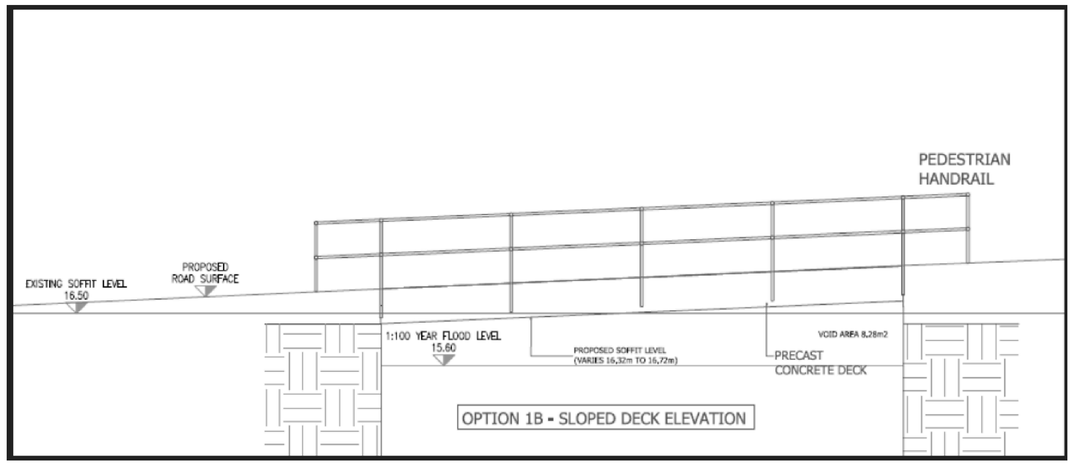
PBA Drawing No.	Revision
024.0036.009	B

Appendix H





PROPOSED B3335 HIGHBRIDGE ROAD LONGITUDINAL SECTION
(SCALE H 1:500, V 1:100)



PROPOSED BRIDGE DECK SKETCH
(NTS)

GENERAL NOTES

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2. ANY VARIATIONS OR DISCREPANCIES BETWEEN THESE DRAWINGS IN TERMS OF DIMENSIONS OR DETAILS SHOULD BE DRAWN TO THE ATTENTION OF THE ARCHITECT AND/OR THE ENGINEER FOR CLARIFICATION.
3. PAUL BASHAM ASSOCIATES ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF BACKGROUND INFORMATION PRODUCED BY THIRD PARTIES – THIS MUST BE TREATED AS INDICATIVE ONLY.
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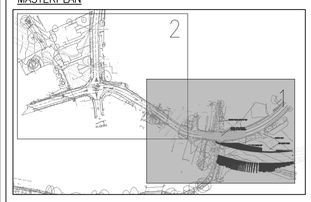
MASTERPLAN



PRELIMINARY
DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

Rev	Description	Date	By	Chkd
E	BRIDGE DECK SKETCH ADDED	10.07.18	RL	RW
D	ROAD PROFILE AMENDED, RAMP REMOVED	26.06.18	RW	MS
C	ROAD PROFILE AMENDED	22.06.18	RW	MS
B	ADDITIONAL INFORMATION ADDED	05.06.18	RW	MS
A	PROPOSED ITCHEN BRIDGE LEVELS ADDED	08.03.18	CL	MS

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Client: HIGHWOOD / GallifordTry Partnerships

Project Name: NORTH BISHOPSTOKE SGO

Title: ALLBROOK BYPASS - ALIGNMENT EAST OF ALLBROOK RAILWAY BRIDGE (SHEET 1 OF 2)

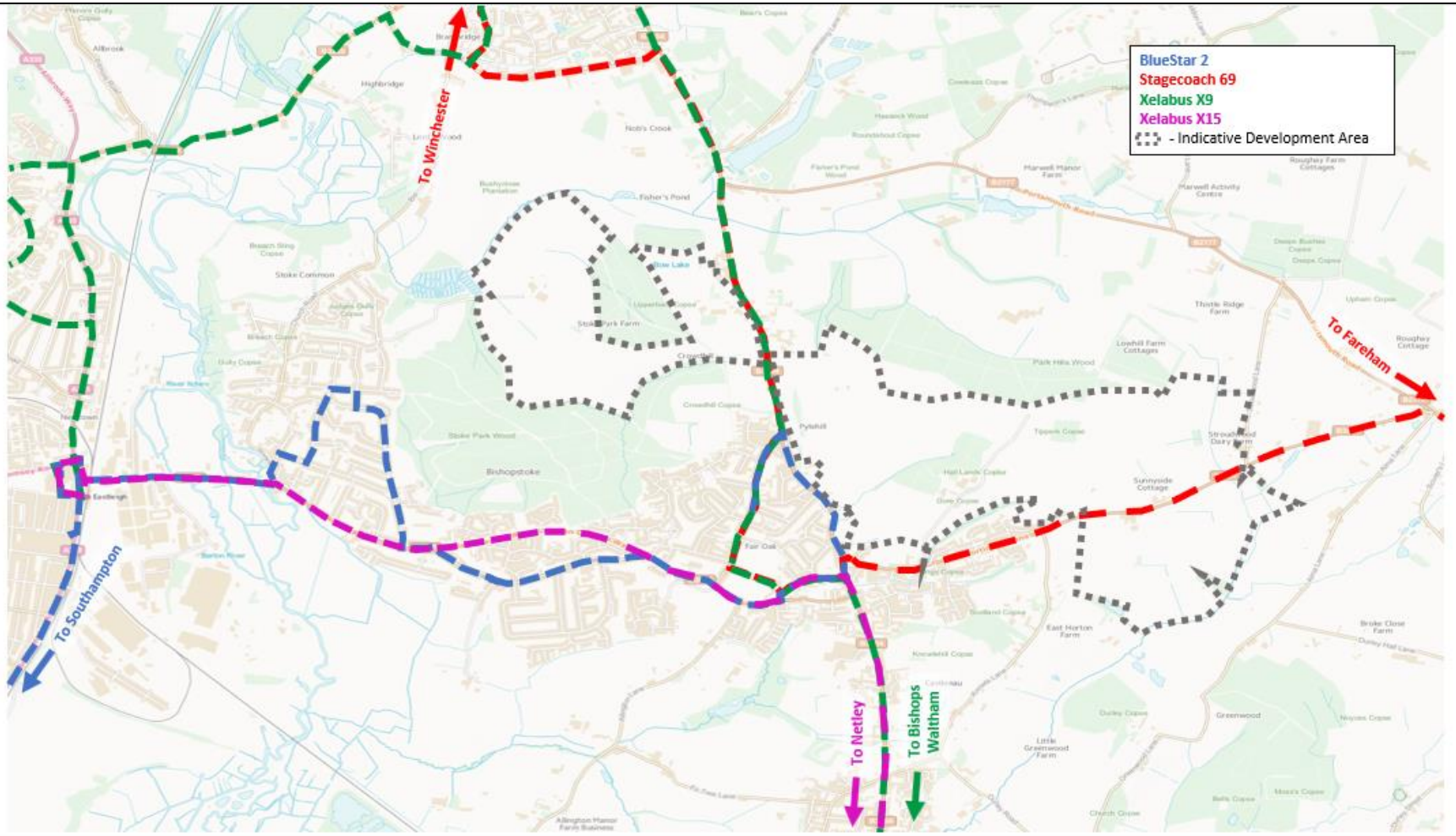
Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
MS	20.11.17	CL	20.11.17

Client Drawing No.	Scale
-	1:250 (AT A1 SIZE)

PBA Drawing No.: 024.0036.006
Revision: E

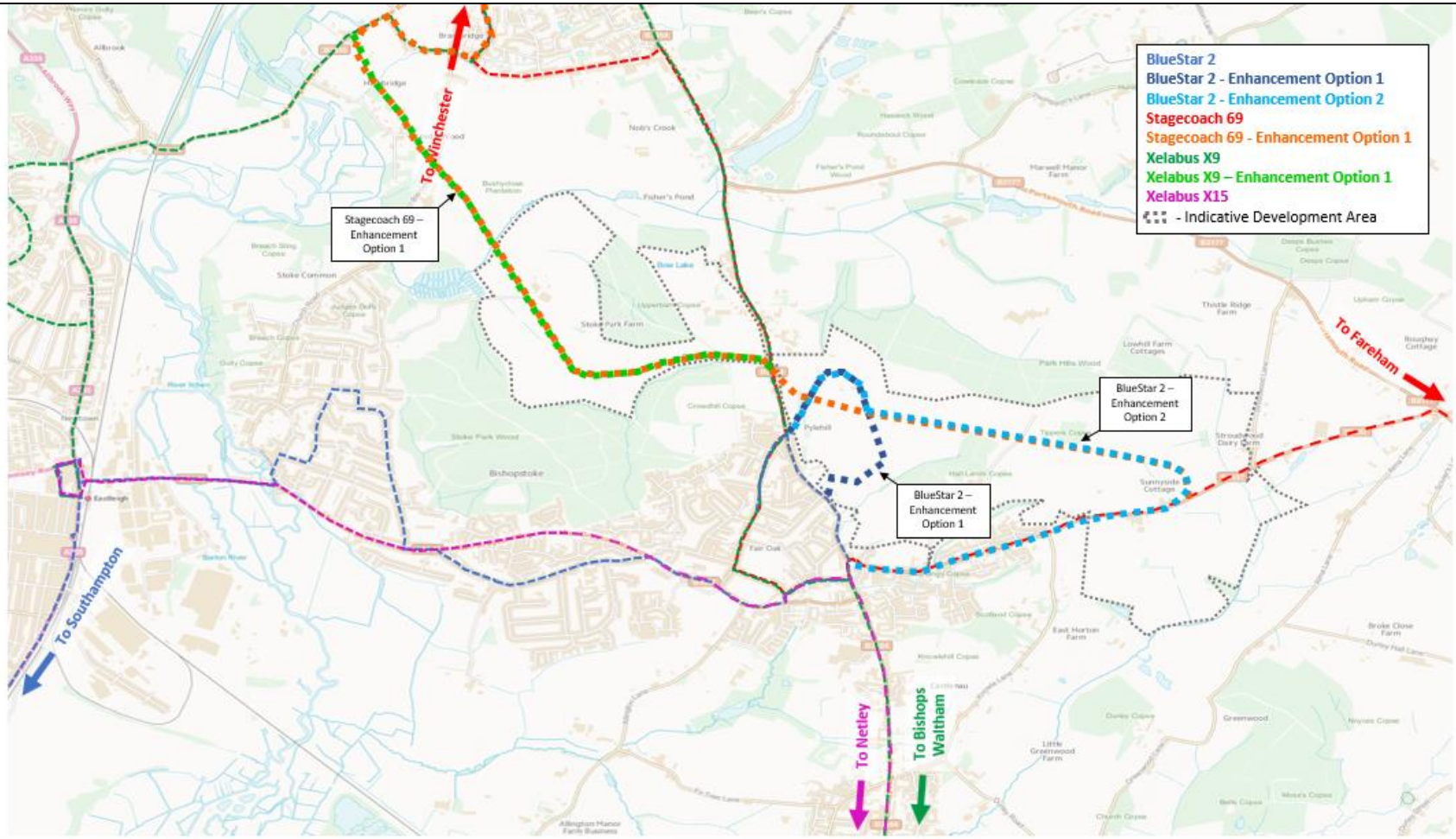
Appendix I



		Monday – Friday	Saturday	Sunday
BlueStar 2 (double decker)	**Fair Oak Square** – Bishopstoke – Eastleigh Bus Station – North Stoneham – Bassett Green Rd – Swathling – Portswood – **Southampton**	Half Hourly (0630-0947), every 15-20 minutes (0902-2000), then hourly until 0100	Every 30 minutes (0636-1002), every 15 minutes (1017-1732), then every 30 minutes until 1930	Hourly (0912-2322)
Stagecoach 69 (double decker)	**Fareham** – Wickham – Waltham Chase – Swanmore – Bishops Waltham – Fair Oak – Colden Common – Twyford – St Cross – **Winchester**	Hourly (0859-1559) 1704, 1749, 1815, 1840, 1923	Hourly (0859 -1559)1657, 1757,1853	No Service
Xelabus X9 (single decker)	**Bishops Waltham** – Swanmore – Waltham Chase – Curdrigde – Botley Station – Botley School – Hedge End – Hedge End Station – Denhams Corner – Fair Oak– Colden Common – **Eastleigh Bus Station**	0738, 0843 Hourly (0948 -1748)	0738, 0948, 1148, 1348, 1548, 1748	No Service
Xelabus X15 (single decker)	**Eastleigh** – Fair Oak – Denhams Corner – Boorley Green – Botley School – Hedge End – Lowford P.O – Bursledon (Tesco) – Netley – Butlocks Heath – **Hamble Square**	0933, 1043, 1153, 1303, 1413, 1724	No Service	No Service

**Existing school bus services not included*

Project Number: 024.0036	Title: Existing Bus Routes in vicinity of North Bishopstoke SGO	paulbasham associates	Checked By: MS	Checked Date: 08.10.18
Project Name: North Bishopstoke SGO			Drawn By: SRW	Drawn Date: 08.10.18



		Potential Enhancements
BlueStar 2 (double decker)	**Fair Oak Square** – Bishopstoke – Eastleigh Bus Station – North Stoneham – Bassett Green Rd – Swathling – Portswood – **Southampton**	Enhancement Option 1 – Routing around proposed District Centre, continuing into Fair Oak. Enhancement Option 2 – Routing through the proposed development via the link road and around proposed District Centre, continuing into Fair Oak via Mortimers Lane.
Stagecoach 69 (double decker)	**Fareham** – Wickham – Waltham Chase – Swanmore – Bishops Waltham – Fair Oak – Colden Common – Twyford – St Cross – **Winchester**	Enhancement Option 1 – Increased frequency to half-hourly, routing every other service through the proposed development via the link road, continuing through Brambridge.
Xelabus X9 (single decker)	**Bishops Waltham** – Swanmore – Waltham Chase – Curdridge – Botley Station – Botley School – Hedge End – Hedge End Station – Denhams Corner – Fair Oak– Colden Common – **Eastleigh Bus Station**	Enhancement Option 1 - Increased frequency to half-hourly, with every other service routed through the proposed development via the link road.
Xelabus X15 (single decker)	**Eastleigh** – Fair Oak – Denhams Corner – Boorley Green – Botley School – Hedge End – Lowford P.O – Bursledon (Tesco) – Netley – Butlocks Heath – **Hamble Square**	No proposed enhancements.

**Existing school bus services not included*

Project Number: 024.0036	Title: Enhancement Opportunities for Bus Routes in vicinity of North Bishopstoke SGO	paulbasham associates	Checked By: MS	Checked Date: 09.10.18
Project Name: North Bishopstoke SGO			Drawn By: SRW	Drawn Date: 09.10.18