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## ASHDOWN SCHOOL HOUSE

Technical Report: Transport Impacts associated with the Proposed Development at the Former Ashdown School House Site

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## 1. INTRODUCTION

### 1.1 Overview

1.1.1 This Technical Report has been prepared by Momentum Transport Consultancy ('Momentum') on behalf of Simon Waters ('the Client') regarding the potential transport impacts of the future redevelopment of an existing school for residential use ('Proposed Development') in Forest Row, East Sussex at RH18 5JY ('the Site').

### 1.2 Site Context and History

1.2.1 The Site is located at the northern end of an unmarked private road ('the access road'), which can only be accessed via B2110 Hartfield Road. Private residences to the south and west of the Site rely on the same private access road via Hartfield Road. The existing highway network is described in further detail in Chapter 3 of this report.
1.2.2 The existing Site was used as a small private boarding school (Ashdown House Preparatory School), which operated from 1919 until July 2020 and was attended by students aged 7 to 13 years old, with the option to attend as day students introduced in later years. The Site contains several listed buildings which the proposed scheme will be required to preserve.
1.2.3 Ashdown House school had the capacity to accommodate up to 173 students ${ }^{1}$. However, during the period of 2014 - 2019 (the latest years for which data is available), on average, 121 students ${ }^{2}$ were enrolled per year.
1.2.4 Both the private access road and junction of Hartfield Road appear to be constructed to nonrecognisable standards, and on visual inspection appear to be worn and toward the end of their design life. Of particular concern are two small bridges on the private access road and their ability to support increased traffic flows or vehicle weights. The access road therefore requires assessment as to what extent the Proposed Development may impact on its condition - something addressed in Chapter 5 of this report.

PROPOSED DEVELOPMENT
1.2.5 The Proposed Development is a residential scheme promoted by Even Ashdown Ltd (the 'Developer'). The proposals currently consist of 46 dwellings of assorted sizes and configurations, including private houses and flats.
1.2.6 The development proposals 'W012150010 3246-DEN-ZZ-ZZ-DR-A-0006’ included in Appendix A have been produced by Den Architecture. These proposals are dated March 2022 and are likely to have been revised since, although any newer revisions have not been provided. The detail in this report is part based on these development proposals and any revisions to these proposals may have an impact on any calculations and assumptions Momentum has made in this report.

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### 1.3 Scope of Study

1.3.1 This study assesses both the existing highway conditions of the Site and the likely impacts of the construction and operation of the proposed residential development. Subsequently, the study outlines recommended mitigation measures in response to those impacts.
1.3.2 The assessment strategy comprises a combination of site visits, traffic surveys, and desktop research conducted by transport planners and engineers at Momentum.
1.3.3 This Technical Report comprises the following chapters:

- Chapter 2 provides a review of relevant policies and transport standards
- Chapter 3 presents the existing conditions of the Site, including observations from a Site visit and traffic surveys
- Chapter 4 describes the anticipated transport impact of the proposed development including estimating the number of trips generated by the Site
- Chapter 5 provides recommendations for the proposed development including suggested mitigation measures
- Chapter 6 presents a conclusion to the report, reiterating key insights and recommendations.


## 2. POLICY AND STANDARDS REVIEW

2.1.1 National, regional and local policies and transport standards that may be relevant to the study area have been reviewed and this Technical Report has been prepared in full consideration of these. See Appendix B for further details.

### 2.2 Policy Review

2.2.1 The following national policies have been considered:

- National Planning Policy Framework (2019)
- Good Practice Guidelines: Delivering Travel Plans through the Planning Process (2009)
- Equality Act (2010)
- Waste Management Plan for England (2013)
2.2.2 The following regional policies have been considered:
- East Sussex County Council Local Transport Plan 3 (2011)
2.2.3 The following local policies have been considered:
- Adopted Wealden Local Plan (1998)
- Wealden Core Strategy Local Plan (2013)
- Wealden Design Guide (2008)
- Wealden Local Plan Transport Study (2018)


### 2.3 Standards Review

2.3.1 The following highway design standards have been considered:

- Design Manual for Roads and Bridges (DMRB)
2.3.2 The following rural road design standards have been considered:
- HS2 Rural Road Design Criteria (2012)


## 3. EXISTING CONDITIONS

### 3.1 Introduction

3.1.1 This chapter summarises the existing conditions at the Site, including the surrounding road network, access conditions, public transport accessibility, and baseline traffic flows and speeds. Momentum also completed a Site visit on Thursday 21 July 2022 which has informed the review of existing site conditions.
3.1.2 Figure $3-2$ shows the existing access road and highway network in relation to the Site.

### 3.2 Local Highway Network

## A22 LONDON ROAD

3.2.1 The nearest village to the Site is Forest Row, through which the A-road London Road (A22) runs which connects to Greater London to the north and to Eastbourne on the south coast. In Forest Row the A22 operates one lane in each direction with footways on each side and no designated cycle lanes.

## B2110 HARTFIELD ROAD

3.2.2 Hartfield Road (B2110) is a two-lane B-road which operates with one lane in each direction. The speed limit is 50 mph for vehicles on Hartfield Road as they pass the Site junction. This speed limit reduces to 30 mph shortly after the junction for vehicles heading into Forest Row.
3.2.3 The accommodation for pedestrians and cyclists is poor with a narrow footway only provided on the northern side of the road, to the west of the Site heading into the village of Forest Row. The footway terminates at the access junction. No designated cycle lanes are provided.

## JUNCTION OF HARTFIELD ROAD

3.2.4 The junction to the private access road is located along Hartfield Road (B2110), approximately 2 km east of the village of Forest Row. Hartfield Road has a 50 mph speed limit at the junction, with the junction itself situated on the outer edge of a tight curve in the Hartfield Road alignment. During the site visit, it was observed that the existing junction is of a non-standard and potentially confusing layout.
3.2.5 The junction is also on a steep gradient as it meets the B2110. While a topographical or level survey would be required to ascertain the exact level differences between the access road and Hartfield Road, it is likely that the junction gradient is sub-standard. This junction is shared with a neighboring residential property, Beech Cottage, which adds to the unusual layout of this junction. Figure 3-1 shows the junction layout.

Figure 3-1 Junction of Hartfield Road


Figure 3-2: Site Location


## PRIVATE ACCESS ROAD

3.2.6 The access road to the site from Hartfield Road is approximately 940 m in length and 3 m in width, varying in places. Plan M001195-DR-001, included in Appendix C highlights the key geometry of the access road.
3.2.7 The single lane road has three passing points for opposing vehicles. Also included in Appendix C, plan M001195-DR-002 shows the location of these existing passing points. During the site visit, Momentum were informed that the road was originally laid in 1996, with the work completed by Coppards of Crowborough. Approximately 15 years later, a 'chip and tar' overlay was provided, and since then various pothole repairs have been completed.
3.2.8 The initial 200 m of the access road includes tall trees and foliage on either side with bends in the road. Figure 3-3 and Figure $3-4$ below show the bends and greening along the road.

Figure 3-3 Foliage Along Access Road


Figure 3-4 Bend in Access Road

3.2.9 Within the initial 200 m , the access road has several speed bumps, which Momentum were informed were provided due to excess speeds resulting in collisions between vehicles travelling in opposing directions. During the site visit, it was observed that these speed bumps are hard to spot in the road and provided a harsh bump to motorists.
3.2.10 Momentum were informed that a length of road through this section had been widened to better allow opposing vehicles to pass each other, using space from a neighbouring field which had resulted in a large verge - again by Coppards of Crowborough to the same construction specification as the original road design. This area of additional width can be seen in Figure 3-5 below, approximately marked with a red line.
3.2.11 The access road crosses a brick-built bridge over a former railway line, which now operates as the Forest Way Cycle Route NCN21. The road also crosses another brick-built bridge over the River Medway. These bridges can be seen in Figure 3-6 (bridge over cycle route NCN21) and Figure 3-7 (bridge over the River Medway).

Figure 3-5 Additional Width in Access Road


Figure 3-6 Bridge Over Cycle Route

3.2.12 It was observed that these bridges are showing signs of wear and appeared to have undergone patchwork maintenance/repair work (though no details were available). The date of construction for these bridges are unknown, but they have been in place since at least 1967, and could have been constructed in the pre-Victorian era.

Figure 3-7 Bridge Over River Medway


Figure 3-8 Access Road to Site

3.2.13 Given the lack of as-built records, the condition of the bridges are unknown, and may be susceptible to damage or even failure through ongoing use and intensification of use, particularly if used for construction traffic.
3.2.14 Continuing along the access road, its next section of the route is surrounded by farmers' fields on each side. Figure 3-8 above shows the access road up to the farm. This section of road also features an informal junction for access to the neighboring properties.
3.2.15 The access road has an approximate width of 3 m , although this varies in places and does provide a number of dedicated passing points. The width of these passing points is observed to be approximately 5 m in total, the locations of these are shown in plan M001195-DR-002, included within Appendix C. This plan also details the approximate distance between the passing points - between 215 m and 290 m apart.

### 3.3 Traffic Flows

3.3.1 As shown in Figure 3.9, traffic counters were placed on Hartfield Road to record vehicles travelling westbound, towards Forest Row, and eastbound, towards Coleman's Hatch. Traffic counters were also placed on the Site access road, for vehicles traveling northbound, towards the Site, and southbound, towards Hartfield Road.
3.3.2 Table 3.1: Hartfield Road Traffic Flows presents a summary of the ATC for Hartfield Road. It should be noted that for Saturday and Sunday, the AM and PM vehicle peak hours varied by direction and day of the week, and therefore the hours of the respective peaks are provided in brackets. For weekdays, the standard 08:00-09:00 and 17:00-18:00 peak hours are used. The full survey results are included in Appendix D.

Table 3.1: Hartfield Road Traffic Flows

| Direction | Time Period | Average Weekday | Saturday | Sunday |
| :---: | :---: | :---: | :---: | :---: |
| Eastbound | AM Peak | $\begin{gathered} 159 \\ (08: 00-09: 00) \end{gathered}$ | $\begin{gathered} 170 \\ (11: 00-12: 00) \end{gathered}$ | $\begin{gathered} 140 \\ (10: 00-11: 00) \end{gathered}$ |
|  | PM Peak | $\begin{gathered} 184 \\ (17: 00-18: 00) \end{gathered}$ | $\begin{gathered} 164 \\ (17: 00-18: 00) \end{gathered}$ | $\begin{gathered} 122 \\ (17: 00-18: 00) \end{gathered}$ |
|  | Total Daily | 2,023 | 1,892 | 1,426 |
| Westbound | AM Peak | $\begin{gathered} 195 \\ (08: 00-09: 00) \end{gathered}$ | $\begin{gathered} 152 \\ (11: 00-12: 00) \end{gathered}$ | $\begin{gathered} 113 \\ (10: 00-11: 00) \end{gathered}$ |
|  | PM Peak | $\begin{gathered} 150 \\ (17: 00-18: 00) \end{gathered}$ | $\begin{gathered} 177 \\ (15: 00-16: 00) \\ \hline \end{gathered}$ | $\begin{gathered} 133 \\ (16: 00-17: 00) \end{gathered}$ |
|  | Total Daily | 1,997 | 1,816 | 1,404 |

Figure 3.9: Traffic Survey Counter Locations

3.3.3 Table 3.2 presents a summary of the ATC for the Site access road. It should be noted that for Saturday and Sunday, the AM and PM vehicle peak hours varied by direction and day of the week, and therefore the hours of the respective peaks are provided in brackets. For weekdays, the standard 08:00-09:00 and 17:00-18:00 peak hours are used. The full survey results are included in Appendix E.

Table 3.2: Site Access Road Traffic Flows

| Direction | Time Period | Average Weekday | Saturday | Sunday |
| :---: | :---: | :---: | :---: | :---: |
| Northbound | AM Peak | $\begin{gathered} 4 \\ (08: 00-09: 00) \end{gathered}$ | $\begin{gathered} 4 \\ (11: 00-12: 00) \end{gathered}$ | $\begin{gathered} 4 \\ (11: 00-12: 00) \end{gathered}$ |
|  | PM Peak | $\begin{gathered} 5 \\ (18: 00-19: 00) \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ (18: 00-19: 00) \end{gathered}$ | $\begin{gathered} 6 \\ (16: 00-17: 00) \end{gathered}$ |
|  | Total Daily | 62 | 32 | 30 |
| Southbound | AM Peak | $\begin{gathered} 3 \\ (08: 00-09: 00) \end{gathered}$ | $\begin{gathered} 5 \\ (09: 00-10: 00) \end{gathered}$ | $\begin{gathered} 3 \\ (11: 00-12: 00) \end{gathered}$ |
|  | PM Peak | $\begin{gathered} 4 \\ (17: 00-18: 00) \end{gathered}$ | $\begin{gathered} 3 \\ (17: 00-18: 00) \\ (18: 00-19: 00) \end{gathered}$ | $\begin{gathered} 6 \\ (16: 00-17: 00) \end{gathered}$ |
|  | Total Daily | 62 | 32 | 32 |

### 3.4 Traffic Speeds

3.4.1 The ATC survey also recorded the speed at which each vehicle crossing the survey point was travelling. Both the mean and $85^{\text {th }}$ percentile speeds from this data are analysed to understand the behaviour of diverse motorists. The $85^{\text {th }}$ percentile represents the speed at which $85 \%$ of motorists are travelling at or below.

## HARTFIELD ROAD

3.4.2 The speed limit on Hartfield Road is 50 mph , however vehicles are likely to travel slower near the junction with the Site access road due to limited visibility and the sharp bend in the road. This assumption was supported by the ATC.
3.4.3 During the survey, vehicles on Hartfield Road at the ATC location travelled at an $85^{\text {th }}$ percentile speed of 33.5 mph eastbound and 33.6 mph westbound.

## SITE ACCESS ROAD

3.4.4 There is no designated speed limit for the Site access road.
3.4.5 During the survey, vehicles on the Site access road at the ATC location travelled at an $85^{\text {th }}$ percentile speed of 23.5 mph northbound and southbound.

### 3.5 Issues With the Local Highway Network

## STANDARDS

3.5.1 Highway design standards have been taken from the Design Manual for Roads and Bridges (DMRB), specifically parts CD109 and CD123 for reviewing the access junction layout and visibility for motor vehicles.
3.5.2 Highway design standards from the DMRB are limited for such rural locations with regards to the single lane access road. As such, suitable alternative standards have been reviewed for roads possessing the same nature, such as standards from the HS2 project, although standards from the DMRB should still be applied where possible. Included in Appendix B, these standards (HS2 Rural Road Design Criteria) have been developed to 'provide a safe, consistent and proportionate approach to help ensure that the character and distinctiveness of such routes is retained as far as is reasonable practicable' (para A1.5).

## JUNCTION WITH HARTFIELD ROAD

3.5.3 As detailed earlier in this report, the junction of the access road and Hartfield Road is situated approximately 2 km east of the village of Forest Row. Vehicles travelling through this section of road could be travelling at speeds up to 50 mph through the tight bend, with limited visibility and no pedestrian access provided across the junction.

## Geometry

3.5.4 The junction at Hartfield Road comprises a priority arrangement, with vehicles from the site giving way to vehicles travelling along the main road. The geometry of this junction is unusual - the mouth of the junction is approximately 35 m wide and is separated by a grassed verge approximately 11 m in width. As mentioned earlier, the junction is also shared with a neighboring property, Beech Cottage, with access via a narrow driveway located directly onto the priority junction. The operation of this junction may be confusing to drivers who are unfamiliar with the local area, and even more so as the junction has no road markings or signage to help direct vehicles.
3.5.5 The gradients of the junction also exacerbate potential highway safety challenges as the junction possesses a steep gradient where it meets Hartfield Road. Vehicles were observed during the site visit to struggle with pulling out onto Hartfield Road, with some vehicles stalling or wheel spinning whilst trying to manoeuvre into a gap in the traffic. This could increase the chances of a traffic incident with vehicles coming around the bend of Hartfield Road at speed.
3.5.6 It would appear that the intention was that vehicles accessing the site would use the area to west of the buildout, with egressing vehicles using the eastern side of the junction to manoeuvre onto Hartfield Road. However, during the Momentum site visit, vehicles were observed using this junction in differing manners.
3.5.7 It is also worth noting that vehicles travelling eastbound along Hartfield Road are not required to reduce speed significantly as they turn into the access road as the priority junction has no radii to encourage vehicles to slow down before turning into the junction. This represents a non-standard layout, and heightens the risk of accidents, including conflicts with crossing pedestrians.
3.5.8 Should the Proposed Development proceed, the geometry of this junction will pose a problem for large heavy goods vehicles. Plan M001195-TR-001 shows vehicle swept path analysis of a 16.5 m articulated vehicle accessing and egressing the site and shows the vehicle will overrun the grassed central island of the junction and the 50 mph traffic signage. This also occurs for the swept path analysis of a 10 m rigid vehicle, as per plan M001195-TR-002. Both plans can be found in Appendix C. Such heavy good vehicles will also need sufficient time to manoeuvre out of the junction, overrunning opposing lanes and overcoming the steep junction levels. This poses a risk for other road users, who may be travelling at speed around the bend with limited visibility.
3.5.9 During the site visit, we were informally told that several collisions had been witnessed with vehicles travelling too fast around the bend of Hartfield Road. It was also noted that locals in
the area complain about how dangerous the junction can be. An analysis of road accident data from Sussex Safer Roads Data Portal in the vicinity of the Site revealed no serious or fatal accidents over the last five years. However, a slight accident was recorded on the bend in Hartfield Road east of the access junction in 2018, and several more slight accidents were recorded along Hartfield Road in the last five years, west of the Site. Note that slight accidents are collisions with no serious or fatal injuries.
3.5.10 Once the development is completed, the geometry of the junction and limited width of the access road may create a capacity issue as a result of the increased number of road users to the site. A trip generation assessment, as presented in Section 4.2, suggests that the increase in road users could reach 9 additional trips in the morning peak (08:00-09:00), 21 additional trips in the evening peak (17:00 - 18:00), and 118 additional trips throughout the day. To mitigate this, potential changes to the junction are detailed later in this report.

## Visibility

3.5.11 In addition to the irregular layout of the junction, safety issues are amplified by the sharp bend on the main road and 50 mph speed limit.
3.5.12 Visibility has been assessed for vehicles egressing the junction. Visibility standards from the DMRB are based on the Design Speed of the road (as opposed to the Speed Limit), which is taken as the $85^{\text {th }}$ percentile speed of traffic on the main road. As part of the vehicle traffic surveys completed in October, vehicle speeds were measured along Hartfield Road, and results found the Design Speed to be 33.5 mph . To comply with DMRB standards, egressing vehicles at this junction would require 90 m of stopping sight distance.
3.5.13 The available visibility has been assessed as per plan M001195-DR-003, and included in Appendix C, and shows that only 62 m visibility of westbound vehicles can be achieved. As such, without measures to reduce vehicle speeds on the main road, visibility standards are not achieved in compliance with the DMRB. This sub-standard visibility will pose an additional risk for vehicles already using a non-standard and potentially confusing junction.
3.5.14 As an alternative to DMRB standards, it may be reasonable to apply the visibility standards of the Manual for Streets (MfS), which for this design speed, visibility would be required at 49 m . This amount of visibility can be achieved, although given the busy nature of Hartfield Road, applying these standards should be done with caution.

## ACCESS ROAD

## Width and Passing Points

3.5.15 Referring to the standards noted above, passing points should be placed at a maximum distance of 200 m for single lane roads to allow for vehicles to spot each other and for one of the vehicles to give way for a short amount of time without causing any significant capacity or convenience issues. As such, the existing passing places - spaced up to 290m apart as noted above - can be considered to inadequate.
3.5.16 Regarding the width of such rural single lane roads, 3.5 m would be considered more suitable with widening required at bends to accommodate larger vehicles. As the access road is approximately 3 m in width for the majority of its length, it is important to provide the correct provision of passing points as vehicles may be encouraged to pass opposing vehicles (and cyclists) where there is inadequate space.
3.5.17 During construction, Momentum anticipates that the development will attract a material number of construction vehicles, as well as vehicles used by construction workers arriving and departing the Site, in addition to the existing vehicle traffic accessing the farm and neighboring properties. Further detail on anticipated traffic impacts are included in Chapter 4.
3.5.18 Accordingly, during the construction phase, the existing provision of passing points would experience high usage and may cause traffic issues along the access road. To mitigate this, construction vehicles accessing and egressing the site will need to be carefully managed and monitored to reduce any traffic impact. Depending on construction requirements, a nearby holding area for construction vehicles may be required. Additional measures could include traffic marshals, restricted operating hours for construction vehicles and visibility improvements along the access road.
3.5.19 Once the development is completed, Momentum anticipates that it will attract additional daily vehicle trips along the access road, further details of which is included in Chapter 4. With the existing provision of passing points being inadequate this may cause capacity issues, particularly during the AM and PM peak hours. Given the likely increase in number of users along the access road, it would be recommended that increasing the number of passing points to be sufficient as per the standards is considered. Momentum plan M001195-DR-002 in Appendix C suggests indicative locations for additional passing points to meet the required standards and reduce the likelihood of capacity issues along the private road.

## Visibility

3.5.20 Visibility along the access road to the site is good for the majority of its length. However, for the initial 200 m of access from the main road, visibility is restricted. This is caused by the outgrown foliage on either side of the road and by curves in the road. This can be seen in Figure 3-3 and Figure 3-4 Bend in Access Road displayed above.
3.5.21 As stated earlier, the traffic surveys instructed by Momentum suggest that $85 \%$ of vehicles travelling along the access road are going at a speed up to or below 23.5 mph in either direction. During the construction and completion phases of the project, vehicles travelling at these speeds may pose a risk to other road users, given that visibility along the initial length of access road is restricted in places. The width of the access road may also pose a risk for vehicles and other road users travelling at speed with limited visibility.

## Road Surface

3.5.22 As noted earlier in the report, the access road was originally laid in 1996. Approximately 15 years later, a chip and tar finish was implemented, and since then various pot hole repairs have been completed. It was observed that the road surface was of a lesser quality finish and various repair work would be recommended in places.
3.5.23 As stated above, through the initial length of access road the width had been increased along one edge to allow vehicles to pass each other, this increased width has been built onto the edge of a neighboring field, with a large embankment built beneath to support the road above.
3.5.24 Detailed further in Chapter 4, it is anticipated that a number of heavy goods vehicles will access and egress the site via the access road during the construction phase of the development. It is considered that the quantity and weight of these vehicles using the road could cause significant damage to the surface, foundation, fill and embankments.
3.5.25 Upon the completion of the development, the repeated movements of additional vehicles during the AM and PM peak hours could also be anticipated to have implications for the road surface.

## Bridges

3.5.26 As noted earlier in this chapter, the access road crosses two small brick built bridges. The construction and age of these bridges is unknown but they are assumed to have been built in Victorian times. During the site visit, it was evident that these two bridges are showing signs of wear and have had some repair work completed in previous years. It is reasonable to assume that these bridges have not been built to withstand use by heavy goods vehicles that will be accessing the site during construction of the proposed development. A more detailed review and structural analysis of these bridges will be required to better understand their construction and suitability for both construction activities and long-term intensification of use.

## Speed Bumps

3.5.27 The speed bumps located along the access road were found to be hard to locate, particularly during hours of darkness, and provided a harsh bump to motorists. These bumps could prove to be an issue for any future occupiers of the development. It is recommended that these speed bumps are revised to a more appropriate construction and for them to be made more visible to users of the access road.

### 3.6 Public Transport Network

## BUS SERVICES

3.6.1 The closest bus stops are located on Hartfield Road, shown in Figure 3-2, approximately 1.4 km from the Site and would take around 17 minutes to reach on foot via the access road. These 'Forest Road' bus stops are serviced by three bus routes (150, 261, and 291). The frequency and direction of these services is presented in Table 3.3: Bus Service Frequencies.

Table 3.3: Bus Service Frequencies

| Bus No. | Route | Frequency* <br> (Buses per hour) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | AM Peak <br> (07:00 to 08:00) | $\begin{gathered} \text { PM Peak } \\ \text { (18:00 to } \\ \text { 19:00) } \end{gathered}$ | Off-Peak | Weekend |
| 150 | Withyham Chailey School | 2 | 2 | 0 | 0 |
| 261 | Uckfield East Grinstead | 2 | 2 | 0 to 2 | 0 |
| 291 | Tunbridge Wells Crawley | 2 | 2 | 2 | 0 to 2 |
| Total |  | 6 | 6 | 2 to 4 | 0 to 2 |

*Includes both directions
3.6.2 As shown above, there is a low frequency of bus services operating in the local area, especially on the weekends, when only one route is available.
3.6.3 The infrastructure for the two bus stops appears to be limited and in poor condition. For eastbound services, only a bus stop flag is provided on the footway, with no seating or shelter for waiting passengers. For westbound services, a bus stop flag and shelter with seating is provided, although this is almost hidden in the overgrown foliage.
3.6.4 There is no provision for pedestrians (or cyclists) on the access road, and no provision of cycle parking at the bus stops.
3.6.5 This poor-quality bus service infrastructure is a further deterrent to residents of the Site who may then prefer to use their private car. Therefore, it would be reasonable to expect higher levels of private car usage than might be expected (or indeed required) of a new development.

## RAIL SERVICES

3.6.6 The closest rail station to the Site is East Grinstead station, which is approximately 8.7 km away and would take approximately 15 minutes to reach by car. East Grinstead station is serviced by Southern Railway and Thameslink, with one service operating between London Victoria and Uckfield. On a weekday, there are a total of 72 train arrivals and departures to/from East Grinstead station, with 54 on Saturdays and 56 on Sundays. This rail service frequencies are detailed further in Table 3.4.

Table 3.4: Rail Service Frequencies

| Rail Provider | Service Origins / Destinations | Frequency* <br> (Trains per hour) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | AM Peak <br> (07:00 to 08:00) | $\begin{gathered} \hline \text { PM Peak } \\ \text { (18:00 to } \\ \text { 19:00) } \end{gathered}$ | Off-Peak / <br> Weekend | Weekend |
| Southern Railway and Thameslink | London <br> Victoria / <br> London <br> Bridge / East <br> Croydon / <br> Oxted / <br> Uckfield | 7 | 8 | 2 to 4 | 4 |

*Includes both directions
3.6.7 Bus routes 261 and 291 stop at East Grinstead station, so Site users would be able to take the bus from Forest Road to access rail services to London. However, as mentioned previously, the bus stops are not easily reached from the Site and services may be too infrequent for commuters.

## SUMMARY

3.6.8 Due to the limited bus and rail services available in the local area, and the long distance between these connections and the proposed development Site, public transport is unlikely to be the primary method of travel chosen by the Site users. Instead, the Site users are likely to rely on private vehicles for at least some portion of their journey.
3.6.9 This assumption of low public transport uptake is supported by the 2011 Census Travel to Work dataset for the local District of Wealden presented Table 3.5. The categories 'Working mainly at or from home' and 'Other' were removed for the purpose of this assessment, and the 2011 Census is the latest available dataset. 74\% of the remaining respondents reported that they travel to work by 'driving a car or van', with only 10\% traveling via public transport and $10 \%$ traveling via active travel (walking or cycling).

Table 3.5: 2011 Census Travel to Work Method of Travel for Wealden District

| Method of Travel | Total | Mode Share \% |
| :--- | :---: | :---: |
| Underground, metro, light rail, tram | 151 | $0 \%$ |
| Train | 4,981 | $8 \%$ |
| Bus, minibus or coach | 1,407 | $2 \%$ |
| Taxi | 163 | $0 \%$ |
| Motorcycle, scooter or moped | 426 | $1 \%$ |
| Driving a car or van | 46,973 | $74 \%$ |
| Passenger in a car or van | 3,114 | $5 \%$ |
| Bicycle | 718 | $1 \%$ |
| On foot | 5,760 | $9 \%$ |
| Total | 63,693 | $100.0 \%$ |

3.6.10 The high reliance on cars in the proposed development's surrounding area has been demonstrated and is further supported by the low provision of public transport infrastructure. To drive down the reliance on cars of the proposed development's users and visitors, improvements to public transport links might be necessary.

## 4. TRANSPORT IMPACT ASSESSMENT

### 4.1 Introduction

4.1.1 This chapter of the Technical Report outlines the potential highway impacts resulting from the Proposed Development by considering the change in the number of trips generated by the proposed residential scheme in comparison to the number of trips generated by the former school use.
4.1.2 The impact of construction vehicles required to deliver the Proposed Development has also been considered at a high level to understand the potential impact on the access road during the construction phase.

### 4.2 Forecast Development Impacts

## PROPOSED DEVELOPMENT

4.2.1 The Proposed Development is a residential scheme of 46 dwellings of assorted sizes and configurations, including private houses and flats. Based on the architect's plans for the proposed development, shown in Appendix A, there are approximately 106 parking spaces allocated to the properties including guest spaces. This would be an average of 2.3 parking spaces per dwelling and further supports the assumption that movement to and from the Site will be reliant on vehicles.
4.2.2 The provision of parking for the proposed development would need to be reviewed at a later stage to ensure it is compliant with policy, such as the East Sussex County Council Parking Standards in Appendix B. However, this level of detail (i.e. the number of bedrooms in each dwelling and dwelling type) is not available prior to submission of the planning application.

TRIP GENERATION - METHODOLOGY
4.2.3 A trip generation exercise has been carried out to compare the vehicular impact of the former school when it was operational with the forecasted vehicular impact of the proposed residential scheme. This is a typical assessment carried out for planning applications to understand the number of trips (vehicular and non-vehicular) resulting from a development and the potential impact on the surrounding highway network.
4.2.4 The purpose of the trip generation for this report is to illustrate the difference in the amount of traffic that may be generated by the residential development, which will inform any mitigation measures that may be necessary to protect the access road for its future use given the uplift in traffic. It should be noted that these are indicative calculations only, based on the information available of the Site's former and future uses.
4.2.5 To understand the number of trips typically generated by a school land use and residential land use, 'trip rates' have been extracted from the TRICS database. The TRICS database is an industry-standard tool for calculating the trip generation of new developments in transport planning assessments. The database comprises transport survey data from around the UK, systematised to support the transfer of relevant data based on filters like land use type, region, location, and transport mode.
4.2.6 Table 4.1 shows the TRICS surveys selected for the assessment which provide the number of arrivals and departures throughout the day. For the former school trip generation, surveys
conducted for both primary and secondary schools were selected, taking the average trip rates between the two school types to reflect the age range (7 to 13) of Ashdown House students. For the proposed residential development trip generation, surveys conducted for 'mixed private houses and flats' were selected. The full TRICS report can be found in Appendix F.

Table 4.1: Selected TRICS Surveys

| Land Use | TRICS Ref <br> No. | Region | Survey <br> Location | Date of <br> Survey |
| :---: | :---: | :---: | :---: | :---: |
| Education | CW-04-A-03 | Penryn, Cornwall | Suburban <br> Area | $28 / 03 / 2019$ |
| Education | KI-04-A-01 | New Malden, Kingston | Suburban <br> Area | $20 / 06 / 2019$ |
| Education | DV-04-B-04 | Exeter, Devon | Suburban <br> Area | 02/04/2019 |
| Education | NY-04-B-03 | Skipton, North Yorkshire | Suburban <br> Area | 08/03/2019 |
| Residential | CA-03-K-04 | Soham, Cambridgeshire | Suburban <br> Area | $11 / 07 / 2018$ |
| Residential | CW-03-K-01 | Penryn, Cornwall | Suburban <br> Area | $28 / 03 / 2019$ |
| Residential | DY-03-K-01 | Derby, Derby | Edge of <br> Town | $23 / 07 / 2018$ |
| Residential | HC-03-K-07 | Farnborough, Hampshire | Edge of <br> Town | $12 / 05 / 2022$ |
| Residential | WS-03-K-04 | Horsham, West Sussex | Edge of <br> Town | $28 / 06 / 2018$ |

4.2.7 To understand the proportion of these trips that would be completed by vehicles, further information was gathered to understand the typical 'mode share' of these development types.
4.2.8 For the former school trip generation, the mode share is extracted from the TRICS database, which breaks down the trip generation into different modes of transport. For the residential trip generation, the mode share from the 2011 Census 'Method of travel to work' dataset for the district of Wealden, presented previously in Table 3.5, has been used.
4.2.9 It should be noted that TRICS surveys only provide data from 07:00 to 19:00 and therefore does not capture overnight trips. However, the number of trips generated by the sites outside these hours are not expected to exceed the number of trips recorded during the day and therefore the 'worst case' impact is considered as part of the assessment.

## TRIP GENERATION - RESULTS

## School Trips

4.2.10 The vehicle trip generation for the former school use is based on an assumption of 121 students enrolled, the average number of students enrolled at Ashdown House Preparatory School during the last five years data was made available (2014-2019) on the 'Compare School Performance Service' database ${ }^{3}$.
4.2.11 Some of these students would have been 'boarders' and thus would not have arrived/departed from the school on a daily basis, so the trip generation represents the worst-case scenario.
4.2.12 The trip generation results for a typical school use with 121 students is shown in Table 4.2 below.

Table 4.2: TRICS Vehicle Trip Generation for the Former School Development (121 students)

| Time Range | Arrival Trips | Departure Trips | Total Trips |
| :---: | :---: | :---: | :---: |
| 07:00-08:00 | 6 | 2 | 8 |
| 08:00-09:00 | 20 | 14 | 34 |
| 09:00-10:00 | 3 | 3 | 5 |
| $10: 00-11: 00$ | 1 | 1 | 3 |
| $11: 00-12: 00$ | 1 | 1 | 3 |
| $12: 00-13: 00$ | 1 | 2 | 3 |
| $13: 00-14: 00$ | 1 | 1 | 3 |
| $14: 00-15: 00$ | 2 | 2 | 4 |
| $15: 00-16: 00$ | 5 | 13 | 18 |
| $16: 00-17: 00$ | 8 | 11 | 19 |
| $17: 00-18: 00$ | 2 | 3 | 5 |
| $18: 00-19: 00$ | 2 | 1 | 4 |
| Total | 54 | 53 | 107 |

4.2.13 The number of trips presented above also includes other trips such as delivery and servicing trips occurring throughout the day or staff trips and an estimated maximum of six daily servicing vehicle arrivals/departures including catering and post.

Proposed Development Trips
4.2.14 The vehicle trip generation results for a typical residential use, assuming the residential scheme of 46 dwellings is operational and fully occupied, is shown below in Table 4.3.
${ }^{3} h t t p s: / / w w w . c o m p a r e-s c h o o l-p e r f o r m a n c e . s e r v i c e . g o v . u k / s c h o o l / 114624 / a s h d o w n-h o u s e-~$ school/absence-and-pupil-population

Table 4.3 TRICS Vehicular Trip Generation for the Proposed Residential Development (46 dwelling)

| Time Range | Arrival Trips | Departure Trips | Total Trips |
| :---: | :---: | :---: | :---: |
| 07:00-08:00 | 3 | 15 | 18 |
| 08:00-09:00 | 6 | 21 | 27 |
| $09: 00-10: 00$ | 6 | 9 | 14 |
| $10: 00-11: 00$ | 6 | 7 | 13 |
| $11: 00-12: 00$ | 6 | 7 | 12 |
| $12: 00-13: 00$ | 8 | 6 | 14 |
| $13: 00-14: 00$ | 7 | 7 | 14 |
| $14: 00-15: 00$ | 6 | 7 | 14 |
| $15: 00-16: 00$ | 15 | 10 | 24 |
| $16: 00-17: 00$ | 15 | 7 | 22 |
| $17: 00-18: 00$ | 18 | 8 | 26 |
| $18: 00-19: 00$ | 17 | 9 | 26 |
| Total | 111 | 114 | 225 |

4.2.15 Table 4.4 presents the net change in daily vehicles trips from the former school use compared to the proposed residential use.
Table 4.4 Change in Daily Vehicle Trips from the Former School to the Proposed Residential Development

| Time Range | Arrival Trips | Departure Trips | Total Trips |
| :---: | :---: | :---: | :---: |
| 07:00-08:00 | -3 | 13 | 10 |
| 08:00-09:00 | -14 | 7 | -7 |
| $09: 00-10: 00$ | 3 | 6 | 9 |
| $10: 00-11: 00$ | 5 | 5 | 10 |
| $11: 00-12: 00$ | 4 | 6 | 10 |
| $12: 00-13: 00$ | 6 | 5 | 11 |
| $13: 00-14: 00$ | 5 | 6 | 11 |
| $14: 00-15: 00$ | 5 | 5 | 10 |
| $15: 00-16: 00$ | 10 | -3 | 7 |
| $16: 00-17: 00$ | 6 | -3 | 3 |
| $17: 00-18: 00$ | 15 | 6 | 21 |
| $18: 00-19: 00$ | 15 | 8 | 23 |
| Total | 58 | 60 | 118 |

4.2.16 Whilst there is a decrease in total trips in the AM peak hour (-7 total trips during 08:00 09:00), the Proposed Development represents an overall increase in total daily trips. A total increase of 118 daily trips is expected, with the largest change during the evening peak between 17:00 and 19:00 with an additional 21 to 23 trips per hour.
4.2.17 The additional number of vehicle trips should also be looked at alongside the existing vehicles using the Access Road in the existing condition, where no school or development is present. The traffic survey counts presented in Chapter 3 which indicated 7 vehicles (two-way) in the AM Peak and 9 vehicles (two-way) in the PM Peak. Accordingly, the introduction of the new development could be expected to lead to a significant increase in trips relative to both the current condition, and the condition when the former school was in operation
4.2.18 Upon the completion of the development, the forecasted additional vehicle movements throughout the day are anticipated to have implications for the access road and junction onto Hartfield Road. Further, the geometry of the junction and limited width of the access road may create a capacity issue, along with posing a potential safety hazard due to the increased number of road users to the site (this hazard increasing with the increased numbers of road users). Potential changes to the junction to mitigates these issues are proposed in Chapter 5.

### 4.3 Forecast Construction Impacts

4.3.1 The number of construction vehicle trips to be generated by the Site will be based on various factors including construction programme (length and intensity) and the amount of demolition and enabling works required, which cannot be forecasted at this stage. Nevertheless, these additional trips will have a capacity impact on the access road and junction of Hartfield Road.
4.3.2 The types of vehicles arriving on site will likely range from LGVs (vehicles under 3.5T) and HGVs (vehicles over 3.5T). Consideration should be given during construction to avoid exacerbating any congestion in the area during the AM and PM peak hours. It should also be noted that during construction the Site will attract multiple passenger vehicles and light goods vehicles for personnel arriving and departing the Site during AM and PM peak hours.
4.3.3 It is considered that the quantity and weight of the construction vehicles using the road may cause damage to the surface, as the nature of the road surface was not intended for such large vehicles. It is also a concern that such heavy goods vehicles using the additional width of road would cause damage to this structure and to the earthwork bank supporting the road. Again, this bank was never constructed to withstand the weight of such heavy vehicles.
4.3.4 The geometries of the access junction are also anticipated to pose a hazard for large heavy goods vehicles accessing and egressing the site during construction, as shown in the swept path analysis plan M001195-TR-001 and M001195-TR-002 in Appendix C. These vehicles will also need sufficient time to maneuver out of the junction, overrunning opposing lanes and overcoming the steep junction levels. This poses a risk for other road users, who may be travelling at speed around the bend with limited visibility.

## 5. RECOMMENDATIONS

5.1.1 To address the potential issues and impacts of delivering the Proposed Development, this chapter suggests a set of improvements and reviews of the Site that might be considered as part of the development proposals.

### 5.2 Access Junction

5.2.1 The junction could be revised to follow a more conventional layout. A potential junction layout is provided in plan M001195-DR-004 in Appendix C. This layout is only indicative and would be subject to multiple design iterations and appropriate road safety audits.
5.2.2 In addition to this layout, safety improvements could be made by extending the nearby 30 mph speed limit east along Hartfield Road and past the bend in the road. This would ensure more vehicles are travelling at lower speeds around the poorly sighted junction, reducing the risk of collisions. Additionally, a high friction carriageway surface could be applied around the bend to improve vehicle grip in wet conditions.
5.2.3 Further safety improvements could be made for visibility improvements, such as frequent trimming of the foliage blocking visibility along Hartfield Road.

### 5.3 Private Access Road

5.3.1 As noted in Chapter 3 of this report, along the access road, three vehicle passing places are provided at a distance ranging from 215 m to 290 m . These passing points provide a complete width of 5 m for vehicles to pass each other.
5.3.2 Passing places should ideally be provided at least every 200 m for single lane roads. This would allow a sufficient distance for vehicles to spot each other and for one of the vehicles to give way for a short amount of time without causing any capacity or convenience issues. Shortening the gaps between passing places would result in a total of four passing places along the access road, with indicative locations shown in plan M001195-DR-002 in Appendix C.
5.3.3 An additional width of 2 m is recommended for passing points, thereby providing a combined width of 5 m at these locations. It is important to provide the correct provision of passing points as vehicles may be encouraged to pass opposing vehicles (and cyclists) where there is inadequate space
5.3.4 It is recommended that the speed bumps along the access road are revised to a more appropriate construction and for them to be made more visible to users.
5.3.5 Further structural assessment in advance of any works, along with associated monitoring, would be recommended for the length of access road and the two bridges to ensure longevity and safe operation during and after heavy loading and frequent use by construction vehicles.

### 5.4 Planning

5.4.1 To help alleviate some of the issues detailed above in this report, the development proposals could be revised. These development proposals may have been revised since March 2022 but any new revisions have not been made available.
5.4.2 The development proposals could be reduced in size from the current 46 dwellings. Reducing the number of dwellings will reduce the number of vehicles coming to and from the site once operational and will reduce the number of vehicles required for construction. Less vehicles coming to and from the Site will also reduce any capacity impacts on the access road and junction of Hartfield Road.
5.4.3 Additionally, the development proposals could provide improved pedestrian and cycle infrastructure in the local area to help deter use of the private car. This could include a footway along the access road and new cycle links to the existing cycle route that passes near the Site.
5.4.4 Improvements to local public services and facilities could also be made to encourage use of these services.
5.4.5 Future residents of the Site could opt to use a consolidated delivery service. Multiple deliveries would be sent to a single location away from the Site and delivered on a single vehicle, rather than multiple delivery vehicles arriving at the Site each day. This would further reduce any impacts on the access road and junction of Hartfield Road.

### 5.5 Additional Items to Consider

## DURING PLANNING

5.5.1 A topographical survey of the junction and access road and adjacent verges/embankments is recommended to allow a greater level of detail in assessing the access conditions and junction in its current form. The assessments outlined within this report have been completed using Ordnance Survey mapping, which provides a lower level of accuracy when compared to topographical surveys.
5.5.2 Preparation of a detailed alternative access design is recommended that seeks to mitigate issues identified in the existing conditions.
5.5.3 Preparation of an outline study of potential locations for additional passing points is recommended in accordance with adoptable highway standards along the access road.
5.5.4 Statutory utility surveys (including Ground Penetrating Radar surveys) at the junction of Hartfield Road are recommended. This would allow any outline design to be developed in further detail and accuracy, were it required, reducing the risk of clashes with underground services (including gas, water, electricity, sewers, communications apparatus).
5.5.5 Pavement core samples and Dynamic Cone Penetration (DCP) testing of the existing private road is recommended to review the build-up beneath the road and allow an assessment of its residual design life and future maintenance liability.
5.5.6 A review of plans submitted by the developer in relation to the development is recommended to assess potential risks and opportunities they might present related to transport. Specifically, the provision of parking should be assessed to ensure that car parking is provided according to the maximum standard set by the East Sussex County Council Parking Standards, as overprovision may further increase pressure on the road network.

## DURING CONSTRUCTION

5.5.7 A detailed condition survey of the access road and adjacent verges, including specific tests on current skid resistance, cracking, potholes, rutting, etc. is recommended to be conducted to assess its compliance with 'adoptable' standards, and also to create a clear baseline prior to construction in the likely case construction vehicles degrade the access road.
5.5.8 Undertake similar pavement core and DCP tests of the access road surface post-construction to ascertain any loss in carriageway stability caused by the construction traffic, and to therefore identify the need for repairs / mitigation.
5.5.9 Engagement with a structural engineering partner for structural surveys of the two bridges to create a clear baseline prior to construction in case damage was incurred due to construction.
5.5.10 Regular monitoring surveys are recommended to be conducted during construction to identify any degradation of the access road, bridges, and passing points.
5.5.11 Obtain advice on construction logistics including lorry holding points, marshalling, control of the access road and shuttle operations.
5.5.12 Review the implementation of any highway interventions agreed as being delivered through the planning application, to ensure quality and deliver to appropriate standards.
FOLLOWING COMPLETION
5.5.13 Following completion of the Proposed Development works, it is recommended that further surveys are carried out on the access road, bridges and passing points to understand any damage caused during construction.
5.5.14 Final construction layouts should also be assessed and undertake snagging of the finished works. Following this, final surveys at the conclusion of any agreed defects or handover period should also be carried out.

## 6. SUMMARY \& CONCLUSION

6.1.1 This Technical Report has been prepared by Momentum Transport Consultancy to consider the potential impacts of the future redevelopment of an existing school for residential use in Forest Row, East Sussex at RH18 5JY. The nearest village to the Site is Forest Row, approximately 3.2 km from the Site.
6.1.2 The Site is located at the northern end of an unmarked private access road, which can only be accessed via B2110 Hartfield Road. The existing Site was used as a small private boarding school and is proposed to be redeveloped (as of March 2022) into a residential scheme of 46 dwellings with 106 parking spaces.
6.1.3 Private residences to the south and west of the Site rely on the same private access road and access junction which suffer from limited capacity and visibility. The private access road operates one lane shared by vehicles travelling in both directions with no provision of cycling or walking infrastructure. The distance between passing points on the access road is also below standard. The ability of two bridges and verge on the access road to support increased traffic flows or vehicle weights during the construction and operation of the proposed development is uncertain.
6.1.4 The access junction via Hartfield Road comprises a confusing and non-standard layout, creating a hazard for vehicles. The junction suffers from limited signage and no provision for pedestrians. The junction also possesses a steep gradient and is located adjacent to a tight bend in Hartfield Road, where the vehicular speed limit is 50 mph . Visibility for egressing vehicles is restricted due to the sharp bend and overgrown foliage.
6.1.5 Public transport in the area is limited, with two bus stops serviced by three routes located on Hartfield Road, a 17-minute walk from the Site ( 1.4 km ). Bus stop infrastructure at these stops is limited and of poor quality. The closest train station is East Grinstead, a 15-minute drive from the site $(8.7 \mathrm{~km})$. Due to limited services and long distances to public transport connections, along with limited provision of walking and cycling infrastructure in the area, most residents and guests of the Site can be expected to use private vehicles for at least part of their journey.
6.1.6 An additional 118 daily trips are estimated to be generated by the proposed development compared to the school when it was operational, with 9 additional trips occurring in the AM peak and 21 additional trips occurring in the PM peak. This operational uplift, along with the construction phase of the development, is expected to have implications for the capacity and safety of the local road network, and for the carriageway and structures (bridges, verges) found along the access road.
6.1.7 It was also identified that large construction vehicles (16.5m articulated vehicles and 10 m rigid vehicles) would overrun the grassed verge and signage at the access junction and multiple lanes on Hartfield Road during access/egress based on a vehicle swept path analysis.
6.1.8 Proposed improvements to overcome these challenges include implementing a more conventional layout for the access junction, increasing the number of passing points along the access road, reducing the speed limit on Hartfield Road, and trimming foliage around the junction and bends in the access road. Further recommendations for the planning, construction, and completion phases of the proposed development include reducing the size of the development, a topographical survey for more detailed design reviews, a condition survey of the access road and verges, structural surveys of the access road bridges, and regular monitoring surveys during and after construction.

## APPENDIX A: PROPOSED DEVELOPMENT LAYOUT



## APPENDIX B: POLICY REVIEW

### 6.2 National Planning Policy and Legislation

## NATIONAL PLANNING POLICY FRAMEWORK (2019)

> 1.1.1 The National Planning Policy Framework (NPPF) has been produced by the Department for Communities and Local Government, published in February 2019.
1.1.2 The framework sets out the Government's planning policies and how these are expected to be applied. The NPPF replaces almost all existing national guidance in the form of Planning Policy Guidance (PPGs) and Planning Policy Statements (PPSs), although the accompanying guides largely remain in force.
1.1.3 The NPPF requires the following to be ensured when assessing any development proposals:

- "Appropriate opportunities to promote sustainable transport modes can be, or have been taken up, given the type of development and its location;
- Safe and suitable access to the site can be achieved for all users; and
- Any significant impacts from the development on the transport network can be cost effectively mitigated to an acceptable degree".
1.1.4 The NPPF requires all developments that will generate significant amounts of movement to provide a travel plan, and the application should be supported by a transport statement or transport assessment so the likely impacts of the proposal can be assessed. A travel plan is required to ensure that the occupant will promote the use of sustainable transport.


## EQUALITY ACT (2010)

1.1.5 The Equality Act legally protects people from discrimination in the workplace and wider society.
1.1.6 The Equality Act 2010 requires public service vehicles, rail vehicles, new buildings, and the area around new buildings to be accessible safely and without unreasonable difficulty for people who are mobility impaired. The development proposals should have proper regards to the Act, including a sufficient level of disabled parking, in suitable locations and suitable access to buildings.

## WASTE MANAGEMENT PLAN FOR ENGLAND (2013)

1.1.7 The construction, demolition and excavation sector has been the largest contributor to waste, with approximately 77.4 million tonnes generated in 2010. To reduce the number of wastes produced by this sector, this document has outlined the necessary actions and process in regard to waste management.
1.1.8 The arrangements put in place coincide with the government's localism agenda in supporting local authorities to provide sufficient waste disposal infrastructure. It also describes how the industry is working in partnership with The Department for Environment, Food and Rural Affairs to reach the target of recovering 70\% (by weight) of waste by 2020 .
1.1.9 The plan also sets out a waste hierarchy whereby prevention is highest, followed by preparation for reuse, recycling, other recovery and finally the disposal of waste.

### 6.3 Regional Planning Policy and Legislation

## EAST SUSSEX COUNTY COUNCIL LOCAL TRANSPORT PLAN 3 (2011)

1.1.10 The East Sussex County Council (ESCC) Local Transport Plan (LTP) lays out the future direction of transport infrastructure and services in the region through planning and provision in the years between 2011 and 2026. The focus of the plan is delivering sustainable economic growth and supporting the provision of housing with safety, health, and security in mind.
1.1.11 The LTP is accompanied by an Implementation Plan, the latest of which expired in 2021, but will be updated and replaced following a consultation period which is set to begin in autumn 2022.

## WEALDEN DESIGN GUIDE (2008)

1.1.12 The Wealden Design Guide (2008) aims to establish and encourage a high standard of design for development in the area, in response to recent developments that did not meet this standard.
1.1.13 The guide identifies the opportunity in re-development schemes to improve the existing transport network based on updated guidance.
1.1.14 Principles within the design guide that relate to transport include a user hierarchy where pedestrians and cyclists are prioritised, creating walkable neighbourhoods, and creating connected and accessible routes.

## WEALDEN CORE STRATEGY LOCAL PLAN (2013)

1.1.15 The Wealden Core Strategy Local Plan (2013) forms a part of the council's current statutory development plan, along with the 'saved' policies of the adopted Wealden Local Plan (1998) and Affordable Housing Delivery Local Plan (2016).
1.1.16 This plan details a long-term spatial vision and strategic objectives for the district during the period of 2013 to 2027.
1.1.17 Developments which may impact the Ashdown Forest Special Area of Conservation (SAC)/Special Protection Area (SPA) and which could generate traffic flows on road which pass through the Ashdown Forest are subject to additional screening and approval processes through the Wealden District Council.
1.1.18 The provision of suitable parking provision, with self-sufficiency and sustainability in mind, is identified as a tool for improving economic prosperity, reducing economic disparities across the district, and improving the district's retail offer.
1.1.19 Reducing reliance on car travel is connected to public transport through an aim to concentrate developments near to public transport opportunities and improving the quality of journeys made by sustainable transport modes. Simultaneously, the plan states that a development's sustainability should not be compromised by a lack of public transport infrastructure, wherever possible.
1.1.20 The dispersed settlement pattern of the district is identified as a key challenge in providing efficient and viable public transport, along with the tendency for main roads
and railways to provide connections to London and other districts rather than between towns in Wealden.

## ADOPTED WEALDEN LOCAL PLAN (1998)

1.1.21 The 1998 Wealden Local Plan is still considered and referenced in current plans and policies. This document details the Council's strategy for transport provision, focusing on reducing travel, especially by car, and promoting the safe, efficient, and sustainable transport of people and resources.
1.1.22 This plan includes guidance on car parking standards according to land use classes, recommending referring to the standards set by the East Sussex County Council Parking Standards for Development in Table 6.1.

Table 6.1: ESCC Car Parking and Cycle Parking Standards

| Use Class | Description | Maximum car parking provision | Minimum cycle parking provision |
| :---: | :---: | :---: | :---: |
| C3 Residential | Flats, maisonettes, bedsits | 1 space per unit plus 1 space per 3 units for visitors | 1 long-term space per unit if no garage or shed provided |
|  | Large Dwelling houses | 2 spaces per dwelling plus 1 space per 3 dwellings for visitors (dwellings with 4+ bedrooms may be expected to provide double garages, depending on local circumstances). |  |
|  | Small housing (<3 bedrooms) and affordable housing | 1 space per unit plus 1 space per 3 units for visitors |  |
|  | Residential caravans | 1 space per caravan plus <br> 1 space per 3 caravans for visitors |  |
|  | Sheltered housing | 1 space per 2-4 units of accommodation plus 1 space per resident staff (all dependent on the type of sheltered housing scheme) | 1 short-term space per 3 units plus 1 long-term space per 5 units |
|  | Residential hostels, student hostels | 1 space per 6 students/beds. <br> Note: this includes an allowance for staff parking | 1 long-term space per unit if no garage or shed provided |
|  | Note for all residential developments: Reduced car parking provision may be acceptable for high density residential development proposals in appropriate circumstances. |  |  |

### 6.4 Highway Design Standards

6.4.1 The Design Manual for Roads and Bridges (DMRB) defines the requirements for every aspect of UK road infrastructure, published by National Highways. Standards contained in the DMRB which are of relevance to this report are as follows:

- CD 123 - Geometric design of at-grade priority and signal-controlled junctions
- CD 109 - Highway link design


### 6.5 Rural Road Design Standards

6.5.1 In some cases, published design standards such as the DMRB are not fully relevant to rural roads. Most local highway authorities choose to adopt or adapt DMRB standards and advice for their major rural roads. A set of design criteria have therefore been developed for works on rural roads where no other design basis is suitable, to ensure a safe, consistent, and proportionate approach is followed. The following guiding principles are stated in the HS2 Rural Road Design Criteria of relevance to this report:
i) All works - both temporary and permanent - affecting rural roads must provide route continuity for non-motorised users (NMUs) as well as vehicular traffic.
ii) Where adverse impacts on rural roads are unavoidable, appropriate and proportionate mitigation measures must be incorporated into the design.
iii) All works - both temporary and permanent - affecting a rural road should aim to retain the existing character and distinctiveness of the route wherever feasible.
iv) Therefore, as a general rule, the starting point for design should be the existing engineering parameters when a rural road is diverted or reinstated.
v) All works should be designed to minimise, as far as is reasonably practicable, future maintenance requirements.

## APPENDIX C: MOMENTUM PLANS

- M001195-DR-001
- M001195-DR-002
- M001195-DR-003
- M001195-DR-004
- M001195-TR-001
- M001195-TR-002




NOTES
This drawing is referenced from Ordnance Survey
Existing road markings are sketched as indicative
Only. Design Manual for Roads and Bridges. All splay Design Manual for Roads and Bridges.
are set back from Hartield Road by 4.5 m .
are set back from Hartifield Road by 4.5 m .
Hartfield Road is of a 50 mph speed limit as
passes the access road to site.
Visibility splays have been drawn following result from traffic surveys, which revealed the design
speed ( $85 \%$ oile) to be 33 . visibility of 90 m being required. Refer to
Momentum Technical Report for further details.
6. Refer to drawing MO01195-DR-001 for overview plan.
KEY

-     -         -             -                 - 90 m visibility splay ( 33.5 mph design speed)
-     -         -             -                 - 62 m visibility splay maximum achieved of west bound vehicles)



## momentum

$\qquad$
SIMON WATERS

## ASHDOWN SCHOOL HOUSE

brammg tile hartfield road
EXISTING VIIIBILITY SPLAYS FROM PRIVATE ACCESS ROAD JUNCTION
FORINFORMATION



NOTES

1. This drawing is referenced from Ordnance Survey mapping, dated September 2022.
2. Road markings are sketched as indicative only.
3. Vehicle swept path analysis has been completed 5 mph . 5 mph .

KEY



## APPENDIX D: ATC TRAFFIC SURVEY HARTFIELD ROAD




Forest Row ATC 01, Hartfield Road
Produced by Streetwise Services Ltd.

Forest Row ATC 01, Hartfield Road
Produced by Streetwise Services Ltd.

S/streetwise

|  | Channel 1- Eastound |  |  | Average Speed |  |  | Week 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 081702022 | 0991012022 | 1011012022 | 11/1012022 | 1217012022 | ${ }^{13110120222}$ | 14102022 |
| Ending | Salurday | Sunday | ${ }^{\text {M }}$ 30day | ${ }_{\text {Tuestay }}$ | Wedinesday | Thuustay | ${ }_{\text {Friday }}$ |
| ${ }_{2}$ | ${ }^{20.5}$ | ${ }^{30.5}$ | 33.5 <br> 33.0 | ${ }_{31,3}^{32.3}$ |  | ${ }_{3}^{30.1}$ | ${ }_{28,6} 28$. |
|  |  |  |  |  |  |  |  |
| 4 | ${ }_{31.1}$ | ${ }^{32,2}$ | ${ }_{25.5}$ | 29.2 | ${ }_{25.5}$ | 25.5 |  |
| 5 | ${ }_{35.5}$ | 38.0 | 38.0 | 30.5 | 38.0 | 31.8 | 38.0 |
| 6 | ${ }^{30.5}$ | ${ }^{25.5}$ | 31.7 | -290, | 31.0 | 29.8 |  |
|  |  | ${ }^{2}$ | ${ }_{2} 2$. |  |  |  |  |
| ${ }_{8}^{8}$ | 28, ${ }_{2}^{277}$ | 27.9 <br> 208 <br> 2.8 | 27.5 <br> 208 | 27.9 277 |  | 27.5 | 28.8 |
|  | ${ }_{2}^{27.6}$ | 20.0 20.0 | $\stackrel{26.0}{26.5}$ |  | 28.9 <br> 27 |  |  |
| 11 | $\stackrel{27.0}{ }$ | ${ }_{26,6} 2$. | 27.1 | 27.9 | 27.1 | ${ }_{26.5}$ | ${ }^{27.7}$ |
| ${ }_{12}^{12}$ | $\stackrel{27,5}{27.5}$ | ${ }^{27.5}$ | 26.4 | ${ }^{27.2}$ | ${ }^{27.3}$ | 26.5 | 27.5 |
| ${ }_{14}^{13}$ | 27.6 <br> 209 <br> 1 | $\stackrel{27.0}{277}$ | ${ }_{2}^{27.2}$ | 27.5 <br> 273 | 27.3 <br> 273 | ${ }_{2}^{27.7}$ | 27.0 |
| ${ }_{15}^{15}$ |  |  |  |  |  |  |  |
| 16 | ${ }^{27,3}$ | 27.7 | 27,4 | ${ }^{27.6}$ | ${ }_{2} 27.0$ | $\stackrel{27.5}{ }$ | 26.8 |
| 17 | ${ }^{27,6}$ | ${ }^{27.4}$ | 27.8 | 27.7 | 27.7 | 278 |  |
| ${ }_{18}^{18}$ | 27.5 <br> 278 | $\stackrel{27,8}{267}$ |  | 28.0 | 28.3 <br> 279 <br> 18 |  |  |
| 19 |  | ${ }_{20,}^{20.7}$ | 28.8 | 27.5 |  |  |  |
| ${ }_{21}^{20}$ | ${ }^{23,0}$ | ${ }_{2}^{28.1}$ | $\stackrel{29.9}{28.9}$ | ${ }_{29,6}^{28.4}$ | ${ }_{20,3}^{20.6}$ | ${ }_{29,5}^{29,5}$ | $\xrightarrow{28.3}$ |
| ${ }^{22}$ | 28.5 | ${ }^{28.5}$ | 31.8 | 29.4 | 30.1 | 29.2 |  |
| ${ }^{23}$ | 27.9 | ${ }^{28.2}$ | 29.0 | ${ }_{28.8}$ | 29.9 | ${ }_{28.5}$ | ${ }_{27.3}$ |
| 24 | 30.0 | 28.5 | 29.9 | 32.5 | 28.8 | 31.1 | 27.1 |


| 10.12 | 27.3 | 27.1 | 26.7 | 27.5 | 27.2 | 26.5 | 27.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 14.16 | 27.3 | 27.5 | 27.6 | 27.3 | 27.0 | 27.6 | 27.0 |
| 0.24 | 27.6 | 27.6 | 27.7 | 27.8 | 27.8 | 27.7 | 27.6 |


| 7 Day Ave | 27.7 |
| :--- | :--- |



 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10.12 | 33.5 | 33.4 | 33.4 | 33.6 | 33.7 | 26.5 | 33.2 |
| 14.16 | 33.3 | 33.3 | 33.1 | 33.5 | 33.5 | 33.3 | 34.0 |
| 0.24 | 33.6 | 33.9 | 33.6 | 33.2 | 33.4 | 33.8 | 33.1 |

Channel 2 - Westbound

 | $7-19$ | 1579 | 1222 | 1632 | 1777 | 1732 | 1692 | 1720 | 1711 | 1622 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $6-22$ | 1743 | 1353 | 1789 | 1973 | 1906 | 1870 | 1914 | 1890 | 1793 |
| $6-24$ | 1784 | 1399 | 188 | 2002 | 1938 | 1899 | 1957 | 1923 | 1824 |
| $0-24$ | 1816 | 1404 | 1845 | 2025 | 1965 | 1925 | 1989 | 1950 | 1853 |

|  | Channel 2 - Westbound |  |  |  |  | 7 Day Ave | 33.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Average Speed |  |  | Week 1 |
|  | $\begin{gathered} \hline 08 / 10 / 2022 \\ \text { Saturday } \end{gathered}$ | $\begin{aligned} & \hline 09 / 10 / 2022 \\ & \text { Sunday } \end{aligned}$ | 10/10/2022 Monday | $\begin{gathered} \hline 11 / 10 / 2022 \\ \text { Tuesday } \end{gathered}$ | $\begin{array}{c\|} \hline 12 / 10 / 2022 \\ \text { Wednesday } \end{array}$ | $\begin{gathered} 13 / 10 / 2022 \\ \text { Thursday } \end{gathered}$ | 14/10/2022 |
| 1 | 29.8 | 28.5 | 33.0 | 33.0 | 33.0 | 35.5 | 30.0 |
| 2 | 28.0 | 29.7 | 33.0 |  |  | 25.5 | 33.0 |
| 3 | 32.2 | 25.5 | 30.5 | 33.0 | 20.5 | 30.5 | 33.0 |
| 4 | 25.5 | 25.5 | 30.0 | 28.0 | 30.5 | 27.4 | 29.8 |
| 5 | 25.5 | 32.2 | 33.0 | 33.8 | 32.4 | 31.2 | 34.2 |
| 6 | 34.5 | 28.5 | 31.3 | 29.6 | 29.9 | 29.7 | 31.0 |
| 7 | 29.7 | 27.0 | 27.8 | 27.8 | 29.0 | 30.0 | 28.9 |
| 8 | 28.8 | 29.3 | 26.9 | 28.5 | 28.1 | 27.5 | 28.9 |
| 9 | 28.6 | 29.8 | 27.3 | 27.1 | 27.8 | 27.7 | 27.9 |
| 10 | 27.9 | 28.3 | 27.4 | 26.6 | 28.0 | 27.8 | 28.4 |
| 11 | 27.0 | 27.3 | 27.6 | 27.5 | 28.4 | 27.7 | 28.4 |
| 12 | 27.5 | 27.8 | 27.6 | 27.7 | 28.1 | 27.3 | 28.1 |
| 13 | 27.2 | 27.4 | 27.7 | 27.8 | 27.8 | 27.3 | 26.9 |
| 14 | 27.7 | 27.8 | 28.5 | 27.7 | 27.5 | 27.7 | 27.8 |
| 15 | 27.6 | 27.3 | 27.8 | 27.9 | 27.1 | 27.8 | 27.4 |
| 16 | 27.2 | 27.1 | 26.9 | 27.6 | 27.5 | 27.9 | 27.5 |
| 17 | 26.9 | 26.8 | 27.6 | 27.4 | 27.9 | 27.5 | 27.4 |
| 18 | 27.9 | 27.5 | 28.6 | 28.8 | 28.7 | 28.0 | 26.8 |
| 19 | 28.1 | 27.2 | 28.4 | 27.2 | 27.5 | 27.4 | 27.4 |
| 20 | 26.9 | 28.0 | 27.7 | 27.6 | 27.9 | 28.0 | 26.8 |
| 21 | 28.6 | 28.4 | 29.1 | 28.3 | 30.0 | 28.5 | 29.5 |
| 22 | 28.0 | 27.5 | 28.2 | 29.2 | 28.0 | 27.4 | 26.6 |
| 23 | 29.0 | 30.5 | 29.6 | 28.1 | 27.7 | 27.5 | 26.1 |
| 24 | 29.4 | 27.0 | 30.5 | 29.9 | 31.0 | 27.4 | 29.8 |
| $10-12$ | 27.3 | 27.5 | 27.6 | 27.6 | 28.3 | 27.5 | 28.3 |
| 14.16 | 27.4 | 27.2 | 27.3 | 27.7 | 27.3 | 27.8 | 27.4 |
| 0-24 | 27.7 | 27.7 | 27.8 | 27.7 | 28.0 | 27.7 | 27.8 |
|  |  |  |  |  |  | 7 Day Ave | 27.8 |



|  |  | $\underbrace{}_{\substack{\text { O910102022 } \\ \text { Sunday }}}$ |  |  | 1210102022 | ${ }^{1311012022}$ | 441020222 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr Ending | Saturay | ${ }_{\text {Sunaay }}^{384}$ | Monday | Tuesday | Wedinesday | Thussay | Friday |
| 2 | ${ }_{33,3}$ | ${ }_{33}$ | ${ }_{\substack{33.0 \\ 33.7}}$ |  |  | ${ }_{25,6}{ }^{52,6}$ | - |
| 3 | ${ }_{38,5}$ | ${ }_{25,8}$ | ${ }_{33,5}$ | ${ }^{33.6}$ | 26.0 | ${ }_{33,3}$ | ${ }_{33,7}^{33.7}$ |
| 4 | 26.4 | 25.7 | ${ }_{33.6}$ |  |  | ${ }_{33,6}$ |  |
| 5 | 26.0 | ${ }_{38.5}$ | ${ }_{33.2}$ | ${ }_{38.1}$ | ${ }_{38.2}$ | ${ }_{38.8}$ | ${ }_{38.3}$ |
| 6 | ${ }^{38,4}$ | ${ }^{33} 2$ |  |  |  |  |  |
|  |  | ${ }_{3}^{336}$ |  |  |  |  |  |
| 9 | ${ }_{\text {3 }}^{3.7}$ | ${ }_{3.9}{ }^{3.9}$ | $\begin{array}{r}33,8 \\ 334 \\ \hline 3.4 \\ \hline\end{array}$ | - 3 34.4 | ${ }_{3,5}$ | ${ }^{33.4}$ |  |
| 10 | ${ }^{33.7}$ | ${ }^{33.5}$ | 33.9 | ${ }^{33.5}$ | ${ }_{33.8}$ | ${ }_{33,3}$ | ${ }_{3} 3.4$ |
| 11 | ${ }^{34}$ | ${ }^{33.2}$ | ${ }^{33}$ | ${ }^{33.5}$ |  | ${ }_{33.8}$ |  |
| ${ }^{12}$ | ${ }^{33,3}$ | ${ }^{33.7}$ | ${ }^{33,1}$ | ${ }^{34.0}$ | ${ }^{33,3}$ | ${ }^{33.2}$ | ${ }^{33.4}$ |
| 14 | ${ }_{334}$ | ${ }_{3}{ }_{3}$ | ${ }^{3}$ | ${ }_{334}{ }^{33}$ | ${ }_{3}^{33,0}$ |  | ${ }^{337}$ |
|  | ${ }^{33.7}$ | ${ }^{33,8}$ | ${ }^{33}$ | ${ }_{33,4}$ |  | ${ }^{33} 3$ |  |
| 16 | ${ }^{332}$ |  | ${ }^{33}$ |  |  |  |  |
| 17 | ${ }^{33.4}$ | ${ }^{33,8}$ | ${ }^{33.4}$ | ${ }^{33.5}$ | ${ }_{33.9}$ | ${ }^{33.4}$ |  |
| 18 | ${ }^{33.5}$ | ${ }^{33,2}$ | ${ }^{33,3}$ | ${ }^{33.1}$ | ${ }_{33,4}$ | ${ }^{33.4}$ |  |
| 19 | ${ }^{33.8}$ | ${ }^{34.0}$ | ${ }^{34.0}$ | ${ }^{33.5}$ | ${ }_{33,1}$ | 33.9 |  |
| ${ }^{20}$ | ${ }^{33,5}$ | ${ }_{33,1}$ | ${ }^{33,8}$ | 34.0 |  |  |  |
| ${ }_{21}^{22}$ | 33.4 <br>  <br> 3 <br> 35 | ${ }_{\substack{33, 338}}$ | ${ }^{333}$ | ${ }_{33,6}{ }_{3}^{33}$ | ${ }_{\substack{38,8 \\ 337}}$ | 339 <br> 335 <br> 3 |  |
|  |  | ${ }_{38,4}$ | ${ }_{38,7}$ | ${ }^{33,7}$ | ${ }_{33,4}$ | ${ }_{33}^{33}$ | ${ }^{26.5}$ |
| ${ }^{24}$ | 33.6 | ${ }_{33.5}$ | ${ }_{33,3}$ | 33.4 | 38.0 | 33.9 | 33.6 |
| 10.12 | ${ }^{33,5}$ | ${ }^{33.1}$ | ${ }^{33,4}$ | ${ }^{33,7}$ | ${ }^{332}$ | ${ }^{33,3}$ | ${ }^{336}$ |
| ${ }^{\frac{14.16}{0.24}}$ | ${ }_{33,9}^{33,}$ | ${ }_{3}^{33.2}$ | ${ }_{33.9}^{33.9}$ | ${ }_{33,8}^{33,}$ | ${ }_{33,5}^{332}$ | ${ }^{\frac{333}{33.2}}$ | ${ }_{33,6}^{33.6}$ |
|  |  |  |  |  |  |  |  |

## Forest Row ATC 01, Hartfield Road

Produced by Streetwise Services Ltd.

| Channel 1 - Eastbound |  |  | Vehicle Class | Week 1 |
| :---: | :---: | :---: | :---: | :---: |
| ${ }_{\text {Day } / \text { Time }}$ Classes | Car/LGV ${ }_{\text {c }}$ Caravan - 1 | ${ }_{-2,3,5,6,7,12}^{\text {OGV } / \text { Bus }}$ | $\begin{gathered} \text { OGV2 } \\ -4,8,9,10,11,13 \end{gathered}$ | ${ }_{-1-13}^{\text {TOTAL }}$ |
| 088/10/2022 |  |  |  |  |
| 7-19 | 1467 | 172 | 1 | 1640 |
| 6 -22 | 1610 | 188 | 1 | 1799 |
| 6.24 | 1660 | 192 | 1 | 1853 |
| 0-24 | 1693 | 198 | 1 | 1892 |
| 09/10/2022 |  |  |  |  |
| 7-19 | 1140 | 105 | 2 | 1247 |
| 6 -22 | 1248 | 118 | 2 | 1368 |
| 6 -24 | 1261 | 121 | 2 | 1384 |
| 0.24 | 1299 | 125 | 2 | 1426 |
| 10/10/2022 |  |  |  |  |
| 7-19 | 1447 | 278 | 1 | 1726 |
| 6 -22 | 1618 | 297 | 1 | 1916 |
| 6 -24 | 1648 | 298 | 1 | 1947 |
| 0-24 | 1668 | 303 | 1 | 1972 |
| 11/10/2022 |  |  |  |  |
| 7-19 | 1622 | 269 | 2 | 1893 |
| 6.22 | 1818 | 297 | 2 | 2117 |
| 6.24 | 1844 | 300 | 2 | 2146 |
| 0.24 | 1874 | 308 | 2 | 2184 |
| 12/1012022 |  |  |  |  |
| 7-19 | 1556 | 273 | 4 | 1833 |
| 6-22 | 1713 | 299 | 4 | 2016 |
| 6 -24 | 1749 | 302 | 4 | 2055 |
| 0-24 | 1766 | 306 | 4 | 2076 |
| 13/10/2022 |  |  |  |  |
| 7-19 | 1503 | 253 | 1 | 1757 |
| 6 622 | 1686 | 276 | 2 | 1964 |
| 6 6-24 | 1730 | 282 | 2 | 2014 |
| 0-24 | 1755 | 285 | 2 | 2042 |
| 14/10/2022 |  |  |  |  |
| 7-19 | 1517 | 275 | 4 | 1796 |
| 6 -22 | 1723 | 302 | 4 | 2029 |
| 6-24 | 1772 | 306 | 4 | 2082 |
| 0.24 | 1802 | 309 | 4 | 2115 |
| Average |  |  |  |  |
| 7-19 | 1465 | 232 | 2 | 1699 |
| 6 -22 | 1631 | 254 | 2 | 1887 |
| 6-24 | $\begin{array}{r}1666 \\ 1694 \\ \hline\end{array}$ | $\stackrel{257}{262}$ | 2 | 1926 |
| 0-24 | 1694 | 262 | 2 | 1958 |



Total Vehicle Class Distribution


## APPENDIX E: ATC TRAFFIC SURVEY ACCESS ROAD




Forest Row ATC 02, Unnamed Road
Produced by Streetwise Services Ltd.
Channel 1-Northbound


Forest Row ATC 02, Unnamed Road

## Produced by Streetwise Services Ltd.

Shstreetwise

|  | orthbound |  |  | Average Speed |  |  | Week |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr Ending | 08/10/2022 | 09/10/2022 Sunday | 10/10/2022 Monday | 11/10/2022 Tuesday | $12 / 10 / 2022$ Wednesday | 13/100/2022 Thursday | 14/10/2022 Friday |
| 1 |  |  |  |  |  |  |  |
| 2 | . | . | - | . | . | . | . |
| 3 | . | . | - | , | . | . |  |
| 4 | . | . | . | . | . | . |  |
| 5 | . | . | . | . |  | . |  |
| 6 | . | . | . | . | . | . |  |
| 7 | . |  | . |  | - | . | , |
| 8 |  | 28.0 |  | 18.0 |  |  |  |
| 9 | 25.5 | 33.0 | 19.8 | 21.3 | 23.0 | 28.0 | 25.5 |
| 10 | 25.5 |  | 13.0 | 18.0 |  | 18.0 | 24.2 |
| 11 | 18.0 | 28.0 | 11.5 | 23.0 | 24.2 | 18.0 | 19.7 |
| 12 | 24.2 | 20.5 | 13.7 | 23.0 | 25.0 | 28.0 | 21.3 |
| 13 | 16.3 | 20.5 | 20.5 | 21.8 | 20.2 | 21.3 | 20.8 |
| 14 | 23.0 |  | 21.8 | 23.0 | 24.7 | 24.2 | 22.0 |
| 15 | 22.2 | 24.2 | 21.3 | 20.5 | 22.2 | 25.5 | 23.0 |
| 16 | 5.0 |  | 21.3 | 23.0 | 26.3 | 20.5 | 21.3 |
| 17 | 21.3 | 20.8 | 22.2 | 27.0 | 21.8 | 25.0 | 28.0 |
| 18 | 15.5 | 18.0 | 20.5 | 23.0 | 23.0 | 22.0 | 24.0 |
| 19 | 23.0 | 21.0 | 22.2 | 21.6 | 21.8 | 25.5 | 23.0 |
| 20 | 18.0 | 33.0 | 25.5 | 21.3 | 24.2 | 28.0 | 18.0 |
| 21 | 18.0 |  |  | 23.0 | 23.0 | 23.0 | 23.0 |
| 22 |  | 28.0 |  | 23.0 | - |  |  |
| ${ }_{2}^{23}$ |  |  | 23.0 |  |  | . | - |


| 10.12 | 23.0 | 22.0 | 12.8 | 23.0 | 24.7 | 22.0 | 20.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 14.16 | 19.7 | 24.2 | 21.3 | 22.3 | 24.2 | 23.0 | 22. |
| 0.24 | 21.0 | 22.6 | 20.4 | 22.5 | 23.0 | 23.0 | 22.7 |







| 7 Day Ave | 23.5 |
| :--- | :--- |


| Hr Ending | $\begin{gathered} 081 / 0 / 20222 \\ \text { Saturday } \\ \hline \end{gathered}$ | 09/10/2022 Sunday | 10/10/2022 | 11/10/2022 Tuesday | $\begin{aligned} & 12 / 10 / 2022 \\ & \text { Wednesday } \end{aligned}$ | ${ }^{13 / 1010 / 2022}$ | 14/10/2022 Friday |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |
| 2 | . | . | . | . | . | . | . |
| 3 | - | - | - | . | - | . | . |
| 4 | . | . | . | . | . | . | . |
| 5 | . | . | . |  | . | . |  |
| 6 | . | . |  | 33.5 |  |  |  |
| 7 |  |  | 33.6 |  | 28.9 |  | 28.7 |
| 8 | 28.8 | 28.1 | 23.2 | 33.3 | 18.6 | 29.0 | 28.9 |
| 9 |  | 33.2 | 28.9 | 23.3 | 28.3 |  | 28.4 |
| 10 | 28.5 |  | 28.1 | 23.0 | 33.1 | 18.3 | 28.3 |
| 11 | 28.8 | 28.7 | 28.4 | 28.5 | 28.5 | 23.5 | 28.3 |
| 12 | 28.6 | 33.5 | 23.3 | 28.2 | 28.2 | 33.4 | 28.2 |
| 13 | 28.8 | 23.4 | 23.9 | 23.9 | 29.0 | 23.7 | 28.5 |
| 14 | 18.0 | 28.1 | 23.8 | 33.6 | 33.1 | 23.2 | 18.2 |
| 15 | 28.2 | 23.7 | 28.3 | 33.8 | 28.0 | 28.4 | 28.6 |
| 16 | 23.1 | 28.9 | 28.7 | 28.9 | 33.3 | 33.5 | 33.4 |
| 17 | 28.1 | 28.5 | 28.3 | 28.3 | 23.7 | 33.8 | 28.9 |
| 18 | 18.3 | 23.1 | 28.1 | 28.5 | 28.9 | 23.5 | 28.5 |
| 19 | 28.1 | 28.8 | 28.0 | 28.1 | 23.5 | 23.4 | 28.2 |
| 20 | 28.0 | 28.4 | 33.3 | 33.6 | 23.4 | 28.5 | 23.7 |
| 21 | 28.5 | 28.5 |  |  | 33.8 |  | - |
| 22 |  |  | . | . |  | . | . |
| 23 | . | 18.5 | - | - | . | . | . |
| 24 | . |  | . | . | . | . | . |
| 10.12 | 28.7 | 33.2 | 28.8 | 28.4 | 28.8 | 28.2 | 28.7 |
| 14.16 | 28.5 | 28.3 | 28.3 | 34.0 | 33.7 | 28.6 | 28.6 |
| 0-24 | 28.8 | 28.1 | 28.2 | 28.1 | 28.7 | 28.5 | 28.8 |

Forest Row ATC 02, Unnamed Road

## Produced by Streetwise Services Ltd.

Channel 1 - Northbound



| TOTAL | 32 | 30 | 45 | 44 | 60 | ${ }^{36}$ | 46 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Forest Row ATC 02, Unnamed Road

## Produced by Streetwise Services Ltd.



Speed Summary (MPH)

$\square 0-20 \quad \square 21-35 \quad \square 36-50 \quad \square 51-100$



## APPENDIX F: FULL TRICS REPORT












|  |  |  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Ave. | Trip | No. | Ave. | Trip | No. | Ave. | Trip |  |  |  |  |
| Time Range | Days | PUPILS | Rate | Days | PUPILS | Rate | Days | PUPILS | Rate |  |  |  |  |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 2 | 818 | 0.002 | 2 | 818 | 0 | 2 | 818 | 0.002 |  |  |  |  |
| 08:00-09:00 | 2 | 818 | 0.04 | 2 | 818 | 0 | 2 | 818 | 0.04 |  |  |  |  |
| 09:00-10:00 | 2 | 818 | 0.001 | 2 | 818 | 0 | 2 | 818 | 0.001 |  |  |  |  |
| 10:00-11:00 | 2 | 818 | 0.001 | 2 | 818 | 0 | 2 | 818 | 0.001 |  |  |  |  |
| 11:00-12:00 | 2 | 818 | , | - 2 | 818 | 0 | 2 | 818 | 0 |  |  |  |  |
| 12:00-13:00 | 2 | 818 | 0 | 2 | 818 | 0 | 2 | 818 | 0 |  |  |  |  |
| 13:00-14:00 | 2 | 818 | 0 | 2 | 818 | 0 | 2 | 818 | 0 |  |  |  |  |
| 14:00-15:00 | 2 | 818 | 0 | 2 | 818 | 0 | 2 | 818 | 0 |  |  |  |  |
| 15:00-16:00 | 2 | 818 | 0.001 | 2 | 818 | 0.02 | 2 | 818 | 0.021 |  |  |  |  |
| 16:00-17:00 | 2 | 818 | 0 | 2 | 818 | 0.021 | 2 | 818 | 0.021 |  |  |  |  |
| 17:00-18:00 | 2 | 818 | 0.001 | 2 | 818 | 0 | 2 | 818 | 0.001 |  |  |  |  |
| 18:00-19:00 | 2 | 818 | 0.002 | 2 | 818 | 0.001 | 2 | 818 | 0.003 |  |  |  |  |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Daily Trip Rat |  |  | 0.048 |  |  | 0.042 |  |  | 0.09 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TRIP RATE for | Land Use 04 - EDUC | UCATION/B - SEC | CONDARY |  |  |  |  |  |  |  |  |  |  |
| Calculation Fa | tor: 1 PUPILS |  |  |  |  |  |  |  |  |  |  |  |  |
| Count Type: V | HICLE OCCUPANTS |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |  |  |
|  | No. | Ave. | Trip | No. | Ave. | Trip | No. | Ave. | Trip |  |  |  |  |
| Time Range | Days | PUPILS | Rate | Days | PUPILS | Rate | Days | PUPILS | Rate |  |  |  |  |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 2 | 818 | 0.054 | - 2 | 818 | 0.007 | 2 | 818 | 0.061 |  |  |  |  |
| 08:00-09:00 | 2 | 818 | 0.243 | - 2 | 818 | 0.088 | - 2 | 818 | 0.331 |  |  |  |  |
| 09:00-10:00 | 2 | 818 | 0.019 | - 2 | 818 | 0.011 | - 2 | 818 | 0.03 |  |  |  |  |
| 10:00-11:00 | 2 | 818 | 0.016 | - 2 | 818 | 0.014 | 2 | 818 | 0.03 |  |  |  |  |
| 11:00-12:00 | 2 | 818 | 0.01 | 2 | 818 | 0.01 | 2 | 818 | 0.02 |  |  |  |  |
| 12:00-13:00 | 2 | 818 | 0.013 | - 2 | 818 | 0.02 | 2 | 818 | 0.033 |  |  |  |  |
| 13:00-14:00 | 2 | 818 | 0.015 | 2 | 818 | 0.021 | 2 | 818 | 0.036 |  |  |  |  |
| 14:00-15:00 | 2 | 818 | 0.019 | 2 | 818 | 0.011 | 2 | 818 | 0.03 |  |  |  |  |
| 15:00-16:00 | 2 | 818 | 0.042 | 2 | 818 | 0.137 | 2 | 818 | 0.179 |  |  |  |  |
| 16:00-17:00 | 2 | 818 | 0.027 | 2 | 818 | 0.167 | 2 | 818 | 0.194 |  |  |  |  |
| 17:00-18:00 | 2 | 818 | 0.043 | 2 | 818 | 0.034 | 2 | 818 | 0.077 |  |  |  |  |
| 18:00-19:00 | 2 | 818 | 0.064 | 2 | 818 | 0.02 | 2 | 818 | 0.084 |  |  |  |  |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Daily Trip Rat |  |  | 0.565 |  |  | 0.54 |  |  | 1.105 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TRIP RATE for | -and Use 04 - EDUC | UCATION/B-SEC | CONDARY |  |  |  |  |  |  |  |  |  |  |
| Calculation Fa | tor: 1 PUPILS |  |  |  |  |  |  |  |  |  |  |  |  |
| Count Type: P | DESTRIANS |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ARRIVALS |  |  | DEPARTURES |  |  | TOTALS |  |  |  |  |
|  | No. | Ave. | Trip | No. | Ave. | Trip | No. | Ave. | Trip |  |  |  |  |
| Time Range | Days | PUPILS | Rate | Days | PUPILS | Rate | Days | PUPILS | Rate |  |  |  |  |
| 00:00-01:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 01:00-02:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 02:00-03:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 03:00-04:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 04:00-05:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 05:00-06:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 06:00-07:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:00-08:00 | 2 | 818 | 0.023 | 2 | 818 | 0 | 2 | 818 | 0.023 |  |  |  |  |
| 08:00-09:00 | 2 | 818 | 0.265 |  | 818 | 0.003 | - 2 | 818 | 0.268 |  |  |  |  |
| 09:00-10:00 | 2 | 818 | 0.012 | , | 818 | 0.002 | 2 | 818 | 0.014 |  |  |  |  |
| 10:00-11:00 | 2 | 818 | 0.007 | 2 | 818 | 0.006 | 2 | 818 | 0.013 |  |  |  |  |
| 11:00-12:00 | 2 | 818 | 0.004 | 2 | 818 | 0.003 | 2 | 818 | 0.007 |  |  |  |  |
| 12:00-13:00 | 2 | 818 | 0.008 | 2 | 818 | 0.018 | 2 | 818 | 0.026 |  |  |  |  |
| 13:00-14:00 | 2 | 818 | 0.023 | 2 | 818 | 0.011 | 2 | 818 | 0.034 |  |  |  |  |
| 14:00-15:00 | 2 | 818 | 0.007 | 2 | 818 | 0.012 | 2 | 818 | 0.019 |  |  |  |  |
| 15:00-16:00 | 2 | 818 | 0.009 | - 2 | 818 | 0.198 | - 2 | 818 | 0.207 |  |  |  |  |
| 16:00-17:00 | 2 | 818 | 0.012 | - 2 | 818 | 0.101 | 2 | 818 | 0.113 |  |  |  |  |
| 17:00-18:00 | 2 | 818 | 0.012 | - 2 | 818 | 0.006 | 2 | 818 | 0.018 |  |  |  |  |
| 18:00-19:00 | 2 | 818 | 0.004 | 2 | 818 | 0.005 | - 2 | 818 | 0.009 |  |  |  |  |
| 19:00-20:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20:00-21:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21:00-22:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22:00-23:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23:00-24:00 |  |  |  |  |  |  |  |  |  |  |  |  |  |













[^0]:    ${ }^{1}$ According to the 'Get Information on Schools' database (https://get-informationschools.service.gov.uk/Establishments/Establishment/Details/114624)
    ${ }^{2}$ According to the 'Compare School Performance Service' database (https://www.compare-school-performance.service.gov.uk/school/114624/ashdown-house-school/absence-and-pupil-population)

