West Hoathly Parish Council

West Hoathly Parish Council

Ibstock Brick Works, Sharpthorne

Highway, Transport and Accessibility Review

April 2023

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1 Introduction

1.1 Overview

1.1.1 PJA has been commissioned by West Hoathly Parish Council to review Highway, Transport Accessibility issues associated with proposals for the potential redevelopment of the former Ibstock Brickworks within the village of Sharpthorne in the Mid Sussex District of West Sussex.

1.1.2 The site is currently a vacant brownfield site, with the Brickworks ceasing operations in 2020. A full planning application was submitted at the site on the 24th March 2023 and validated on the 29th March 2023 (PA reference: DM/23/0827) for: *"demolition of existing structures and redevelopment of the site to provide 108 residential dwellings (Class C3) and associated works, including the provision of an on-site SANG, access, landscaping, parking and associated works."* The application is currently pending consideration.

1.1.3 As part of the planning application, a Transport Assessment (TA) was prepared by RGP, dated March 2023.

1.1.4 As a 'windfall' development site, the proposals have not advanced through the Local Plan process against a spatial plan and site selection criteria. This report therefore considers transport and accessibility in accordance with the current planning policy.

1.1.5 It also explores salient transport and highway issues, which represent material considerations which the Parish Council might cite when responding to the planning application. Focusing on the submitted transport assessment the report will set out:

- The relevant policy context that the planning application will need to respond to and the challenges this will raise for the site.
- The existing highway network conditions and how the development proposals will need to respond to these, including any existing collision trends.
- Is the current level of sustainable transport infrastructure (walk, cycle bus) and local amenities appropriate to facilitate sustainable development of the site.
- The anticipated vehicular trip generation demands of the proposals and the mitigation that may be needed on the local highway network to accommodate these demands.

1.2 Report Structure

1.2.1 The remainder of this report is structured as follows:

- **Section 2** – Policy Review;
- **Section 3** – Baseline Transport Conditions;
- **Section 4** – Accessibility;
- **Section 5** – Travel Demand; and
- **Section 6** – Summary and Conclusion.

2 Policy Review

2.1 Overview

2.1.1 This section sets out the relevant policy that will inform the material considerations for any development proposal and planning decision.

2.2 National Planning Policy Framework

2.2.1 The revised National Planning Policy Framework (NPPF) was published in March 2012 and updated in July 2021 and sets out the Government's planning policies for England and how these are expected to be applied.

2.2.2 Paragraph 113 notes that *"all development that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed".* Therefore, a Transport Assessment (TA) and Travel Plan (TP) will need to be prepared to meet this requirement.

2.2.3 Paragraph 110 of the NPPF states that:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b safe and suitable access to the site can be achieved for all users;

c the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and

d any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."

2.2.4 Furthermore, Paragraph 111 states:

"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."

2.2.5 As set out in Paragraph 112, within this context, applications for development should:

a "Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d Allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."

2.2.6 It might be reasonable to state that appropriate opportunities can or have been taken to promote sustainable travel (110a) 'given the location' but that assumes that the scale of development is appropriate in this location. It is also unclear how the proposals have given priority to pedestrian/cycle movement thus it is likely that the package of mitigation measures and the Travel Plan incentives may need to be more robust to comply with these policy tests, explored further below.

2.2.7 RGP prepared a TA for the planning application for 108 dwellings submitted in March 2023. It includes surveys, information and assessment of highway and transport issues, identifying some mitigation measures. It concludes "it is not considered that the proposed development would result in a 'severe' impact in highway and transport terms.

2.3 West Sussex Transport Plan (2022-2036)

2.3.1 The West Sussex Transport Plan (WSTP) sets out the County Council's policies for managing the transport network in West Sussex.

2.3.2 The WSTP sets out how the County Council intends to address key challenges by improving, maintaining and managing the transport network up to 2036. The objectives relevant to this report are:

- *"Objective 2: Support development and regeneration plans across the County by enabling local living and through strategic investments, particularly in sustainable modes of transport, at the right time and place to ensure the transport network is fit for the future.*

- *Objective 5: Ensure the transport network allows residents and visitors (including people with disabilities) to live healthy lifestyles with good access to green and blue spaces*
- *Objective 11: Reduce the need to travel by car by enabling local living*
- *Objective 16: Ensure the bus network is customer focussed and integrated with other modes of transport to provide an attractive option for journeys to nearby towns.*
- *Objective 17: Extend and improve the network of active travel facilities so it is coherent and high quality enough to make active travel an attractive, safe option for short distance trips and to transport interchanges."*

2.3.3 The TA reports how WSTP "aims to ensure that transport and land use planning are closely aligned…" but seems to suggest that the policy is limited to the completion of a Transport Assessment and compliance with the parking standards.

2.3.4 Similar to the findings in Section 2.2, the TA considers accessibility (in Section 5) does not respond to Objective 2. Whilst some improvements are identified to enhance accessibility these are typically limited to the introduction of drop kerbs or bus stops and thus make a limited contribution to local living contribute to sustainable transport. Section 4 of this report will therefore identify areas where further mitigation might be considered to support this objective.

2.4 Mid Sussex District Plan (2014-2031)

2.4.1 Mid Sussex District Council adopted its District Plan in March 2018. The District Plan is the main planning document used by the Council when considering planning applications. It includes the strategy, proposed level of development and a number of planning policies.

2.4.2 The District Plan sets out a number of strategic objectives, the following that are relevant to this site are:

2.4.3 6. *"To ensure that development is accompanied by the necessary infrastructure in the right place at the right time that supports development and sustainable communities. This includes the provision of efficient and sustainable transport networks.*

15. *To create places that encourage a healthy and enjoyable lifestyle by the provision of first class cultural and sporting facilities, informal leisure space and the opportunity to walk, cycle or ride to common destinations."*

2.4.4 Policy DP6 builds on the Settlement Sustainability Review which defines Sharpthorne as a Category 3 settlement, a medium-sized village "...providing essential services for the needs of their own residents and immediate surrounding communities." As a village with a shop, school with a bus service it might be considered suitable for modest scales of development. Proportionate scales of

development are identified in the Local and Neighbourhood Plan, thus the proposals at Ibstock Brickworks might be considered to be a 'windfall' site offering additional housing development.

2.4.5 Policy DP21: Transport sets out that decisions on development proposals will take account of whether:

- *"The scheme is sustainably located to minimise the need for travel noting there might be circumstances where development needs to be located in the countryside, such as rural economic uses;*
- *Appropriate opportunities to facilitate and promote the increased use of alternative means of transport to the private car, such as the provision of, and access to, safe and convenient routes for walking, cycling and public transport, including suitable facilities for secure and safe cycle parking, have been fully explored and taken up;*
- *The scheme is designed to adoptable standards, or other standards as agreed by the Local Planning Authority, including road widths and size of garages;*
- *The scheme provides adequate car parking for the proposed development taking into account the accessibility of the development, the type, mix and use of the development and the availability and opportunities for public transport; and with the relevant Neighbourhood Plan where applicable;*
- *Development which generates significant amounts of movement is supported by a Transport Assessment/ Statement and a Travel Plan that is effective and demonstrably deliverable including setting out how schemes will be funded*
- *The scheme provides appropriate mitigation to support new development on the local and strategic road network, including the transport network outside of the district, secured where necessary through appropriate legal agreements;*
- *The scheme avoids severe additional traffic congestion, individually or cumulatively, taking account of any proposed mitigation;*
- *The scheme protects the safety of road users and pedestrians; and*
- *The scheme does not harm the special qualities of the South Downs National Park or the High Weald Area of Outstanding Natural Beauty through its transport impacts."*

2.4.6 The TA records accessibility to a range of local facilities, including the school. It identifies mitigation measures that will enhance accessibility to the shop and existing bus services and might be considered to comply with DP 6 and the Strategic Objectives of District Plan. However, the distance, severance (during peak times) and infrastructure (footway width, gradient and steps et al.) begin to weigh against the willingness to walk to some facilities, thus one might conclude the development does not meet the tests of DP21, particularly the delivery of infrastructure to " … *promote the increased use of alternative means of transport to the private car…"*

2.5 West Sussex Local Design Guide

2.5.1 The WSCC Guidance sets parameters for development masterplans, street layouts, width, visibility and parking. They also provide a reasonable basis for considering existing issues that might be material to a development which increases travel demands.

2.5.2 Drawing No. 2022/6607/009 responds to the physical constraints of the existing site access, incorporating a 4.85-5.25m wide access road, with a single 1.5m footway. As this is the sole means of access to the development, it remains unclear how this meets NPPF112(a) and DP21 et al.

2.5.3 Whilst a Road Safety Audit was completed, and the audit teams may decide certain issues might not result in a risk where mitigation measures might remove, reduce or mitigate the risk of personal injury, it is unclear how closely the audit team considered the intervisibility of vehicles and active travel users.

2.5.4 Drawing Numbers 2022/6607/006 & 007 considers vehicle swept paths at the end of Hamsey Road, beyond what could be described as a speed control bend. None consider the prospect of a car/HGV passing nor the inter-visibility where these vehicles might not pass. It seems likely therefore that the introduction of a priority working pinch-point might therefore offer a means to overcome this concern whilst delivering a full standard footway.

2.6 Summary

2.6.1 Overall, the TA prepared for the site states that the proposals will be conformant to the same national and local policy outlined above. The TA reports that the site can be safely accessed through a highways safety review and junction modelling. However, it is limited in how the site can be accessed sustainably and how local living can be achieved, although the scheme does propose some improvements to enhance local conditions to encourage people to walk on foot.

3 Baseline Conditions

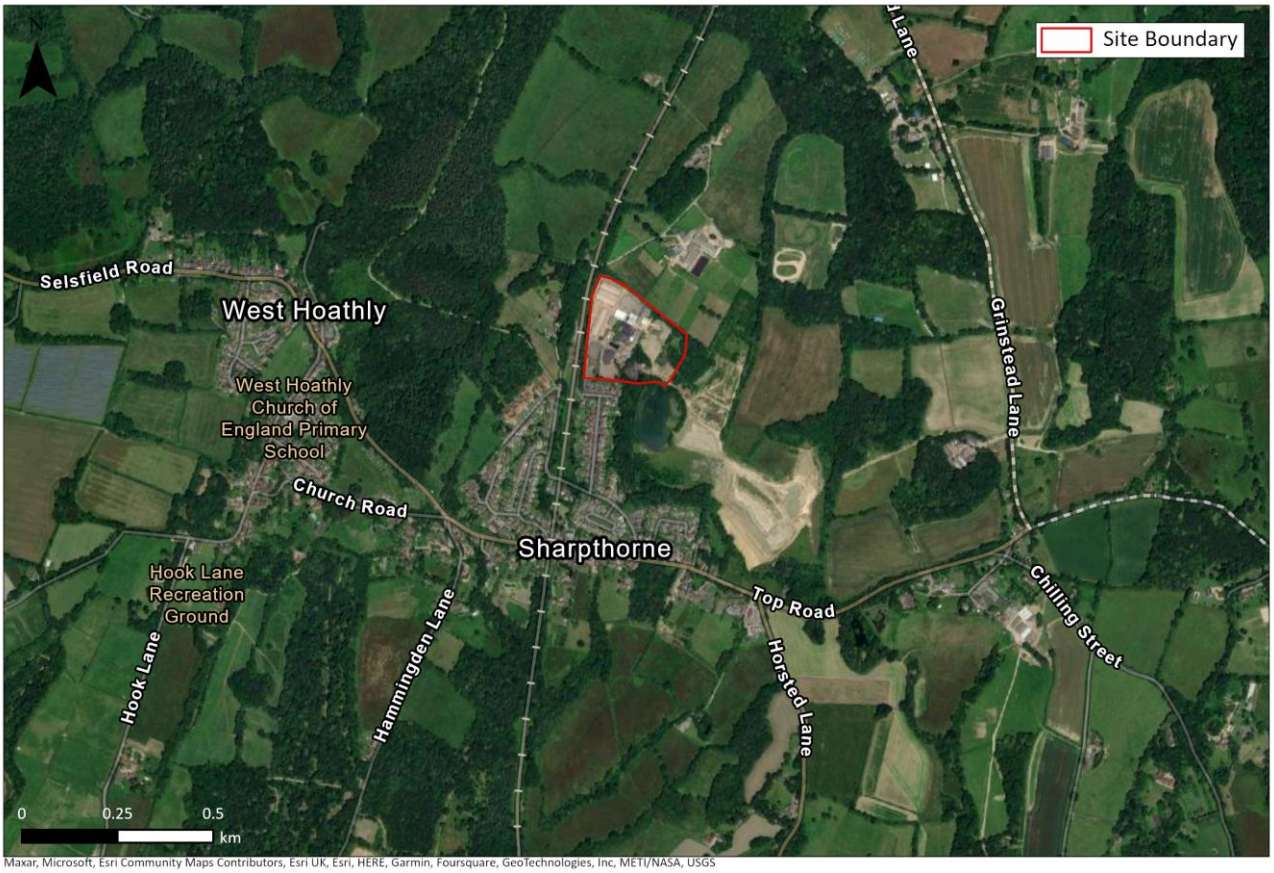
3.1 Overview

3.1.1 This section sets out the existing site accessibility both surrounding the site and within the wider highway network. It aims to understand the pedestrian, cycle, public transport and highway infrastructure connecting the site and the existing amenities and services and highlights the challenges that the applicant will need to overcome to ensure the site can support sustainable travel and achieve sustainable development.

3.2 Site Location

3.2.1 The site is located on the northern edge of the village of Sharpthorne, on the former Ibstock Brickworks. The site is bound by agricultural fields to the north and east, residential development to the south and the former national rail line to the west, that is now the Bluebell Railway heritage line. Figure 3-1 shows the location of the site.

Figure 3-1: Site Location



3.2.2 To the southeast of the development site is the former mineral extraction, subject to the agreed remediation works.

3.3 Local Highway Network

Hamsey Road and Station Road

3.3.1 Hamsey Road is a single carriageway road that is subject to 30mph speed limit. Hamsey Road currently provides access to the south-west of the site.

3.3.2 Parking is unrestricted along Hamsey Road, and currently generates demand for on street and kerbside parking.

3.3.3 A site visit was undertaken in March 2023. Similar to Figure 6 in the TA, Figure 3-2 shows a photo of the level of on-street parking occurring along Hamsey Road. The presence of on-street parking restricts two-way movement, the RGP TA notes that there is a prevalence of on-street parking along Hamsey Road but does not consider the need for mitigation.

Figure 3-2: Hamsey Road Site Visit Photo

3.3.4 Hamsey Road / Station Road form a priority junction, both serving mainly residential areas. Whilst it is subject to 30mph speed limit vehicle speeds are low, but the visibility east (Figure 3-3 refers)

appears to be restricted (right - in the primary direction) This may be due to the absence of verge and/or poor maintenance of adjacent vegetation, in which case trimming could be undertaken to preserve highway safety. If the limit of highway does enable such maintenance to be delivered, it may be necessary to make a judgement based on the level of intensification of use of the existing junction. As a potentially proportionate mitigation measure the development could fund the use of highway powers to 'cut of the corner' to improve visibility.

Figure 3-3: Hamsey Road/Station Road Junction

3.3.5 Station Road routes east-west, providing access to residential development and a farm to the east, and connects to Top Road at its western extent by means of a priority junction.

3.3.6 Parking is also unrestricted along the entire length of Station Road, which raises similar issues as highlighted along Hamsey Road, with parking occurring on-street having the potential to restrict two-way movement, also affecting turning movements at Home Platt. Again, this issue is not considered within RGP's TA.

Top Road

3.3.7 Top Road is a C-class road forming the main route through the village of Sharpthorne. Top Road routes east-west and provides access to the neighbouring village of West Hoathly to the west, and further towards Crawley. To the east it provides access to the A22 north at Forest Row and the A22 south at Wych Cross.

3.3.8 Top Road is the primary route through the village where the greenspace adjacent the Station Road junction is maintained by the Parish and is considered as a public realm / way-finding point, depicted in Figure 3-4.

Figure 3-4: Top Road/Station Road Green

3.3.9 Top Road also provides access to the main amenities within and surrounding the village, including the Costcutter convenience store, the Fox pub and the West Hoathly Primary School. Combined with the Public Rights of Way (PROW) network it is an important thoroughfare and barrier to movement.

Figure 3-5: Top Road/The Hollow – PROW Crossing

3.3.10 Top Road has narrow intermittent footways on both sides of the carriageway, thus the combination of boundaries exaggerated the edge effects typically reducing the effective width (Figure 3-6 refers). Whilst the TA considers the introduction of uncontrolled crossings and has no pedestrian crossing facilities along much of its length.

Figure 3-6: Top Road

3.3.11 East of Bulldogs Bank, on-street parking is present for much of the day, outside affordable housing. The parking creates an informal shuttle/priority working arrangement (single-file traffic giving way to on-coming traffic), where the flows ensure this delivers a traffic management function.

3.3.12 Priority Working arrangements normally operate satisfactory with traffic flows below 6,000 vehicle per day. At higher flows the length of the pinch-point and the tidal pattern will have a greater effect on levels of congestion and delay.

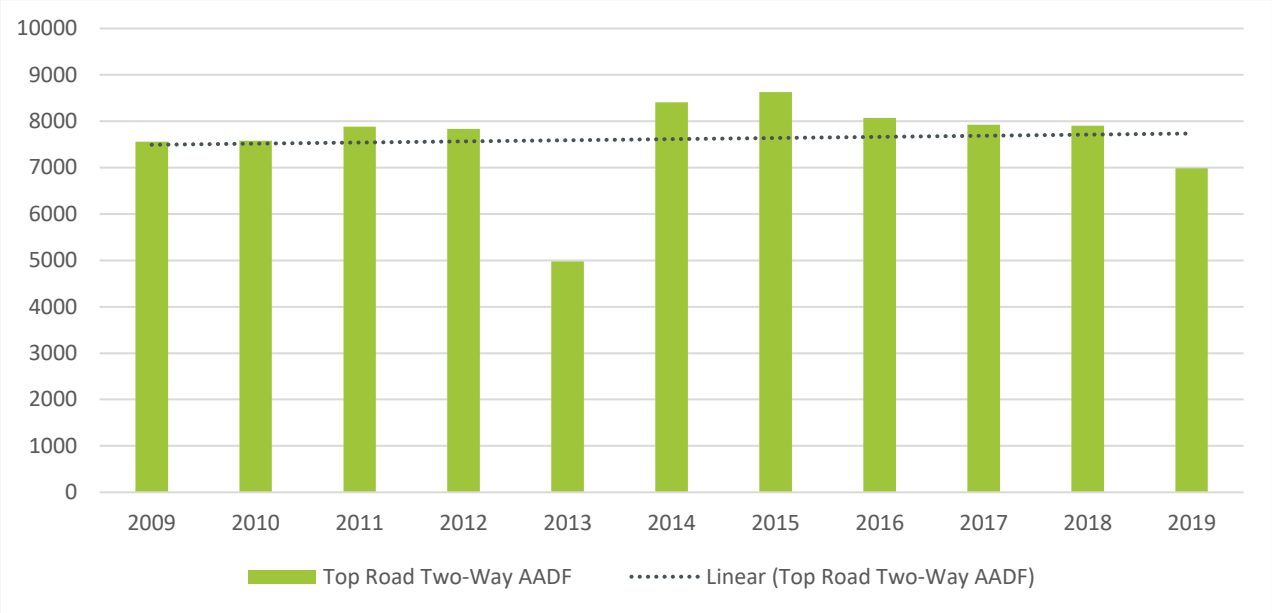
3.4 Traffic Flows

3.4.1 To establish existing traffic flows along Top Road, Department for Transport (DfT) traffic counts have been interrogated. A DfT traffic count is located along Top Road, approximately 100m west of the junction with Horsted Lane.

3.4.2 In recent years traffic conditions have changed so observations and forecasts are challenging. Travel behaviour in the UK has also been changing, some contributing to paradigm shifts in commuting and business travel, contributing to reductions in traffic.

3.4.3 Average Annual Daily Flows (AADF) determined from the DfT traffic counts is shown in Figure 3-7. The figure demonstrates that traffic flows have remained consistently between 7,500 to 8,500 vehicles per day two-way. The traffic flows decrease slightly in 2019 to an average of 7,000 two-way vehicles per day.

Figure 3-7: Top Road, Sharpthorne – Average Annual Daily Flow (AADF)



3.4.4 As traffic flows are not available after 2019, TEMPro has been investigated to assess whether this downward trend will continue or if traffic is expected to rise again. The Middle Super Output Area (MSOA) Mid Sussex 006 has been selected, in which the site is located, and traffic has been forecast from 2019 to 2028, five years from now. Table 3-1 shows the resulting growth factor from TEMPro for the area and, the resulting level of traffic that TEMPro predicts would occur in 2028.

Table 3-1: TEMPro Growth Factor

	TEMPro Growth Factor	2028 AADF
Mid Sussex 006	1.0898	7,610

3.4.5 Appendix J if the TA includes 2022 traffic surveys, suggest traffic flows are similar or slightly lower than 2019 levels.

3.4.6 It is worth noting that TEMPro traffic growth forecasts are based on the latest planning information at the time of publication. Amongst other things they include network, economic and development growth forecasts for the areas. They do not include forecasts for Development Consent Orders such as those at Gatwick.

3.5 Highways Safety

3.5.1 In order to establish whether there are any safety concerns on the local highway network that could be exacerbated by any redevelopment that comes forward, publicly available Personal Injury Collision (PIC) data has been extracted for the most recent five-year period available (2017-2021) from the Department for Transport.

Figure 3-8: Collision Locations

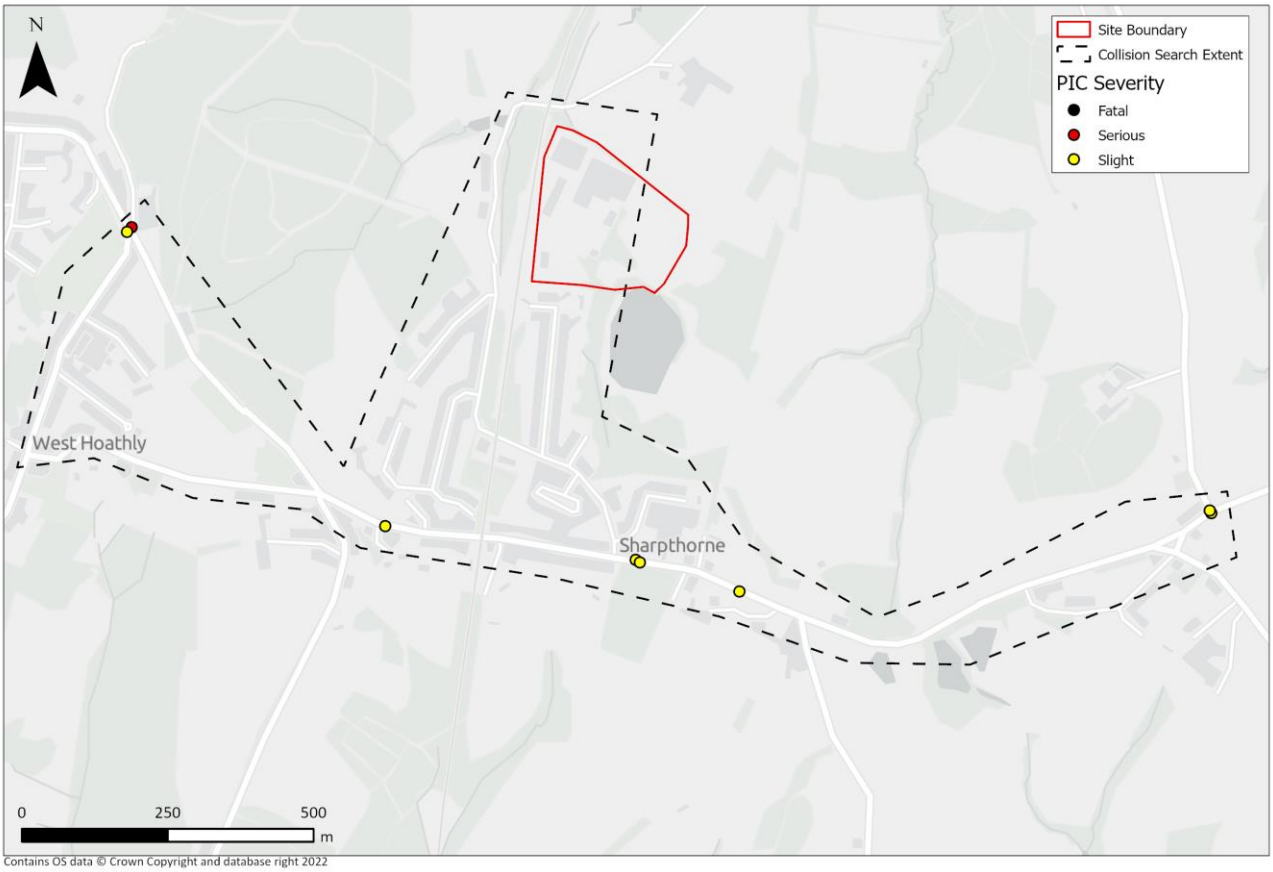


Table 3-2: Collision Summary

Location	Severity			Sensitive Road Users		
	Slight	Serious	Fatal	Pedestrian	Cyclist	Motorcyclist
Top Road	4	-	-	1	-	-
Plawhatch Lane/Grinstead Lane Junction	2	-	-	-	-	1
Chapel Row/The Hollow/North Lane Crossroad	1	1	-	-	-	-

3.5.2 A total of four collisions occurred along Top Road, all of which resulted in injuries of slight severity. Two of these collisions occurred near to the Top Road/Station Road T-junction. One of these collisions involved a car going straight ahead and colliding with a pedestrian, resulting in the pedestrian having slight injuries. The second collision involved two vehicles travelling ahead from opposite directions colliding with each other, both first impacted on the front first.

3.5.3 Two collisions occurred around the Chapel Row/The Hollow/North Lane crossroads junction within the study period, one of these resulted in injuries of serious severity. This collision involved two cars approaching the junction travelling ahead and colliding with each other, both first impacting the front of the vehicle. The driver and passenger of one of the cars sustained serious injuries. The other collision at this location involved a car approaching the junction going ahead, collided with a car waiting to turn left onto the main road, resulting in the car going ahead sustaining slight injuries.

3.5.4 At the Plawhatch Lane/Grinstead Lane T-junction, two collisions resulting in slight injury had occurred. One of these collisions involved a motorcycle (125cc and under) going ahead that collided with a car that had moved off the road and resulted in the motorcyclist sustaining slight injuries. The other collision at this location involved a car turning left onto the main road colliding with a car going straight ahead.

2015 & 2016 Collisions

3.5.5 TA's typically assess collisions for the most recent three or five year period, but it should be noted that due to the impacts of lockdown restrictions associated with Covid-19 in 2020 and 2021, this may have resulted in less collisions occurring due to reduced traffic volumes. Therefore, to establish if there are any existing collision trends in the immediate vicinity of the site, it may be worth review collisions that occurred within 2015 and 2016 as well as these may reveal a localised cluster.

3.5.6 Table 3-3 sets out a brief summary of collisions that occurred within the vicinity of the site in 2015 and 2016.

Table 3-3: 2015 & 2016 Collisions

Location	Severity			Sensitive Road Users		
	Slight	Serious	Fatal	Pedestrian	Cyclist	Motorcyclist
Top Road/Station Road Junction	2	-	-	-	-	-
Plawhatch Lane/Grinstead Lane Junction	1	1	1	-	-	-

Highway Safety Summary

3.5.7 A total of eight collisions have occurred in the vicinity of the site in the most recent five-year period for which data is available (2017-2021). Of these collisions, one resulted in serious injuries, the rest were slight in severity. One collision involved a pedestrian, and one involved a motorcycle.

3.5.8 The TA provides an up-to-date review of collisions between 2015-2021, as years 2020 and 2021 may have been impacted due to COVID-19. The study area only assesses collisions within the Sharpthorne village. The TA concludes that there are no road safety issues in the local area, but notes that there is scope to introduce improvements, particularly at the Top Road/Station Road junction. The improvements proposed involve replenishing the existing anti-skid surfacing and road markings at the junction and providing new uncontrolled pedestrian crossing facilities along Top Road and Station Road. These improvements will help to improve road safety.

3.6 Highway Geometry

3.6.1 National and Local Highway Design guidance has become less prescriptive, responding to other guidance on design quality and place-making. It is however definitive on visibility, as there is a relationship of speed and safety. Where there is or might be an intensification of use of an existing feature that is or might become deficient, the application should be expected to demonstrate speeds and visibility are acceptable and take steps to mitigate these, for example:

- visibility right at the Hamsey Road/Station Road junction; and,
- visibility left at the Home Platt/Station Road junction.

3.6.2 Historically, the number of dwellings and/or length of a cul-de-sac without a secondary access, this requirement has been removed through national guidance and replaced with a discretionary approach applied by the Fire & Rescue Service (F&RS). As the proposed development would be introduce new homes around 600m from the only point of highway access, the application might be expected to complete a risk assessment for the F&RS, potentially identifying mitigation to preserve access in the event of a collision.

4 Access by Sustainable Modes

4.1 Local Amenities

4.1.1 The proximity of local amenities to a site and the ability to reach such facilities by foot and cycle are a key consideration when determining the sustainability of a development.

4.1.2 Guidance provided by the Institution of Highways and Transportation (IHT) in their publication 'Guidelines for Providing for Journeys on Foot' (2000) suggests that in terms of commuting, walking to school and recreational journeys; walk distances of up to 2,000m can be considered as a preferred maximum, with 'desirable' and 'acceptable' distances being 500m and 1,000m, respectively.

4.1.3 For non-commuter journeys, the Guidance suggests that walk distances of up to 1,200m can be considered a preferred maximum, with the 'desirable' and 'acceptable' distances being 400m and 800m, respectively.

4.1.4 Section 5.2 of the TA considers acceptable walking distances. As PJA/RGP apply a subtly different interpretation on the CIHT guidance, Table 4-1 summarises the broad walk journey times that can fall under each category, assuming a typical walking speed of approximately 1.4m/s. .By presenting these in distance and walk time, the Parish and others are able to apply some judgement as to the effect gradient might alter walk times.

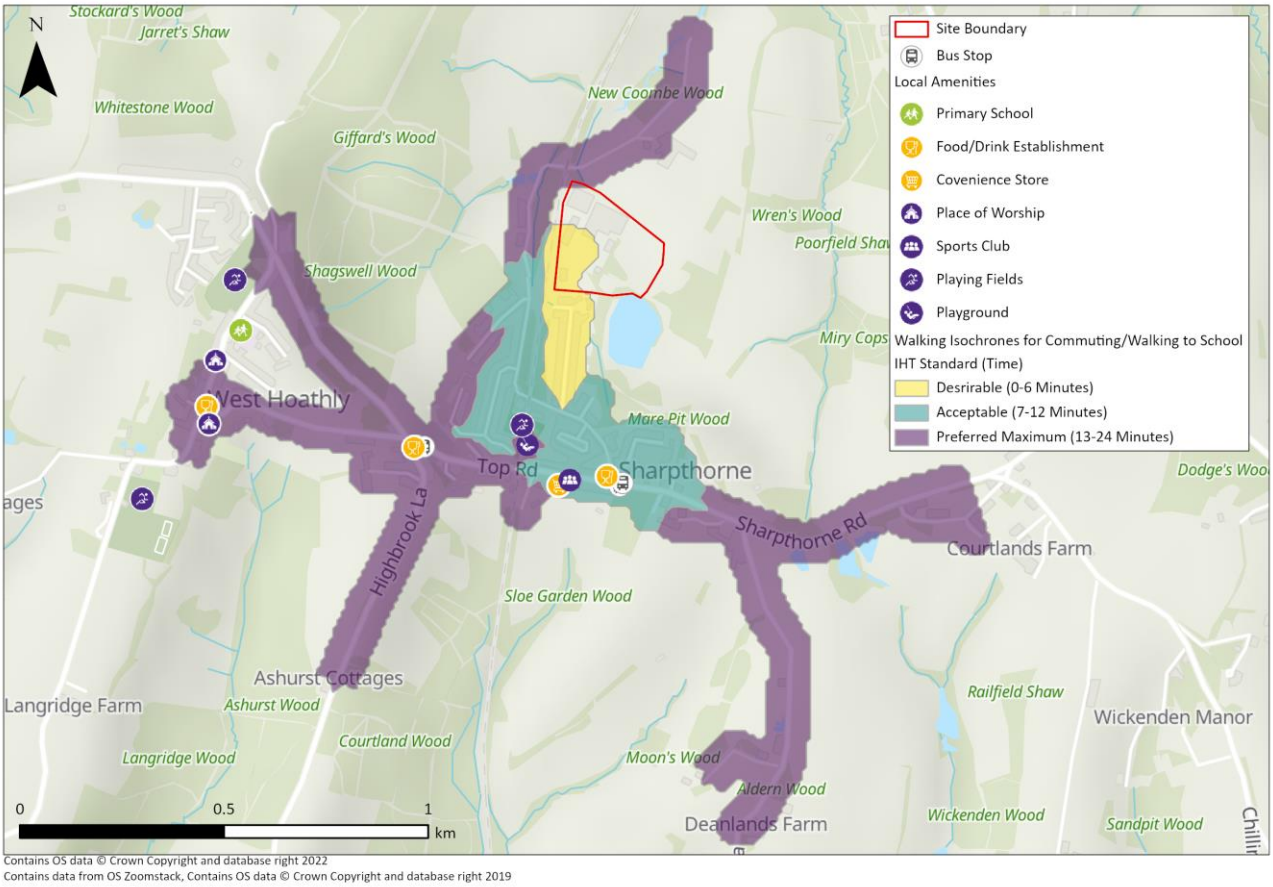
Table 4-1: Walk Journey and Time Thresholds

IHT Standard	Distance (m)		Walk Time (mins)	
	Commuting, Walking to School and Recreation	Other, non-commuter journeys	Commuting, Walking to School and Recreation	Other, non-commuter journeys
Desirable	500	400	6	5
Acceptable	1000	800	12	10
Preferred Maximum	2000	1200	24	14

4.1.5 Taking account of the IHT walk journey time and distance thresholds outlined in Table 4-1, Figure 4-1 shows walk isochrones from the centre of the site, with commuting and walking to school IHT standards shown and local amenities. It should be noted that the village of Sharpthorne has steep topography, and so walking times may take slightly longer than calculated, as the methodology used does not account for topography.

4.1.6 This figure demonstrates that the one school within the local area is outside of the preferred maximum walking distance recommended by IHT. Figure 4-1 also highlights that employment opportunities within a suitable walk distance from the site are very limited.

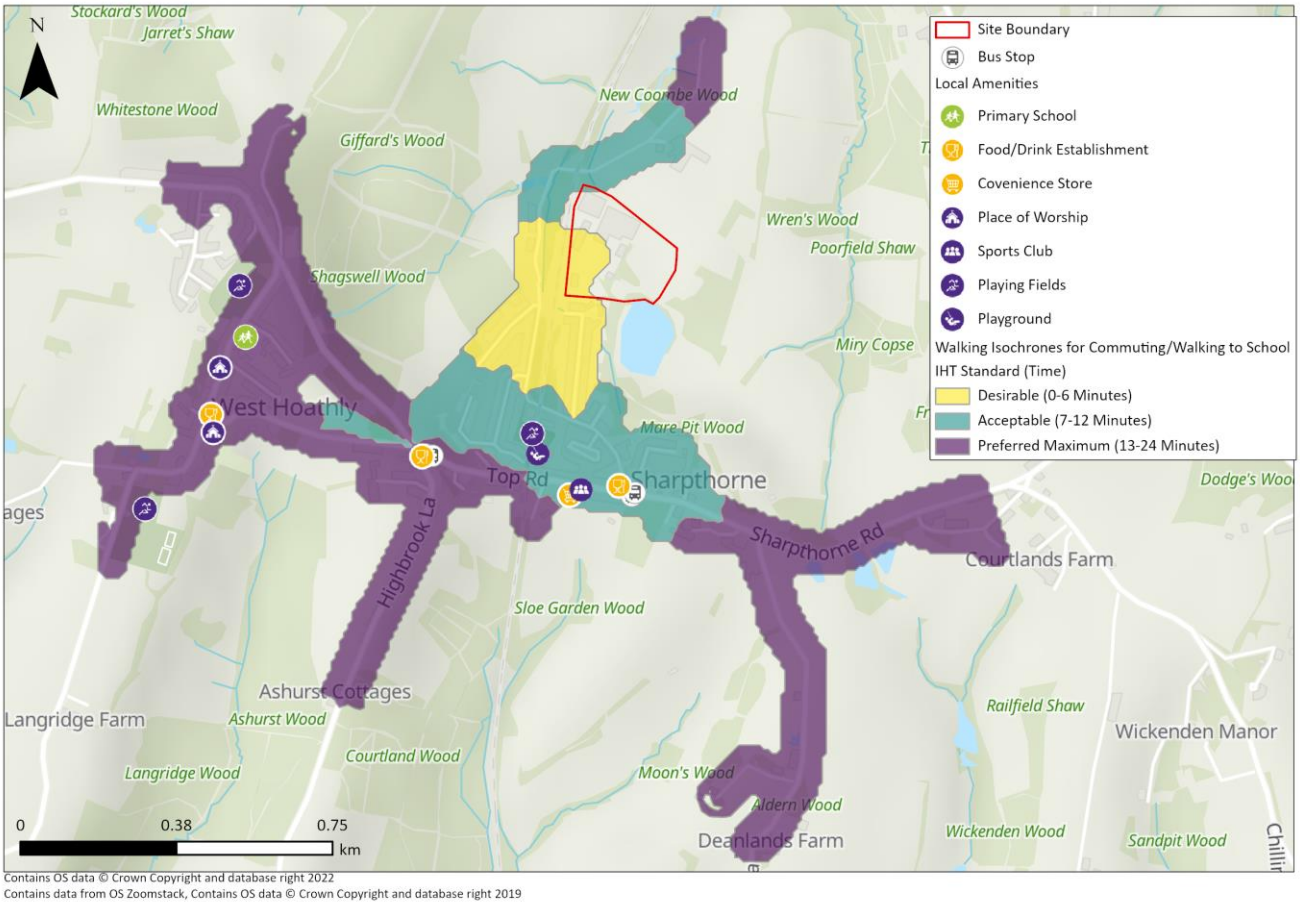
Figure 4-1: Walk Isochrones with IHT Standards for Commuting/Walking to School



4.1.7 The walk isochrones presented in Figure 4-1 are determined from using the road network. The TA prepared by RGP provides an accessibility review for walking and includes Public Rights of Way (PROW) within the walking routes/times for local amenities.

4.1.8 Figure 4-2 presents walk isochrones when the adjoining footpaths are included and the at-grade crossing over the bluebell heritage railway, to the south-west of the site. This is a permissive path and whilst open most of the year it relies on residents crossing over the railway to access the Bridleway to the west of Sharpthorne. Assuming this route remains open and users are able to navigate the surface/gradient/steps the primary school can then be accessed within IHT's preferred maximum time.

Figure 4-2: Walk Isochrones with IHT Standards for Commuting/Walking to School with footpaths



4.1.9 However, it should be noted that currently pedestrian links to the school may not be accessible at all times of the year, particularly in the winter with bad weather making the routes muddy and unsafe in the evenings without lighting. If these are to be used throughout the year then improvements would need to be undertaken, such as improving the surfacing along the route to a cyclable standard and consideration should be given as to whether the route should be lit.

4.1.10 RGP's TA for the site proposes that improvements will be delivered to the local PROW to improve pedestrian connections to/from the site, and these have been consulted with an officer from WSCC Public Rights of Way Team. These include introducing handrailing along Footpath 3770, a direct connection at the north-western corner of the site to Footpath 2WH and cutting back vegetation along Bridleway 43WH. The TA states that further measures to improve surfacing and how these improvements will be delivered will be confirmed through the consultation process.

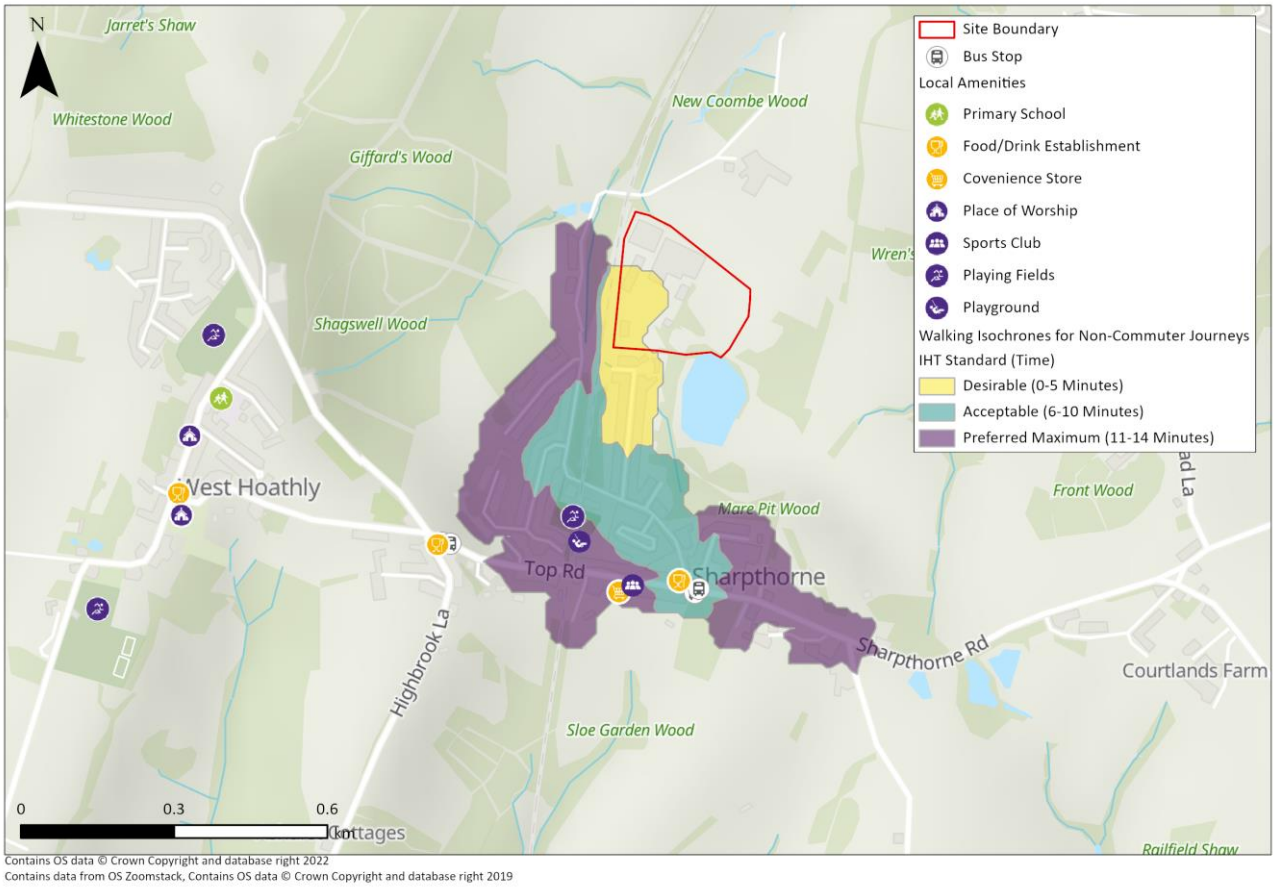
4.1.11 If the improvements noted above can be delivered, then all of the amenities for commuting and walking to school within Sharpthorne and West Hoathly will be accessible within IHT's preferred maximum walking time. Whilst such improvements make significant progress towards meeting the

NPPF policy test (110a) residents will have limited access to jobs, (secondary) education or health without the use of a car as the range of facilities in the village and bus services are limited .

4.1.12 Figure 4-3 demonstrates walk isochrones from the centre of the site with non-commuter journeys IHT standards shown. The figure shows that local amenities within a suitable walk distance from the site are extremely limited, with one café and a small local convenience store, which are unlikely to fulfil all of the needs of the residents of any future development.

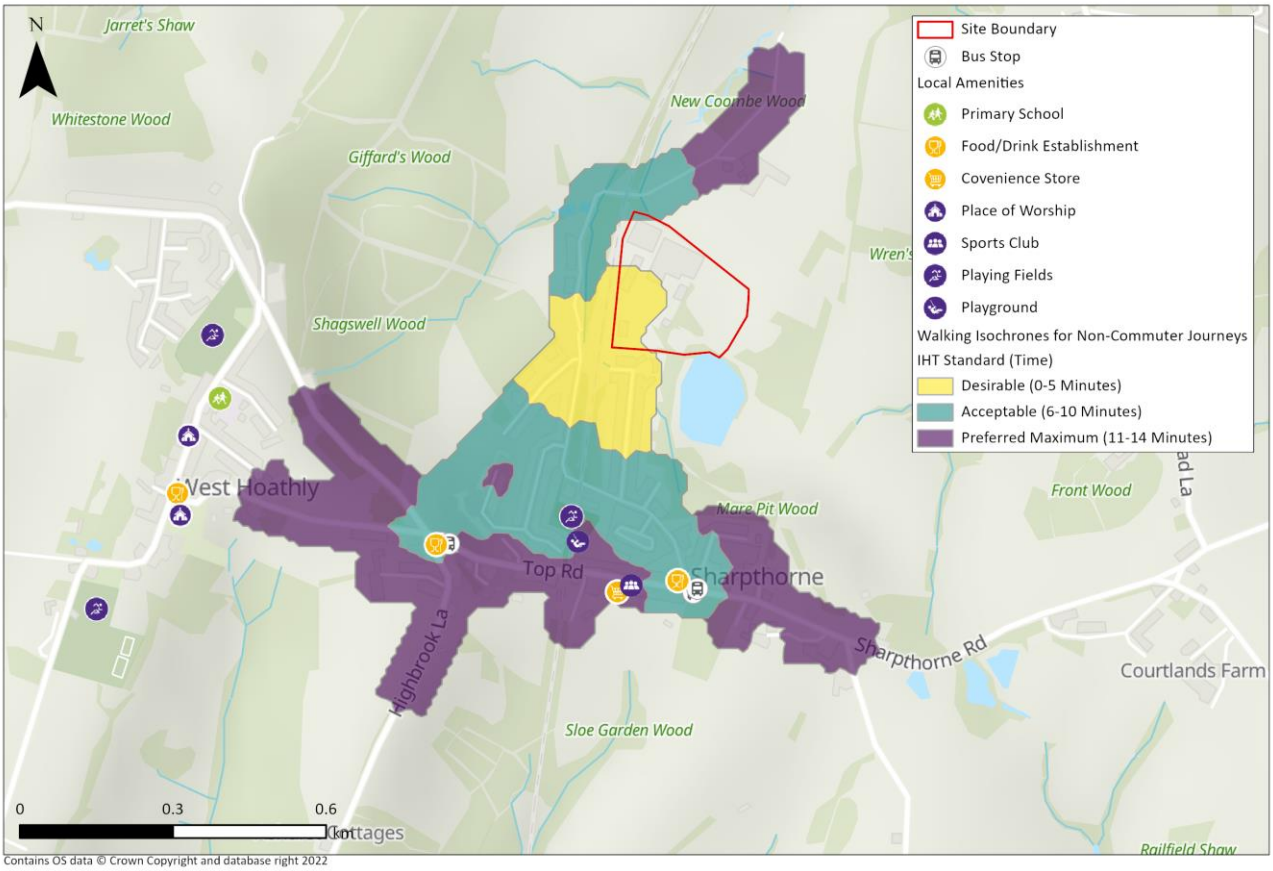
4.1.13 The Fox Pub and all of the amenities within West Hoathly are all outside of IHT's preferred maximum walk distance for non-commuter journeys.

Figure 4-3: Walk Isochrones with IHT Standards for Non-Commuter Journeys



4.1.14 Similar to other figures, Figure 4-3 above is based on the road network and Figure 4-4 below demonstrates the walk catchments from the site if the footpaths are used. With the footpaths, the Fox Pub can be reached in IHT's preferred maximum walk time. However the rest of West Hoathly's amenities still fall outside of IHT's preferred walk times.

Figure 4-4: Walk Isochrones with IHT Standards for Non-Commuter Journeys with footpaths



4.2 Walking and Cycling

4.2.1 There are pedestrian footways on both sides of Hamsey Road, enabling pedestrian connections to Station Road. However, from a site visit undertaken in March 2023, it appears that on-footway parking occurs along Hamsey Road, which causes reduced accessibility for pedestrians from the site. This is shown in the photo in Figure 3-2 and was omitted from RGP's TA.

4.2.2 Station Road provides a narrow continuous pedestrian footway on the northern side linking to Top Road. The TA prepared by RGP proposes that dropped kerbs and tactile paving will be provided along Station Road to improve pedestrian access. However, the TA does not address the issue of on-footway parking occurring along Station Road, which may restrict pedestrian movement and two-way vehicular movement.

4.2.3 Top Road has narrow footways on both sides of the carriageway. Guidance from the Inclusive Mobility[1] document, published by DfT in 2021 should be taken into account, as it states that footways should be 2000mm as a minimum, as this allows enough space for two wheelchair users

[1] Inclusive Mobility (DfT, 2021)

to pass. However, where this is not achievable due to physical restrictions, a minimum width of 1500mm would be acceptable. A width of 1000mm can be acceptable where there are obstacles, but should only be present for a maximum width of 6m. Therefore, depending on the widths of the footways along Top Road, the footways may not be appropriate to provide suitable access for all users to the local facilities.

4.2.4 In addition, no pedestrian crossing facilities are provided along the entire length of Top Road, as well as a lack of street lighting. Top Road provides access to local facilities and public transport infrastructure to the west.

4.2.5 The TA proposes improvements at the Top Road / Station Road junction, including the road markings and anti-skid surfacing would be replenished.

4.2.6 The TA also proposes that the development will introduce uncontrolled pedestrian crossings at either side of the junction on Top Road. A Stage 1 Road Safety Audit (RSA) was undertaken for the site. The audit raised one issue, that adequate and unobstructed visibility would need to be provided at the uncontrolled pedestrian crossing to the west of the junction, as it is noted that vehicles park along the road frequently.

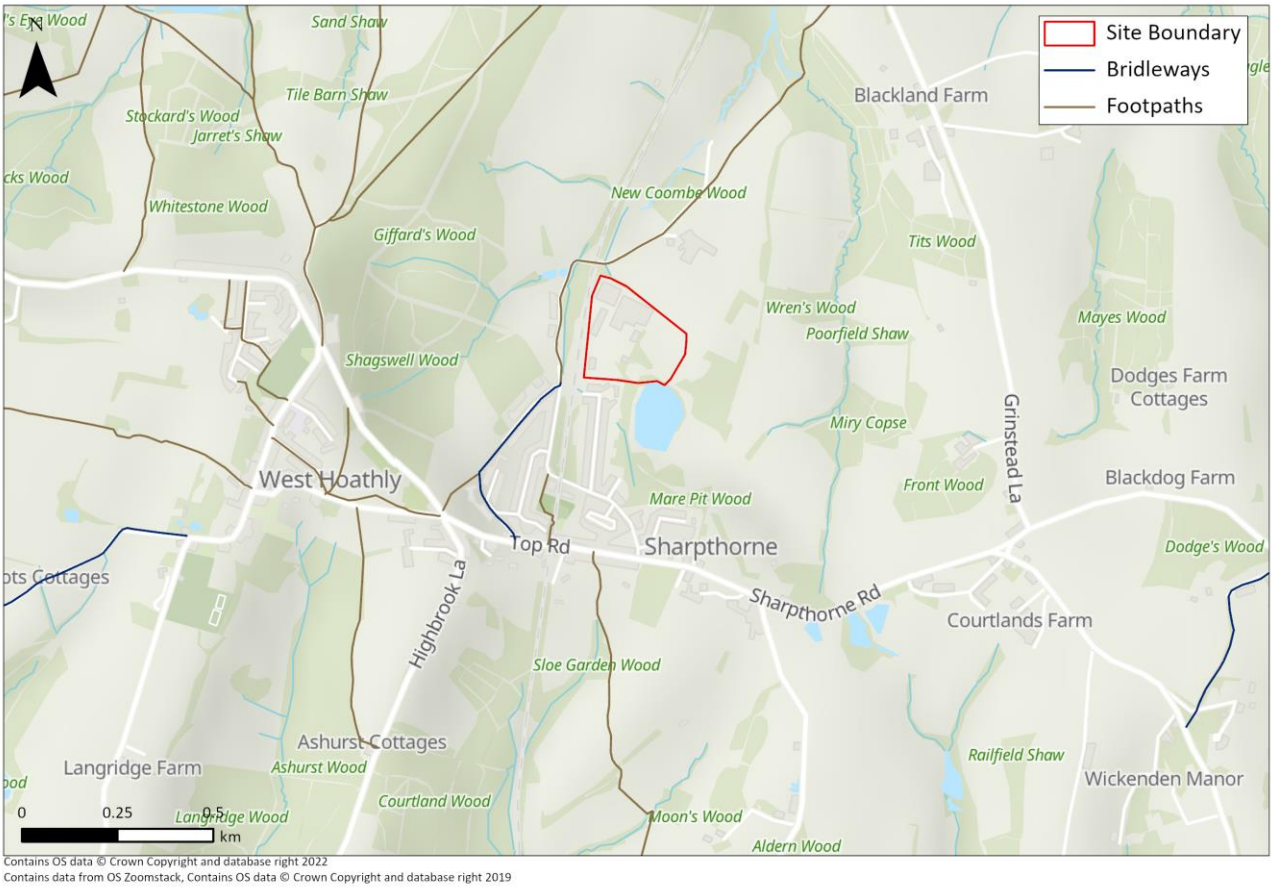
4.2.7 The TA's response to this recommendation was that the pedestrian crossing would deter on-street parking and as there are not any formal parking controls within the village, introduction of these would not be appropriate. This is not a reasonable conclusion and sufficient evidence should be provided to justify this conclusion.

4.2.8 Actually, the RSA visibility 'Problem' may go beyond the introduction of an uncontrolled pedestrian crossing, as Top Road follows a long sweeping bend where the footway is around 1.2m wide. Consequently, the boundary hedge beyond the café, around 30m from the junction, affects visibility at the junction, Figure 4-5 refers. This constraint may be acceptable for speeds below 30mph, and similar to Hamsey Road/Station Road this is an existing constraint that might have some effect on the collision record at the junction so a proportionate mitigation may be acceptable.

Figure 4-5: Station Road/Top Road – Visibility Right]

4.2.9 There are several Public Rights of Way (PROW) in the vicinity of the development site, these are presented in Figure 4-6.

Figure 4-6: Public Rights of Way



4.2.10 A permitted right of way is also available most of the time, linking Hamsey Road – Station Road with an at grade crossing of the railway via Bluebell Lane and the footpath. A photo of this crossing from the site visit is shown in Figure 4-7.

Figure 4-7: Railway At Grade Crossing Site Visit Photo

4.2.11 This crossing connects to PROW 2WH, which runs to the west of the site, routing north-south through the west of Sharpthorne. The PROW forms part of a wider network linking the Sussex Border Path and the High Weald Landscape Trail. This route offers a slightly more direct route to The Fox pub and adjacent bus stops but is still around 600m (>7 minutes).

4.2.12 Figure 4-8 shows a photo of the current conditions of the footpath from a site visit, the current surfacing of the footpath would mean that it may not be accessible all year round. However the TA proposes resurfacing this footpath to control draining, this is currently under considered by the WSCC PROW team.

Figure 4-8: Footpath Site Visit Photo

4.2.13 There are no footways on The Hollow or Church Hill, instead connections within the village are achieved via other parts of the PROW network, linking Finche Field, Garden Mead/Sandy Lane and North Lane.

4.2.14 As highlighted previously, the TA prepared by RGP has consulted with officers within the WSCC Public Rights of Way team on improvements to PROW in the vicinity of the site. In addition Appendix D of the TA provides an audit of the PROW network. However, whilst the audit does identify improvements as mentioned previously, there is limited reference to the gradient issues. As Figure 4-9 below shows a photo from the site visit, showing the entrance to the footpath just opposite the Fox Pub.

Figure 4-9: Footpath Entrance Site Visit Photo`12

4.2.15 There are no dedicated cycle routes within the surrounding areas of the site. Figure 4-10 is reproduced from Figure 4.1 from LTN1/20[2], which demonstrates what conditions are suitable for cycling in mixed traffic. Hamsey Road and Station Road are both subject to 30mph speed limits and traffic flows are <2,000, according to Figure 4-10, cycling in mixed traffic here would not be suitable for all people and will exclude some potential users.

4.2.16 Along Top Road traffic flows are >6,000 vehicles per day, and therefore cycling in mixed traffic according to the figure from LTN1/20 would not be appropriate. Therefore, suitable cycle access to the site could not be achieved with the current conditions. This is not addressed within the TA submitted in March 2023.

[2] Cycle Infrastructure Design – Local Transport Note 1/20 (DfT, 2020) - Cycle Infrastructure Design (publishing.service.gov.uk)

4.2.17 If a 20mph traffic regulation order (TRO) was introduced within the village of Sharpthorne, this would make cycling along Hamsey Road and Station Road suitable for most people, however cycling would only be suitable for most people along Top Road due to the high traffic volumes and would require self-enforcing speed controls through the village As residual conditions would be similar to those on the B3006 through Selbourne a package of traffic management measures might be sought.

4.2.18 The introduction of light segregation along Top Road would make the route suitable for most people to cycle along, even if it remained a 30mph road according to Figure 4-10, as this would make motorists more aware of cyclists and improve their safety. However, it is uncertain whether land ownership constraints may prevent this provision.

Figure 4-10: Appropriate Protection from Motor Traffic on Highways

4.3 Public Transport

4.3.1 The nearest bus stops are located on Top Road, approximately 700m south-east from the centre of the site. Guidance[3], strongly recommends that for higher-density development, every dwelling is located within 400m of a bus stop or a high-frequency service. This is currently not achieved, therefore any TA brought forward needs to consider how the site would achieve suitable access to bus services.

4.3.2 The TA prepared by RGP does not address this issue and states that the bus stops are located 550m from the site, measuring the distance from the entrance point, rather than the middle of the site. In reality, residents will be located more than the 550m away from a bus stop stated within the TA.

4.3.3 The eastbound stop is provided with a flagpole and timetable information, and the westbound stop is provided with a flag pole, timetable information and a shelter with seating. As part of the proposals within the TA, it is suggested that these bus stops will be refurbished, with new bus shelter facilities provided for the eastbound stop and improving the existing shelter for the westbound stop.

4.3.4 These bus stops are only served by the 84 service. The service has a limited frequency, with five buses per day in the eastbound direction. The last bus from Crawley departs at 4pm, making this bus service not a viable option for commuting. The bus timetable is summarised below:

Table 4-2: Bus Times

Bus Stop	Bus Times
Eastbound (to East Grinstead)	07:45, 10:07, 12:07, 14:07, 16:43
Westbound (to Crawley)	07:38, 08:53, 10:53, 12:53, 15:33, 17:27

4.3.5 There are no rail stations within the immediate vicinity of the site. Although the 84 bus service does provide access to both East Grinstead Railway Station and Three Bridges Railway Station, the limited frequency of the bus service limits the practicality of accessing the site by rail.

4.4 Summary

4.4.1 Overall, the following issues with achieving sustainable access to the site are:

- Both employment opportunities and local amenities are very limited and those that are provided, many are located beyond suitable walking distances for many;
- If on-footway parking occurs along Hamsey Road this may limit pedestrian accessibility from the site;

[3] Bus Services New Residential Developments (Stagecoach, 2017) and Buses in Urban Developments (CIHT, 2018)

- Narrow footways along Top Road may not be appropriate to provide suitable access for all users to the local facilities;
- Suitable cycle access to the site cannot currently be achieved following LTN1/20 guidance; and
- Bus stops are currently located outside of the recommended 400m walk distance and these provide a limited service.

4.4.2 It is therefore considered that accessibility to the site by alternative modes of transport to the private car is limited and any TA brought forward on the site would need to address all of the issues raised above.

4.4.3 The TA brought forward in the March 2023 planning application concluded that there are several options to travel from the site via sustainable forms of transport for short and medium-distance journeys. The TA also states that the improvements proposed as part of the development would also help to encourage journeys by foot, such as improvements to local PROW's and pedestrian improvements to nearby junctions. In addition, a Travel Plan has been prepared as part of this planning application to encourage further sustainable travel.

5 Travel Demand

5.1 Existing Trip Generation

5.1.1 It is worth noting that the site currently comprises the former Ibstock Brickworks and quarry, which ceased production in 2020. It should be noted, that as part of the planning consent for the brickworks and quarry, planning condition 20 states that in the event that the brickworks close, a revised scheme to include details of restoration and aftercare needs to be submitted.

5.1.2 Bright & Associates prepared the revised restorations scheme in August 2022, to restore the site to its rural nature, principally with grassland habitats. Therefore, the net impact of any development proposals should be taken against the trip generation associated with the restoration scheme of the brickworks only.

5.1.3 The TA prepared by RGP utilises data provided from the previous operator of the Brickworks site that outlines typical traffic movements to/from the site when the Brickworks was still in operation but as it was gradually winding down its operation. The TA goes on to state in the sites net impact that although the proposed development does result in an increase in trips, the change in traffic profile through removing HGV traffic should be considered.

5.1.4 However, as stated above, the trip generation net impact should be taken against the trip generation associated with the restoration and aftercare needs of the site, rather than the previous activity of the now closed brickworks.

5.2 Proposed Residential Trip Generation

5.2.1 The TA prepared by RGP provides a trip generation assessment for the proposed 108 units at the site. The assessment utilised TRICs and determined the survey sites based on the following categories:

- Category: 03/A – Houses, Privately Owned;
- Regions: All (excluding Greater London);
- Days: Weekdays Only; and
- Locations: Neighbourhood Centre, Village.

5.2.2 The resulting trip rates and trip generation that is used within the TA is reproduced in Table 5-1 below.

Table 5-1: Proposed Residential Vehicle Trip Rates & Generation (RGP TA)

Time Period	Trip Rate per dwelling			Trip Generation – 108 units		
	Arr	Dep	Two-way	Arr	Dep	Two-way
AM Peak	0.170	0.471	0.641	18	51	69
PM Peak	0.442	0.212	0.654	48	23	71
Daily	**2.712**	**2.837**	**5.549**	**293**	**306**	**599**

5.2.3 The sites utilised within the pre-application report have been summarised within Table 5-2.

Table 5-2: TRICs Sites Comparison

TRICS Sites	Location	Population within 1 mile	No. Public Transport Services per day
CS-03-A-03	Village	1,000 or less	None
CS-03-A-04	Village	1,000 or less	None
SF-03-A-05	Edge of Town – Residential Zone	10,000 to 15,000	136
SM-03-A-02	Village	1,000 to 5,000	12
SM-03-A-03	Village	1,000 to 5,000	None
TW-03-A-03	Village	5,000 to 10,000	64
WS-03-A-07	Village	1,000 to 5,000	10

5.2.4 From the table above, both TRICs sites SF-03-A-05 and TW-03-A-03 have very different characteristics from the site, with much higher public transport services and much higher population levels within one mile. Therefore, these are not the most representative sites to use to determine the trip generation, and if these sites were removed it would result in higher trip rates and therefore a higher level of trips to/from the site. However, WSCC have been consulted on the above trip rates and have confirmed that they are acceptable, and therefore these trip rates are agreeable.

5.2.5 There are over 230 existing dwellings served by the Top Road/Station Road junction. Based on comparable traffic demands this represents nearly 1,400 vehicles per day (vpd). With the resulting trip rates for this development of 599 vehicles per day this represents just under 2,000 vpd along Station Road.

5.3 Trip Distribution

5.3.1 The pre-application report and the subsequent TA provides a trip distribution at the Station Road/Top Road junction. The distribution is based on Census 2011 data, from the table *'WU03EW – Location of usual residence and place of work by method of travel to work'*. The method

undertaken is outlined within the pre-application report, and the resulting trip distribution is shown in Table 5-3.

Table 5-3: Trip Distribution – Pre-Application Report (RGP June 2022)

Direction	Proportion	No. Daily Trips
West (Towards West Hoathly)	54%	449
East (Away from West Hoathly)	46%	383
Total	**100%**	**832**

5.3.2 It should be noted that this method does not account for different journey purposes apart from commuting to work. It is also worth considering 2021 Census albeit many trips were affected by the Pandemic.

5.4 Traffic Impact

Severance

5.4.1 The Guidelines for the Environmental Assessment of Road Traffic by the Institute of Environmental Assessment[4] sets out how severance may result from *"the difficulty of crossing a heavily trafficked road"*. The guidance sets out that severance is difficult to measure and predict, but that the following factors should be taken into consideration:

- Road width;
- Traffic flow and composition;
- Traffic speeds;
- Availability of crossing facilities; and
- The number of anticipated movements across the road.

5.4.2 Based on LA112, traffic flows on streets can affect ability to cross and/or willingness to walk based on the flow ranges in Table 2, where diversions might be considered as:

- Major >500m
- Moderate >250-500m
- Minor >50-250m
- Negligible <50m

[4] Guidelines for the Environmental Assessment of Road Traffic (Institute of Environmental Assessment, 1993) - 8.17 Guidelines for Environmental Assessment of Road Traffic IEA.pdf (fareham.gov.uk)

Table 2: Community Severance

Severance	Traffic Flow (vehicles per day)
Very High	>16,000 vpd
High	>8-16,000 vpd
Medium	>4-8,000 vpd
Low	>4,000 vpd

5.4.3 The TA prepared by RGP undertook traffic surveys in December 2022 along Top Road, which suggests that traffic flows on Top Road are below 8,000 vehicles per day, around 7,200. Therefore, not as much traffic growth occurred as predicted by TEMPro and with the addition of the anticipated 599 trips associated with the development, it is not expected that Top Road would exceed the thresholds for severance. There are however flow variations during peak times that will make the road harder to cross, where approach speed and visibility at crossing points will be more important.

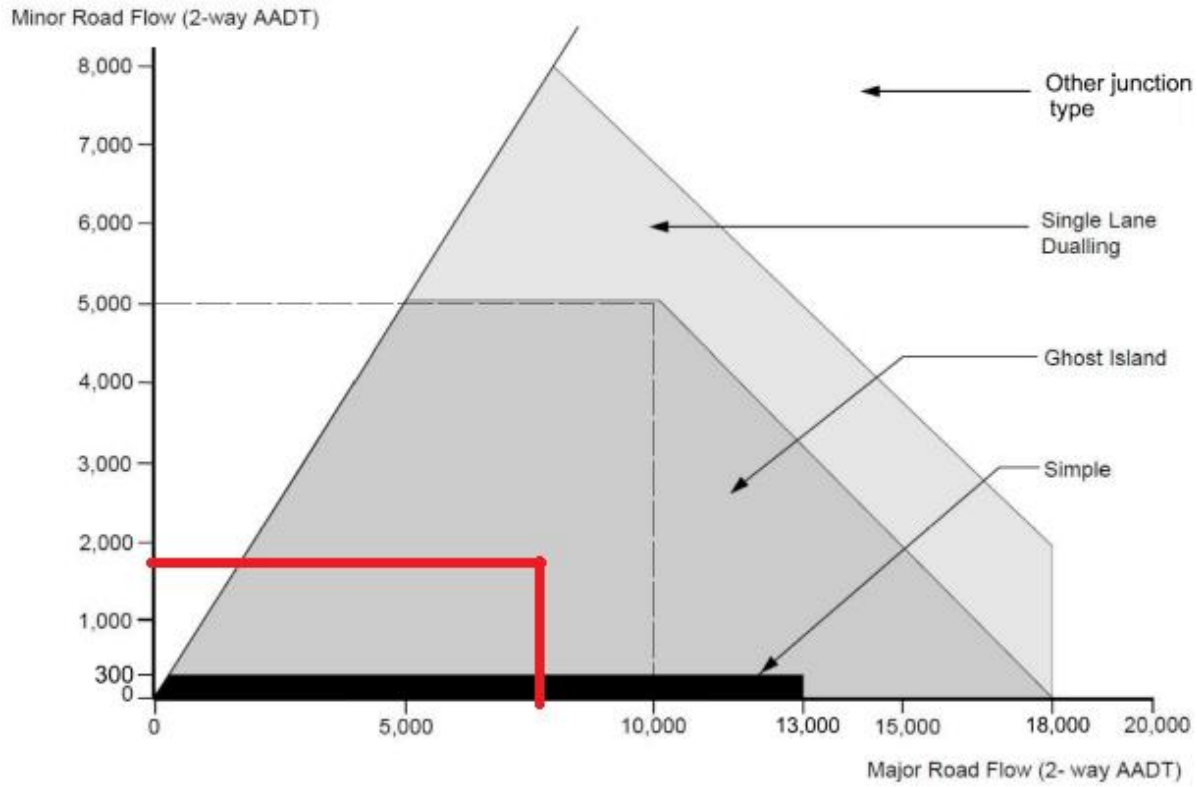
Junction Impact

5.4.4 The Design Manual for Roads and Bridges (DMRB)[5] indicates that any junctions with over 300 two-way AADT movements on the minor road approach, would need to be a Ghost Island junction, as shown in Figure 5-1.

5.4.5 The TA submitted as part of the March 2023 planning application on the site concluded that there are currently 225 existing dwellings served by Station Road, this will increase by 108 under the proposals resulting in 333 dwellings being served by the single point of access. Utilising the two-way daily trip rate from the trip generation assessment presented above, the increase in the number of dwellings is anticipated to result in a combined minor aim traffic flow of circa 1848 vehicles per day. This is significantly higher than the minimum 300 vehicles per day where a right turning lane should be considered.

[5] CD 123 – Geometric design of at-grade priority and signal-controlled junction (DMRB, 2021)

Figure 5-1: DMRB Figure 2.3.1 Approximate priority junction provision on single carriageway roads



5.4.6 However, the highway boundary will be limited at this junction so there may not be sufficient width to accommodate a ghost island junction. Therefore, any TA would need to come up with a solution to this issue, as the existing priority junction arrangement does not align with DMRB guidance. As there are a combination of safety issues at the Station Road/Top Road junction it would seem reasonable that this junction is examined more closely to judge the magnitude of risks and the need to explore alternative/additional mitigation measures.

5.4.7 Junction modelling has been undertaken at the Top Road/Station Road junction within RGP's TA and concluded that within the 2028 baseline scenario with the development added, the junction operates significantly within its theoretical capacity. However, the results of this junction modelling should be queried as it predicts minimal queues along Top Road (<1), however in the queue length surveys, record queues are frequently recorded along Top Road East. It is uncertain why these large queues occur, when there are few recorded right-turn movements into Station Road, it is recommended that this is investigated further.

5.4.8 In addition, the TA proposes several improvements to the Top Road/Station Road junction, including replenishing anti-skid surfacing and road markings and new uncontrolled pedestrian crossings.

5.4.9 Further, at the Station Road/Top Road junction, there is a potential issue that the visibility may be substandard at the junction, therefore any TA would need to look in more detail at the visibility splays and confirm whether they are achievable or not. Speed surveys would also need to be undertaken to confirm 85th percentile speeds at this junction, as the speed limit changes from national speed limit to 30mph approximately 220m east of the junction.

5.4.10 If the visibility is not achievable at this junction, then any TA would need to consider the highways safety implications of this, as they are substantially increasing the amount of traffic using this junction and therefore considerably increasing the potential risks if the visibility is substandard.

5.4.11 RGP's TA does not confirm whether the visibility is achievable at this junction.

6 Summary & Conclusions

6.1 Summary

6.1.1 PJA has been commissioned by West Hoathly Parish Council to prepare a Transport and Accessibility Appraisal for the potential redevelopment of the former Ibstock Brickworks within the village of Sharpthorne in the Mid Sussex District of West Sussex.

6.1.2 The site is currently a vacant brownfield site, as the Brickworks ceased production in 2020. A full planning application was submitted at the site on the 24th March 2023 and validated on the 29th March 2023 (PA reference: DM/23/0827) for: *"demolition of existing structures and redevelopment of the site to provide 108 residential dwellings (Class C3) and associated works, including the provision of an on-site SANG, access, landscaping, parking and associated works."* The application is currently pending consideration.

6.1.3 The TA has addressed some of the transport issues that have been identified within this note, however there are some outstanding issues that need to be addressed, these include:

- The site access is constrained in terms of width just beyond a bend. The vehicle swept paths appended to the TA do not consider a car/HGV passing near the bend, where inter-visibility is restricted, thus this should be provided before the access is considered acceptable.
- The proposals also promote a single 1.5m footway, offering a connection to either a permitted right of way or highway footways where kerbside parking restricts the width of the route. Without mitigation it would be hard to suggest these proposals 'give priority to pedestrian and cycle movement'.
- On-street parking affects 2-way traffic accessing the site. It may be appropriate to explore parking controls to ensure reasonable levels of access are maintained;
- Both employment opportunities and local amenities within a suitable walk distance are very limited;
- On-footway parking along Hamsey Road limiting pedestrian accessibility to/from the site;
- Narrow footways along Top Road may not be appropriate to provide suitable access for all users to the local facilities;
- Suitable cycle access to the site cannot currently be achieved following LTN1/20 guidance; and
- Bus stops are currently located outside of the recommended 400m walk distance and these provide a limited service.
- The net impact of any development proposals should not be taken against the trip generation when the brickworks was in full operation, but what is associated with the restoration works;

- Any trip distribution assessment should assess all the different journey purposes in its methodology;
- Investigate further the junction modelling undertaken at the Top Road/Station Road junction, particularly the queues occurring east of Top Road that were identified within the traffic surveys but not occurring within the junction model;
- Look in more detail at visibility splays at the Top Road/Station Road junction and confirm whether they are achievable or not. Speed surveys would also need to be undertaken to confirm 85th percentile speeds at this junction.