

Land at Turners Hill Road: Transport Strategy Note

Ref: MS/DS/1iTB9155-040 TN
Date: 11 May 2023

SECTION 1 Introduction

1.1.1 Mid Sussex District Council (MSDC) has recently undertaken Regulation 18 consultation on its proposed Local Plan housing allocations. A number of comments have been received from consultees in response to the consultation. In respect of transport matters in relation to draft site allocation DPH13, Land at Turners Hill Road., these comments can be broadly summarised as follows:

- 1** Whether the site can be accessed by sustainable transport;
- 2** Whether safe and suitable access can be achieved;
- 3** Whether the traffic impact of development is being considered by stakeholders and how traffic impact will be mitigated.

1.1.2 Wates Developments, as the Site Promoter, has engaged MSDC in respect of its ongoing Mid Sussex Transport Study (MSTS) work and has received pre-application advice from West Sussex County Council in order to develop the transport strategy for the site.

1.1.3 This Technical Note (TN) provides a summary of the emerging sustainable accessibility strategy; presents the access strategy agreed with WSCC and summarises the results of the initial modelling undertaken on behalf of WSCC for draft allocation Site DPH13, to assist Officers with any queries arising through the Regulation 18 consultation. The TN is structured as follows:

- Section 2 – Mobility Strategy
- Section 3 – Access Strategy
- Section 4 – Traffic Impact Study

SECTION 2 Mobility Strategy

2.1 Overarching Strategy

- 2.1.1 To achieve the overarching objective of sustainable development, a clear and targeted strategy is required. The Mobility Strategy will seek to take a 'Reduce, Contain and Facilitate Alternatives' approach to travel demands – only after these steps have been taken should the strategy allow for the mitigation of vehicular impacts.

Image 2.1: Sustainable Transport Hierarchy



Reduce

- 2.1.2 The first step of the strategy will be to seek to minimise the need for travel. One of the biggest contributors to travel demand during peak periods, as identified by NTS 2019, is that attributed to commuting journeys.
- 2.1.3 The national response to Covid has resulted in a significant shift in the working culture. More and more employees are able to work either from home or remotely, with less time spent in offices as a result of hybrid working approaches. As a result, the design of residential dwellings has become a key focus, with many homebuyers now seeking space within properties to enable home working, and travel demand can be reduced by providing dwellings that reflect these requirements.

- 2.1.4 While residents of the development will seek to own their own vehicles, the provision of comprehensive on-plot electric vehicle charging will enable residents to reduce the reliance upon traditional combustion engine vehicles, and own private vehicles that have a lessened impact on the environment, while overcoming one of the major obstacles to electric car ownership in providing dedicated facilities to enable charging. EV charging will be provided in line with the Building Regulations Approved Document S.

Contain

- 2.1.5 Key to encouraging local journeys will be to provide for a layout that has ‘walkable neighbourhoods’, characterised as having a range of facilities within 10 minutes walking distance (around 800 metres). However, the propensity to walk or cycle is not only influenced by distance but also the quality of the experience; people may be willing to walk or cycle further where their surroundings are more attractive, safe and stimulating and the design of the site will strive to achieve this through good design and prioritising journeys on foot and by bicycle.
- 2.1.6 Of course, simply providing appropriate infrastructure within the site will not, by itself, contain travel. On-site facilities will be provided as a destination for these journeys. These facilities will be provided at the heart of walkable neighbourhoods so that the use of sustainable modes of travel is quicker, easier and cheaper than the use of private car, as advocated in the Chartered Institute of Highways and Transportation guidance “Better Planning, Better Transport, Better Places” (CIHT, 2019).
- 2.1.7 To maximise the containment of trips, a range of non-residential uses are proposed, including:
- Open space
 - Playspace
 - Sports pitches
 - 50 bed care home
 - Community building / doctor’s surgery

Facilitate Non-Car Trips

- 2.1.8 While the reduce and contain aspects of the strategy will minimise the need and distances travelled, there will still be a travel demand arising from the site. Analysis of travel patterns enables targeted investment in sustainable transport infrastructure to encourage the uptake of sustainable modes of transport to accommodate these journeys, and the opportunity exists to embrace new and innovative methods to capture these trips.

2.1.9 A comprehensive Transport Assessment (TA) and Travel Plan (TP) will be developed alongside the proposals. The TA will review the local network and identify where there are opportunities to enhance local sustainable travel opportunities, enabling the targeting of any transport related financial contributions towards infrastructure improvements that encourage the uptake of sustainable modes of travel. The TP will build upon the work within the TA to identify a strategy for encouraging the uptake of sustainable travel modes, including the promotion of travel initiatives, provision of travel vouchers and car sharing as well as outlining a structure for monitoring and auditing modal shift.

SECTION 3 Sustainable Connectivity

3.1 Walking and Cycling

3.1.1 The site is within a walkable distance to Crawley Down and its associated facilities as shown below:

Destination	Distance	Walking journey time	Cycling journey time
Leisure			
Crawley Down Village Hall	290m	4 min	1 min
King George Playing Fields	600m	8 mins	3 mins
All Saints Parish Church Crawley Down	800m	10 mins	3 mins
Allotments at Vicarage Road	1km	12 mins	4 mins
The Royal Oak Public House	1.4km	17 mins	5 mins
The Haven Centre, Social Club	1.2km	15 mins	5 mins
Children's Play Park at Station Road	1.3km	12 mins	4 mins
Retail			
Hurst Farm	100m	1 min	1 min
Grange Farm, Farm Shop	1.2km	15 mins	5 mins
The Co-Operative	1.4km	17 mins	5 mins
Martin's Newsagents	1.4km	17 mins	5 mins
Employment			
Local Businesses, Sandy Lane	260m	3 mins	1 min
Silverwood Estate	1.5km	17 mins	5 mins
The Cox Group of Companies	4.4km	55 mins	17 mins
Education			
Crawley Down Village Church of England School	1.2km	15 mins	5 mins
Donkey Field Pre-School	1.2km	15 mins	4 mins
Copthorne Preparatory School	3.2km	37 mins	9 mins
Health			
Denture Care Centre	200m	2mins	1min
Crawley Down Health Centre	1km	13 mins	4 mins
Elm House Dental Practice	1.2km	17 mins	5 mins
Crawley Down Pharmacy	1.2km	18 mins	5 mins

Key:

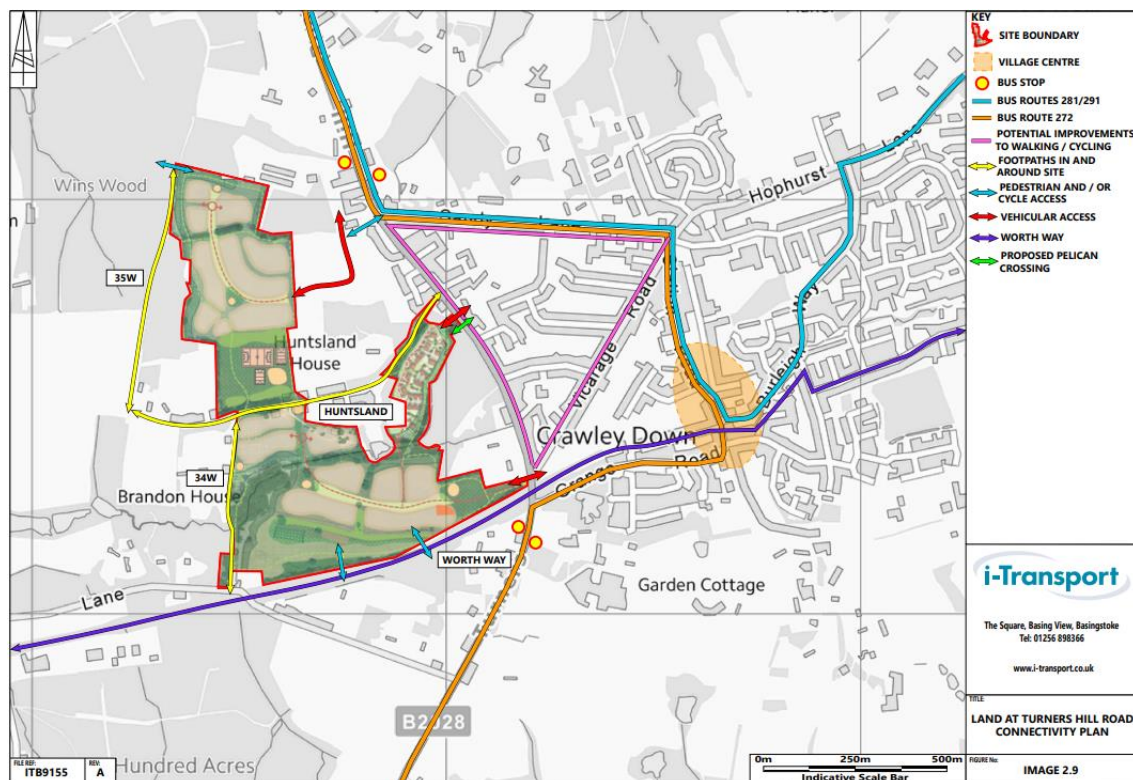
	Within 800m walking distance
	Within 1,600m walking distance
	Within 3,200m walking distance

3.1.2 To facilitate non-car trips, the following improvements have been identified:

- Permeable site with direct access to rights of way including Huntsland and Worth Way.
- Pedestrian / cycle access at or near the vehicular access points (*ref: a and c, below*) including:
 - A pedestrian / cycle access to the south of the northern access.
 - Footway improvements on Turners Hill Road and towards village centre.
 - A Pelican crossing immediately south of the central access.
 - A pedestrian / cycle route on the southern side of the southern access, forming a connection to Worth Way.
- Improved rights of way and on site cycleways / footways through overlooked year-round open space.
- Provision of new and improved bus stops on Turners Hill Road.
- Exploring direct points of access onto Worth Way, which provides a cycling route west to Crawley and East to Crawley Down and East Grinstead.
- Consideration to a new cycle route on Turners Hill Road.

3.1.3 The connectivity strategy is illustrated in Figure 1, reproduced below:

Image 3.1: Connectivity Strategy

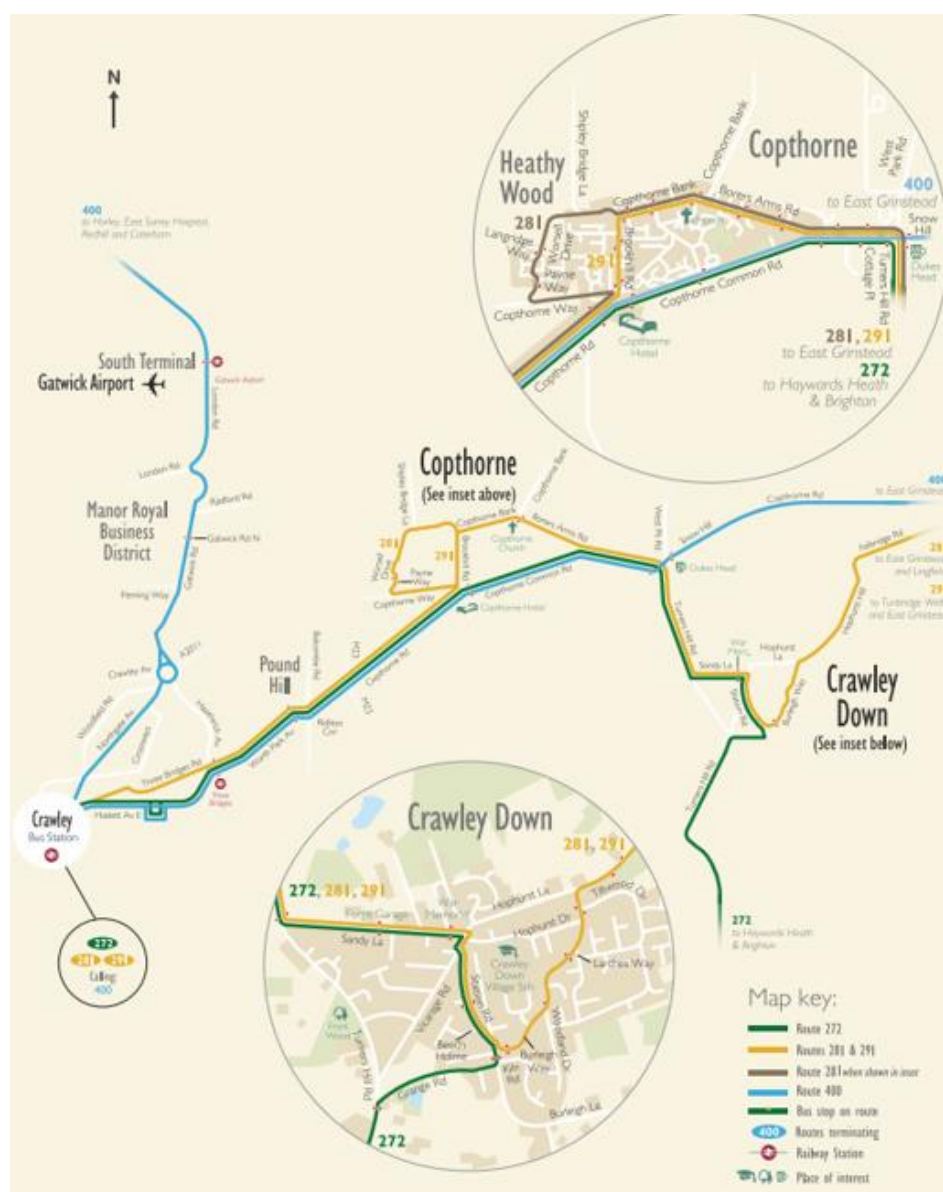


3.2 Bus Services

3.2.1 The bus stops collectively provide the following services:

- 272 – Crawley, Haywards Heath, Burgess Hill, Royal Sussex County Hospital – every one to two hours on weekdays and every two hours on Saturdays;
- 281 - Crawley, Three Bridges, East Grinstead, Lingfield – every hour from Monday to Saturday; and
- 291 - Crawley, Three Bridges, East Grinstead and Tunbridge Wells - every hour from Monday to Saturday and every other hour on Sundays.

Image 3.2: Local Bus Routes



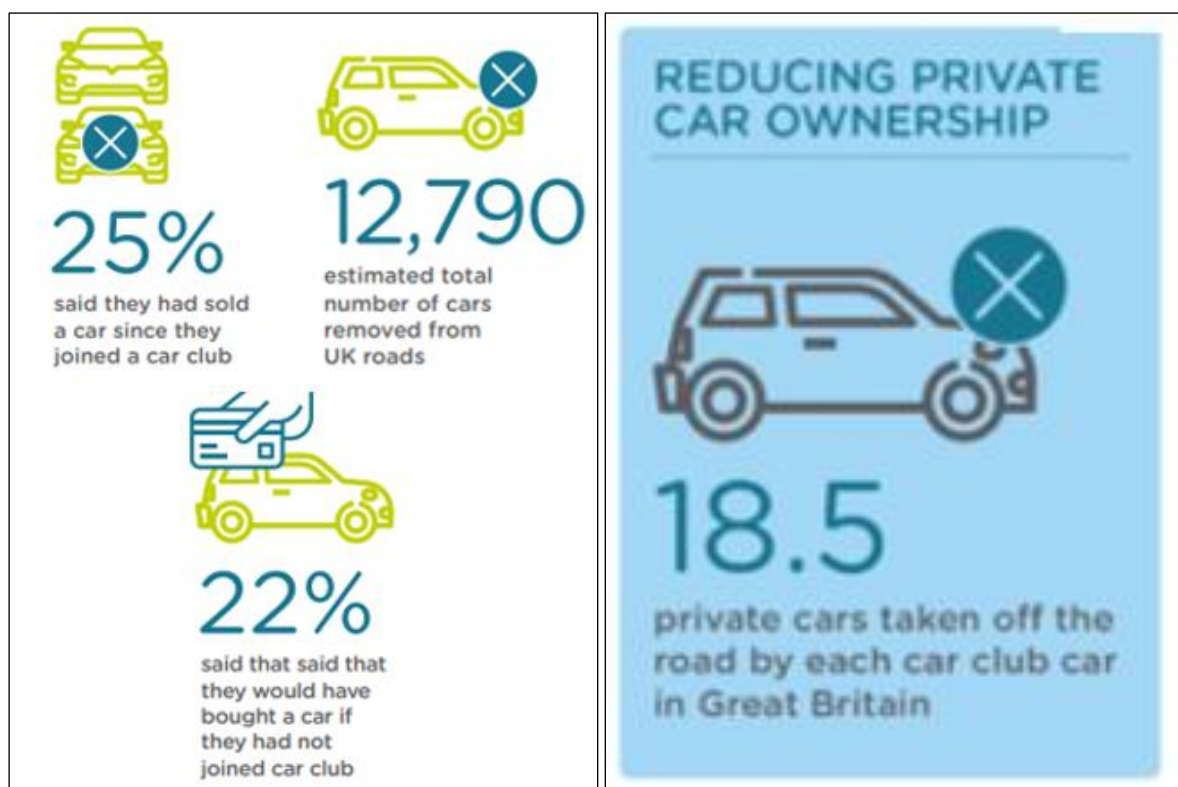
3.2.2 The development has the opportunity to supplement the existing services, providing additional capacity and increasing the frequency of services further and this will be explored with bus operators as the proposed development progresses.

3.3 Car Club

3.3.1 Car club vehicles and are proven to reduce the need for car ownership and provide residents the ability to access the car for occasional use, without the considerable costs associated with ownership of a vehicle including maintenance and insurance.

3.3.2 There has been a 90% increase in the growth of car club membership since October 2018, and 20% of the respondents identified access to a car club vehicle as providing a more cost-effective measure than owning their own vehicle.

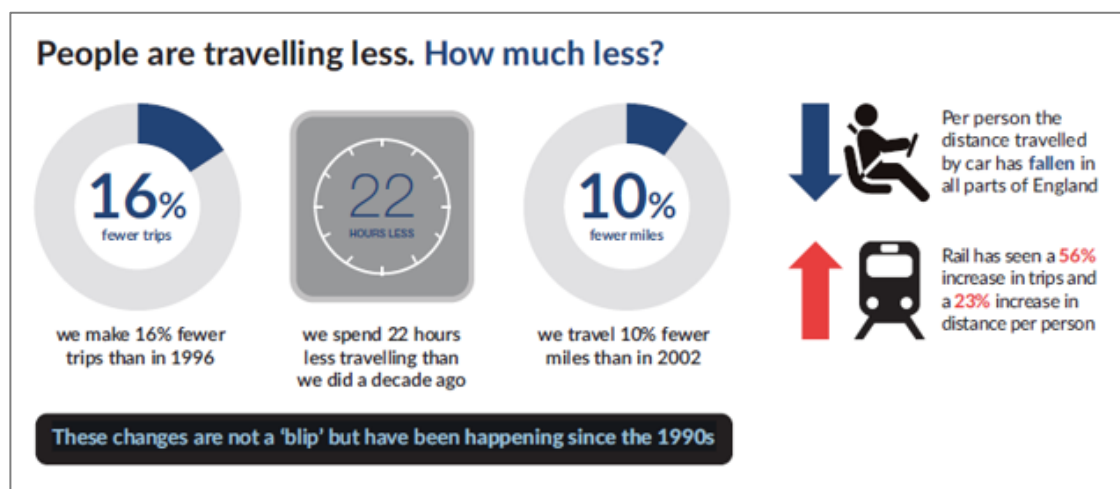
Image 3.4: Car Club Vehicle



Source: CoMoUK Survey

3.3.3 The rise of car club use reflects a decrease in car ownership and use in society; we travel substantially less today, per head of population, than we did one or two decades ago. According to research by the Commission on Travel Demand we make 16% fewer trips than we did in 1996, travel 10% fewer miles than we did in 2002 and spend 22 hours less travelling than we did a decade ago.

Image 4.4: Statistics Published by the Commission on Travel Demand



3.3.4 These reductions in travel demand have occurred as a result of a combination of longer-term societal shifts including:

- How we work and how we shop and the role of new technology – with more people working at home and shopping online;
- Changing demographics and attitudes to car ownership and use – with more young people only owning a car later in life or not owning a car; and
- Urbanisation – an increasing focus on increasing population density in urban areas and close to transport hubs so that people don't need to use a car.

3.3.5 In terms of the decline in car ownership and use for young people, 17 – 29 year olds are now making between 26% - 44% fewer trips than they did in 1992/94 and the number of 17-20 year olds with a driving license has fallen by 19% whilst the number of 21-29 year olds with a driving license has fallen by 12%.

3.3.6 These societal trends lend themselves to the car club business model which offers user a car 'on demand' – but without the need to maintain a car. The Site Promoter will explore the opportunity for Car Club provision to be incorporated into the site with specialist operators.

SECTION 4 Access Strategy

- 4.1 Three vehicular points of access, with adjacent pedestrian and / or cycle accesses, are proposed:
- a An extension of Wychwood Place into the site – the 'northern' access;
 - b A new priority junction south of Huntsland – the 'central' access; and
 - c A new staggered priority junction with Turners Hill Road and Vicarage Road (the 'southern' access).
- 4.2 The access strategy has been subject to pre-application advice from WSCC and has been agreed in principle.

Image 4.1: Access and Connectivity Strategy



Image 4.2: The Northern Site Access

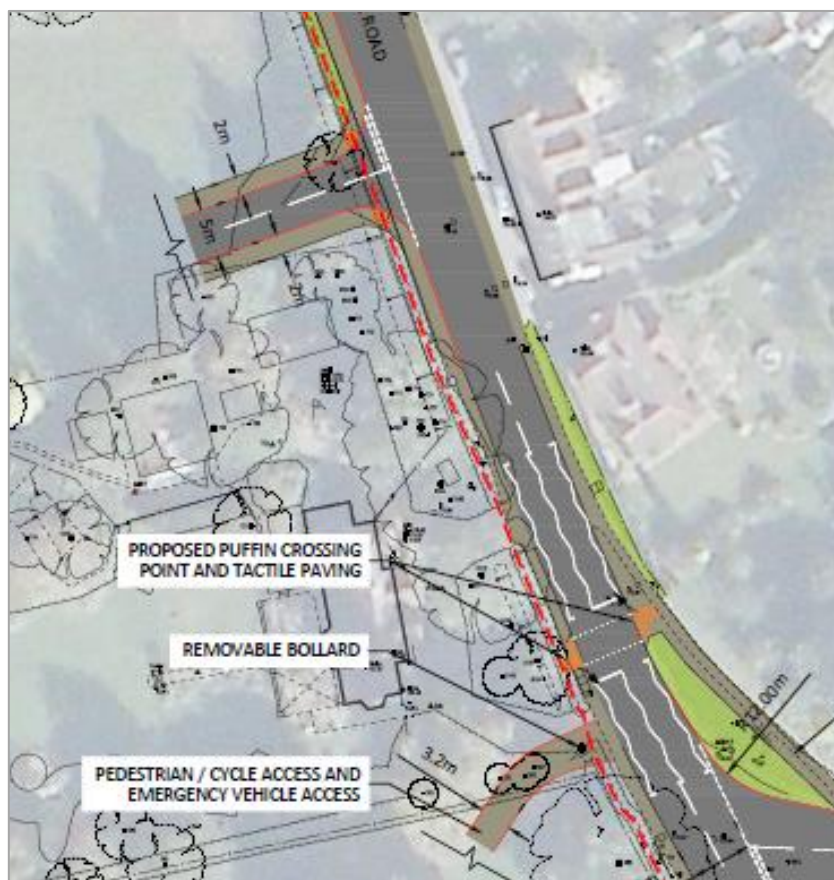


Image 4.3: The Central Site Access

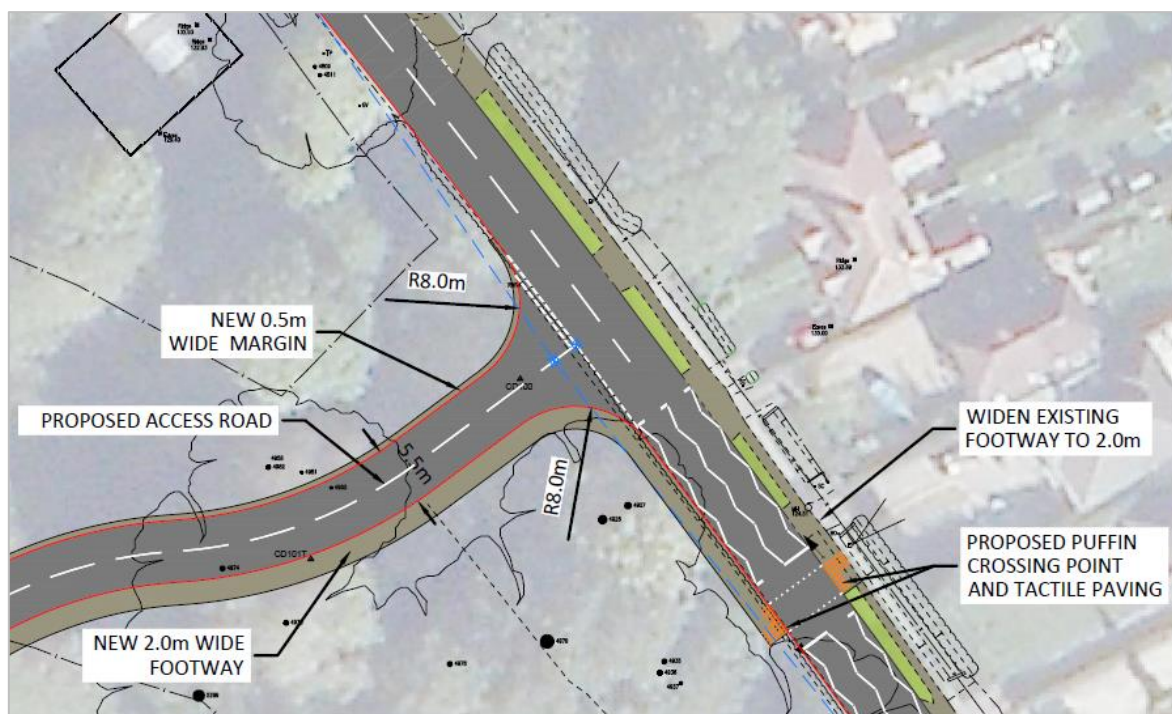
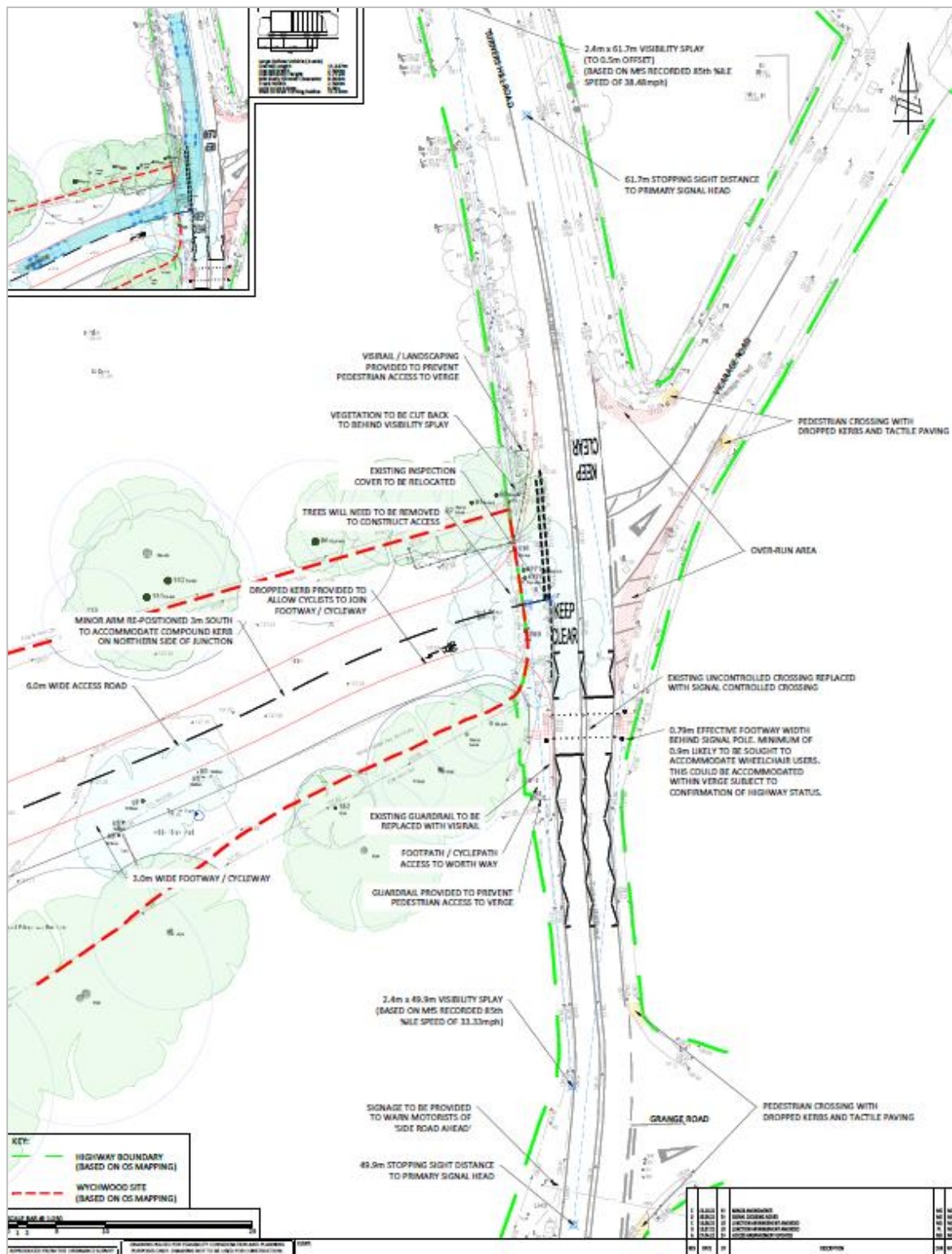


Image 4.4: The southern Site Access

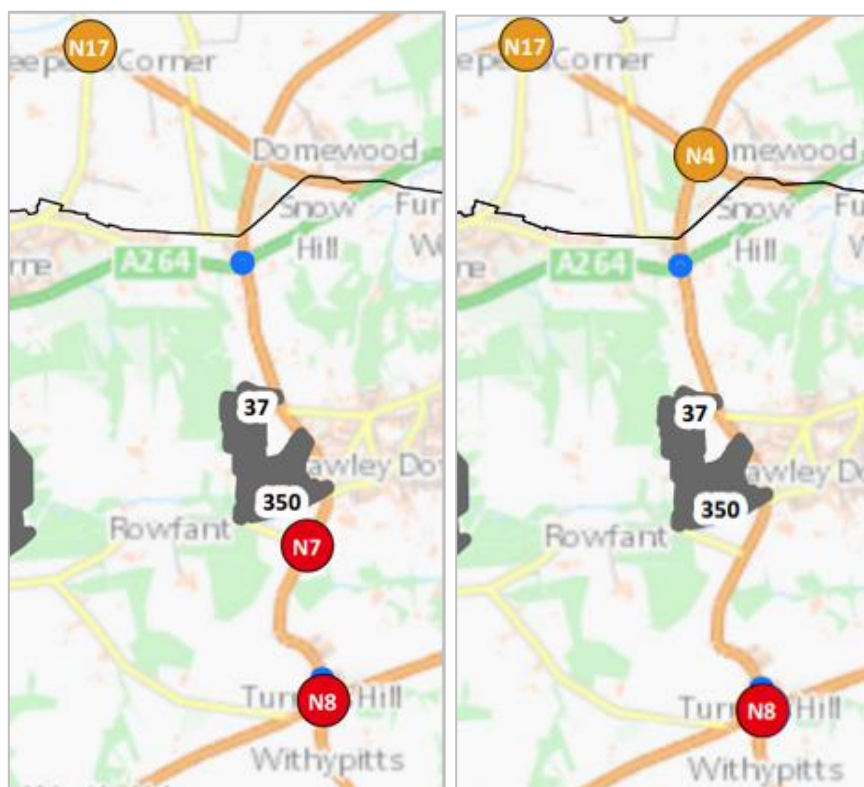


- 4.3 As noted in Section 2, new and improved walking / cycling links on and off site are also proposed. Providing three points of access has the advantage of improving connectivity between the site and the village; reducing walking times to local facilities; and dispersing traffic impacts.

SECTION 5 Traffic Impact Study

- 5.1 National Highways' response to the Regulation 18 consultation advises that they will need to be satisfied that the cumulative impact of development can be adequately mitigated; MSDC is working with WSCC and SYSTRA on an updated highways model and will engage further with NH when further modelling has been produced.
- 5.2 The Mid Sussex Strategic Highway Model (MSSHM) informs the Mid Sussex Transport Study (MSTS) and has been published as part of the Local Plan evidence base. Stage 4 of the MSSHM work has now concluded.
- 5.3 Scenario 4 of the MSTS considers the impact of development in 2039 with Local Plan development Scenario 4m1 considers the impact of development in 2039 with Local Plan development, allowing for the potential impact of initial car trip rate reductions as a result of home working, internalisation and use of on-site facilities.
- 5.4 Scenario 4 identifies two local junctions where mitigation will be developed through the MSTS to address the impacts of development:
- B2028 Turners Hill Road / Wallage Lane; and
 - B2110 / B2028 Turners Hill.

Image 4.1: Mitigation Locations

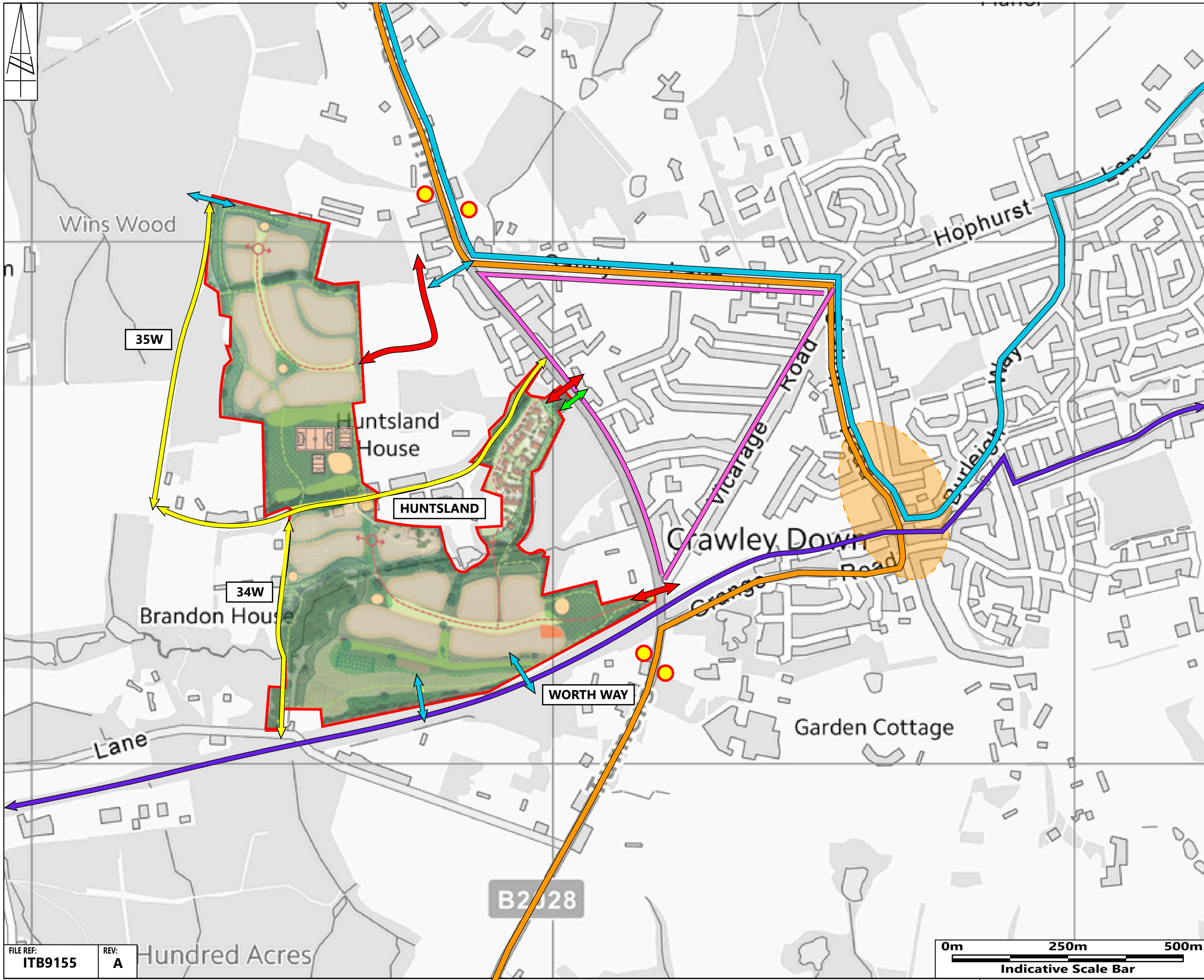


SECTION 6 **Summary**

6.1 In response to comments made in respect of the Regulation 18 Local Plan consultation on Land at Turners Hill Road:

- 1 A strategy is being developed to improve sustainable transport links on and off site and minimise the need for travel and the resulting traffic impact of development;
- 2 A vehicular access strategy has been developed and agreed in principle with WSCC; and
- 3 Further traffic modelling will be undertaken through the Mid Sussex Transport Study, which will identify mitigation for the traffic impacts of planned development on junctions local to the proposed development site. This work is being led by MSDC and both West Sussex County Council and National Highways will be engaged in this process.

FIGURES



- KEY**
- SITE BOUNDARY
 - VILLAGE CENTRE
 - BUS STOP
 - BUS ROUTES 281/291
 - BUS ROUTE 272
 - POTENTIAL IMPROVEMENTS TO WALKING / CYCLING
 - FOOTPATHS IN AND AROUND SITE
 - PEDESTRIAN AND / OR CYCLE ACCESS
 - VEHICULAR ACCESS
 - WORTH WAY
 - PROPOSED PELICAN CROSSING



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TITLE:
**LAND AT TURNERS HILL ROAD
CONNECTIVITY PLAN**

FIGURE No:
IMAGE 2.9

FILE REF:
ITB9155

REV:
A

0m 250m 500m
Indicative Scale Bar

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