

Transport Summary Note



A35: Land at Former Wisley Airfield

Project No. 17055-01

9th May 2018

Client **HALLAM LAND**

1. SUMMARY

- 1.1 This Transport Summary Note has been prepared on behalf of Hallam Land who act as strategic land promoters for a consortium of landowners who include: the Harris' (Land at Bridge End Farm); the Matthews' (Land at 2 Yew Tree Cottages); and the Fieldings (Land at Little Upton). It is intended to provide transport and highways advice in relation to the proposed allocation of Land at the former Wisley Airfield (A35) for residential led mixed use development of and additional employment, community and educational floor space.
- 1.2 Based on the evidence produced to date, development at Wisley could deliver much need housing for the local area. This would assist the Council in meeting a 5-year housing land supply, address an existing transport network problem and enable Surrey County Council (SCC) and Highways England (HE) to develop a strategy to address existing and future infrastructure requirements through Guildford.
- 1.3 In addition, it is considered that the potential to deliver sustainable travel options for existing and future housing would help expand the polycentric settlement pattern in the area whilst reinforcing bus service viability. The Wisley airfield site also offers the opportunity to tackle an existing congestion issue along the A3 and at Junction 10 of the M25.
- 1.4 As set out in the Hearing Statement from CBRE, through the evolution of the plan, the boundaries of strategic allocation A35 have been extended, and as a result the size of the site has increased. This increase in area however has not resulted in the quantum of development being increased.
- 1.5 The current version of the allocation proposes "approximately 2,000" Class C3 homes. If the quantum of housing was to increase by the same proportion as the site area, then circa 2,940 homes would be proposed (at 30dph). Whilst it considered that a quality masterplan encompassing all requirements would not be able to deliver this number of homes, it is considered that the provision of 2,000 homes should be a minimum with some potential for uplift subject to detailed masterplanning. It is relevant to note that the Transport Assessment and associated modelling for the Appeal site assessed 2,100 dwellings.

- 1.6 Within central Surrey many trips gravitate towards London. Increasing the number of dwellings at the Wisley Airfield site therefore offers an excellent opportunity to deliver housing need in a location that can reduce the length of trips and minimise the impact on the A3 through Guildford, whilst maximising the potential for public transport use.
- 1.7 This note therefore appraises the highway potential for up to 2,500 homes as an upper limit to robustly test the impact of an uplift over and above the minimum 2,000 homes to be delivered across the strategic allocation along with the other mix of uses.

2. CONTEXT

- 2.1 As summarised above, and notwithstanding the proposed policy position, Wisley Airfield and additional land falling outside of the allocated site area is currently subject to an outline planning application (ref: 15/P/00012) for:
- 2.2 *“the phased development of a new settlement of up to 2,068 dwellings incorporating up to 100 sheltered accommodation units and associated infrastructure including accesses onto the A3 (Ockham Interchange), Ockham Lane and Old Lane and revised access to Elm Corner, a primary/secondary school, community provision, nursery provision, health facility, a local centre (incorporating food & drink, retail, a visitor centre and offices), employment area, 8 travellers pitches, sports and recreational facilities (incorporating a floodlit sports pitch and pavilion). Sustainable Drainage Systems and an area of Suitable Alternative Natural Greenspace (SANG) incorporating a landform feature and car parking. The erection of associated utilities infrastructure. The development proposal to incorporate the demolition/removal of the runway and VOR Beacon (and any associated outbuildings). Matter for determination is access (with matters of scale, appearance, landscaping and layout reserved).”*
- 2.3 This application was refused by Guildford Borough Council (GBC) for a number of reasons and the applicant is in the process of appealing that decision. It is noted however that the work undertaken for the appeal site assesses 2,068 dwellings; as the Highways Authority, Surrey County Council (SCC) have confirmed that this quantum of development is acceptable to them, subject to mitigation measures being delivered.
- 2.4 It is considered that an uplift on this number represents an opportunity to improve the sustainability of the site and to increase the patronage on local bus services by giving the potential for new residents to commute from Effingham Junction and Horsley train stations without the need to drive into Guildford town centre. The proposals would assist in the wider delivery of housing anchored by a local centre, community and educational land uses thereby reducing the need to travel.
- 2.5 Whilst this Report has a clear focus on the entirety of A35 allocation and not solely the land included in the appeal site, it is nonetheless an important point of reference in the context of transport matters as the proposals, quantum of development, impact and the mitigation measures to accommodate 2,068 dwellings have been deemed acceptable by SCC.
- 2.6 It is recognised that discussions are still ongoing between GBC, SCC and Highways England in relation to improvements to the M25 and the A3 that will be fundamental in the delivery of housing needs throughout Guildford across the plan period.

- 2.7 It is therefore considered reasonable that transport methodology and agreements reached between the appeal site and SCC to date form the basis of this Report, albeit any future masterplan and planning application would be required to fully demonstrate that an increased number of units will be deliverable in accordance with any proposed enhancements to the strategic road network by HE.

Strategic Infrastructure Improvements

- 2.8 Statutory public consultation for Highways England's (HE) scheme to improve the M25 J10 commenced in February 2018, with construction scheduled to begin in 2020/21. Whilst no timescale for completion is given, it is anticipated that works would be completed by 2022.
- 2.9 The benefits and objectives of the scheme are described as including:
- Increased road capacity at the M25 J10 roundabout;
 - Increased road capacity on the A3 between Ockham and Painshill;
 - Improved traffic flows and reduced delays at M25 junction 10 on the A3; and
 - supporting sustainable travel routes promoted by Surrey County Council and developers.
- 2.10 The modelling work undertaken by the HE predicts considerable benefits, in terms of reduced delays at Junction 10 of the M25 and on the A3.
- 2.11 For Junction 10, the improvement is predicted to result in vehicle hour reductions of up to 68% in 2022 and up to 45% in 2037. For the A3 between Clandon and Painshill, the improvement is predicted to result in vehicle hour reductions of up to 43% in 2022 and 43% in 2037. These reductions will be fundamental in delivering area wide growth within Guildford.
- 2.12 Given the site's proximity to the A3 and Junction 10 of the M25, it can be concluded that the planned improvements will provide an improvement to the future road network in the local area, accounting for area wide growth, without significant development specific interventions being required.

Vehicle trip generations

- 2.13 The appeal site was supported by a Transport Assessment prepared by WSP. This document included the details of the agreed level of vehicle trip generation. For comparative purposes, the number of vehicles generated by the 2,068 units proposed by that application and the number of vehicles that would be generated by 2,500 units is summarised below in Table 2.1 and 2.2 for the morning and evening peak hour periods respectively.

Table 2.1 – Uplift in trips for the morning peak hour

Units	AM peak hour Period	
	Arrivals	Departures
2,068	207	817
2,500	250	988
Difference	+43	+171

Table 2.2 – Uplift in trips for the evening peak hour

Units	PM peak hour Period	
	Arrivals	Departures
2,068	744	330
2,500	900	400
Difference	+156	+70

- 2.14 As would be expected, the trip generation figures presented above confirm there would be an uplift in total vehicle trips from the site in the peak hours, with an additional 171 vehicles departing the site in the morning peak hour and 156 vehicles arriving at the site during the evening peak hour. In the context of trips on the A3 corridor, this represents substantially less than 1% of all traffic flow and it is not considered that this increase in trips would have any further material impact on the strategic road network. This would however require further testing through use of the strategic model in due course.

3. PROPOSED SITE ACCESS STRATEGY

- 3.1 The Draft Allocation proposes that the land at Wisley airfield is served by two primary vehicular accesses located at the west and eastern boundaries respectively. The western access will connect with the A3 Ockham Interchange offering access to the A3 and Portsmouth Road. To the east, the second point of vehicular access will join Old Lane connecting the site with the A3 to the north and Effingham to the south.
- 3.2 Some possible access proposals have been modelled and developed by WSP as part of the Transport Assessment prepared for the appeal site for some 2,068 dwellings; that assessment has been considered acceptable to SCC.

Ockham Interchange

- 3.3 The existing junction of the A3 with the B2039 Ockham Road North, also known as the A3 /Ockham Interchange, is currently a simple priority-controlled roundabout underneath the A3. It is understood that the junction currently operates at or close to theoretical capacity during the peak hours with some arms of the junction experiencing modest congestion and delay.

- 3.4 The appeal site proposes a new junction arrangement that incorporated the proposed development access in the form of a 4th arm, between the existing off slip of the southbound A3 and the Ockham Road north arm. As part of those proposals, the improvements to the junction included signalisation of the roundabout and better pedestrian facilities as well as some kerb re-alignment and improved road markings. It is considered this arrangement would be appropriate to support a modest increase in development quantum, subject to further testing in the strategic model.
- 3.5 The TA for the appeal site provides the results of an assessment of the proposed site access at Ockham Interchange and demonstrates that the junction would operate with sufficient capacity in the 3031-forecast year. The TA assessed 4 different forecast scenarios to test the impact of the development under various levels of mitigation. For the purposes of this TAR, it is scenario C that is presented which assumes an improved scheme for the M25.
- 3.6 These proposals have been approved by SCC and it is therefore reasonable to assume that the arrangement proposed could be sufficient to support a larger number of dwellings. A summary of the modelling results is provided in Table 3.1 below.

Table 3.1 – Ockham Interchange Assessment to 2031

Junction Arm	AM Peak		PM Peak	
	RFC/Deg. of Sat. %	Queue	RFC/Deg. of Sat. %	Queue
2031 Forecast (with development traffic and mitigation)				
A3 Off slip	78.9%	12	79.8%	13
Site Access	78.5%	8	78%	9
Ockham Road	58.5%	1	54.9%	1
Portsmouth Road	66.4%	6	67.2%	6
PRC	14.4%		9.6%	

- 3.7 It is evident that sufficient spare capacity would exist at the site access junction to accommodate an uplift in traffic flow, subject to wider area strategic improvements being delivered.

Old Lane

- 3.8 Similarly, the TA for the appeal site demonstrates that the site access onto Old Lane is expected to operate with spare capacity and limited queuing to 2031. A summary of the modelling results is shown in Table 3.2.

Table 3.2 – Old Lane / Site Access Assessment to 2031

Junction Arm	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
Site Access	0.72	3	0.46	1
Old Lane (N)	0.11	0	0.39	1

- 3.9 Based on the above, it is evident that sufficient spare capacity would exist at the site access junction to accommodate a modest uplift in traffic flow, subject to wider area strategic improvements being delivered.

Potential Access onto Ockham Lane

- 3.10 Whilst the access strategy outlined above is generally supported, it is considered that there is also the potential for an additional point of access to be provided onto Ockham Lane that could provide access for a limited number of units to come forward earlier in the plan period.
- 3.11 The southern part of the site is fronted by Ockham Lane and as such provides the opportunity for a suitable point of access to the development site. However, any development accessible to Ockham Lane would be required to respect the width and nature of the carriageway and local environment.
- 3.12 Ockham Road North is a rural lane, which is on average 6.6m wide. It runs to the south west of the proposed development.
- 3.13 The road provides a link between the A3 and various small settlements along the road until Horsley to the south. The road is currently subject to 40 mph speed limit between the A3 and Ockham Lane.
- 3.14 According to the 'Design Manual for Roads and Bridges', a development resulting in fewer than 300 AADT vehicle movements into the minor arm could be served via a simple priority junction. This would equate to approximately 150 units being accessible from this location and would therefore provide the upper limit for the quantum of development to be served off this single access and would not require the need for third party land.
- 3.15 Based on the Stopping Site Distance (SSD) calculation in Manual for Streets and assuming an approach speed of 40 miles per hour, visibility splays of at least 120 metres should be provided for drivers at the site egress point which can be achieved. As demonstrated on drawing 18062-01, attached at Appendix A, visibility splays in excess of 2.4 x 120 metres are achievable to the nearside carriageway edge and as such, drivers exiting the site would be afforded with appropriate levels of visibility without significant intervention.
- 3.16 Given that a suitable access can be provided, and a smaller quantum of development could be brought forward in advance of the wider proposals, a trip generation assessment has been undertaken for an initial phase of up to 150 dwellings. The additional traffic flows resulting from the 150 dwellings is summarised in the Table below.

Table 3.3 – Trip generation for 150 units

150 Units		
	Arrivals	Departures
Morning Peak Hour	15	60
Evening Peak Hour	54	24

- 3.17 Based on the above, an initial capacity assessment has demonstrated that a proposed access onto Ockham Lane could be accommodated without issue with the increase in vehicles flows averaging just over one additional vehicle per minute during the peak hour periods. Such a proposal would allow the potential for an early release of an initial phase of development that is not reliant on the construction of the spine road or delivery of the site access infrastructure required at Ockham Interchange.

4. PUBLIC TRANSPORT

- 4.1 As would be expected, the draft allocation suggests that a significant bus network to serve the site and key destinations including Effingham Junction railway station and/or Horsley railway station, Guildford, Woking and Cobham needs to be provided and secured in perpetuity to ensure that residents and visitors have a sustainable transport option for access to the site. It is expected that the through vehicular link between the A3 Ockham Interchange and Old Lane will therefore have an important function as a bus corridor.
- 4.2 Subject to appropriate masterplanning, it is considered that any spine road through the site should be within an acceptable 400m walk distance to all residents. Figure 4.1 plots the potential through route and demonstrates that the entire site could fall well within a 400m walk distance of a bus route, this would be a significant benefit in promoting and providing access to public transport.
- 4.3 Whilst the appeal site at Wisley Airfield has yet to be determined, it is important to recognise that the applicant has engaged with public transport officers at SCC and a number of new bus routes have been agreed that provide a new service to Guildford, Effingham and Cobham.
- 4.4 An appraisal of the finances based on delivery of 2,046 units was undertaken that confirmed that (based on an agreed set of forecasting parameters) the bus services would become self-financing at the end of the 12-year development period.
- 4.5 It would be reasonable to assume therefore that through the development of a masterplan that provides a bus route within a short walking distance of each dwelling, an allocation of more than 2,000 dwellings would accelerate the point at which any bus service becomes commercially viable and would increase the expected patronage by virtue of the greater number of residents living on the airfield site that have access to public transport. This would ultimately increase the potential for a bus service to be provided in perpetuity on a commercial basis.

5. CYCLING AND WALKING

- 5.1 Outside of Guildford town centre, the proposed development will provide one of the largest settlements in the Borough and can contribute to reducing the need to travel by car for a number of existing communities in surrounding villages by providing new facilities in closer proximity, particularly in Ockham, Effingham Junction and Wisley as well as for local

residents. Infrastructure that will contribute to the travel demands by future occupiers will generally enhance accessibility to existing communities.

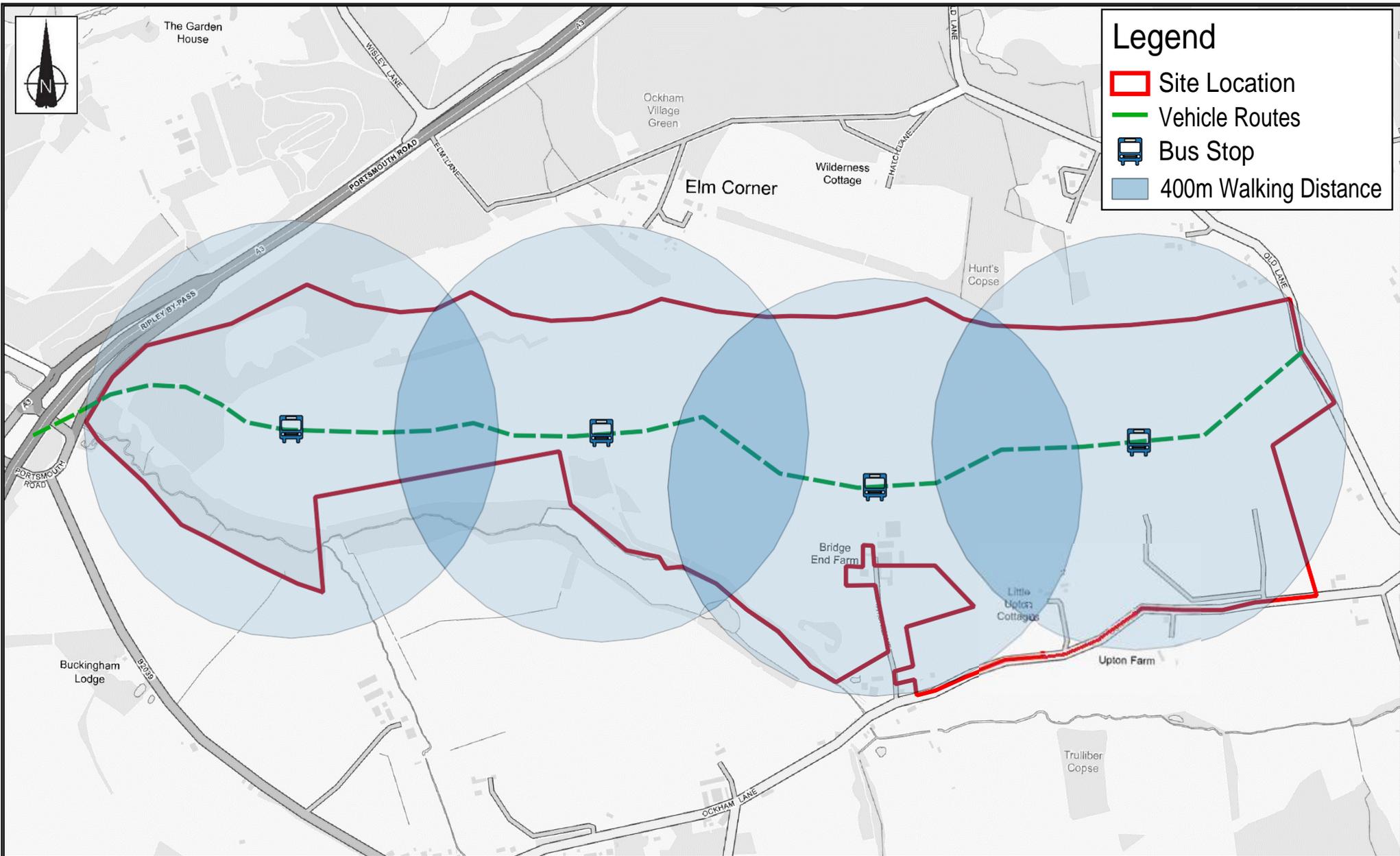
- 5.2 The SCC Cycle Map identifies a cycle connection between Wisley Lane and Sanway Road, via Muddy Lane (PRoW Footpath 566) where cyclists are required to dismount. With the exception of this short link (400m) there is a continuous cycle link between the site and Byfleet and New Haw Station. If this route cannot be enhanced, it is still possible to enhance the amenity of this connection as the station and adjacent Brooklands area provides a significant range of employment and retail uses that could reasonably contribute to the employment needs of future occupiers as the alternative road access is indirect.
- 5.3 Other facilities in Ripley, besides healthcare and recreation include: Ripley Court Independent School, Ebenezer Strict Baptist Chapel, Ripley Post Office and Ripley Primary School all of which are within an acceptable cycle distance.

6. SUMMARY AND CONCLUSIONS

- 6.1 This Transport Appraisal Report has considered the transport effects arising from an increase in potential development on of Land at the former Wisley Airfield (A35).
- 6.2 This initial appraisal has considered both work undertaken by Guildford Borough Council and Surrey County Council and that presented by WSP as part of the appeal site.
- 6.3 Adopting the same traffic forecasts as those approved by SCC for the appeal site suggests that whilst the increase in development quantum will contribute to increases in travel demand, as a result of the potential mitigation strategy, the residual effects will not be severe.
- 6.4 Given the site's proximity to the A3 and to Junction 10 of the M25, the site will benefit from and can assist in the delivery of to improvements to the strategic road network.
- 6.5 A strategy for pedestrian and cyclists could be incorporated into the masterplan that provides a mix of highway improvements and contributions intended to deliver safe and attractive links to local facilities, particularly those in Ripley, Ockham and at Effingham Junction Railway Station. Primarily to enhance cycle and equestrian amenity.
- 6.6 The aim of the public transport strategy would be to provide connections to Cobham, Guildford, Woking and the nearest Rail Station, Effingham Junction. An initial transport strategy has been agreed between WSP and SCC for the appeal site. Were the housing allocation across the site to be increased, it is reasonable to conclude that an allocation of 2,500 dwellings would have the effect of accelerating the point at which any bus service becomes commercially viable and would ensure the new settlement has the potential to provide a bus service over the long term on a commercial basis. It is however considered fundamental that a well-prepared masterplan comes forward to ensure that all dwellings and other uses across the site could be located within 400m of the new bus corridor.
- 6.7 Subject to the preparation of a comprehensive masterplan for the site and the further refinement of the access strategy, it is considered that the increased quantum of

development results in impacts that are less than severe and that the airfield site represents a suitable location to provide an uplift in overall housing numbers.

- 6.8 On this basis, it is considered that the highway infrastructure could accommodate a development of up to 2,500 whilst meeting the transport policy objectives and requirements set out in the NPPF.



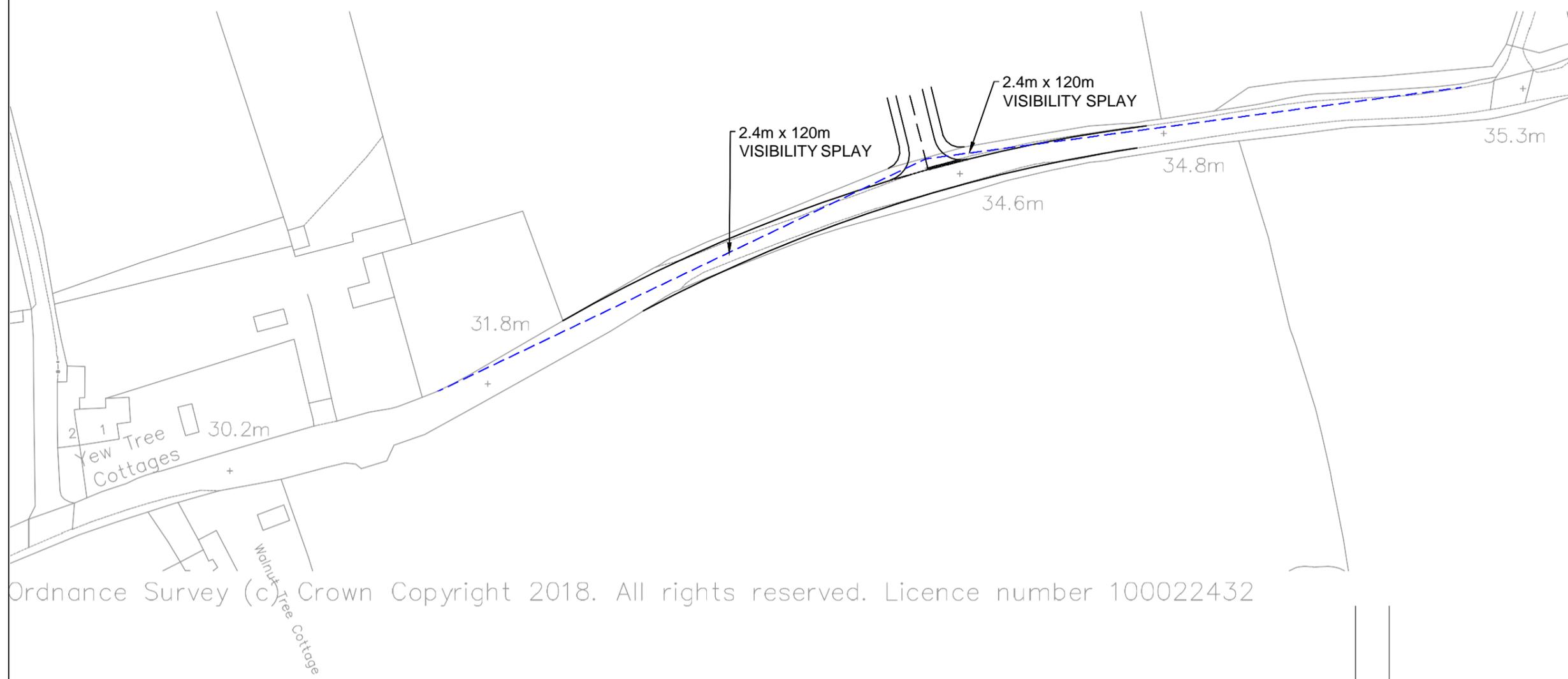
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Rev	Amendments	Dm	Chk	App	Date
Scale	NTS	Date	MAY 18	Designed	SK
Drawn	SK	Checked	DT	Approved	DT
Job No	18062-00	Figure No	FIGURE 4.1	Rev	


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Job Title
BRIDGE END FARM, WISLEY
 Drawing Title
SITE LOCATION & WALKING DISTANCE FROM BUS STOP

Client
HALLOM LAND



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	9th Floor, The Tower Building, York Road SE1 7AX	Job Title LAND AT BRIDGE END FARM	Client HALLAM LAND	Rev Scale 1:1000 @ A3	Amendments Date MAY 18	Dm Chk App Designed KO	Date
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PROPOSED ACCESS
VISIBILITY SPLAY

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Job No	Drawing No		Rev
18062-01	18062-01-001		-