The Hurlstone Partnership

PROPOSED REPLACEMENT ACCESS TO LAND AT LOPCOMBE CORNER, SALISBURY, WILTSHIRE

Access Review

August 2020

JPH/200301/D1

Seven Oaks Farm, Crew Green, Shrewsbury SY5 9AS

Tel: 01743 884849 Fax: 01743 884947 E-mail: office@hurlstones.com

PROPOSED REPLACEMENT ACCESS TO LAND AT LOPCOMBE CORNER, SALISBURY, WILTSHIRE

Document Status – 1st Draft

Produced by: - - - - - - J P Hurlstone Date: August 2020

Transportation Planning, Highway Design and Environmental Assessment

CONTENTS

1 INTRODUCTION 1
2 EXISTING SITUATION 1
Traffic Flows 2
Highway Safety 2
3 ACCESS DESIGN 3
4 POTENTIAL FOR REPLACEMENT ACCESS 9
5 CONCLUSIONS 10
6 SUMMARY 12

FIGURES

1 Potential Replacement Access to A30 – Option 1
2 Potential Replacement Access to A30 – Option 2
3 Potential Replacement Access to A30 – Option 3

1 INTRODUCTION

1.1 The Hurlstone Partnership Limited was instructed to provide advice regarding the potential for developing an area of land to the north of the A30 at Lopcombe Corner, Salisbury, Wiltshire for residential use.

1.2 The site is opposite Popple Down Farm, approximately 1km from the junction between the A30 and A343 to the west.

1.3 The review undertaken reveals that there is potential to achieve an access with the default visibility requirements in both directions based on Ordnance Survey mapping data and on-site measurements. However, the access would require the route into the site to be constructed on an embankment due to the level difference between the A30 and site at that point.

1.4 Alternative access position are available to the west, but these would require the Highway Authority to accept the flexibility advocated in current design guidance in terms of the visibility splay being achieved towards the oncoming traffic, rather than the edge of the carriageway.

1.5 The remainder of this report details the findings of the review undertaken and presents three alternative access options.

2 EXISTING SITUATION

2.1 The A30 is classified as a Principal Route on *"Map 3.1 Wiltshire's strategic transport network"* (page 26 of the Wiltshire Local Transport Plan 2011 – 2026 Strategy document).

2.2 In the vicinity of the site the A30 is subject to a 50 mph speed limit. It is a single-carriageway route and benefits from a straight, alignment which descends slightly from approximately 0.5km to the west before levelling and continuing along he site frontage, which extends approximately 161m. To the east of the site frontage the A30 begins to climb, as it continues on a straight alignment toward the County boundary.

2.3 The site is served by an existing access towards its southwest corner. To the west of the access there is a field bounded by a post and wire fence set back 1.1m from the carriageway edge. Although it is possible to see over / behind the fence towards oncoming traffic from the west (subject to vegetation being trimmed and maintained) as the field is in separate ownership, technically the view across the third party land cannot be relied upon.

2.4 The boundary at the eastern end of the site is set back 1.6m from the carriageway edge and is enveloped by vegetation.

2.5 To the east of the existing access there is a post marking the on-carriageway bus stop in the verge. A sign confirming the presence of a hydrant is fixed to the bus stop post.

2.6 Vegetation along the site frontage extends across the verge, close to the carriageway edge, in places, which restricts visibility to the east from the 2.4m and 2.0m set back distances at the access position. However, due to the excellent forward visibility along the A30 towards the access from both directions, oncoming drivers are able to see a vehicle emerging from the access in good time to slow down and stop if necessary to avoid a collision.

Traffic Flows

2.7 Traffic flow information along the A30 has been obtained from the Department for Transport website, which includes two Count Points in the vicinity of the site. Count Point 73592 is located approximately 330m to the west of the site, whilst Count Point 36318 is located approximately 2km to the east of Count Point 73592.

2.8 The traffic data identifies an estimated Annual Average Daily Flow (AADF) flow (i.e. the average daily flow over 365 days per annum) at the westerly Count Point of 4344 vehicles including 100 HGVs in 2018. Between 2000 and 2018 all of the AADF flows are either estimated based on the previous year's flow, or calculated from observed flows at a neighbouring Count Point.

2.9 At Count Point 36318, the estimated AADT flow in 2018 was the same as set out above. However, counted data was available at Count Point 36318 from 2015, when an AADF of 4232 vehicles including 92 HGVs was recorded.

2.10 The raw count data from Monday 01 June 2015 confirmed the peak hour flow of 462 vehicles including 9 HGVs occurred between 08:00 – 09:00. The comparable PM peak hour flow of 446 vehicles including 3 HGVs occurred between 17:00 – 18:00.

Highway Safety

2.11 A review of Crashmap information indicates that there have been no recorded personal injury accidents along the straight road in the vicinity of the site within the most recent 5 year period for which data is available (2015 – 2019 inclusive). Given the excellent visibility along the A30, this is not surprising.

3 ACCESS DESIGN

3.1 Based on the traffic flows on the A30, it is apparent that traffic volumes along the A30 are relatively low, and comparable with the 4000 vehicle average identified on page 96 of Manual for Streets (MfS) when researching the "*Traffic flow and road safety for streets with direct frontage access*".

3.2 The MfS guidance advises: *"Traffic flows at the sites varied between 600 vehicles per day to some 23,000 vehicles per day, with an average traffic flow of some 4,000 vehicles per day…It was found that very few accidents occurred involving vehicles turning into and out of driveways, even on heavily trafficked roads…Links with direct frontage access can be designed for significantly higher traffic flows than have been used in the past, and there is good evidence to raise this figure to 10,000 vehicles per day."*

3.3 It is therefore apparent that the traffic volumes on the A30 are well within the range considered under the MfS guidance, which confirms on page 5 under the heading *"Status and application*": *MfS focuses on lightly-trafficked residential streets, but many of its key principles may be applicable to other types of street, for example high streets and lightly-trafficked lanes in rural areas. It is the responsibility of users of MfS to ensure that its application to the design of streets not specifically covered is appropriate.*

MfS does not apply to the trunk road network. The design requirements for trunk roads are set out in the Design Manual for Roads and Bridges (DMRB)."

3.4 Notwithstanding this, by cross-referencing DMRB CD123 "*Geometric design of at-grade priority and signal-controlled junctions*", Figure 2.3.1 on page 11 of the document indicates a simple priority junction is appropriate where the minor arm flow (site access in this case) is up to 300 movements AADT onto a priority route carrying up to 13,000 vehicles per day AADT.

3.5 MfS2, which was launched in September 2010, provides additional information in terms of the application of the principles of MfS1 to the wider highway network and confirms that "*most MfS advice can be applied to a highway regardless of speed limit. It is therefore recommended that as a starting point for any scheme affecting non-trunk roads, designers should start with MfS*" –emphasis as per paragraph 1.3.2 of MfS2. As the A30 is not a trunk road, it is therefore apparent that national guidance confirms MfS should be the starting point, not DMRB.

3.6 Paragraph 1.3.3 of MfS2 continues *"Where designers do refer to DMRB for detailed technical guidance on specific aspects, for example on strategic inter-urban non trunk roads, it is recommended that they bear in mind the key principles of MfS, and apply DMRB in a way that reflects the local context. It is further recommended that DMRB or other standards and guidance is only used where the guidance contained in MfS is not sufficient or where particular evidence leads a designer to conclude that MfS is not applicable."*

3.7 Table 1.1 of MfS2 confirms that the Stopping Sight Distance (SSD) principle of MfS1/2 can be applied to 20 and 30 mph speed limits and they may also be applied on routes subject to 40 mph and 50+ mph speed limits *"subject to local context*."

3.8 At paragraph 1.3.5. MfS2 advises *"Much of the research behind MfS1 for stopping sight distance (SSD) is limited to locations with traffic speeds of less than 40 mph and there is some concern that driver behaviour may change above this level as the character of the highway changes. However, 40 mph speed limits in built-up areas cover a wide range of contexts, from simple urban streets with on-street parking and direct frontage access to 2/3 lane dual carriageways. Furthermore, local context varies not only from street to street but also along the length of a street".*

3.9 Paragraph 1.3.6 continues *"Where a single carriageway street with on-street parking and direct frontage access is subject to a 40mph speed limit, its place characteristics are more of a residential street or high street, with higher traffic flows, and may result in actual speeds below the limit. It is only where actual speeds are above 40mph for significant periods of the day that DMRB parameters for SSD are recommended. Where speeds are lower, MfS parameters are recommended."*

3.10 At paragraph 1.3.7 MfS2 confirms that *"in rural areas many parts of the highway network are subject to the national speed limit but have traffic speeds significantly below 60 mph. Again, in these situations where speeds are lower than 40 mph, MfS SSD parameters are recommended."*

3.11 Paragraph 1.3.9 advises "*This approach demonstrates that the key MfS principles can be applied widely to improve the quality of highways and their application is not limited to low speed or lightly trafficked routes."*

3.12 MfS2 confirms that HGVs and buses have different rates of deceleration to cars and light vehicles. However, at paragraph 10.1.8 it states "*As a guide, it is suggested that bus/HGV SSD should not need to be assessed when the combined proportion of HGV and bus traffic is less than 5% of traffic flow, subject to consideration of local circumstances*". This is likely to be due to the fact that large vehicles (HGVs and Buses) typically travel at speeds below the 85th percentile. For example, paragraph 10.1.12 of MfS2 advises "*Based on free flow vehicle speeds travelling in 30mph limits given in Transport Statistics Bulletin 2008, buses travel at 90% of the average speed for all vehicles*"; noting that this is below the average speed and therefore well below the 85th percentile speeds.

3.13 The deceleration rate for large vehicles is identified as 0.375g, which is slower than that for light vehicles of 0.45g under MfS guidance. It is also significantly slower than the 0.67g adopted in the Highway Code when assessing emergency stopping distances.

3.14 The 0.375g rate of deceleration is referenced for HGV and Bus stopping distances, and as the basis of establishing the absolute minimum stopping distances for all vehicles on the trunk road where speeds exceed 60 kph in Table 10.1 of MfS2. It is noted that 60 kph

(37.28 mph) is referenced within Table 10.1 whereas 40 mph (64.37 kph) is referenced in paragraphs 1.3.5 to 1.3.7 of MfS2.

3.15 Paragraph 10.1.4 of MfS2 clearly advises that the visibility splay requirements are based on the requirement to stop: "*Stopping sight distance (SSD) is the distance drivers need to be able to see ahead and they can stop within from a given speed. It is calculated from the speed of the vehicle, the time required for a driver to identify a hazard and then begin to brake (the perception-reaction time), and the vehicle's rate of deceleration. For new streets, the design speed for the location under consideration is set by the designer. For existing streets, the 85th percentile wet-weather speed is used*".

3.16 The 85th percentile speed referred to is that recorded on the priority route, which in this case is the A30. It is therefore apparent that the purpose of the visibility splay is to allow the oncoming driver on the main road to see a potential hazard ahead and stop safely if necessary, rather than to allow the emerging driver to stop, as the latter's speed is not taken into account. Similarly, the quantum of traffic using the access road is not taken into account when assessing the visibility splay lengths, as it is the ability of a vehicle travelling on the priority route to stop that is the key consideration in terms of safety.

3.17 Whilst it is desirable to provide lateral visibility for the emerging driver to see oncoming traffic over the length of the SSD, it is not essential in order to maintain an acceptable level of highway safety.

3.18 Notwithstanding this, there is also a degree of flexibility in terms of the length of the visibility splays, as is recognised in paragraph 10.5.9 of MfS2, which advises: "*The Y distance should be based on the recommended SSD values. However, based on the research referred to above, unless there is local evidence to the contrary, a reduction in visibility below recommended values will not necessarily lead to a significant problem."* (Our emphasis).

3.19 This evidence based approach is reiterated in an article contained in the November 2010 edition of Transportation Professional, the magazine of the Chartered Institution of Highways and Transportation. The Cover Story article "*Manual for Streets 2*" quotes Alan Young, the principle author of MfS1 and MfS2: "*The advice is to look at speed first, then detailed assessment of local context and vehicle and pedestrian collision records. If there is a problem of safety, deal with it as appropriate; if collision records are acceptable, avoid rigorous following of standards and focus on the quality of the place," says Mr. Young."* The article concludes with a further quotation *"This research combined with what's been recognised before suggests greater visibility could be increasing hazards, but the important message is do not get hung up on standards. Be flexible and make decisions based on evidence."*

3.20 The advice of Alan Young and MfS2 is underpinned by independent research into the relationship between restricted lateral visibility and collisions, which is reported in section 10.4 of MfS2.

3.21 Section 10.4 of MfS2 considers Visibility at Priority Junctions on pages 076 and 077. Paragraph 10.4.2 states "*It has often been assumed that a failure to provide visibility at priority junctions in accordance with the values recommended in MfS1 or DMRB (as appropriate) will result in an increased risk of injury collisions. Research carried out by TMS consultancy for MfS2 has found no evidence of this."*

3.22 The study reported on pages 76 and 77 of MfS2 advises *"A series of "high risk" priority junctions was identified as the basis for research. Uncontrolled crossroads and T-junctions were selected for all classes of road throughout Nottinghamshire, Sandwell, Lambeth and Glasgow...A series of collision types at high risk locations where Y distance was less than 45m were compared with locations with more than 45m visibility. There were no statistically significant differences between the two sets of data. The data analysed included main road bus and large vehicle collisions, and the research did not find high numbers of collisions involving these types of vehicles at low visibility sites."*

3.23 The report concludes *"This study has been unable to demonstrate that road safety concerns regarding reduced Y distance are directly associated with increased collision risk at "high-risk" urban sites; Previous research for MfS1 demonstrated that main road speed is influenced by road width and forward visibility. Many of the locations in this study were straight roads with good forward visibility. The ability of a driver to stop is likely to be affected by more than just what is happening in the side road and an understanding of the factors influencing main road speed is important when assessing visibility requirements."*

3.24 The fact that the sites reviewed provided good forward visibility explains why there was no link to collisions despite the restricted lateral visibility at these junctions. There are few drivers who are intent on having a collision, and any reasonable driver would take steps to avoid a collision where possible; even if this means slowing down on the priority route.

3.25 This principle of driver behaviour is recognised at Page 80 of MfS2, which considers obstacles to visibility. Paragraph 10.7.1 states: *"Parking in visibility splays in built-up areas is quite common, yet it does not appear to create significant problems in practice. Ideally, defined parking bays should be provided outside the visibility splay. However, in some circumstances, where speeds are low, some encroachment may be acceptable (See Example below)".*

3.26 The text accompanying the Example referred to advises: *"At urban junctions where visibility is limited by buildings and parked cars, drivers of vehicles on the minor arm tend to nose out carefully until they can see oncoming traffic and vice-versa.*

In the images above, the blue car moves forward slowly until it can see past the parked vehicles to see that the gap to the next oncoming vehicle is long enough for it to pull out. Drivers on the major route will also be able to see the vehicle pulling forward slowly and may slow down or stop to allow it to pull out".

3.27 As reported in MfS2 at paragraph 3.1.8, the Highway Code provides advice to drivers to *"take the road and traffic conditions into account. Be prepared for unexpected or difficult situations, for example, the road being blocked beyond a blind bend. Be prepared to*

adjust your speed as a precaution…where there are junctions, be prepared for road users emerging." Paragraph 3.1.10 of MfS2 advises that drivers are responsible for their own safety and cites a ruling "*The overriding imperative is that those who drive on the public highway do so in a manner and at speed which is safe having regard to such matters as the nature of the road, the weather conditions and the traffic conditions. Drivers are first and foremost responsible for the own safety."*

3.28 MfS2 is critical of the approach of some practitioners at paragraph 3.2.1 which states: *"For some time there have been concerns expressed over designers slavishly adhering to guidance regardless of local context."* The document goes on to state in the following paragraphs "*Designers are expected to use their professional judgement when designing schemes and should not be over-reliant on guidance….Available guidance is just that, guidance, and cannot be expected to cover the precise conditions and circumstances applying at the site under examination….The authors of guidance, how ever accomplished, will not be cognizant of the site and situation in question. It would be neither reasonable nor rational to presume that anyone could produce an optimal design in abstract. The informed judgement of trained professionals on-site, should logically take precedence over guidance*".

3.29 Specific guidance is given for rural areas at section 2.8 of MfS2, which states at paragraph 2.8.1: "*Rural roads are an integral part of the landscape, often reflecting and preserving historic landscape features such as ancient routes or field boundaries and set within outstanding countryside. Elements such as hedges, verges, banks and fingerposts may contribute strongly to local character and historic significance*." Paragraph 2.8.2 continues: "*There is a considerable variation in the highway network running through rural areas from motorways to Green Lanes. The majority of other rural roads follow old pathways and boundaries and do not conform to present guidance on highway standards. Indeed to do so could be to the detriment of local character and lead to intrusion into some of our most outstanding landscapes."*

3.30 MfS2 refers to Devon County Council's good practice advice, with the following text: "*Junction improvements will only be considered where there is a proven safety need...There should be a presumption of retaining trees hedges and verges including any central grass areas....If a traditional Devon hedge needs to be removed for the realignment of a road, the practicality of translocation/moving the hedgebank should be considered in the first instance. Where this is not feasible, the next option should be to carefully dismantle and reconstruct the hedge. Archaeological recording and supervision may be required."*

3.31 As is clear, MfS2 seeks to steer away from the slavish adherence to guidance, and encourages practitioners to think about the circumstances of the case.

3.32 Based on the preceding guidance, it is apparent that reduced X distances and restrictions to lateral visibility may be acceptable subject to the provision of adequate forward visibility and a good safety record.

3.33 As confirmed by reference to recent collision records, the existing site access and those of its immediate neighbours on the same and opposite sides of the road have an excellent

safety record with no recorded injury accidents occurring between the 5 year period 2015 to 2019 inclusive. As stated previously, given the excellent forward visibility along the straight road, this is unsurprising when taking into account the foregoing guidance.

3.34 Table 10.1 of MfS2 provides various parameters for calculating the required stopping distances and visibility splay lengths, ranging between a 2 second perception/reaction time followed by a 0.25g deceleration rate (Desirable Min SSD) and the same perception/reaction time and a 0.375g deceleration rate (Absolute Min SSD) where speeds are over 60 kph (37.28 mph). These apply for all vehicles and take into account the slower deceleration rate for large vehicles (buses / HGVs) as is apparent when comparing the parameters for Design Speeds below 60 kph in Table 10.1, which confirms a faster deceleration rate of 0.45g is appropriate for light vehicles. At speeds below 60 kph, MfS advises a 1.5 second perception-reaction time is appropriate.

3.35 The difference between the desirable minimum and absolute minimum parameters presented in Table 10.1 of MfS2 relate to the objective of the situation. The 0.25g deceleration rate is not related to the ability of a vehicle to stop; but underpins the desirable requirement to maintain a continuous speed on the trunk road, as confirmed by paragraph 2.17 of TD 41/95 *"Vehicular Access to All Purpose Trunk Roads"* and reiterated in MfS2 paragraph 9.4.7. By way of comparison, the 0.375g relates to the comfortable deceleration rate of a large vehicle which is stopping from the design speed as explained in paragraph 10.1.10 of MfS2. This deceleration rate also underpins the deceleration length of right turning lanes at ghost-island junctions, within which vehicles are expected to stop in order to wait to turn right from the trunk road into the minor arm; hence the reason for the right turning lane itself, as confirmed in paragraph 7.41 of TD 42/95 "*Geometric Design of Major/Minor Priority Junctions*".

3.36 The default design speed for a 50 mph speed limit road is 85 kph (52.8 mph). Under the DMRB standards, the default visibility splay length for this design speed is 160m based on the provision for maintaining continuous speed. By way of comparison, if considering the ability of a vehicle to stop, following the 2 second perception/reaction time, a deceleration rate of 0.375g gives an overall stopping distance of 123m.

3.37 Based on the faster perception/reaction times and of 1.5 seconds, the large vehicle would require 113.5m to stop, whilst the lighter vehicle would require 100.9m, when including the 2.4m bonnet length correction applied under MfS guidance.

3.38 Based upon the foregoing, even if a vehicle pulled out of the access and stalled, based on the MfS parameters an oncoming vehicle could easily stop in order to avoid a collision when taking into account the excellent forward visibility towards the access on this straight section of the A30.

3.39 Given the MfS parameters provide a margin of safety within the perception-reaction time and deceleration rates when compared to those used in the Highway Code when assessing the ability to stop in an emergency (such as an anticipated crash), it is not surprising that the access has an excellent safety record, despite the restricted lateral visibility, as drivers may edge out safely to achieve a better view, in exactly the way considered and set out in the MfS2 guidance referenced above.

3.40 Given this advice and evidence, it may be argued that the existing access is satisfactory to serve the proposed use at the site.

3.41 Notwithstanding this, the review has considered the ability to achieve the desirable visibility splays from a relocated access position within the site frontage. In undertaking this exercise, the guidance at paragraph 10.5.3 of MfS2 has been considered: *"The Y distance represents the distance that driver who is about to exit from the minor arm can see to the left and right along the main alignment. For simplicity it has previously been measured along the nearside kerb line of the main arm, although vehicles will normally be travelling at a distance from the kerb line. Therefore, a more accurate assessment of visibility splay is made by measuring to the nearside edge of the vehicle track."*

3.42 This consideration has an influence on the position of the site access when seeking to achieve the relevant requirements without encroaching beyond the site and/or public highway boundaries. If taking a measurement to the near carriageway edge for convenience, there is less flexibility in terms of the access position, due to the proximity of the fence to the carriageway when looking to the west beyond the site boundary.

4 POTENTIAL FOR REPLACEMENT ACCESS

4.1 As a starting point, in order to represent the worst case in terms of restrictions, a 160m long visibility splay in each direction from a 2.4m set-back at the access centreline has been considered.

4.2 As can be seen from Figure 1, in the Figures section of at the back of this report, it would be possible to achieve 2.4m x 160m visibility splays to the near carriageway edge in both directions from a point approximately 43m west along the site frontage from the eastern boundary. At this point the sight lines fall on the roadside of the boundaries measured on site at either end of the frontage. However, at this point there is a level difference of approximately 2m between the road and site, which would need to be overcome by building up the ground within the site to create an acceptable approach gradient to the A30 with a plateau on which vehicles could wait to join the highway.

4.3 An alternative location is illustrated on Figure 2, which positions the access approximately 74.5m to the east of the western site boundary, at the western end of the embankment supporting the A30. At this point, the 160m distance to the east is maintained to the near carriageway edge, whilst the 160m distance to the west is achieved at a point 1m into the eastbound (oncoming) traffic lane. The 1m distance is consistent with the alternative position to which visibility was measured by TMS Consultancy when assessing the relationship between restricted visibility and collision risk, as explained on page 076 of MfS2 at section 10.4 of the document. Given the natural position of traffic within the carriageway, away from the road edge, as explained at MfS2 paragraph 10.5.3, and taking into account the inherent width of an approaching vehicle, the 1m inset is considered to be a reasonable point at which any approaching traffic would be visible from the access.

4.4 At this location, the 123m distance based on the ability for a large vehicle to stop from the 85kph/52.3 mph design speed is achieved 0.1m into the carriageway. Both the 113.5m and 100.9m visibility splays are achieved at the carriageway edge.

4.5 Figure 3 illustrates a potential access position approximately 41.5m to the east of the western site boundary and is based on the provision of a 100.9m visibility splay to the west being achieved at the 1m point into the near traffic lane. This is considered to be representative of the maximum western location the access could be positioned in order to achieve a lateral visibility splay which may be considered to accord with the guidance of MfS2, taking into account the proportion of large vehicles (less than 5%), the 1m distance into the carriageway as an alternative point to measure the Y distance (as per the TMS Consultancy approach described previously) and the 85 kph design speed, assuming the 1.5 second perception reaction time is reasonable when taking into account the 0.67 seconds assumed in an emergency, and the acceptance of 1.5 seconds in urban areas where the likelihood of a collision is higher and where the abundance of road and roadside activity creates more potential distractions for the driver.

4.6 By extending the sight line westwards, the distance of 123m for a large vehicle to stop is achieved 1.8m into the carriageway. Due to the width of such vehicles, any large vehicle approaching the site would be visible at that point and could stop safely if necessary.

4.7 The 160m distance is achieved 3.2m into the carriageway. At this location, assuming a large vehicle was travelling at some distance from the kerb line, it is likely that its off-side would be visible at around the 160m distance from the access.

4.8 At this point the 100.9m distance to the east is also achievable to the near edge. However, due to the carriageway alignment, extending the splay to 160m has no significant impact as the extension effectively runs along the carriageway edge and only moves the 100.9m point 0.3m into the verge.

4.9 As previously described, under all options, the forward visibility towards the potential access for oncoming drivers is significantly in excess of 160m from both directions.

5 CONCLUSIONS

5.1 Having considered the findings of the review undertaken, it is apparent that there is a range of potential access locations available within the site frontage. The preferred choice would depend upon the acceptance of MfS guidance by the Highway Authority.

5.2 It is recommended that pre-application consultations be entered into with a view to agreeing a location which is acceptable to the Highway and Planning Authorities based upon the proposed development and internal layout of the site.

5.3 In terms of highway safety, when taking into account current design guidance, a case could be made for retaining the existing access location, but this would require

acceptance that the western splay for the emerging driver extends over third party land, as it is understood to have done for many years. If no alternative was available, a case could be made to support its retention based upon current design guidance and the excellent forward visibility available.

5.4 However, if a greater degree of control over the visibility splays is preferred by the Highway Authority, it is considered that all of the three alternative options would represent a significant level of betterment when compared with the existing situation, and all would be acceptable when assessed against current highway design guidance. However, based on the findings, numerous alternative positions along the site frontage would be available between the locations identified.

5.5 Due to the increasing level difference between the site and A30, it is considered the Option 1 is the furthest to the east it could be considered necessary to provide an access, even if applying the full trunk road standards set out in DMRB.

5.6 However, taking into account the local context, including:

- the relatively low traffic volumes on the A30
- the fact that the A30 is not a trunk road;
- the fact that traffic speeds are unlikely to be consistent in this locality due to the use of the existing accesses in the area;
- the fact that the use of the existing accesses has not led to adverse safety impacts; and

based on the current guidance in MfS2 it is concluded that the application of the more onerous trunk road standards would provide no practical safety benefit in this case. As a result, it is concluded that the more flexible approach advocated in MfS2 is more appropriate in this case.

6 SUMMARY

6.1 The Hurlstone Partnership Limited was instructed to review the potential options for serving residential development on land to the north of the A30, opposite Popple Down Farm, approximately 1km from the junction between the A30 and A343 to the west.

6.2 In accordance with current design guidance, the review has considered the existing access arrangement, traffic flows on the A30, local road safety performance and appropriate visibility requirements.

6.3 The review undertaken reveals that there is potential to achieve an access with the default visibility requirements in both directions based on Ordnance Survey mapping data and on-site measurements, even if applying the more onerous trunk road standards, which are not considered to be necessary in this case.

6.4 To achieve the trunk road standards, on this non trunk road, the access would require the route into the site to be constructed on an embankment due to the level difference between the A30 and site at that point.

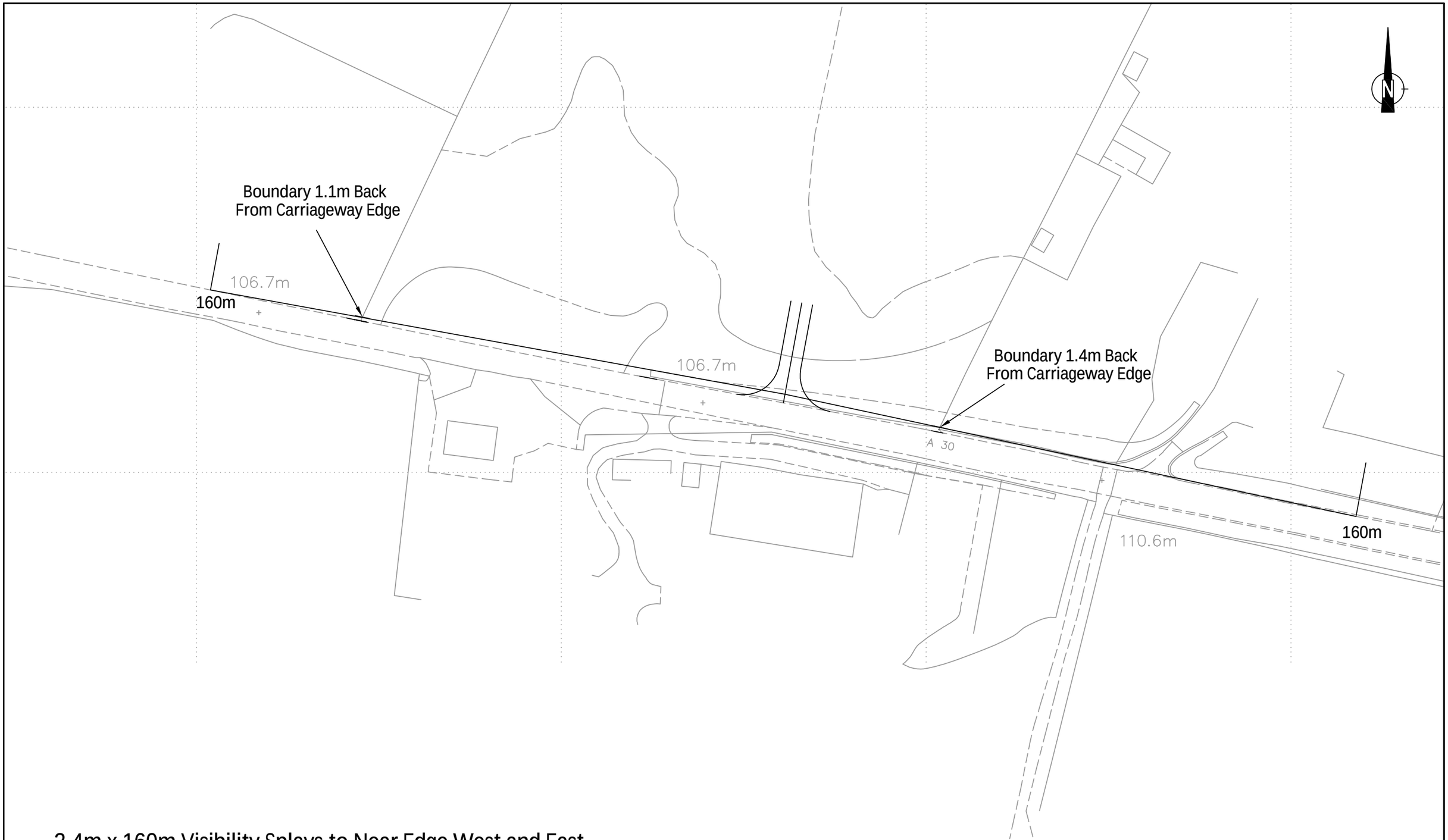
6.5 Alternative access positions are available to the west, but these would require the Highway Authority to accept the flexibility advocated in current design guidance in terms of the visibility splay being achieved towards the oncoming traffic, rather than the edge of the carriageway.

6.6 Taking into account the local context, the more flexible guidance would have no practical adverse impact on highway safety.

6.7 Whilst the review undertaken revealed a case could be made to retain the current access, relocating it to the east would result in an improvement when compared with the existing arrangement.

6.8 Having considered the foregoing it is concluded that as a safe access could be achieved, it is recommended that pre-application consultations are entered into to establish the preferred location, taking into account the Highway and Planning Authorities' preference, together with the internal site layout.

FIGURES



2.4m x 160m Visibility Splays to Near Edge West and East

Ordnance Survey (c) Crown Copyright 2020. All rights reserved. Licence number 100022432

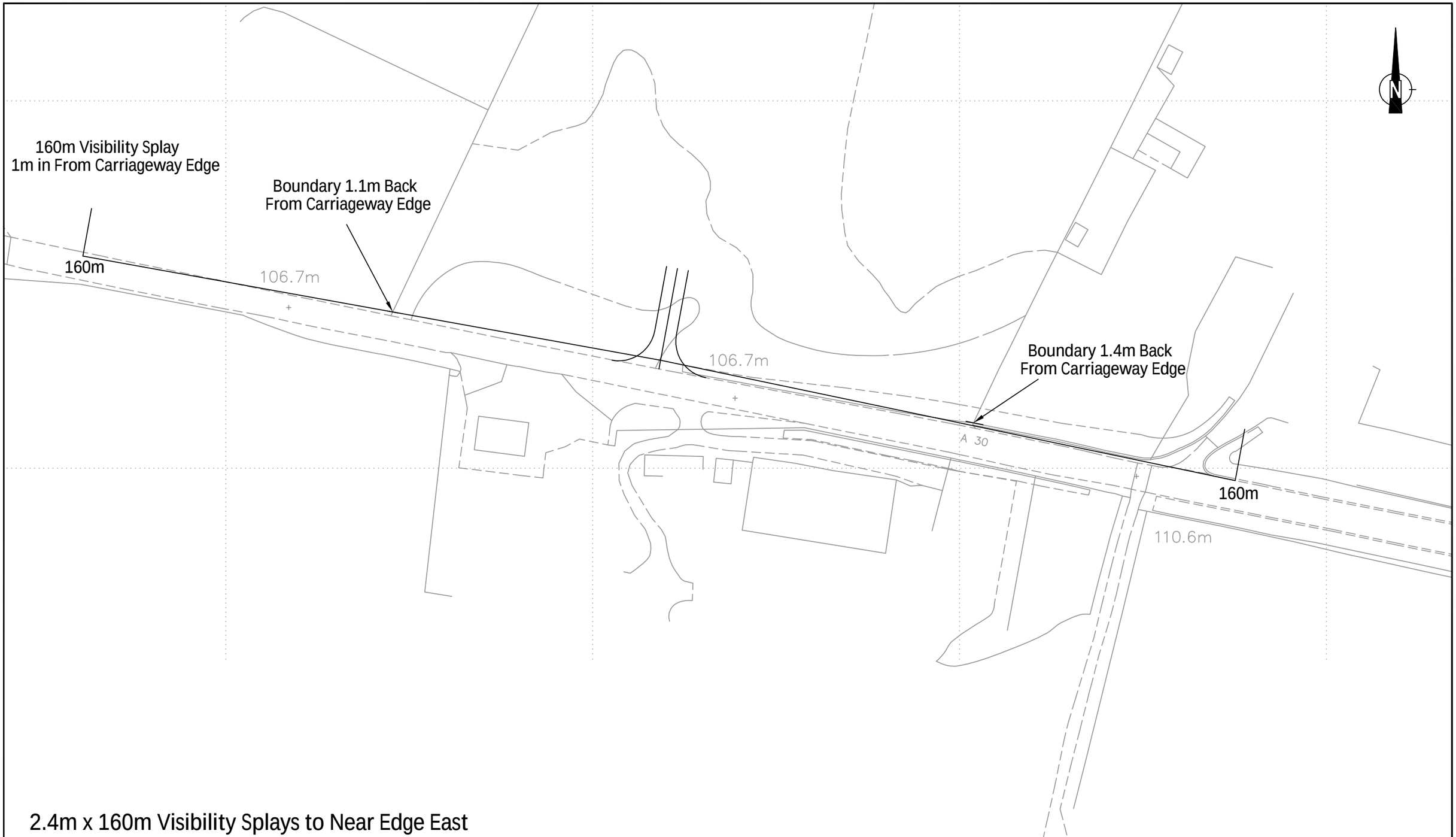
The Hurlstone Partnership
Seven Oaks Farm, Crew Green, Shrewsbury SY5 9AS
Tel: 01743 884849 Fax: 01743 884947
e-mail: office@hurlstones.com

Lopcombe Corner, Salisbury
Potential Replacement Access to A30 - Option 1
Preliminary Layout

DRAWN BY	JOB No.	DATE
JPH	200301	Aug 2020

REV	AMENDMENTS	DATE

SCALE	DWG No.
1:1000 @ A3	Figure 1



2.4m x 160m Visibility Splays to Near Edge East

2.4m x 160m Visibility Splays 1m into Traffic Lane West

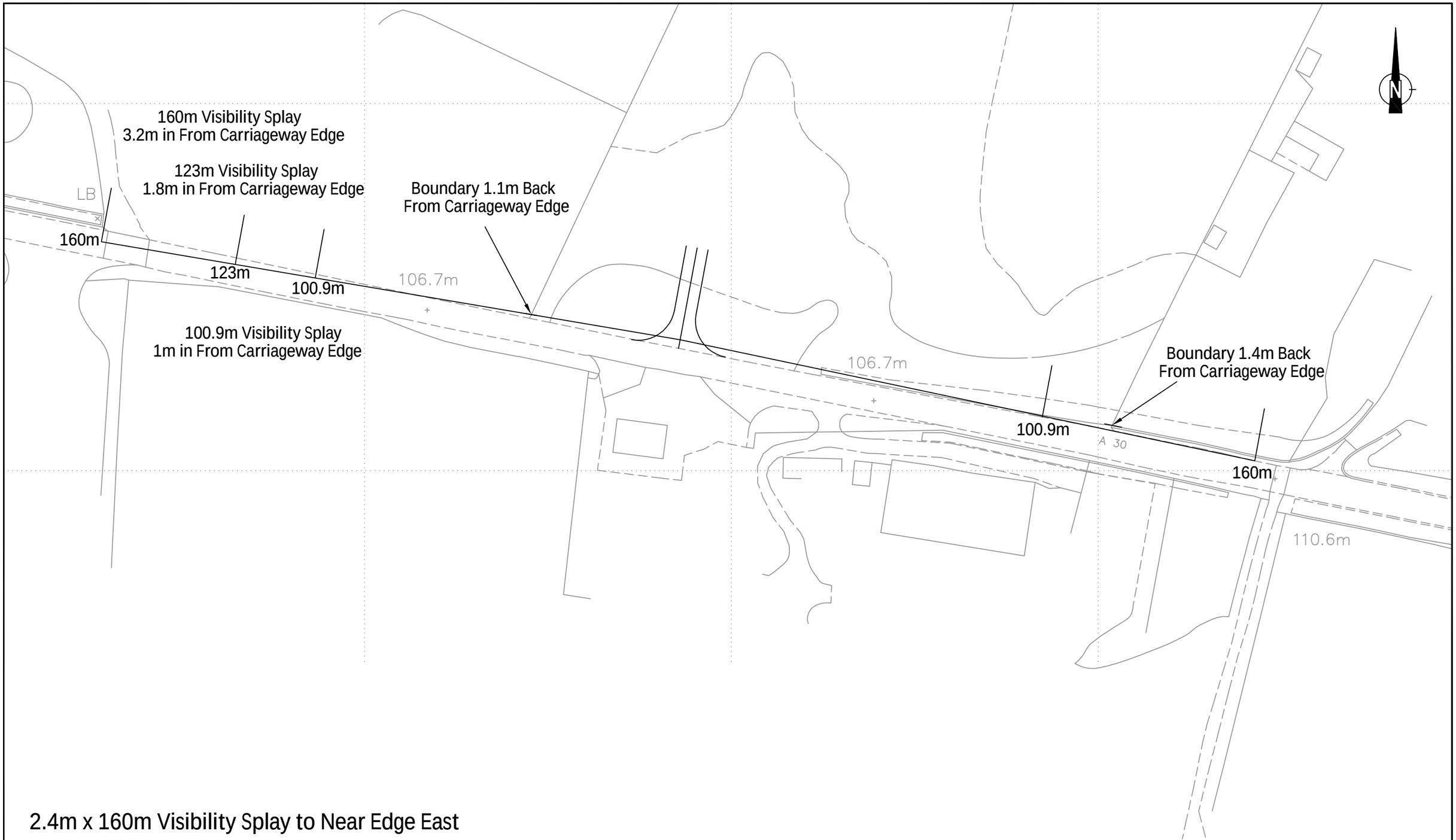
Ordnance Survey (c) Crown Copyright 2020. All rights reserved. Licence number 100022432

The Hurlstone Partnership
Seven Oaks Farm, Crew Green, Shrewsbury SY5 9AS
Tel: 01743 884849 Fax: 01743 884947
e-mail: office@hurlstones.com

Lopcombe Corner, Salisbury
Potential Replacement Access to A30 - Option 2
Preliminary Layout

REV	AMENDMENTS	DATE

DRAWN BY	JOB No.	DATE	SCALE	DWG No.
JPH	200301	Aug 2020	1:1000 @ A3	Figure 2



2.4m x 160m Visibility Splay to Near Edge East

2.4m x 100.9m Visibility Splay 1m into Traffic Lane West

Ordnance Survey (c) Crown Copyright 2020. All rights reserved. Licence number 100022432

The Hurlstone Partnership
Seven Oaks Farm, Crew Green, Shrewsbury SY5 9AS
Tel: 01743 884849 Fax: 01743 884947
e-mail: office@hurlstones.com

Lopcombe Corner, Salisbury
Potential Replacement Access to A30 - Option 3
Preliminary Layout

REV	AMENDMENTS	DATE

DRAWN BY	JOB No.	DATE	SCALE	DWG No.
JPH	200301	Aug 2020	1:1000 @ A3	Figure 3