Site Accessibility and Access Appraisal

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Design note title	Site Accessibility and Access Appraisal		
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1. Existing Site Context

1.1 Overview

1.1.1 This Site Accessibility and Access Appraisal provides a high-level review of existing pedestrian, cycle, public transport and vehicular accessibility to serve the proposed development, which seeks to develop land at George Lane in Kilmington. The development proposals comprise of a residential development and associated parking, with a proposed new access.

1.1.2 The development site is located in the village of Kilmington, near Axminster in East Devon. The site is bounded by the A35 to the north, residential properties to the south, agricultural land/ pub to the east, and George Lane to the west. The indicative redline boundary and site location are shown in Figure 1.1.

Figure 1.1: Site Location Context

1.2 Existing Site Use

1.2.1 The existing site is undeveloped agricultural land that benefits from an existing agricultural gated access point onto George Lane.

1.3 Surrounding Road Network

1.3.1 George Lane bounds the development site to the west and provides a link to the A35. Access to the development is proposed via George Lane which is subject to a 30mph speed limit and provides access to residential dwellings in the village of Kilmington. The carriageway varies in width, allowing for one-way vehicle movements for the majority, and benefiting from numerous passing place points allowing for two vehicles to pass. No footways or street lighting are present along the carriageway with the road being in a rural setting.

1.3.2 At the northern extent of George Lane, the carriageway forms a priority junction with Shute Road. Shute Road is subject to a 30mph speed limit and serves the western boundary of the village of Kilmington. Shute Road forms a junction with the A35 at its eastern extent, directly north of the site.

1.3.3 At the southern extent of George Lane, the carriageway forms a priority junction with The Street which serves many of the residential properties within the village. There are no footways or street lighting present along the carriageway which is not unusual considering the rural setting.

1.3.4 To the east of the site, the A35 provides access to the B3261 via an on-off slip road; the B3261 provides a route to and from Axminster, the closest town to the site. The B3261 is subject to national speed limit (60mph) and reduces to 30mph on approach to Axminster. The B3261 benefits from a shared footway/cycleway along the northern side of the carriageway.

1.4 Road Safety Records

1.4.1 Personal Injury Accident (PIA) data has been obtained from recorded road safety data published annually by the Department for Transport (DfT). The statistics provide PIA data reported in each local authority using the STATS19 accident form. The most recent five-year dataset has been reviewed, covering the period between January 1st 2017 and 31st December 2021 inclusive with the study area as shown in Figure 1.2.

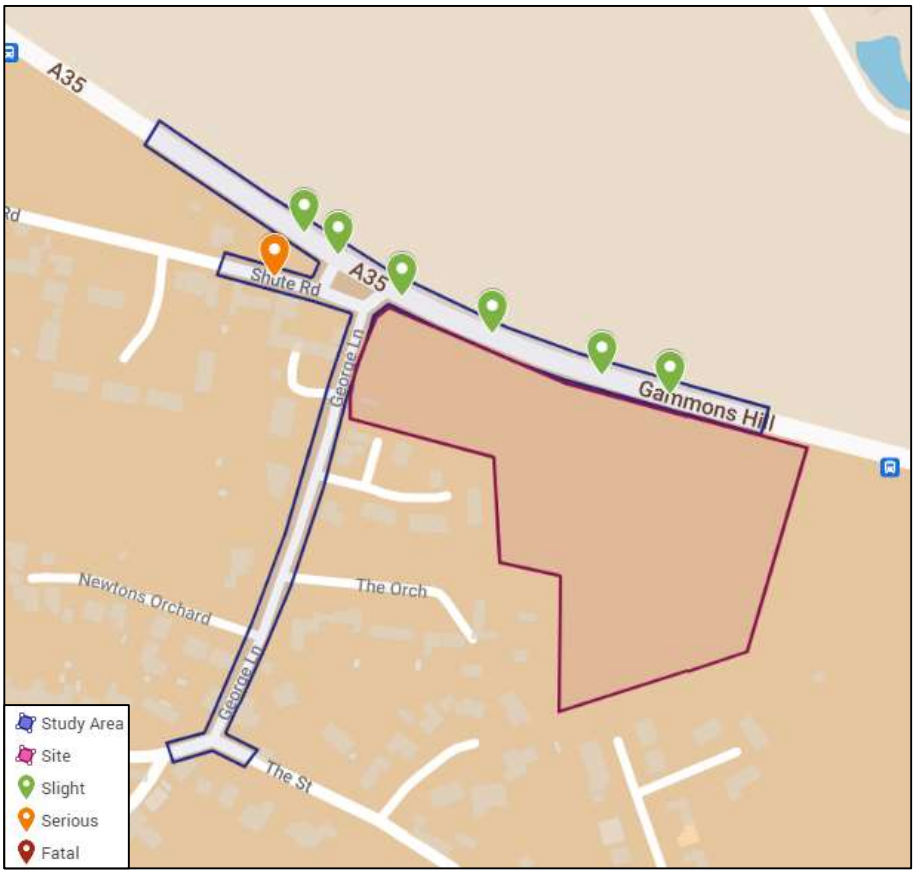


Figure 1.2: PIA Study Area

1.4.2 The purpose of examining PIA data is to ascertain if there are elements of the highway examined that may be causal factors in PIA events. It is unlikely that a single incident at a particular location will be of sufficient evidential value to implicate highway design or condition as a causal factor, unless the particular highway issue is in some way extreme, so particular attention is paid to accident clusters.

1.4.3 Within the study area in the five-year period, seven PIAs were recorded of which six were recorded as slight in nature and one as serious. There were no fatal accidents recorded within the study area. The accidents recorded as slight in nature are summarised as follows:

- **A35**
  - Involved two vehicles and one casualty. Vehicle one was proceeding normally along the carriageway and the first point of impact was at the front of the car; the object that was hit was unknown. Vehicle two was not impacted in the collision.
  - Involved two vehicles and one casualty. Vehicle one was parked in the carriageway and vehicle two was in the act of turning right and collided with the parked vehicle.
  - Involved two vehicles and two casualties. Vehicle two was waiting to proceed normally but was held up and vehicle one was slowing down but collided with the rear of vehicle two.
  - Involved two vehicles and three casualties. Vehicle one collided with the rear of vehicle two.
  - Involved two vehicles and one casualty. Vehicle one collided with the rear of vehicle two.
  - Involved three vehicles and three casualties. Vehicles two and three were waiting to proceed normally but held up and vehicle collided with the rear of the vehicle in front.

1.4.4 The accident recorded as serious in nature was located on Shute Road and involved one vehicle and one pedestrian casualty. The vehicle was proceeding normally along the carriageway and collided with a pedestrian who was walking in the carriageway with their back to the traffic.

1.4.5 There were no cyclists involved in the recorded PIAs in the study area within the most recent five-year period, nor are there clusters of four or more accidents. Although all incidents are regrettable, the PIAs that occurred do not indicate a specific pattern or issue with the geometry of the highway that would be exacerbated by the proposals.

2. Accessibility and Connectivity

2.1 Pedestrian Connectivity

2.1.1 The site benefits from a footway on the A35, connecting to the shared footway/cycleway routing along the B3261 into Axminster. There are crossing points with dropped kerbs and tactile paving provided and junctions. The journey from the site into Axminster is approximately a 30 min walk, where a wider range of facilities are provided.

2.1.2 Within the village of Kilmington, pedestrians typically share the carriageway with motor vehicles and other users, as is commonplace for a site situated in a rural location, and the absence of any pedestrian/vehicle collision history suggests that this does create a safety concern

1.1.1 This situation is not unusual for rural settlements such as this. Manual for Streets 2 notes that villages are the most numerous type of settlement in the UK and, at 2.7.4, that:

2.1.3 'Many villages have existed for centuries and are likely to have an historic centre with a street pattern that is unlikely to conform to a standardised highway layout but which is desirable to conserve in the interests in (sic) maintaining the character of the area. Carriageways are often narrow, and footways may be narrow or non-existent and as a result speeds can be low.

2.1.4 Strava (www.Strava.com) heatmaps were used to review frequently used routes for walking/running. While this data only captures the activity of those who choose to record and upload it, it is a useful tool to demonstrate the attitude of predominantly local users to a particular route. The extract at Figure 2.1 shows that George Lane is well used by pedestrians, suggesting that there is no overriding safety related anxiety arising from the layout.

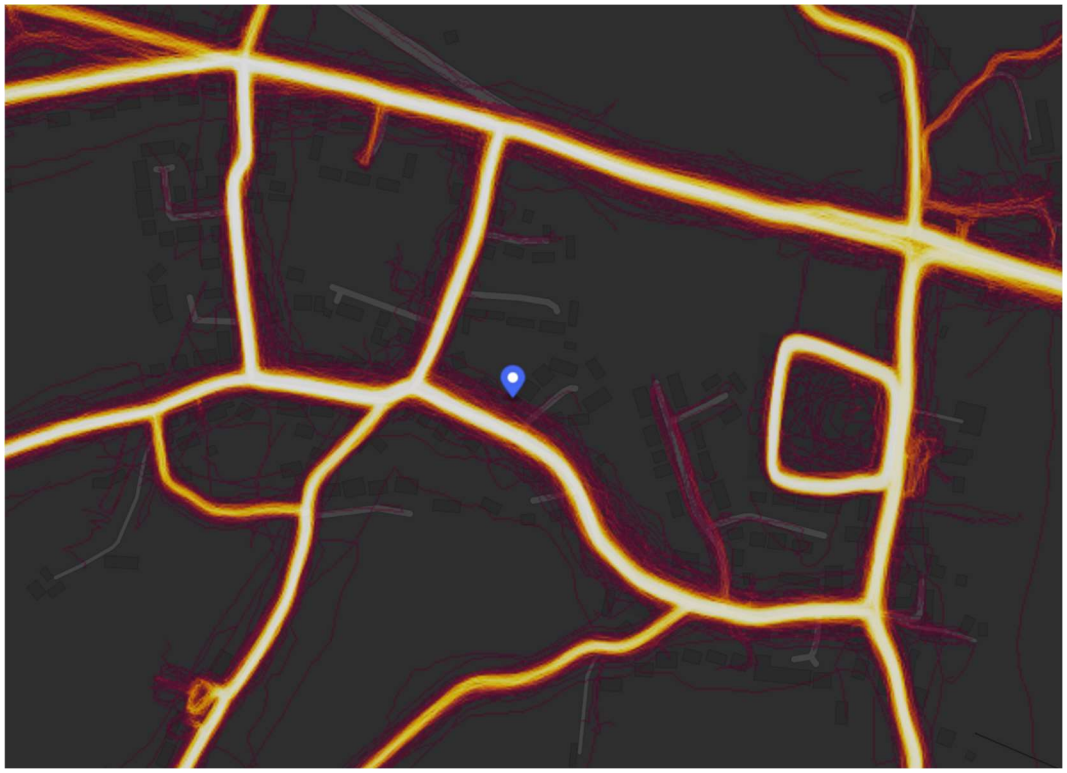


Figure 2.1: Strava Heatmap (Pedestrian)

2.2 Public Rights of Way

2.2.1 The existing Public Right of Way (PRoW) network in the vicinity of the development site has been reviewed, which includes footpaths, bridleways and by-ways. Figure 2.2 indicates the locations of the nearby existing routes, which forms part of Devon County Council's PRoW network. There are no PRoWs which route through the site or that connect to the site.

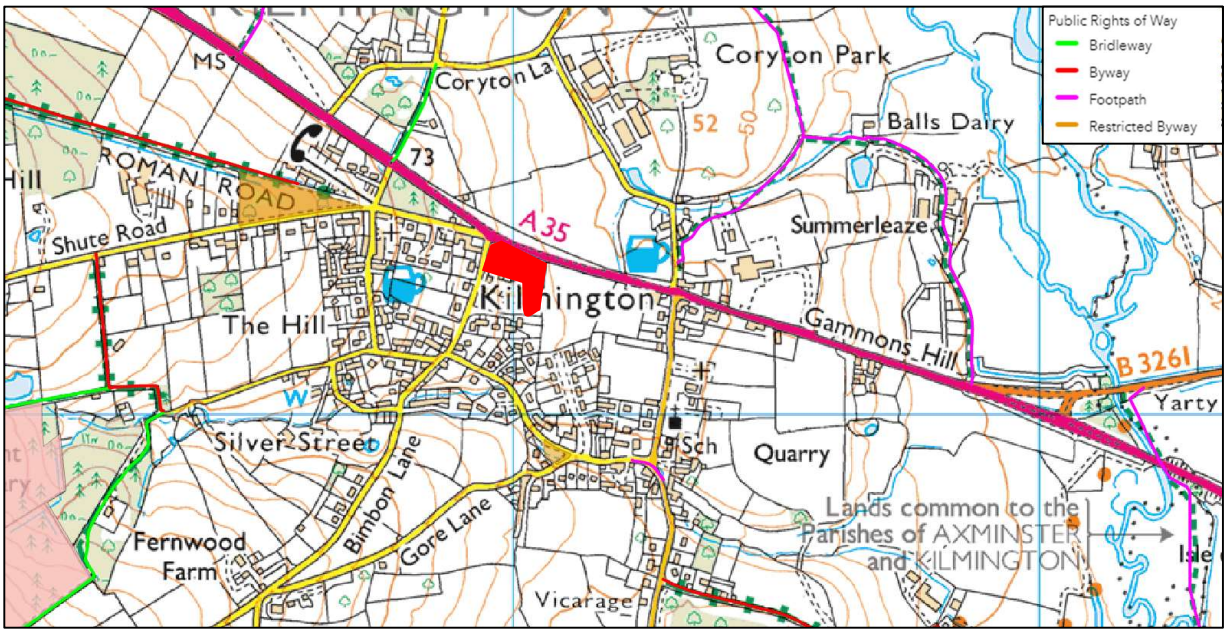


Figure 2.2: Existing PRoW Network

2.3 Cycle Connectivity

2.3.1 The existing cycling facilities within close proximity to the site are shown in Figure 2.3.

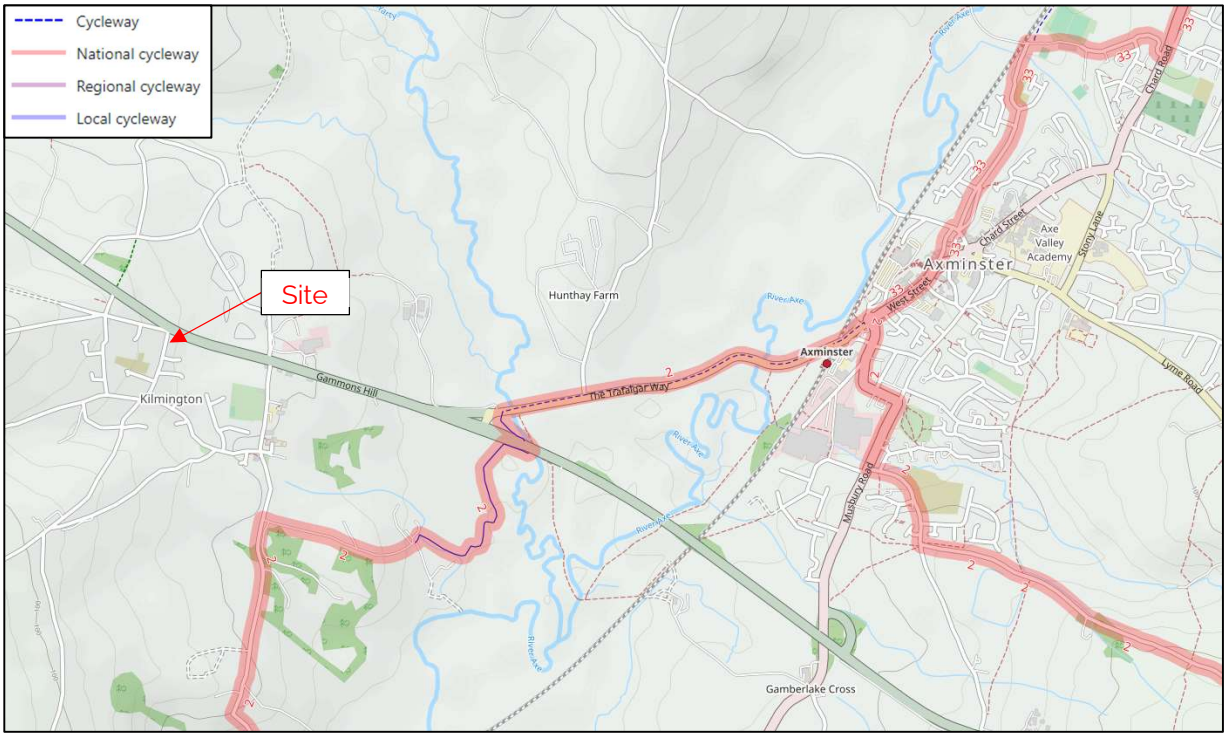


Figure 2.3: Cycle Routes within Close Proximity to Site

2.3.2 The site benefits from an off-road cycleway along the B3261 which routes into Axminster; this route forms part of National Cycle Network (NCN) Route 2. Route 2 is a long-distance cycle route which, when complete, will link Dover in Kent with St. Austell in Cornwall via the south coast of England.

2.3.3 NCN 2 can be accessed from the site via the B3261 which takes approximately a 7-minute cycle which provides access to the east and north. To the south, NCN Route 2 can be accessed via Whitford Road, approximately a 3-minute cycle from the site; to the south the route provides access to the coastal town and villages.

2.3.4 The Strava heatmap extract at Figure 2.4 shows that the surrounding roads are well used by cyclists, and therefore have potential to form part of a journey by bike.

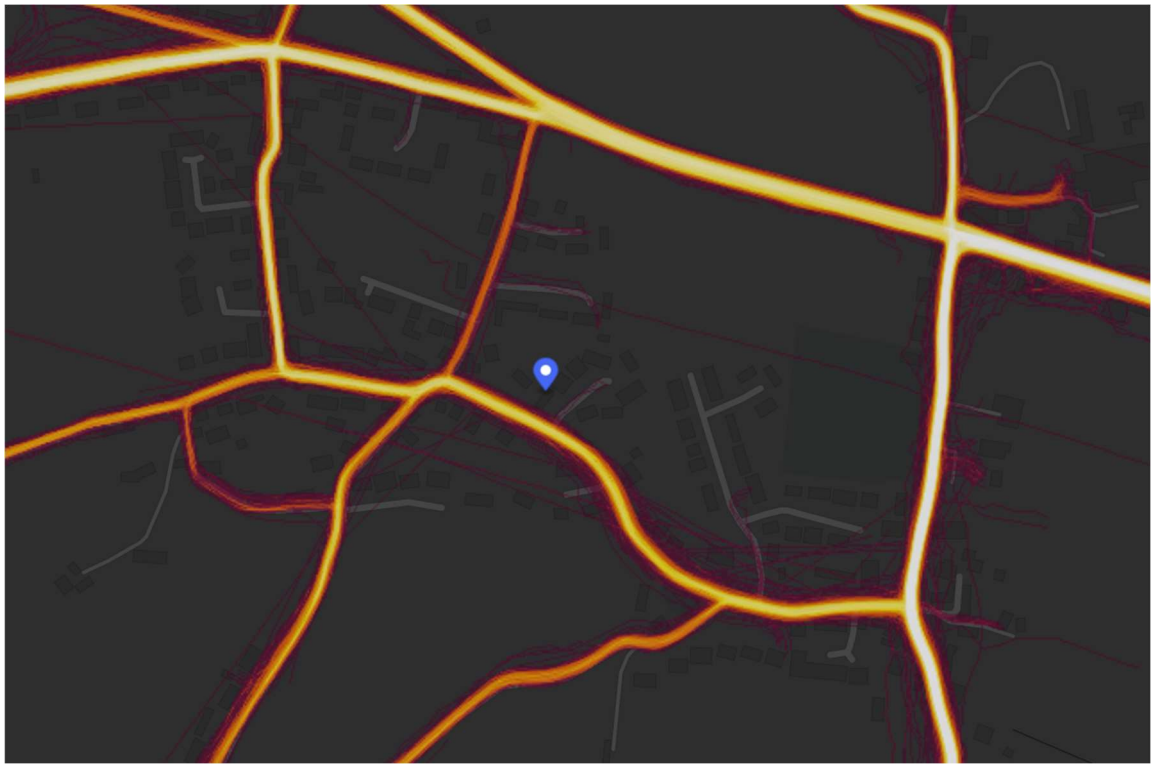


Figure 2.4: Strava Heatmap (Cycle)

2.4 Public Transport

Bus

2.4.1 The closest bus stops are located on the A35 (Old Inn and The Hill stops), to the east and west of the site approximately 180-260m from the site, equating to approximately a 3-minute walk from the site. The services these stops provide however are limited with only one service – service 44A. Service 44A routes from Exeter to Axminster and Axminster to Exeter, providing a service every two hours Monday to Saturday; no service is provided from these stops on Sundays.

Train

2.4.2 Axminster Rail Station is located approximately 2.64km from the site, which equates to a 33-minute walk or an 8-minute cycle. Additionally, bus service 44A routes to and from the station which takes approximately 10 minutes from the site, including the walk to and from the stops.

2.4.3 Axminster Rail Station provides hourly services to Exeter and London Waterloo.

2.5 Local Facilities and Services

2.5.1 Manual for Streets (paragraph 4.4.1) states that 'walkable neighbourhoods' are typically characterised by having a range of facilities within 10 minutes (up to 800m).

2.5.2 Paragraph 2.2 of TA91/05 Provision for Non-Motorised Users states that 2 miles is 'a distance that could easily be walked by the majority of people'. Paragraph 2.3 also continues by stating that 'Walking is used to access a wide variety of destinations including educational facilities, shops, and places of work, normally within a range of up to 2 miles' (3.2km).

2.5.3 In relation to shorter trips in particular, the CIHT publication Planning for Walking (section 2.1) states that across Britain about '80% of journeys shorter than 1 mile (1.6km) are made wholly on foot'.

2.5.4 Although now superseded by CD143, LTN 91/05 does provide useful guidance on likely walking and cycling distances and states (paragraph 2.11) that 'Cycling is used for accessing a variety of different destinations, including educational facilities shops and places of work, up to a range of around 5 miles. Cycling is also undertaken as a leisure activity, often over much longer distances.' Paragraph 2.9 also indicates that 5 miles (8km) is a distance 'that could easily be cycled by the majority of people'.

2.5.5 This is consistent with the statement in LTN1/20 Cycle Infrastructure Design (in paragraph 2.2.2) that 'Two out of every three personal trips are less than five miles in length – an achievable distance to cycle for most people'. Table 2.1 provides a summary of the local facilities and services within the vicinity of the site.

Table 2.1: Key Local Facilities and Services

Destination:	Distance (m)	Walking Time (min) [1]	Cycling Time (min) [2]
Local public transport			
Old Inn Bus Stops	190	2	1
The Hill Bus Stops	260	3	1
Axminster Rail Station	2640	33	8
Education			
Kilmington primary School	720	9	2
Axe Valley Academy (Secondary School)	3000	38	9
Health			
Morton's Pharmacy	2900	36	9
Axminster Hospital	3000	38	9
Local Shops/Supermarkets			
Londis	364	5	1
Millers Farm Shop	435	5	1
Tesco Superstore	2700	34	8

[1]Based on walking speed of 80m/minute, taken from 'Providing for Journeys on Foot', IHT
[2] Based on cycling speed of 320m/minute (19.2kph), taken from Cycling England Design Guide

2.5.6 Based on a review of the existing services and facilities the site is well served within acceptable walking and cycling distances. These are accessible via a mix of pedestrian footways and cycleways, and on road cycling.

2.5.7 The close proximity of these uses will encourage walking and cycling. This will reduce the reliance on the private car and encourage sustainable, active modes of transport.

3. Proposed Development

3.1 Overview

3.1.1 The development site is undeveloped agricultural land, which is proposed for a residential development. The development will include a new access, either located on George Lane or the A35, and associated residential parking on-site.

3.2 Vehicular Access Strategy

3.2.1 There are currently two access options for the development; Option 1 is to be accessed off George Lane via a simple priority T-junction, and Option 2 is to be accessed of the A35 via a priority junction with a ghost-island right turn lane arrangement. The access options are discussed below.

George Lane

3.2.2 The preliminary general arrangement design of this junction is included as Drawing Number 16610-HYD-XX-XX-DR-TP-0301 P01, attached as Appendix A. The geometry has been designed with corner radii of 6 metres, a 5.5-metre-wide access road width and a footway of 2 metres in width which would continue into site.

3.2.3 Visibility splays have been provided in accordance with Manual for Street (MfS) and Manual for Streets 2 (MfS2). Manual for Streets guidance states that visibility splays of 2.4m x 43m should be achieved for roads with a 30mph design speed.

3.2.4 MfS2 states that:

> *"MfS2 builds on the guidance contained in MfS1, exploring in greater detail how and where its key principles can be applied to busier streets and non-trunk roads, thus helping to fill the perceived gap in design guidance between MfS1 and the Design Manual for Roads and Bridges (DMRB). DMRB is the design standard for Trunk Roads and Motorways in England, Scotland, Wales and Northern Ireland. The strict application of DMRB to non-trunk routes is rarely appropriate for highway design in built up areas, regardless of traffic volume."*

3.2.5 Paragraph 1.3.6 of MfS2 states that:

> *"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. Where there may be some doubt as to which guidance to adopt, actual speed measurements should be undertaken to determine which is most appropriate".*

3.2.6 To the north, a visibility splay of 2.4m x 40.7m can be achieved to where George Lane forms a junction with Shute Road; therefore, the northern splay is considered appropriate. To the south, a 2.4m x 43m visibility splay has been provided, in accordance with MfS and MfS2 with a 1m offset from the edge of carriageway; additionally, the access benefits from greater visibility to the south achieving 2.4m x 70m. These visibility splays are shown on Drawing Number 16610-HYD-XX-XX-DR-TP-0301 P01.

3.2.7 It is also noted that the development to the south (Ref 14/1905/MFUL) was permitted with achievable visibility splays of 2.4m x 39m, lower than can be achieved for this site.

3.2.8 Therefore, it is considered that the location of the proposed vehicle access onto George Lane poses no safety issues as suitable visibility can be achieved, in line with guidance. Based on this information, it is considered that there are no reasons for objecting a new access onto George Lane due to proximity to its junction with Shute Road / A35.

3.2.9 Officers at Devon County Council were consulted on the potential for a new access and replied;

> *We do not have any major concerns with the proposed access from George Lane, although we note that there are existing vehicle passing places on this narrow road and would not wish for a new access to impede these in any way. Also the slight angle of the proposed access to the existing George Lane could be altered to make the road a little wider towards the existing junction with Shute Road.*

3.2.10 Based on this response and the initial appraisal, it is considered that an acceptable junction can be achieved onto George Lane.

A35

3.2.11 Additionally, an access on the A35 has been considered; Sketch Drawing 16610-HYD-XX-XX-SK-TP-0103 (Appendix B) demonstrates that appropriate visibility splays can be achieved. Visibility splays have been provided in accordance with DMRB for a design speed of 50mph.

3.2.12 Paragraph 2.21 of DMRB Volume 6 Section 2 Part 7 states that:

> *"Normally, an "X" distance of 4.5m shall be provided for a direct access where use in the design year is forecast not to exceed 500 AADT. The choice of setback distance is related to the forecast traffic using the access. For lightly used accesses, for example those serving a single dwelling or a small cul-de-sac of a half a dozen dwellings, the set back "X" may be reduced to 2.4m. The 2.4m set back relates to normally only one vehicle wishing to join the trunk road at one time. The 4.5m covers the situation where two light vehicles may want to accept the same gap in the trunk road traffic."*

3.2.13 The sketch drawing demonstrates that 2.4m x 160m visibility splays and 4.5m x 160m visibility spays can be achieved to both the north west and to the east. Therefore, suitable visibility can be provided from the A35 in line with DMRB guidance.

3.2.14 Feedback has been received from National Highways on the potential for providing an access directly from the A35. In summary, this would require a Departure from Standards to allow the access and, if permitted, would require ghost-island/turning lane arrangement, potentially with widening into the site.

3.3 Pedestrian and Cycle Access

3.3.1 The development proposals will connect to existing local infrastructure where possible to promote the use of walking and cycling trips.

4. Summary and Conclusions

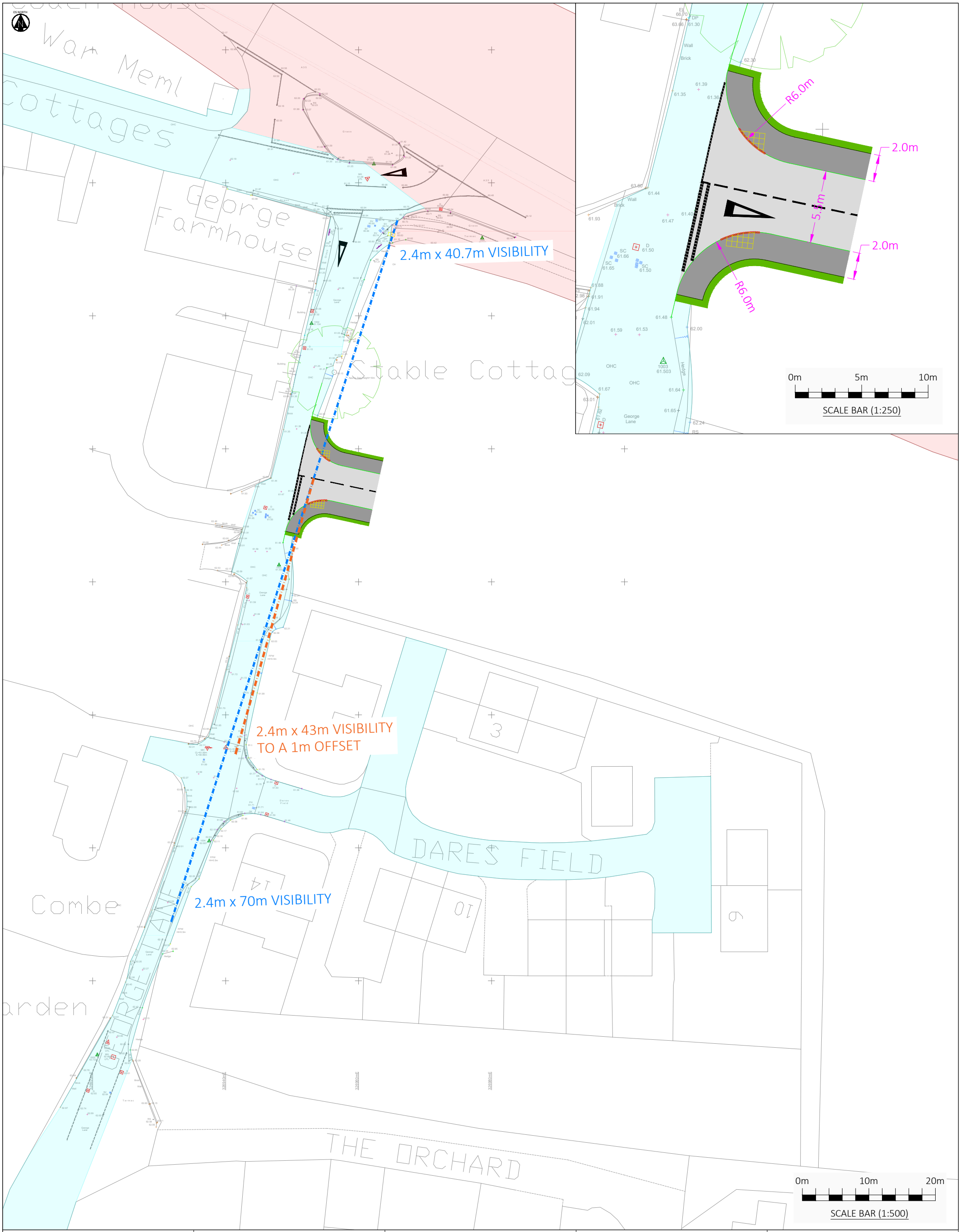
4.1.1 This Transport Appraisal concludes that the site is accessible based on a review of the existing services and facilities within acceptable walking and cycling distances via a mix of existing footways and cycleways, and on road cycling. In addition, the site benefits from public transport facilities/services located within close proximity to the site.

4.1.2 In terms of vehicular access, there are two potential access options; Option 1 is to be accessed off George Lane via a simple priority T-junction, and Option 2 is to be accessed of the A35 via a priority junction with a ghost-island right turn lane arrangement.

4.1.3 It is considered that the location of the proposed vehicle access onto George Lane is appropriate as suitable visibility can be achieved in line with guidance. Based on this information, it is considered that there are no reasons for objecting a new access onto George Lane due to proximity to its junction with Shute Road / A35.

4.1.4 Consideration could also be given to the provision of an access onto the A35, albeit this would require further design assessment to establish its extent and scale, informing its acceptability to National Highways.

Appendix A George Lane Access Design



KEY PLAN

PUBLIC HIGHWAY OWNERSHIP
(INTERPRETED FROM DEVON CC DATA)

PUBLIC HIGHWAY OWNERSHIP
(INTERPRETED FROM HIGHWAYS ENGLAND DATA)

NOTES

REVISIONS

Rev	Date	Description	By	Ckd	App
P01	16/11/2021	First Issue.	AC	NB	JM

Hydrock
FIRST FLOOR,CASTLEBRIDGE 5
5-19 COWBRIDGE ROAD EAST
CARDIFF
[redacted]

CLIENT
PLACE LAND LTD.

PROJECT
GEORGE LANE,
KILMINGTON

TITLE
VISIBILITY SPLAYS -
GEORGE LANE ACCESS

HYDROCK PROJECT NO.
16610-TGEN

SCALE @ A3
SEE SCALE BARS

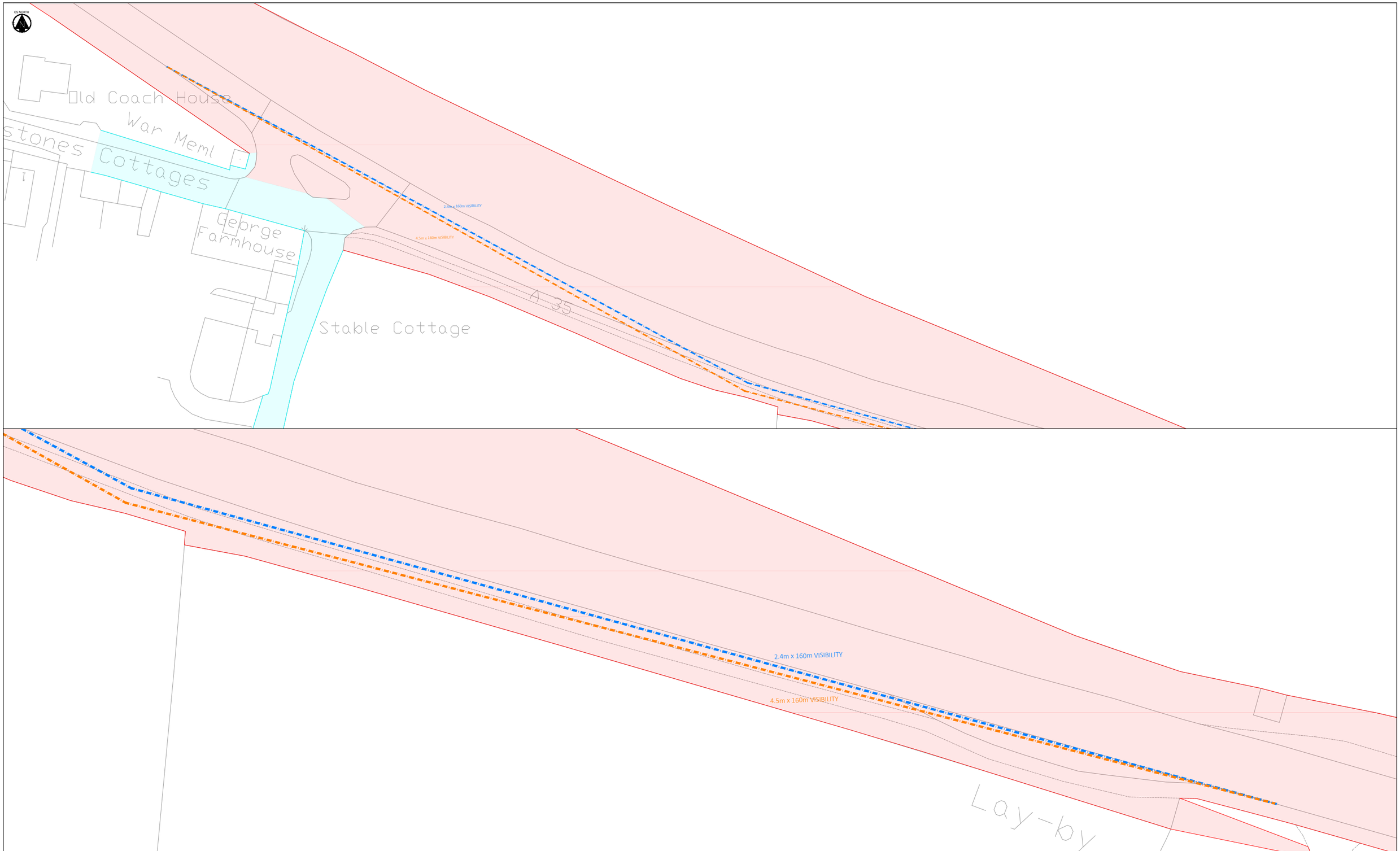
STATUS DESCRIPTION
INFORMATION

STATUS
S2

DRAWING NO. (PROJECT CODE-ORGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)
16610-HYD-XX-XX-DR-TP-0301

REVISION
P01

Appendix B A35 Access Visibility Splays



KEY PLAN

PUBLIC HIGHWAY OWNERSHIP
(INTERPRETED FROM DEVON CC DATA)

PUBLIC HIGHWAY OWNERSHIP
(INTERPRETED FROM HIGHWAYS ENGLAND DATA)

NOTES

NOTES *(CONTINUED)*

REVISIONS *(CONTINUED)*

REVISIONS

Rev	Date	Description	By	Ckd	App
P02	22/10/2020	Second Issue.	AC	NB	NB
P01	04/08/2020	First Issue.	AC	NB	NB

Hydrock
FIRST FLOOR,CASTLEBRIDGE 5
5-19 COWBRIDGE ROAD EAST
CARDIFF
[redacted]

CLIENT
PLACE LAND LTD.

PROJECT
GEORGE LANE,
KILMINGTON

TITLE
VISIBILITY SPLAYS REQUIRED
FOR 50MPH ROAD (DMRB)-
A35 ACCESS

HYDROCK PROJECT NO.
16610-TGEN

SCALE @ A3
NOT TO SCALE

STATUS DESCRIPTION
INFORMATION

STATUS
S2

DRAWING NO. (PROJECT CODE-ORGINATOR-ZONE-LEVEL-TYPE-ROLE-NUMBER)
16610-HYD-XX-XX-SK-TP-0103

REVISION
P02