

Our Ref: 48851/LG/MJD

Your Ref:

02 March 2018

Mr D Piper
Abel Homes Ltd
Neaton Business Park
Norwich Road
Watton
Norfolk
IP25 6JB

Dear Mr Piper

RE: Land South of Norwich Road, Hingham – Highways & Access

We refer to our instructions to consider the transport aspects for a potential residential development off Norwich Road, Hingham. The site comprises of greenfield land and is approximately 13ha in size. The main multi-modal access will be off Norwich Road, with a potential vehicular and pedestrian link to the west into a previous Phase of development referenced "Phase 1". Our assessment for an access and the transportation elements for land south of Norwich Road, Hingham has been made on the potential for proposal of 250 dwellings.

This assessment considers current policy with regards to access for the development and accessibility, which are addressed in following matters and we seek your views in the proposed mitigation for the offsite infrastructure.

1. Access and offsite assessment of highways.
2. Location and accessibility to services.
3. Transportation links including pedestrian, cycle and public transport modes.
4. Development trip generation.
5. Traffic routes towards village.
6. Highway/transportation improvements.

The site is located off Norwich Road in Hingham with a grid reference of 603043, 302031 and an approximate postcode of NR9 4LS. The site is bound by Norwich Road (B1108) to the north and the dwellings of Seamere Road to the south, see **Figure 1** attached. To the west of the site is a Public Right of Way footway linking Norwich Road and Seamere Road with a residential housing estate currently under construction adjacent and beyond that the centre of the village of Hingham to the west. Surrounding the site from the east, are agricultural fields.

Cont'd.../

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The civil parish of Hingham resides in rural Norfolk, within the South Norfolk District, with approximately 944 households and a population of 2367 (taken from the 2011 Census data for the Hingham parish). The village is situated along Norwich Road (B1108) which stretches to Norwich in the east and Bodney via Watton to the west. Hingham is approximately 21.7km southwest of Norwich city centre, 10.8km southeast of Dereham and 8.8km west of Wymondham. The main proposed access to the site would be from Norwich Road.

Access and offsite assessment of highways

An access is proposed, which provides for adequate visibility according to the 30mph speed limit, avoiding the existing mature trees. Improved pedestrian and cyclist connections via Phase 1 into the village centre, are also proposed.

The access parameters for the site have been considered for a development of up to 250 No. Dwellings. The type of access required to serve the development is dictated by the Norfolk Residential Design Guide and is to be taken as a Type 2 road, which is 6.0m wide and would be taken from Norwich Road. The initial straight length of the road should be minimum of 15m in length.

An initial design of the potential access location on Norwich Road indicates that adequate visibility of up to 70m should be available in both directions from a 2.4m setback.

The north site boundary is bound by Norwich Road with a width of 6.0m with approximately a 1.2m verge on one side and a 1.8m footway on the northern side. There are presently no footways on the southern side along the site boundary of Norwich Road to give the site access to the bus stops or local facilities without crossing the B1108. A new footway would therefore be required to support this development proposal, to connect the site to the bus stop located west of the proposed access. Further to this, another footway will be constructed to the east of the proposed access with a potential pedestrian crossing point (type and configuration to be agreed with NCC highways) to link the site to the northern side of Norwich Road. The footways are designed to allow for better pedestrian access to the site, local facilities and bus stops, avoiding the tree roots protection zone to ensure the trees will not be damaged in the implementation of the footway.

Furthermore, a pedestrian refuge island was implemented in Phase 1, to allow safer, sufficient access to local facilities and bus stops. This is situated further west along Norwich Road at the Ironside Way bus stop. To access the crossing point from the new development, pedestrians would walk to the access and along the proposed west footway linking to a footpath on the Phase 1 development. Individuals will walk through the Phase 1 development along the footways to reach the pedestrian refuge crossing island in the centre of Norwich Road. This will allow pedestrians to safely cross the B1108 to access the local facilities and primary school. Additionally, small pedestrian bridges could be erected across the existing ditch on the west site boundary, to link the site to the existing public right of way footpath, on the west boundary of the site, before connecting to footpath links through to the Phase 1 development footways.

The access proposals and footway links are indicated on **Drawing 6387-C-SK001** produced by Barter Hill Partnership. This indicates two potential locations for access onto Norwich Road which are both possible. Initially access is proposed from the western option.

Location and Accessibility to Services

To assess the ability for potential residents to access services, research has been undertaken to locate the local services and facilities, which are tabulated below.

Facility/Services Table

Facility	Location	Km	Miles
School - Primary	Hardingham Street	1.08	0.67
School - Secondary	Norwich Road, Attleborough	10.14	6.34
Post Office	Long Street	6.44	4.00
Local Shop	Co-Op, Norwich Street	0.64	0.40
Doctors	Hardingham Street	0.95	0.58
Public House	Market Place	0.90	0.56
Place of Worship	Market Place	0.94	0.58
Bus Stops	Ironside Way	0.12	0.07
	Ringers Lane	0.32	0.20
Children's Centre	Norwich Road, Attleborough	10.30	6.40

The conclusions that can be drawn from the table are that most of the facilities and services are available in the local area. A key aim of the NPPF is to promote sustainable travel choices and accessibility to shops, jobs and other facilities whilst reducing the need to travel, especially by car.

Walking is identified as the most important form of transport at local level and the walking offers the greatest potential to replace the car for journeys of less than 2.0km. The guidance document (NPPF) also acknowledges that cycling has the potential to replace many car trips of less than 5.0km, which may also form part of longer journeys supported by public transport.

The table above provides an indication of the distances that need to be travelled to the facilities and as a consequence the following list indicates the acceptability of the site in terms of distance, frequency of use and acceptability of need to travel.

Acceptability of Travel/Use Table

Facility	Location	Km	Likely Frequency of Use					
			Daily Km		Weekly Km		Greater than Weekly Km	
			<5.0	>5.0	<5.0	>5.0	<5.0	>5.0
School - Primary	Hardingham Street	1.08	✓					
School - Secondary	Norwich Road	10.14		✓				
Post Office	Long Street	6.44				✓		
Local Shop	Co-Op, Norwich Street	0.64			✓			
Doctors	Hardingham Street	0.95					✓	
Public House	Market Place	0.90					✓	
Place of Worship	Church Street	0.94			✓			
Bus Stops	Ironside Way	0.12	✓					
	Ringers Lane	0.32	✓					
Children's Centre	Norwich Road, Attleborough	10.30		✓				

The conclusions of the acceptability table for distance and frequency travelled indicates that most daily activities are within 2.0km of the development.

Whilst other activities and frequency usage of facilities are likely to be weekly or greater than weekly, the table shows that most are within 5.0km of the site and also less than 2km, indicating that there is a likelihood that walking, and cycling could be used to travel to and from the majority of these locations.

Although the local nearest high school (Attleborough Academy) is outside of the walking and cycling boundaries at 10.14km from the site, Norfolk County Council run a free school bus linking Hingham to Attleborough Academy.

Transportation Links including Pedestrian, Cycle and Public Transport

As stated previously local, regional and national guidance for transportation and residential dwellings advises that proposed development should be readily accessed by all sustainable modes of transport.

Considering the different modes an assessment can be made in respect of the suitability of existing infrastructure.

Pedestrians

The routes for pedestrians are currently served well from the proposed site access to all the facilities recorded in the '*Facility/Services Table*'. All routes consist of road with footways on at least one side of the carriageway. Further, there is a pedestrian refuge in the road to aid pedestrians when crossing the B1107, Norwich Road, to the west of the access for Phase 1.

The new development will offer new footways on the south side of Norwich Road, to bus stops and links to the Phase 1 site to the pedestrian refuge crossing point to allow access to the local facilities and bus stops. This will not only encourage more individuals from the new development to walk to access these facilities, it also makes public transport more accessible to individuals.

An initial assessment of the routes to school, shows the route has been confirmed as safe. However, this is subject to further investigation with use of traffic flow data.

Cyclists

The bicycle has become a much more widely used mode of transport in recent years, as promoting the healthier lifestyle and the current economic circumstances that affects the population. From assessing the locations of the facilities locally, many of them are well within the 5.0km cycling parameters that are recognised in the NPPF.

The majority of the roads in Hingham are within a 30mph speed limit and, thus, provide an appropriate network for cycle use in the village, to access local facilities. Using the Sustrans website, it appears that there are no national or local cycle routes within the vicinity of Hingham, therefore, cycling outside of the village is likely to be for keen cyclists only.

Public Transport

To establish a criteria for public transport provision, guidance was sought from Norfolk County Council on the necessary bus service frequency. A benchmark guide to bus services can be found in the Norfolk Bus Strategy 2003/4 to 2008/9. Whilst this document is a few years old it has not been updated, but does give criteria for 'Target level of service in rural areas (all offering a return journey)'.

The table indicates that for a parish population of between 1500 and 3000 the target service level should provide the following:

- Shopping service, five days a week;
- journey to work service;
- a Saturday service and;
- evening service;

The closest stops to the proposed site are 0.12km and 0.32km from the proposed access from the site.

Operator	Service	Frequency
Konectbus	3 Watton – Hingham – Norfolk & Norwich University Hospital - Norwich City Centre	Mon – Sat: 0700 – 1647 (departing approximately every hour) Sun: 0945, 1145, 1345, 1545
	3 Norwich City Centre – Norfolk & Norwich University Hospital – Hingham - Watton	Mon - Sat: 0750 – 1836 (departing approximately every hour) Sun: 1108, 1308, 1508, 1708
Konectbus	6/6A Watton – Hingham – Wymondham - Norwich City Centre	Mon - Sat: 0717 - 1717 (departing approximately every hour)
	6/6A Norwich City Centre – Wymondham – Hingham - Watton	Mon - Sat: 0857 - 2003 (departing approximately every hour)
Konectbus	13 Shipdham – Watton – Easton College	Mon – Fri: 0750 (during term time)
	13 Easton College – Watton – Shipdham	Mon - Fri: 1721 (during term time)
Konectbus	17 Bradenham – Hingham - Dereham	Tuesdays and Fridays only: 0955
	17 Dereham – Hingham - Bradenham	Tuesdays and Fridays only: 1318

(All main stop details included)

The bus company Konectbus use bus stops on Norwich Road for all services listed above. The stops include Ironside Way, Ringers Lane and Bears Lane.

Services are frequent and offer good commuting and social facilities to the residents requiring access to them. The accessibility of the buses may also encourage more individuals to use public transport, rather than using their cars. Furthermore, there are sufficient footways to reach the bus stops along with a pedestrian refuge in the centre of Norwich Road to aid pedestrian crossing to reach the bus stop on the northern side of the B1108 (Norwich Road).

Overall, accumulatively, the bus timetables meet the Norfolk County Council village requirements for Hingham in terms of public transport availability and frequency.

Development trip generation

The proposed development site vehicle trip generation can be calculated based on similar sites and data taken from a national data base (TRICS). An assessment of the trip generation from the proposed development site could also be taken from the local trips undertaken by the occupants of the dwellings already in the village. In general, the trip generation will be approximate 0.46 trips per dwelling in the peak hour. On this basis, the development is likely to generate approximately 115 additional trips in the peak hour. If it is assumed the key area of employment are Dereham, Wymondham and Norwich, this would amount to approximately 75% of this traffic, which would travel in an easterly direction. Therefore it is assumed that 75% of the traffic would flow away from the village centre.

Based on the information above which is an approximation at this stage, the increase of 29 vehicles travelling into/through the village centre in the peak hour.

Traffic routes towards the village

The route from the site on Norwich Road to Norwich City Centre follows the B1108 through until it becomes Earlham Road and then onto the City Centre.

The area of Norwich Road and other roads surrounding the site are 30mph carriageways with footways on at least one side of the road. There is also a 20mph zone in the centre of the village.

Along Norwich Road in the vicinity of the site, there have been three slight accidents within the last 5 years (2017-2013), the latest being in April 2016, none of which have involved a pedestrian or a cyclist. Furthermore, the accident data shows there have only been two additional accidents to these within the last 10 years (2017-2008), both also reported as slight. This suggests the site is not a high risk accident site and the road will not require any additional traffic calming measures to prevent accidents. All information collected from publicly available data (viewable via www.crashmap.co.uk).

Highway/Transportation Improvements

With the addition of a pedestrian crossing point to the east of the site and footways to access the Phase 1 development, it is concluded that in terms of vehicular access and accessibility to services, the site meets a satisfactory level to deliver a suitable access and pedestrian links.

Conclusions

To collate the issues and highlight the matters that are relevant to transportation for the proposed development at Norwich Road, Hingham, the following table shows the summary of benefits that this scheme includes:

Summary Table

Matters	Comment	Satisfactory	Needs some Upgrade	Not Satisfactory
Site Access	A satisfactory access with necessary visibility can be achieved.			
Local Junction Assessment	Based upon preliminary findings no offsite junction upgrades are required.			
Accessibility to Services	A high proportion of daily and weekly services can be accessed by pedestrian, cyclists or public transport routes all less than 2.0km.			
Pedestrian Links	Good site routes to schools and facilities (upon additional footway implementation within the site)			
Cycle Facilities	There is no specific route in the village however there is a 20/30mph speed limit between the site and local facilities.			
Public Transport	The current public transport provision does meet the NCC targets.			

It is therefore concluded that in terms of vehicular access, accessibility to services, other modes of transport, the site meets all the necessary criteria.

In summary, the development, which will generate a low level of trips in the peak hour towards/through the village centre, shows how, with offsite pedestrian improvements the generated traffic can be mitigated.

I trust the foregoing is satisfactory, but if we can be of further assistance, please do not hesitate to contact us.

Yours sincerely,

Prepared by Lauren Gray
on behalf of Richard Jackson Ltd

Checked by Martin Doughty (Director) – BEng (Hons), CEng, FICE, FCIHT, MAPM
on behalf of Richard Jackson Limited

Encs – Figure 1
Drawing 6387-C-SK001



THE SITE



THE SITE

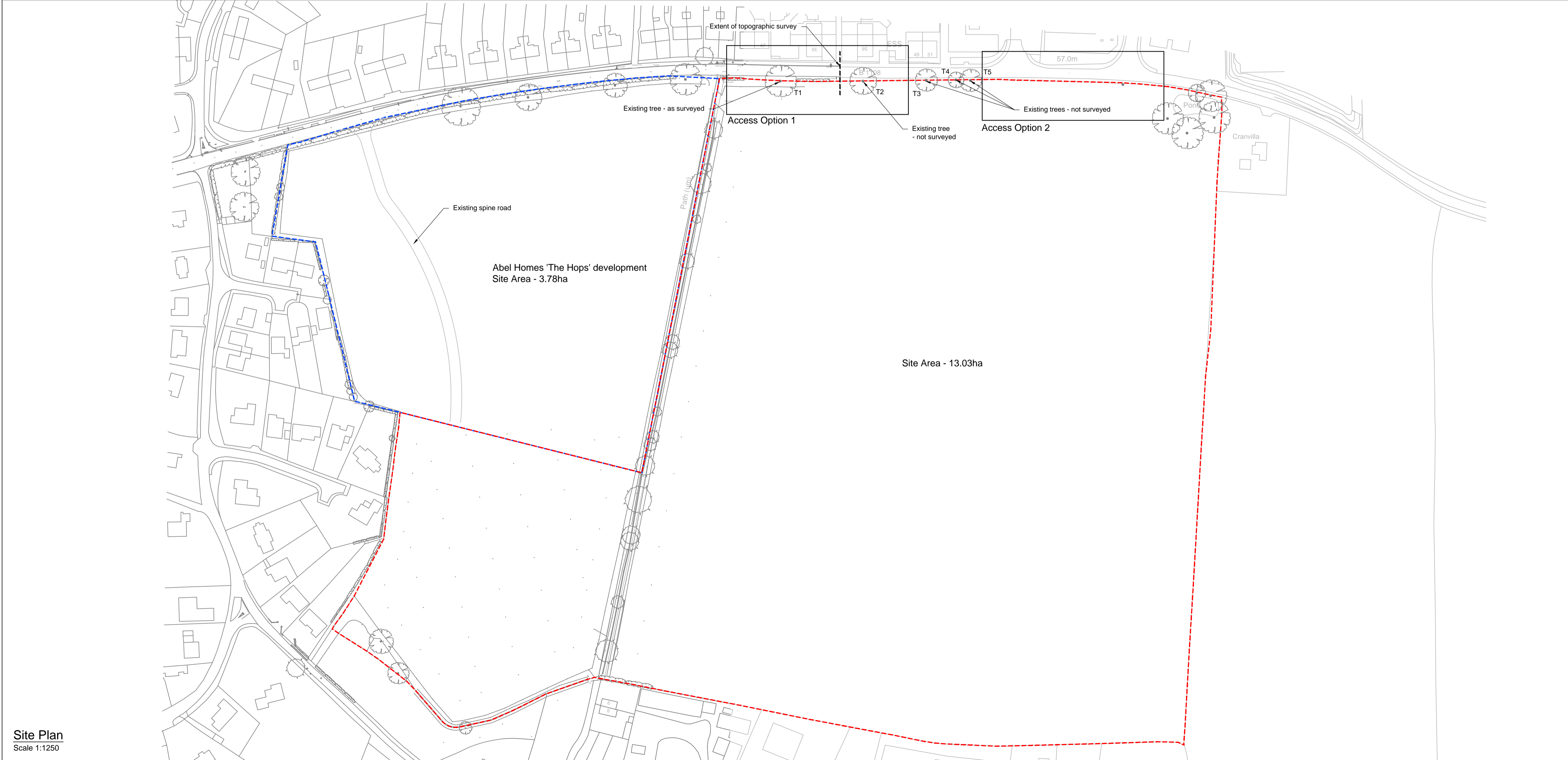
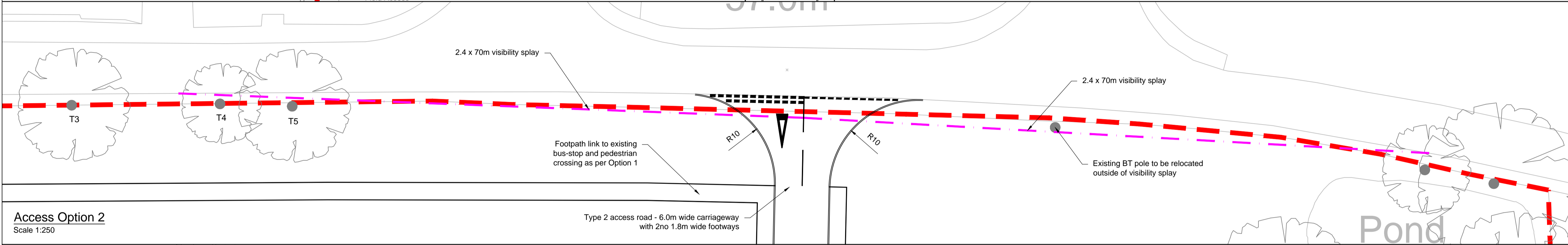
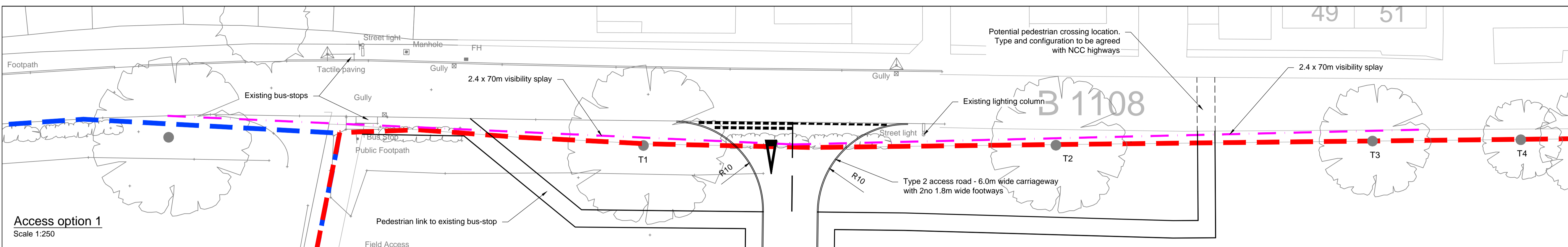
Site location grid reference 603043, 302031
and postcode NR9 4LS

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Client: Abel Homes Ltd		Drawing Title: Site Location Plan		 4 The Old Church, St Matthews Road, Norwich, NR1 1SP Tel. 01603 230240 www.richardjackson.uk.com
Job Title: Land south of Norwich Road, Hingham	Date: 07.02.18	Job No: 48851	Dwg No: Fig. 1 (NTS)	

Notes

NOTES:
PRELIMINARY DRAWING:
 This drawing should be read as a **PRELIMINARY** issue and should **NOT** be used for construction under any circumstances.



P1	Preliminary Issue	DP	01.07.16
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Rev.	Description	By	Date
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Abel Homes Ltd

Project
**Norwich Road
 Hingham Phase 2**

Drawing Title
Access Options

Designed by DP	Drawn by AR	Checked by DP
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Scale @ A1 1:1250/1:250	Date July 2016
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Drawing No. 6387-C-SK001	Revision P1	Job Ref 6387
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Status
PRELIMINARY ISSUE

Cad file P:6387/Teamwork/Civils/BHP Drawings	Contact Office Norwich
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