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TRANSPORT APPRAISAL REPORT

Land North West of Balsham Road, Linton



February 2020

Project no: 60507

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Title: TRANSPORT APPRAISAL REPORT
 Project: Land North West of Balsham Road, Linton
 Client: [REDACTED]
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Figure 1 – Site Location Plan

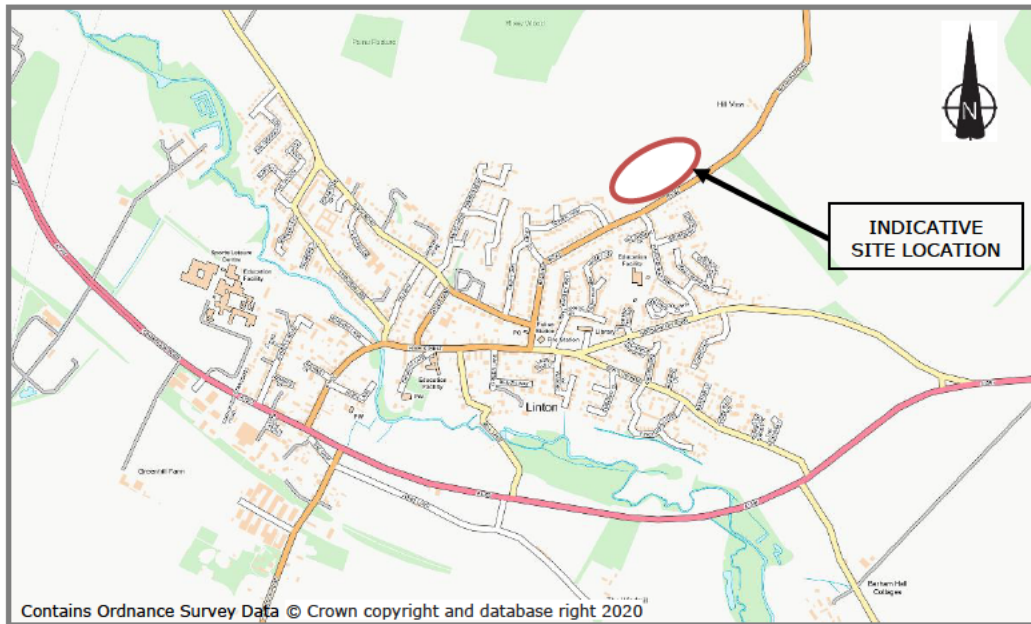
Drawing

60507/PP/SK01 Indicative Site Access

1. Introduction

- 1.1. Richard Jackson Ltd have been instructed by [REDACTED] to consider the transport aspects for a potential development northwest of Balsham Road, Linton. The site comprises of greenfield land and is approximately 14ha in size. The assessment for access and transportation elements for land northwest of Balsham Road, Linton has been made on the basis of the proposed 300 dwelling quantum plus an allowance for a small area of employment.
- 1.2. This assessment considers current policy with regards to access for the development and accessibility, which are addressed in following matters including potential mitigation for 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 and from Linton.
 6. Highway/transportation improvements.
- 1.3. The site is located off Balsham Road (B1052) in Linton with a grid reference of 556770, 247400 and an approximate postcode of CB21 4UW. The site location is shown indicatively in **Figure 1**. To the southwest of the site is residential dwellings on Tower View with the B1052 Balham Road to the southeast. To the west and north of the site, there are agricultural fields. Further south is the centre of Linton and the local schools.

Figure 1 – Site Location Plan



- 1.4. The site resides on the edge of the suburbs of Linton, within South Cambridgeshire, with an approximate population of 4,604 (taken from the 2011 Census data for Linton). The village is situated north of the A1037 which connects Haverhill to the east and Cambridge to the north-west and on to the A1 north of Alconbury (however quicker routes are available to the northwest of Cambridge). To the west of Linton, the A11 stretches between Norwich to the northeast and the M11 to the southwest. Linton is approximately 15.7km southeast of Cambridge city centre, 10.5km east of Duxford and 10.8km west of Haverhill.

2. Access and Offsite Assessment of Highways

- 2.1. Currently the site just has a simple field access to Balsham Road. Balsham Road connects the B1052 (within Linton) with Balsham and Brinkley and across part of the site frontage the speed limit is 30mph, otherwise is 60mph, approximately 270m north of Tower View. There is no street lighting but there is an existing footway on the south eastern side of the road adjacent to the built-up areas along Balsham Road.
- 2.2. The access parameters for the site have been considered for a development of up to 300 no. dwellings plus a small area of employment. The type of access required to serve the development is dictated by the Cambridgeshire Design Guide and South Cambridgeshire District Council (SCDC) District Design Guide SPD and is to be taken as a Primary Street, which is 6.1m wide carriageway with a minimum of 2.0m footways on both sides, plus verges/parking areas of 2.5m width.
- 2.3. The requirements set out for a development quantum of this size are that there is a minimum of two vehicular accesses to the adopted highway

network. As the only part of the site that bounds directly with the public highway is the frontage along Balsham Road, this is the proposed access location.

- 2.4. Although the likely traffic volumes on Balsham Road, outside of Linton, is low; two points of access to Balsham Road in the format of priority junctions should be able to be achieved within the land boundary of the Applicant. The potential priority junction access strategy for the site is shown on **Drawing 60507/PP/SK01**. The northern access would primarily serve the employment uses and would be linked to the southern residential access, effectively providing two points of access for the combined development. The employment access is beyond the existing 30mph speed limit and an extension to this speed limit would therefore be promoted by the Applicant.
- 2.5. The position of the northern access is such that it could facilitate an access point to land located to the south of Balsham Road through the provision of a roundabout junction. Therefore, as part of this site proposal it is recommended that enough land be reserved (and adopted by highway authority) around the northern access position and within the site boundary to enable a roundabout on the alignment of Balsham Road to be constructed (by others) in the future, if required.
- 2.6. In addition to the above vehicular accesses, the sites western boundary is to an existing Public Right of Way (PRoW) known as Rivey Hill. Additional pedestrian access would therefore be provided to the site's western boundary on to this route.
- 2.7. The route from the site towards the village centre is via the B1052 Balsham Road to the southwest of the site. Balsham Road terminates as the minor arm of a simple priority junction with High Street. To the west of Balsham Road, the B1052 High Street is one-way eastbound to its junction with Coles Lane before continuing on to the A1307; a 7.5T (except for loading) weight restriction applies along this route. The reciprocal route towards the site follows the one-way streets of Coles Lane and Back Road which connects to the Balsham Road (which is two-way). To the east of Balsam Road, the A1037 can be reached via Horseheath Road for Haverhill, or Bartlow Road for Cambridge (without weight restrictions).
- 2.8. A number of transport improvements are being made to the A1307 between Cambridge and Haverhill as part of the Greater Cambridge Partnership Cambridge South East Transport project. These include the recent introduction of an east bound bus lane to the west of Linton, plus junction improvements at the A1037/Linton Village College and A1037/High Street junctions. The A1307/Bartlow Road junction is expected to be converted to a roundabout with rural hub (including car parking and bus stop) in the future. These improvements aim to increase the attractiveness of public transport, increase highway capacity and improve safety.

3. Location and Accessibility to Services

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

Table 3.1 - Facility/Services Table

Facility	Location	Km	Miles
School – Infant	Linton CE Infants School	1.1	0.68
School – Junior	Linton Heights	0.5	0.32
School – Secondary	Linton Village College	1.8	1.1
Sports Centre	Linton Community Sports Centre	1.8	1.1
Post Office	Sweet Talk News	1.2	0.75
Doctors/Pharmacy	Health Centre	1.2	0.75
Public House/s	Wagon & Horses	0.8	0.50
Shop	Co-op	0.9	0.50
Bus Stop	Back Road	0.8	0.56
Leisure Centre	Linton Community Sports Centre	1.8	1.1
Recreation Ground	Pocket Park	1.1	0.68

- 3.2. A key aim of the National Planning Policy Framework (NPPF) is to promote sustainable travel choices and accessibility to shops, jobs and other facilities whilst reducing the need to travel, especially by car. Therefore, the conclusions that can be drawn from the table are that a number of facilities and services are available in the local area therefore provide a sustainable option of access to local services.
- 3.3. Walking is identified as the most important form of transport at local level and walking offers the greatest potential to replace the car for journeys of less than 2.0km. 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.
- 3.4. 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.

Table 3.2 - Acceptability of Travel/Use Table

Facility	Location	Km	Likely Frequency of Use						
			Daily		Weekly		Lest often Km		
			<5.0	>5.0	<5.0	>5.0	<5.0	>5.0	
School – Infant	Linton CE Infants School	1.1	✓						
School – Primary	Linton Heights	0.5	✓						
School - Secondary	Linton Village College	1.8	✓						
Sports Centre	Linton Community Sports Centre	1.8			✓				
Post Office	Sweet Talk News	1.2			✓				
Doctors/Pharmacy	Health Centre	1.2						✓	
Public House/s	Wagon & Horses	0.8						✓	
Shop	Co-op	0.9			✓				
Bus Stop	Back Road	0.8	✓						
Leisure Centre	Linton Community Sports Centre	1.8			✓				
Recreation Ground	Pocket Park	1.1			✓				

- 3.5. The conclusions of the acceptability table for distance and frequency travelled indicates that a number of daily activities are within 2.0km of the development, indicating that there is a likelihood that walking and cycling could be used to travel to and from these locations. For travel outside of Linton, regular bus services are available to Cambridge and Haverhill.

4. Transportation Links including Pedestrian, Cycle and Public Transport

- 4.1. 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.
- 4.2. Considering the different modes an assessment can be made in respect of the suitability of existing infrastructure.

Likely destinations by mode

Pedestrians

- 4.3. 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 a road with a footway on at least one side of the carriageway to the village centre and bus stops. In addition, a PRow is available from the site's western boundary to Back Road.
- 4.4. An initial assessment shows that school aged children presently have a safe route to school, due to the suitable footways and crossing locations on the

routes to all schools. The likely routes to Linton CE Infant School are either via the PRow to the site's western boundary then Back Road/Coles Lane and on to High Street and the school's entrance or via Balsham Road/High Street. For Linton Heights Junior School the route is across Balsham Road on to Wheatsheaf Way where the school is located. Secondary education at Linton Village College can be reached via either the PRow/Back Road/Coles Lane or Balsham Road/High Street routes then to Meadow Lane and footpaths to the school.

- 4.5. Therefore, there are no initial off-site highway improvements to accommodate the increase pedestrians along Balsham Road or routes via Back Road/Coles Lane to the centre of Linton as the missing connection along the northern side of Balsham Road would be provided by the Countryside Properties (UK) Ltd as part of the site access works.
- 4.6. The PRow running along the western side of the site which is in a north to south direction, (starting at Back Road and continues to the northern end of the proposal site to Balsham) would not need to be diverted or accommodated as part of any masterplan proposals. The route would however be reviewed as part of any future Transport Assessment which would consider if any improvements were required between the site and Back Road to increase its attractiveness as a non-vehicular route to the village.

Cyclists

- 4.7. The bicycle and e-bikes have become a much more widely used mode of transport in Cambridgeshire 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, all of them are well within the generally recognised 5.0km cycling parameters.
- 4.8. The majority of the roads in Linton are within a 30mph speed limit and, thus, provide an appropriate network for cycle use in the village, to access local facilities.
- 4.9. Adjacent to the proposal site, it is suggested that the existing 30mph speed limit at the site frontage on Balsham Road be extended to incorporate the northern priority junction access (or alternative new roundabout access).
- 4.10. A new cycle route, Linton Greenway forms part of the Greater Cambridge Partnership Cambridge South East Transport project. As part of the route, footways west of the A1037/Linton Village College junction along the north side of the A1037 have recently been widened to foot/cycleway status. The completed Linton Greenway is expected to largely follow the A1037 whilst also passing through Great and Little Abington and Babraham and include a multi-user crossing of the A11.
- 4.11. It is considered that there is no requirement for further off-site cycle improvements as part of this proposal site.

Public Transport

- 4.12. The closest bus stop to the proposed site is 0.8km from the centre of the proposed site. **Table 4.1** summarises the key bus service through Linton.

Table 4.1 – Key Bus Services

Operator	Service	Frequency
Stagecoach	13/13A Cambridge-Abington-Linton-Haverhill	Mon – Fri: 0734 then approximately half hourly to 1914, 2019, 2119, 2219, 2319, 0019 Sat: 0839 then approximately half hourly to 1909, 2018, 2118, 2218, 2318, 0018 Sun: 0959 then hourly until 2159, 2359
	13/13A Haverhill-Linton-Abington-Cambridge	Mon – Fri: 0606 then approximately half hourly to 1816, 1916, 2016, 2116, 2216 Sat: 0659 0744 then approximately half hourly to 1816, 1916, 2016, 2116, 2216 Sun: 0801 then hourly to 2001, 2201

**Correct as of February 2020*

- 4.13. Additional bus services on Stagecoach route X13 operate along the A1307 with the nearest stops close to the High Street junction and provide additional services between Haverhill and Cambridge the majority of which are towards Cambridge in the weekday AM peak period and to Haverhill in the weekday PM peak period. Discussion with bus operator Stagecoach would occur as part of the Transport Assessment work undertaken as part of a planning application on capacity.
- 4.14. Services in the village 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 closest bus stops. Measures to further improve bus movements within Linton are also expected as part of the Greater Cambridge Partnership Cambridge South East Transport project.
- 4.15. The local bus services also travel via key employment areas such as Great Abington which is adjacent to Granta Park as well as Addenbrooke’s Hospital, Cambridge University, Cambridge train station, and Babraham Research Campus.
- 4.16. Overall, the bus frequency within the village meets the expected requirements for Linton in terms of public transport availability and frequency.
- 4.17. The nearest train station is located at Whittlesford Parkway approximately 12.3km distance from the centre of the proposal site. The train station is on the Cambridge – London Liverpool Street line and is operated by Greater Anglia. The train service is typically half hourly Monday to Saturday.

- 4.18. The Greater Cambridge Partnership Cambridge South East Transport project includes for a future mass transit route which would run from the vicinity of the A1307/A505 where a new park and ride would be provided to Cambridge Biomedical Campus with continuation to Cambridge railway station via the existing Busway. A consultation on the scheme was undertaken in late 2019 with a preferred option expected in 2020. The scheme could be available to future residents of the development by the end of 2024.

5. Development Trip Generation

- 5.1. 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 town for the residential part of the development. In general, the trip generation for a semi-rural area will be in the order of 0.5 trips per dwelling in the weekday peak hours. On this basis, the development is likely to generate approximately 150 additional vehicular trips in each of the peak hours for the residential element with some additional trips associated with the employment use which would be reviewed in any future Transport Assessment as the proposals progress.
- 5.2. A brief review of journeys to work from the 2011 Census for South Cambridgeshire 016, in which the site lies, viewed via Datashine Commute, shows that the majority of car driver trips from the area are to Cambridge, Duxford, Haverhill and Saffron Walden for the residential element. For those working in South Cambridgeshire 016 (including Linton) trips are primarily from Haverhill and Cambridge.

Traffic routes to/from the Village

- 5.3. There are two routes likely to be used between the site and Cambridge. For destinations in the north/north-eastern parts of Cambridge the route follows the B1052 north from the site boundary to Balsham then northwest to Cambridge. For southern parts of Cambridge, the route from the site follows the B1052 to the south (via Linton) to the A1307 then northwest. Western parts of Cambridge can be reached either via the A1307 directly or also using the A505 and M11.
- 5.4. The A1307 can also be reached from the site via Wheatsheaf Way and Horseheath Road which is on the route to/from Haverhill, or via Bartlow Road where the Greater Cambridge Partnership Cambridge South East Transport project has proposed junction improvements with the A1307.
- 5.5. Any future planning application for the site would require a Transport Assessment. Whilst the scope of this would need to be agreed with CCC, further assessment of the A1037/High Street would likely be included along with an assessment of the B1052 High Street/B1052 Linton Road/Cambridge Road at Balsham. A review of the one-way system within Linton would also likely be required. Mitigation can be provided, if needed, where any impacts are considered significant or potentially severe as required under the NPPF.

- 5.6. It may be requested by Highways England / CCC for this proposal site to assess the A11/A1307 junction for capacity, however, it is shown on the CCC congestion mapping the interchange does not suffer from congestion.
- 5.7. Along Balsham Road, there have been five recorded injury accidents within the last 7 years (2011-2018) one was 'serious' with the others only of 'slight' severity. This number of accidents does not raise any concerns as they are not clustered in any one position and quite spread out. The serious accident occurred at the junction with Back Road.

6. Highway/Transportation Improvements

- 6.1. It is therefore concluded that in terms of vehicular access and accessibility to services, the site meets a satisfactory level to deliver a suitable access, pedestrian links and is unlikely to be severe and the residual effect minimal.

7. Conclusions

- 7.1. To collate the issues and highlight the matters that are relevant to transportation for the proposed development site northwest of Balsham Road, Linton, the following summary table shows the summary of benefits that this scheme includes.

Summary Table

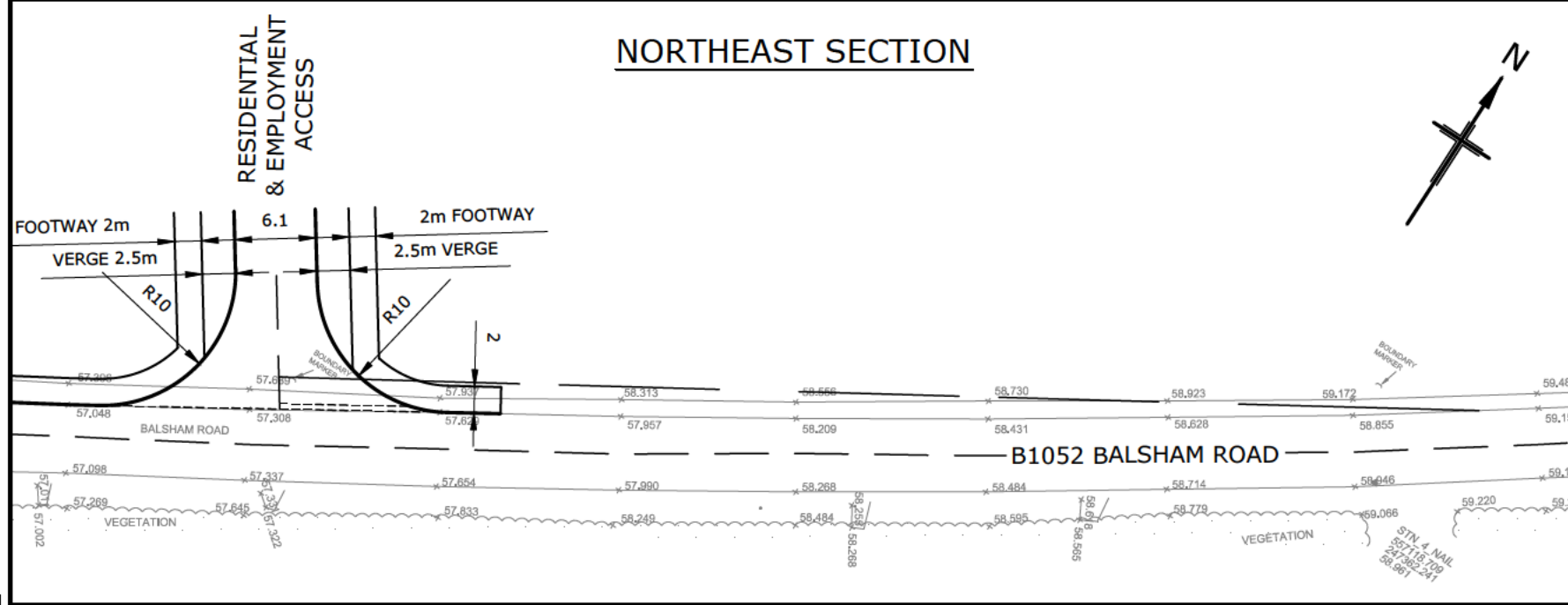
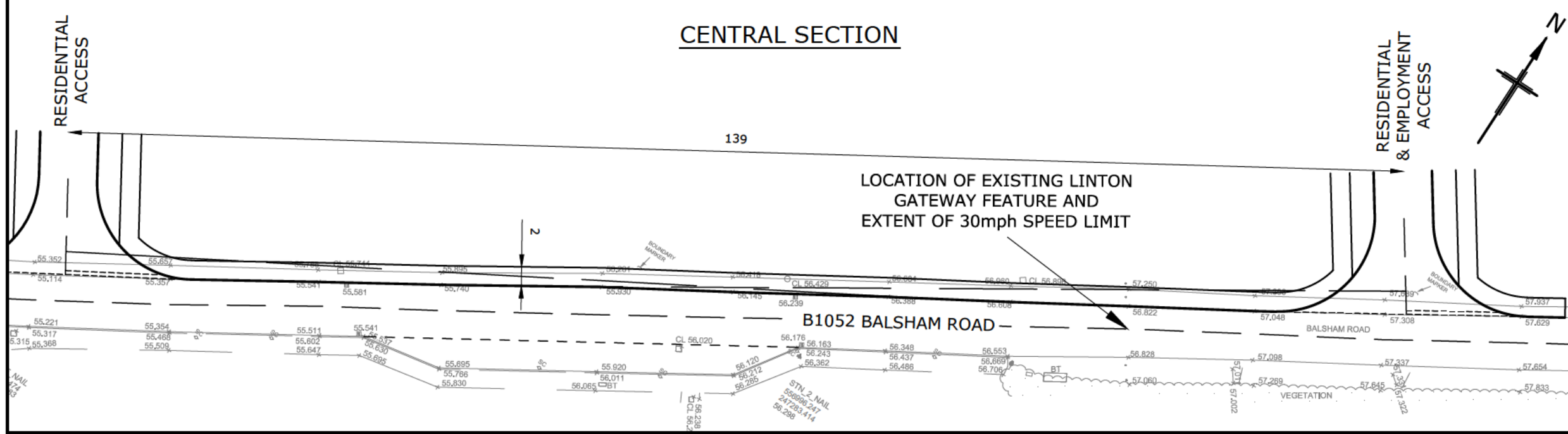
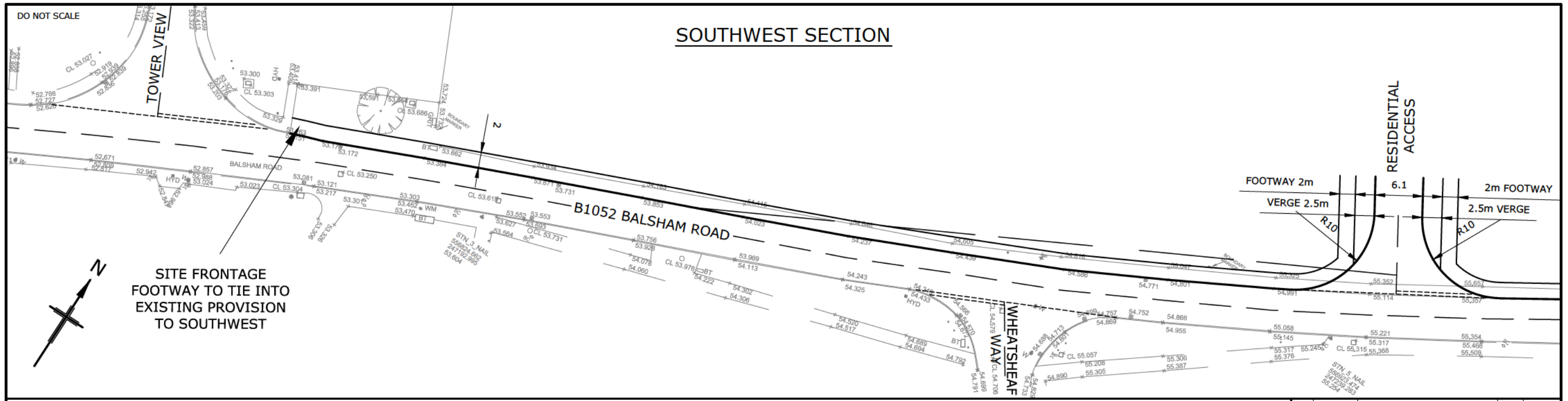
Matters	Comment	Satisfactory with mitigation	Needs some Upgrade / further assessment	Not Satisfactory
Site Access	Two points of access to the site can be achieved as required including linkage to existing pedestrian facilities.			
Local Junction Assessment	Based upon preliminary findings no offsite junction upgrades are likely to be required following improvements by others. This would need to be confirmed as part of any future planning application.			
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. Bus services are available between Cambridge and Haverhill for access to additional services.			
Pedestrian Links	Good site routes to schools and facilities. The PRoW along the sites western boundary would be future reviewed at the planning application stage.			
Cycle Facilities	There are no specific routes in the village but a 30mph speed limit is present between the site and local facilities. A new cycle route towards Cambridge, the Linton Greenway forms part of the Greater Cambridge Partnership proposals for the future.			
Public Transport	A regular bus service is available between Haverhill and Cambridge via Linton. The operator, Stagecoach would be consulted as part of any future planning application and the standard of the nearest bus stops to the site would be reviewed.			

- 7.2. It is therefore concluded that in terms of vehicular access, accessibility to services, other modes of transport, the site meets all the necessary criteria with some mitigation where necessary, which is within the control of the land promoter or within existing highway. In summary, the development, which will generate a relatively high level of trips in the peak hour, it is concluded no offsite improvements would likely be required following improvements, by others, to the A1037 and the generated traffic will not have a detrimental effect on the local road network.

Drawing

Drawing 60507/PP/SK01

Title: TRANSPORT APPRAISAL REPORT
Project: Land North West of Balsham Road, Linton
Client: [REDACTED]
Project No.: 60507



NOTES:

- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. ALL LEVELS REFER TO METRES ABOVE ORDNANCE SURVEY DATUM (MAOD).
- TOPOGRAPHICAL SURVEY HAS BEEN TAKEN FROM COUNTRYSIDE PROPERTIES DRAWING SERV2211 SHEETS 1 TO 3 DATED 15/10/17 AND RJ LTD ACCEPT NO RESPONSIBILITY FOR ERROR OR OMISSION.
- ACCESS BASED ON SOUTH CAMBRIDGESHIRE DISTRICT DESIGN GUIDE SPD FOR A PRIMARY STREET.
- VISIBILITY SPLAYS SHOWN AT 2.4m X 90m FOR A 30mph SPEED LIMIT AND ASSUMES SPEED LIMIT EXTENSION TO BE PROMOTED BY THE APPLICANT. VISIBILITY SPLOY OF 2.4m X 160m TO NORTHEAST OF EMPLOYMENT ACCESS IS ACHIEVABLE IF REQUIRED OVER LAND WITHIN APPLICANTS CONTROL.
- ACCESS SHOWN INDICATIVELY AND IS SUBJECT TO HIGHWAY AUTHORITY APPROVAL, TRAFFIC SURVEYS AND ROAD SAFETY AUDIT. STREET LIGHTING AND HIGHWAY DRAINAGE REQUIREMENTS TO BE CONFIRMED AT DETAILED DESIGN.

REV	DATE	DESCRIPTION	DRAWN	CHKD
REVISIONS				
This drawing is to be read in conjunction with all other Engineer's drawings and all other project information. Any discrepancy between the Engineer's drawings and other project information is to be reported to the Engineer immediately.				
Project				
LAND NORTH WEST OF BALSHAM ROAD, LINTON				
INDICATIVE SITE ACCESSES				

Scale 1:500	Drawn RNL	Date 20/02/20
Job Manager RNL	Checked RNL	Approved RNL

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