

REPORT

Transport Technical Note

Old Norwich Road, Horsham St Faith

Client: Brown & Co

Reference: T&P-PB7928-R001-F1.0

Revision: 1.0/Final

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HASKONINGDHV UK LTD.

Rightwell House
Rightwell East
Bretton
Peterborough
PE3 8DW
Transport UK
VAT registration number: 792428892

+44 1733 334455 T
+44 1733 262243 F
info.london@uk.rhdhv.com E
royalhaskoningdhv.com W

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Author(s): Sarah Simpson

Drafted by: Jimoh Ibrahim

Checked by: Sarah Simpson

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Approved by: Sarah Simpson

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1 Introduction

- 1.1.1 Royal HaskoningDHV has been commissioned by Brown & Co to provide transport planning advice in relation to the Regulation 18 consultation regarding site GNLP0482 at Old Norwich Road in Horsham St Faiths near Norwich.
- 1.1.2 This site has been identified to be potentially suitable for development in the Greater Norwich Local Plan under the Housing and Economic Land Availability Assessment (HELAA) published in December 2017. The Constraints Analysis of the assessment identified that there are potential constraints relating to access and accessibility to services at the site which could be overcome through development.
- 1.1.3 The purpose of this Technical Note is to appraise the accessibility and subsequently the feasibility of achieving a safe and appropriate means of access to the site. In addition, this Technical Note considers the potential off-site works that may be required to ensure improved access to services from the site. In doing so, this note draws on:
- A site visit to appreciate the site's context and take measurements of key highway geometry;
 - Provision of a 2D preliminary design for the access junctions that would be required to serve the site in accordance with the applicable standards; and
 - A review of the existing levels of transport infrastructure within proximity of the site and subsequently identify critical additional infrastructure that would be required to sustain the site.

2 Site Context

2.1 Proposed Allocation

- 2.1.1 The site comprises agricultural land located off Old Norwich Road, which includes the land identified in the HELAA as GNLP0482, as well as adjacent land to the east and south as shown in Figure 1.
- 2.1.2 This Technical Note considers a larger area than that originally set out in the Call for Sites submission as the site has been extended for completeness and incorporates a logical section of the landowner's holding which is clearly defined by Calf Lane and the edge of the existing settlement.
- 2.1.3 GNLP0482 is located in the south of the Horsham St. Faith. The site is currently formed of agricultural land and is bounded by other agricultural land to the south, Old Norwich Road to the west and Bullock Hill to the east. The Norwich Northern Distributor Road is situated to the south of the site, with no direct access being available.
- 2.1.4 The larger site covers an area of approximately 44 hectares, on which an allocation is sought for residential development, including some recreational and leisure use.

2.2 Existing Transport Infrastructure

Highways Infrastructure

- 2.2.1 Vehicular access to the site is provided by existing field accesses taken via Old Norwich Road and Bullock Hill. Old Norwich Road and Bullock Hill form priority junctions with Spixworth Road which in turn provides vehicular access to the wider highway network including the A140 to the west.. To its south, Old Norwich Road and Bullock Hill serve as emergency accesses for Norwich International Airport and serve a small number of properties: residential and commercial.
- 2.2.2 Bullock Hill is a narrow, single carriageway roads subject to a speed limit of 30mph. It has no footway, street lighting or lining along its length.
- 2.2.3 Old Norwich Road is a single carriageway road with a narrow footway along its western edge to the north of Blind Lane, which is separated from the carriageway by a verge strip. The road benefits from a street lighting scheme in part, though it is noted that this is an older system which may need to be upgraded should a development be brought forward at this location.
- 2.2.4 To the north of the site, Spixworth Road is a single carriageway road subject a 30mph speed limit through the village, which changes to the National Speed Limit of 60mph at the junction with Cortishall Lane which coincides with the eastern extent of the site. In the vicinity of the site, Spixworth Road has lining and continuous footways present on the northern edge which coincides with its existing built frontage.
- 2.2.5 To the east of Bullock Hill, Spixworth Road is subject to a 7.5 tonne weight limit except for loading.

Public Transport Infrastructure

- 2.2.6 The closest bus stops to the site are The Church bus stops on Church Street approximately 500m from the site which facilitate southbound and northbound services as shown in **Figure 1**.
- 2.2.7 The bus stops are demarcated by poles and flags, with no timetable information available at these locations. The approximate daytime frequencies and routes for the bus services are set out in **Table 2.1**.

Table 2.1: Summary of Bus Services

Service number	Route	Approximate frequency								
		Monday – Friday			Saturday			Sunday		
		First	Max. Freq.	Last	First	Max. Freq.	Last	First	Max. Freq.	Last
43	Norwich City Centre - Reepham	09:37	1 per hour	18:04	09:41	1 per 2 hours	18:01	No Service		
43	Reepham - Norwich City Centre	07:07	2 per hour	17:05	08:15	1 every 90 minutes	17:05			
44A	Norwich City Centre - Sheringham	07:47	1 per 2 hours	23:03	07:47	1 per hour	23:03	09:02	Every 2 hours	18:02
44A	Sheringham - Norwich City Centre	07:27	1 per 3 hours	22:09	06:56	1 per hour	22:09	08:02	Every 2 hours	17:02

- 2.2.8 **Table 2.1** shows that the site has a moderate level of service by public transport.

Pedestrian and Cycling Infrastructure

- 2.2.9 The majority of the roads in Spixworth have footways present along one or both sides. In the vicinity of the site, the northern edge of Spixworth Road has a discontinuous footway of approximately 2.8m width. There is a wider grassed verge of approximately 4.4m width to the southern edge of Spixworth Road on the northern edge of the site.
- 2.2.10 Bullock Hill and Calf Lane have no footways in place along their entire length, and the absence of trodden paths on the verges to either side of these roads suggest that there is not a particularly high level of walking along these roads at present.
- 2.2.11 In terms of cycling, there is no specific cycling infrastructure in Spixworth. However, the rural nature of the village suggests that there will be scope for cycling to safely take place within the village area.

3 Development Transport

3.1.1 This section details measures which could be provided at the site, to provide a safe and appropriate means of access by all modes of transport.

3.2 Access Arrangements

3.2.1 To ensure that a safe and appropriate means of vehicular access can be achieved, the existing road properties including geometry and speed limits have been taken into consideration.

3.2.2 A minimum offset of 20m from all existing accesses and junctions have been incorporated into the location of the potential accesses as shown in **Figure 2**.

3.2.3 As Old Norwich Road is subject to a speed limit of 30mph, the Manual for Streets (MfS) is applicable. In accordance with the MfS, a sketch of the design of the potential access points for the site on Old Norwich Road is shown at **Figure 3**.

3.2.4 The access on the northern edge of the site is to be located on Spixworth Road which is subject to the National Speed Limit (NSL) of 60mph, although it is considered that the road within the extents of the site could be subject to a 30mph speed limit to better reflect the built up frontage which would result from a development being brought forward at this location.

3.2.5 With regards to the potential access on Spixworth Road, an assumed design speed of 40mph is adopted for the eastern visibility splay to account for the possible variance in speeds as a result of the proximity of the National Speed Limit. Subsequently, in accordance with TD 42/95 of the DMRB as well as the MfS, a sketch of the potential access point the site on Spixworth Road is also shown at **Figure 3**. It is noted that there is sufficient land under the owner's control to provide larger visibility splays should they be required as and when development is brought forward.

3.2.6 Overall, it is demonstrated that the potential access junctions to the site are feasible as they can be provided with adequate levels of visibility and in accordance with the applicable standards.

3.3 Potential Off-Site Works

3.3.1 As an allocation is sought for residential as well as recreational and leisure use, access to the sites by active and sustainable modes of transport will ensure sustainable development, and maximise the opportunities for integration with the existing community.

3.3.2 On site measurements note that, the verge is approximately 4.4m wide on Old Norwich Road which could therefore accommodate a footway / cycleway 3m in width should it be required. However, as there is no cycling infrastructure provided at present in Spixworth, it may be more appropriate to provide footways of a minimum 1.8m width along the site edge. This would enable the sites' integration with the existing transport infrastructure.

- 3.3.3 The Institution of Highways and Transportation's (IHT) Guidelines for Planning for Public Transport in Developments advocates that bus stops should ideally be located no more than 400 metres from homes. As the Church bus stops are not located within 400 metres from the centre of the site, new, formal bus stops could be usefully provided at a location on Spixworth Road close to the site, depending on bus routing as development is brought forward.
- 3.3.4 It is considered that these bus stops would enhance existing bus infrastructure which would promote sustainable travel in the village. These enhancements could include the provision of:
- bus shelters with seating;
 - bus boarder kerbs to provide easier access to vehicles;
 - wider footways at the bus stops where possible to accommodate pedestrian movements; and
 - real time information at the bus stops.
- 3.3.5 The potential off-site works suggested above are shown in **Figure 4**.

4 Conclusions

- 4.1.1 This Transport Technical Note has been prepared for Brown & Co to provide transport planning advice further to the Regulation 18 consultation in relation to site GNLPO482 at Old Norwich Road, Horsham St Faith near Norwich.
- 4.1.2 A review of the existing transport infrastructure reveals that the site is well served by existing highway and pedestrian infrastructure which provides links to the existing settlement to the north and west of the site.
- 4.1.3 Potential vehicular access points have been identified for the site, which take account of the existing points of access to both sides of Old Norwich Road and Spixworth Road. Given the level of visibility achievable at the potential access points, it is evident that the site can be accessed safely without hindering the integrity of the existing highway network.
- 4.1.4 In addition, it has been demonstrated that it is feasible to provide a package of off-site works which would accommodate residential development at this location and also enhance the provision for sustainable travel within the local community.
- 4.1.5 On this basis, it is considered that there is no reason relating highways access and infrastructure provision which should hinder the progression of the proposed allocation.



FIGURES AND APPENDICES

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FIGURES

FIGURE 1
Site Location

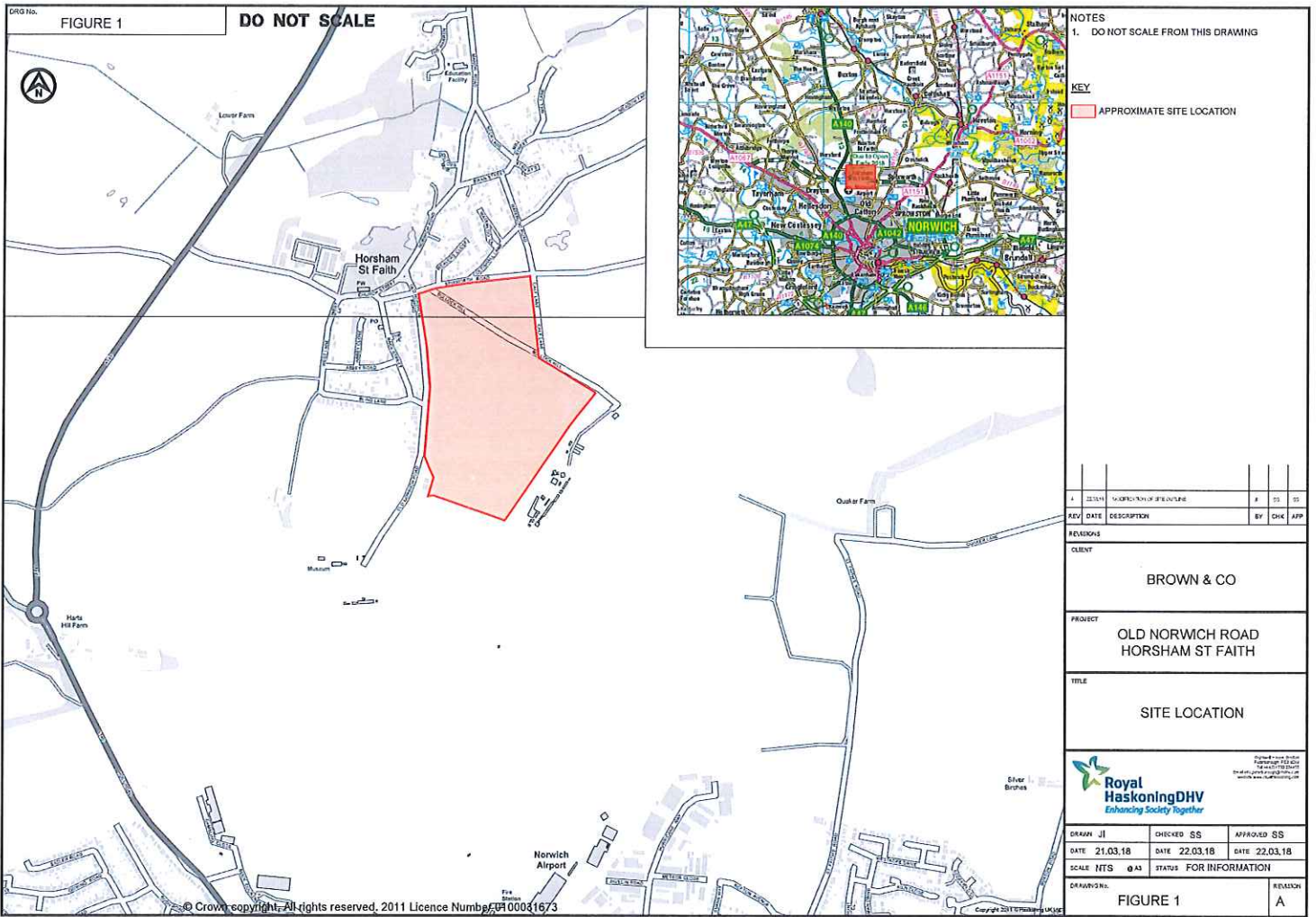
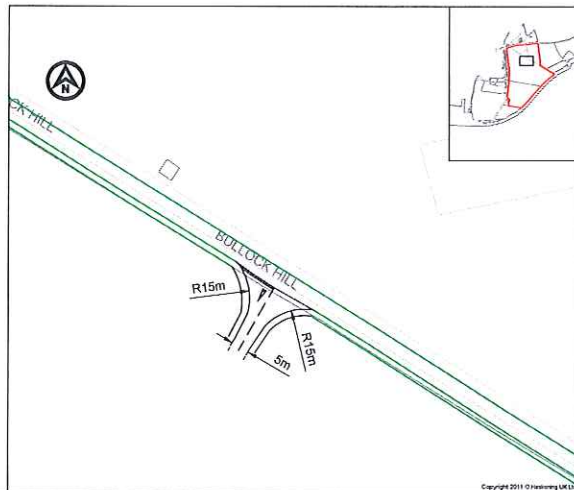
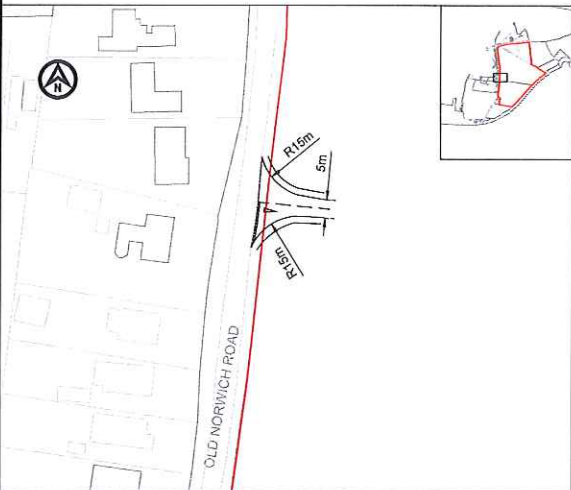
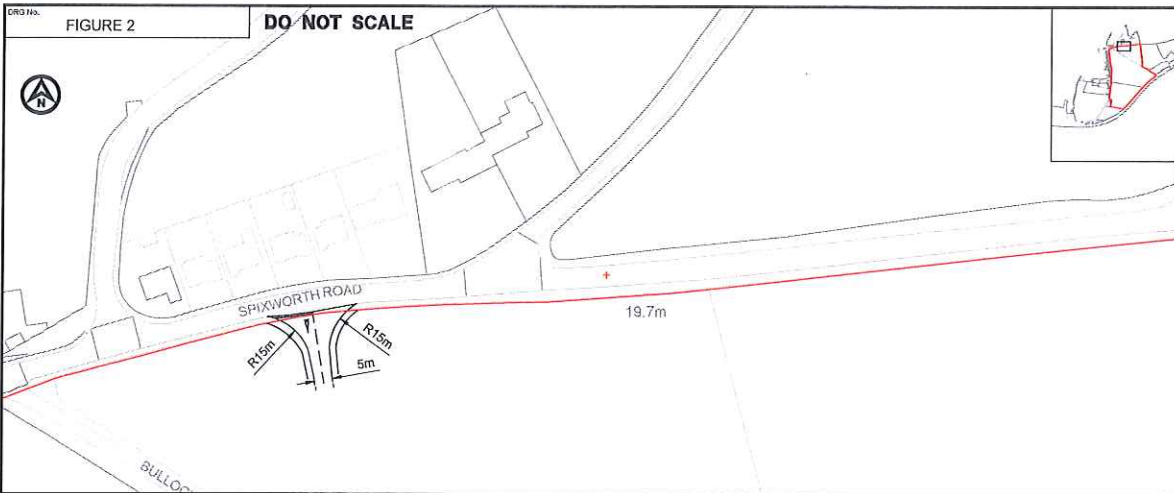


FIGURE 2
Potential Access Arrangements

FIGURE 2 **DO NOT SCALE**



NOTES

- DO NOT SCALE FROM THIS DRAWING

KEY

- APPROXIMATE SITE OUTLINE
- POTENTIAL NEW ACCESS
- POTENTIAL CARRIAGEWAY IMPROVEMENTS 5m WIDE CARRIAGEWAY AND 1.8m FOOTWAY

REV	DATE	DESCRIPTION	BY	CHK	APP
A	22.03.18	ISSUANCE OF THIS DRAWING			

REVISIONS

CUSTOMER

BROWN & CO

PROJECT

**OLD NORWICH ROAD
HORSHAM ST FAITH**

TITLE

**POTENTIAL ACCESS
ARRANGEMENTS**

Royal HaskoningDHV
Enhancing Society Together

DRAWN	JJ	CHECKED	SS	APPROVED	SS
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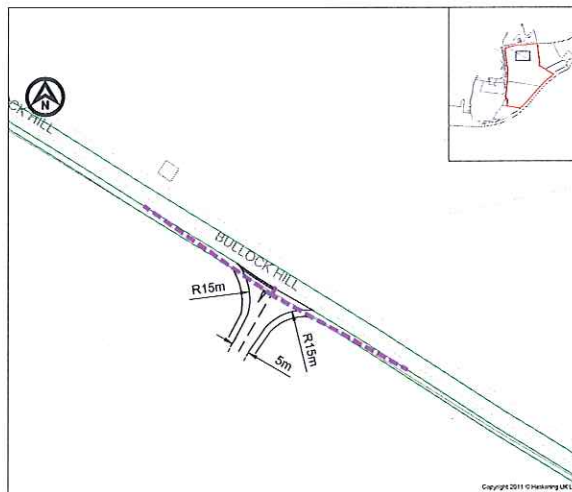
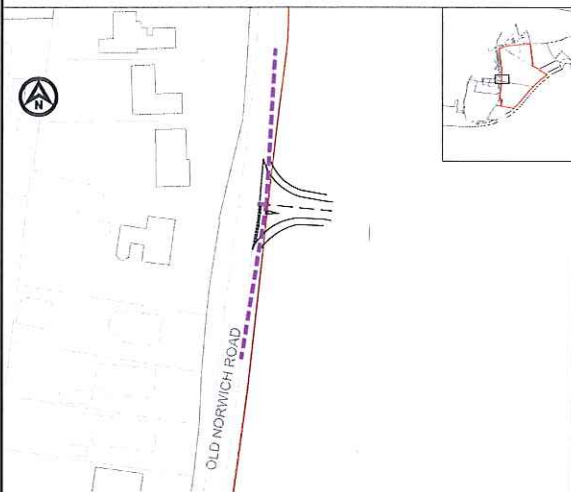
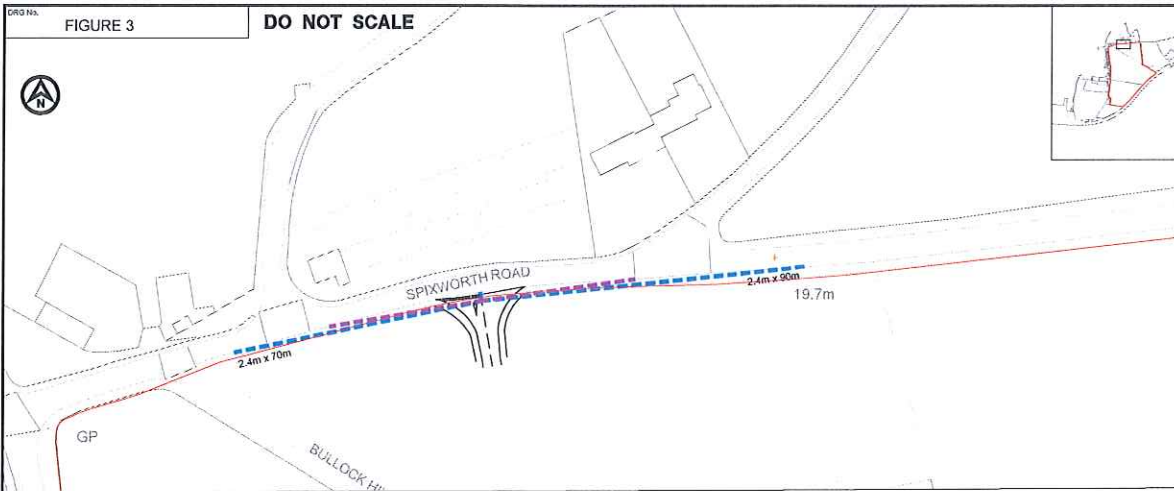
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DRAWING NO. **FIGURE 2** REVISION **A**

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FIGURE 3
Visibility Splays

FIGURE 3 **DO NOT SCALE**



NOTES
1. DO NOT SCALE FROM THIS DRAWING

KEY

- APPROXIMATE SITE OUTLINE
- REQUIRED DMAB VISIBILITY SPLAY
2.4m x 70m (30mph)
2.4m x 90m (40mph)
- REQUIRED MIS VISIBILITY SPLAY 2.4m x 43m (30mph)
- POTENTIAL CARRIAGEWAY IMPROVEMENTS 5m WIDE CARRIAGEWAY AND 1.5m FOOTWAY

REV	DATE	DESCRIPTION	BY	CHK	APP
A	22.03.18	ISSUE FOR INFORMATION			

REVISIONS

CLIENT
BROWN & CO

PROJECT
**OLD NORWICH ROAD
HORSHAM ST FAITH**

TITLE
**POTENTIAL ACCESS
VISIBILITY SPLAYS**



DRAWN	CHECKED	APPROVED
JJ	SS	SS
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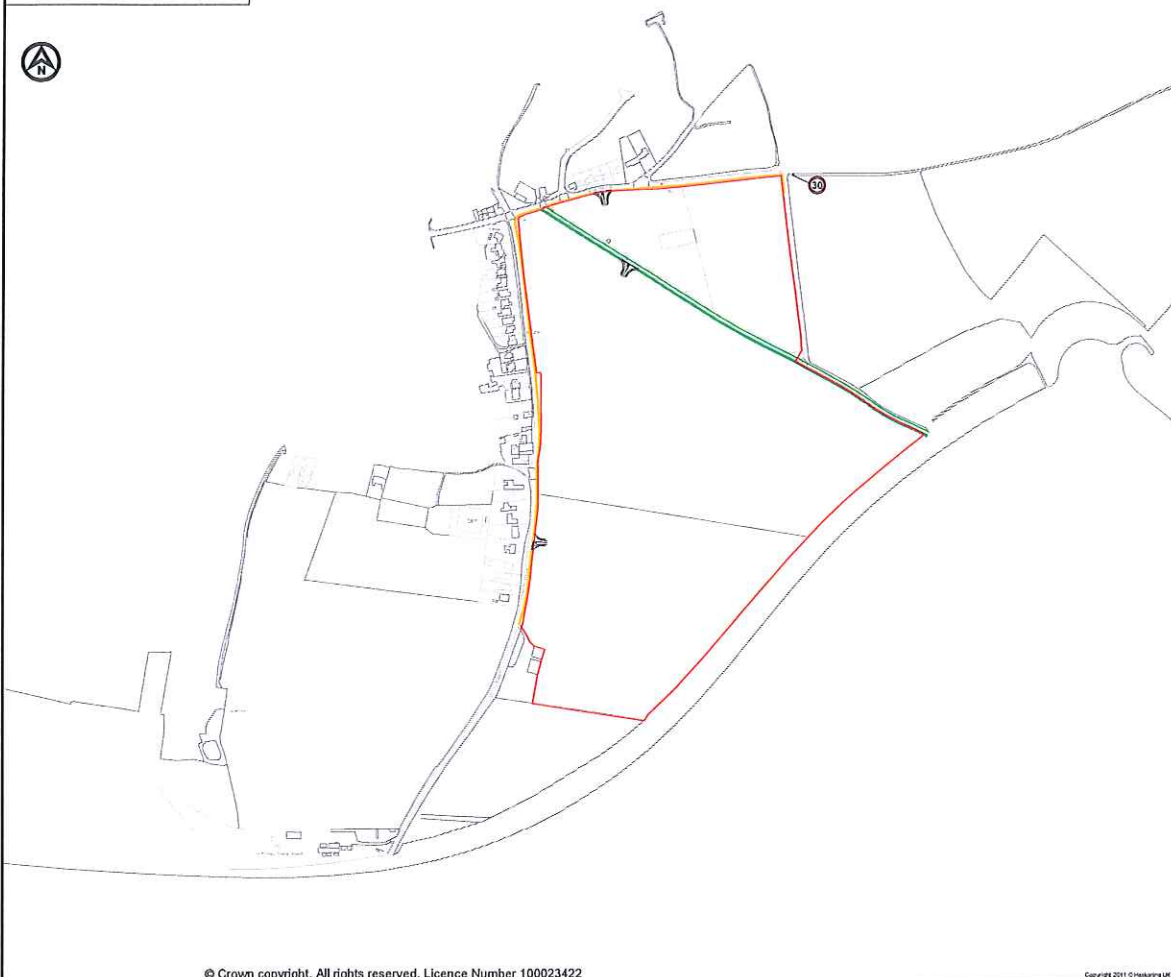
FIGURE 3
A

FIGURE 4

Potential Infrastructure Enhancements

DRG No. **FIGURE 4**

DO NOT SCALE



NOTES
1. DO NOT SCALE FROM THIS DRAWING

- KEY**
- APPROXIMATE SITE OUTLINE
 - POTENTIAL NEW ACCESS
 - PROPOSED 1.8m FOOTWAY
 - POTENTIAL CARRIAGEWAY IMPROVEMENTS 5m WIDE CARRIAGEWAY AND 1.8m FOOTWAY
 - 30 PROPOSED SPEED LIMIT CHANGE

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REVISIONS

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PROJECT
OLD NORWICH ROAD
HORSHAM ST FAITH

TITLE
POTENTIAL INFRASTRUCTURE
ENHANCEMENTS



DRAWN	DESIGNED	APPROVED
JJ	SS	SS

DATE	DATE	DATE
22.03.18	22.03.18	22.03.18

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