

Access Appraisal

client : **Mr D. Jones**

project : **Access Appraisal of Two Sites within
Great Plumstead, Norfolk**

date : **March 2018**

Orari Limited
Rouen House, Rouen Road, Norwich, Norfolk NR1 1RB
tel : 077 99 637 839 | info@orari.co.uk | www.orari.co.uk

Mr D. Jones

Revision	Description	Issued by	Date	Checked by
00	First Draft	SC	2018 / 03 / 22	MBS

This report has been prepared with reasonable skill, care and diligence for the sole benefit, use and information of Mr D. Jones (The Client) for the purposes set out in The Client's instructions that commissioned it, and is issued in commercial confidence. It should not be relied upon by any other party or used for any other purpose. The liability of Orari Limited in respect of the information, designs, design concepts and proposals contained within this report will not extend to any third party.

This report contains confidential information and proprietary intellectual property. All information, designs, design concepts and proposals within this report are the copyright of Orari Limited © March 2018. All Rights Reserved.

author : **Susan Challis** BSc BTh CMILT MCIHT MAPM FRSA

date : **2018 March 22**

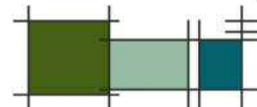
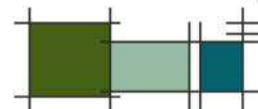


Table of Contents

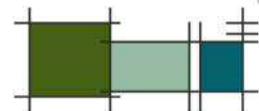
Chapter	Title	Page
1	Introduction	1
2	The Appraisal Sites	3
3	Local Issues	6
4	Proposed Development - Appraisal Site 1	8
5	Proposed Development - Appraisal Site 2	10
6	Summary and Conclusions	12



Mr D. Jones

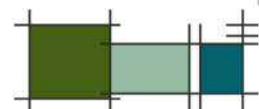
Appendices

Appendix 1	Appraisal Site Location Plans
Appendix 2	Extracts from GNLP HELAA
Appendix 3	Accident Data
Appendix 4	Bus Public Transport Information
Appendix 5	Church Road Planning Application Site Plan



List of Acronyms used within this report

BDC	Broadland District Council
DMRB	Design Manual for Roads and Bridges
DfT	Department for Transport
GNLP	Greater Norwich Local Plan
HE	Highways England
HELAA	Housing and Economic Land Availability Assessment
MfS 1	Manual for Streets - <i>published March 2007</i>
MfS 2	Manual for Streets - Volume 2 - <i>published September 2010</i>
NCC	Norfolk County Council
PIA	Personal Injury Accident
SBD	Secure by Design - Homes 2016 - <i>published February 2016</i>
TRICS	Trip Rate Information Computer System - <i>national database of development trip rates</i>



1. Introduction

Background

- 1.1 Orari Limited has been instructed on behalf of Mr D. Jones ('The Client') to provide a transport Access Appraisal of two sites (The Appraisal Sites) within Great Plumstead, Norfolk.
- 1.2 The two Appraisal Sites are located with the western edge of Great Plumstead, and are shown as Sites numbered 1 – 2 on the plan provided at Fig 1 below.

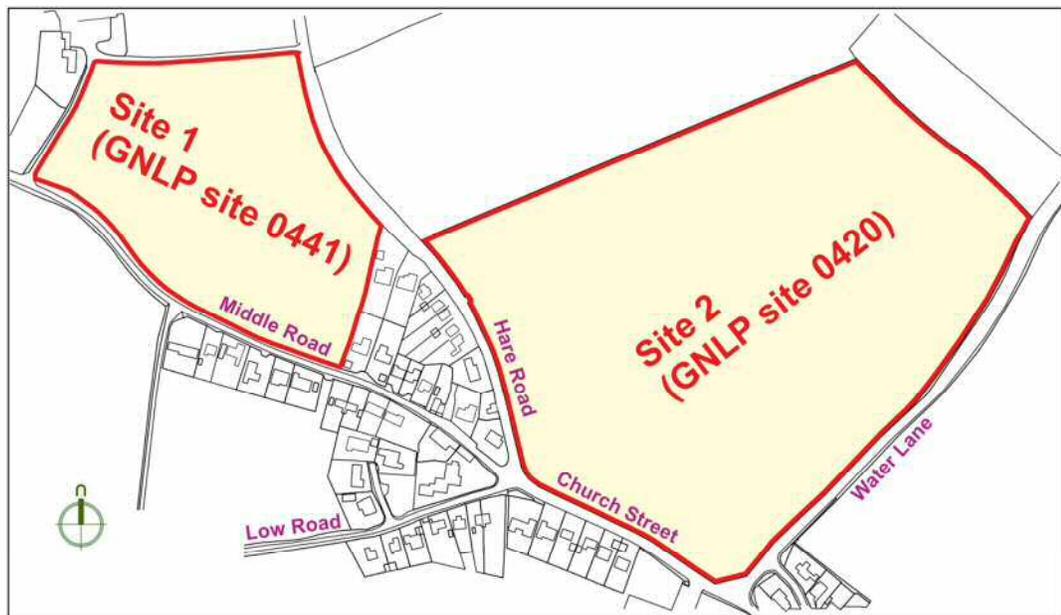
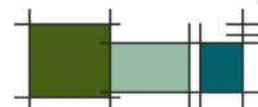


Fig 1 : Location of the two Appraisal Sites.

- 1.3 This Access Appraisal report is required to support a submission regarding the two Appraisal Sites that will be made on behalf of the Client by Bidwells LLP in March 2018, in response to the emerging Greater Norwich Local Plan *Regulation 18 Consultation*.
- 1.4 A copy of a detailed location plan of each of the two sites is attached at Appendix 1.



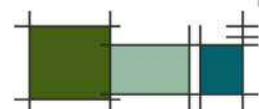
Mr D. Jones

Brief

- 1.5 The purpose of this Access Appraisal is to demonstrate whether an appropriate level of access may be provided, in principle, to each of the two Appraisal Sites to support the requirements of potential development within each site curtilage. The Local Planning Authority (Broadland District Council) and the Local Highway Authority (Norfolk County Council) have not been formally consulted by Orari Ltd regarding these proposals.

Reference Documents

- 1.6 Options for the proposed site layout and access requirements detailed within this report have been assessed utilising National and local design guidance, including the following principal documents:
- *'Manual for Streets 1'* - DfT 2007;
 - *'Manual for Streets 2'* - CIHT 2010;
 - *'Norfolk Residential Design Guide'* - Norfolk County Council, 1998;
 - *'Safe, Sustainable Development'* - Norfolk County Council, November 2015;
 - *'Parking Standards for Norfolk 2007'* - Norfolk County Council, 2007;
 - *'Infrastructure, Service and Amenity Requirements for New Development'* - Norfolk County Council, April 2014;
 - *'Secure by Design - Homes 2016'* - ACPO/SBD, February 2016; and
 - *'Design Manual for Roads and Bridges'* - Department for Transport.



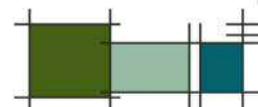
2. The Appraisal Sites

Appraisal Sites included with the emerging GNLN Regulation 18 Consultation

- 2.1 Both of The Client's Appraisal Sites are included within the (January - March 2018) emerging Greater Norwich Local Plan (GNLP) *Regulation 18 public consultation* documents:
- Appraisal Site 1 is listed as site "GNLP 0441 - Land at Middle Road, Gt & Lt Plumstead"; and
 - Appraisal Site 2 is listed as Site "GNLP 0420 - Land at Hare Road, Gt & Lt Plumstead".
- 2.2 Extracts from the GNLP '*Housing and Economic Land Availability Assessment*' (HELAA, dated December 2017) regarding Appraisal Sites 1 and 2, that have been utilised as 'supporting evidence' for the emerging Greater Norwich Local Plan (GNLP) *Regulation 18 public consultation*, are provided at Appendix 2 for ease of reference.

Appraisal Site 1 – Land at Middle Road, Gt & Lt Plumstead (GNLP Site 0427)

- 2.3 Appraisal Site 1, occupies a greenfield site of approximately 4.2 hectares on the western edge of Great Plumstead, Norfolk. A copy of a site location plan is attached at Appendix 1.
- 2.4 The boundaries of Appraisal Site 1 are formed by the following features;
- North west : by the southern frontage of an access road leading to Hall Farm;
 - North east : by the western frontage of the Hare Road carriageway;
 - East : by the boundary fences of two residential properties: Steetly Lodge and Northgate House
 - South : by the northern frontage of the Middle Road carriageway; and
 - West : by the eastern frontage of an access road leading to Hall Farm.
- 2.5 Vehicular access to Appraisal Site 1 is currently achieved via an agricultural field access from within Hall Farm.
- 2.6 The GNLP HELAA report considers Appraisal Site 1 to be suitable for "*Residential development of approx. 30 dwellings, with associated access and open space*".
- 2.7 Appraisal Site 1 is currently grassland. It is considered that the vehicular trip generation associated with the prevailing agricultural use of Appraisal Site 1 is likely to be very low, and for the purposes of this assessment is considered to be negligible.

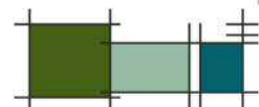


Local Highway Characteristics – Appraisal Site 1

- 2.8 Middle Road is a Norfolk standard rural single carriageway road, of circa 5.5m width that extends in an easterly direction from the centre of Great Plumstead towards Thorpe End. With the exception of a short length (circa 25m) of 1.5m width footway on the southern side of the carriageway, adjacent to its junction with Low Road, Middle Road has no footways. Middle Road has no street lighting.
- 2.9 The Great Plumstead village speed limit of 30mph extends along Middle Road to approx. 50m west of the western boundary of the dwelling called Edgefield. Middle Road is then subject to the national speed limit (ie 60 mph) between Edgefield and its junction with Green Lane.
- 2.10 Hare Road is a Norfolk standard rural single carriageway road, of circa 5.5m width that extends in a north-westerly direction from the centre of Great Plumstead towards Rackheath. Hare Road has no footways or street lighting.
- 2.11 The Great Plumstead village speed limit of 30mph extends along Hare Road to approx. 50m north of the Hall Farm entrance road. Hare Road is then subject to the national speed limit (ie 60 mph) between Hall Farm and its junction Broad Lane and Toad Lane.

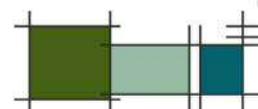
Appraisal Site 2 - Land off Hare Road, Great Plumstead

- 2.12 Appraisal Site 2, occupies a greenfield site of approximately 11 hectares on the north-western edge of Great Plumstead, Norfolk. A copy of a site location plan is attached at Appendix 1.
- 2.13 The boundaries of Appraisal Site 2 are formed by the following features;
- North west : : by an open arable greenfield site, currently in pastoral agricultural;
 - North east : by a tree belt;
 - East : by the western frontage of the Water Lane footway/cycleway;
 - South : by the northern frontage of the Church Lane carriageway; and
 - West : by the eastern frontage of the Hare Road carriageway.
- 2.14 Vehicular access to Appraisal Site 2 is currently achieved via an open agricultural field access onto Water Lane at the north eastern corner of the Appraisal Site, and via an open agricultural field access on Hare Road, opposite no 3 Hare Road.
- 2.15 Appraisal Site 2 is an area of open arable farmland, currently in pastoral agricultural use. It is considered that the vehicular trip generation associated with the prevailing agricultural use of Appraisal Site 2 is likely to be very low, and for the purposes of this assessment is considered to be negligible.



Local Highway Characteristics – Appraisal Site 2

- 2.16 Water Lane is a Norfolk standard rural single carriageway road, of circa 5.5m width that extends in a north-easterly direction from the centre of Great Plumstead towards Little Plumstead.
- 2.17 Water Lane has a circa 1.8m width footway on its eastern side between its junction with Church Road and St Mary's Close. Just north of the St Mary's Close junction the footway provision reverts to the western side of the Water Lane carriageway. Circa 185m north of the St Mary's Close junction, the Water Lane footway becomes a 'shared use' footway/cycleway, and this facility extends along the western side of the Water Lane carriageway until its junction with Hospital Road. Water Lane has no street lighting.
- 2.18 The Great Plumstead village speed limit of 30mph extends along Water Lane to approx. 100m north of its junction with Church Road. Water Lane is then subject to the national speed limit (ie 60 mph) until circa 50m south of its junction with Hospital Lane, where the Little Plumstead village speed limit of 30mph commences.
- 2.19 Hare Road is a Norfolk standard rural single carriageway road, of circa 5.5m width that extends in a north-westerly direction from the centre of Great Plumstead towards Rackheath. Hare Road has no footways or street lighting.
- 2.20 The Great Plumstead village speed limit of 30mph extends along Hare Road to approx. 50m north of the Hall Farm entrance road. Hare Road is then subject to the national speed limit (ie 60 mph) between Hall Farm and its junction Broad Lane and Toad Lane.



3. Local Issues

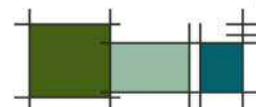
Highway Safety

- 3.1 A qualitative highway safety assessment has been undertaken of the highway network within the immediate vicinity of the two Appraisal Sites, based upon a review of the freely available to view Personal Injury Accident (PIA) data provided on the Crashmap website (www.crashmap.co.uk) for the most recent five period, 2013 - 2017 inclusive.
- 3.2 The plan and Crashmap PIA details attached at Appendix 3 reveal that a total of three PIAs (1 no. Serious and 2 no. Slight severity) were recorded within Great Plumstead, within the immediate vicinity of the Appraisal Sites during the five-year study period. No Fatal severity PIAs were recorded. For ease of reference, Table 3.1 below provides a summary of the Crashmap website PIA data.

Great Plumstead - Recorded PIAs : 2013 – 2017 (inclusive)						
No	Severity	Date	Vehs	Time	Casualties	PIA Cause Summary
1	Slight	Weds 04/02/2015	2 (cars)	09.25	1 (car driver)	Veh 1 (car) emerging from Low Road, collides with Veh 2 (car) travelling on Middle Road Veh 1 (car) driver was Slightly injured.
2	Slight	Thurs 27/10/2016	2 (HGV & Bus)	14.40	1 (Bus Passenger)	HGV and Bus brake to avoid impact on Church Road. Bus passenger (aged over 75 years) was Slightly injured.
3	Serious	Sat 20/05/2011	1 (car)	17.35	1 (ped)	Veh 1 (car) reversed from Middle Road property and hit pedestrian Pedestrian was Seriously injured.

Table 3.1 : Summary of the recorded PIAs within the immediate vicinity of the Application Sites.

- 3.3 It is acknowledged that it is not possible to ascertain the precise nature of the recorded incidents or any of the contributory factors from the Crashmap website's freely available to view PIA data. However, it is reasonable to conclude, based upon a review of the recorded PIA data, that the three recorded PIAs were isolated incidents, as these are the only PIAs recorded within Great Plumstead within the vicinity of the Appraisal Sites during the five year study period.



Mr D. Jones

3.4 Moreover, the recorded PIAs were not associated with, nor could be attributable to, traffic associated with any of the Appraisal Sites. It is therefore reasonable to conclude that there are no highway safety issues to preclude the use of the three Appraisal Sites for future development.

Public Transport Facilities

3.5 The closest bus stops to the Appraisal Sites are located on Church Road, circa 15m east of its junction with Water Lane, opposite and adjacent to the Old School.

3.6 Analysis of relevant bus timetables reveals that:

- one bus service (Konectbus number 5C) uses the Eastbound bus stop, opposite the Old School (i.e. buses travel towards Little Plumstead) as detailed in Table 3.2 below; and
- one bus service (Konectbus number 5C) uses the Westbound bus stop, adjacent to the Old School (i.e. buses travel towards Norwich) as detailed in Table 3.3 below.

Eastbound Bus Services on Church Road – opposite the Old School						
No	Route & Destination	Frequency		First Bus	Last Bus	Operator
5c	Norwich – Little Plumstead	5 buses/day <i>Mon – Fri</i>	4 buses/day <i>Sat</i>	08.21	17.31	Konectbus

Table 3.2 : Westbound Bus Services on Church Road – adjacent to the Old School

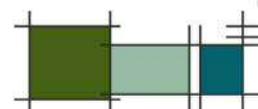
Westbound Bus Services on Church Road – adjacent to Old School						
No	Route & Destination	Frequency		First Bus	Last Bus	Operator
5c	Little Plumstead - Norwich	10 buses/day <i>Mon – Fri</i>	8 buses/day <i>Sat</i>	07.21	16.00	Konectbus

Table 3.3 : Eastbound Bus Services on Church Road – opposite the Old School

Full details of these Great Plumstead bus services are attached at Appendix 4.

3.7 The existing regular bus services between Great Plumstead and Norwich (with its bus, rail and coach travel connections to Cambridge, Stansted Airport, Harwich Ferry terminal, London, rest of UK) provide excellent local links to sustainable public transport networks within the UK, Europe and beyond.

3.8 The local bus services detailed within Tables 3.2 - 3.3 above provide all future residents of the proposed Appraisal Site developments with a convenient and realistic alternative to the use of the private car for both local trips, and for destinations further afield.



4. Potential Development – Appraisal Site 1

HELAA Comments

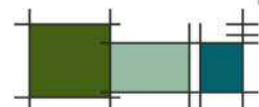
- 4.1 The GNLP HELAA report concluded that Appraisal Site 1 (GNLP Site 0441) is suitable for a “Residential development of approx. 30 dwellings, with associated access and open space”. For ease of reference, a copy of the GNLP HELAA evidence is attached at Appendix 2.
- 4.2 The transport-related GNLP HELAA ‘objections’ to proposed development within Appraisal Site 1 are cited as:
- “Initial highway evidence has indicated that there are potential access constraints on the site, but these could be overcome through development”; and
 - “Subject to suitable footpath provision, any potential impact on the functioning of local roads could be reasonably mitigated.”
- 4.3 The Highway Safety review (para 3.1 et seq above) has revealed that there are no highway safety issues to preclude residential development within Appraisal Site 1.

Potential Development

- 4.4 Appraisal Site 1 occupies a greenfield site of approximately 4.2 hectares on the western edge of Great Plumstead. However, the Client currently only wishes to promote potential residential development within the eastern half of the Appraisal Site, as illustrated within Fig 4 below.



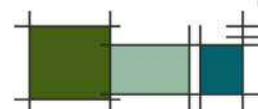
Fig 4 : Appraisal Site 1 – Potential Development



- 4.5 It is envisaged that the provision of up to 30 dwellings within the eastern part of Appraisal Site 1 could include the following development:
- **Middle Road frontage:**
 - Linear residential development along the Appraisal Site's Middle Road frontage - to reflect the existing residential Middle Road properties; and
 - a junction to facilitate a 'Mews Court' within the site curtilage;
 - **Hare Road frontage:**
 - Linear residential development along the Appraisal Site's Hare Road frontage; and
 - a junction to facilitate a 'Mews Court' within the site curtilage.

Vehicular Access to Appraisal Site 1

- 4.6 The design and layout of the Middle Road properties will include a 1.8m width footway (built to NCC adoptable standards) along the Appraisal Site frontage, with private drives for the new dwellings. The design and layout of a 'Mews Court', if provided, would accord with NCC standards for a 'Mews Area' (to facilitate future NCC adoption), with a visibility splay of minimum dimensions 2.4m x 90m (in accordance with DMRB) at its junction with Middle Road.
- 4.7 The design and layout of the Hare Road properties will include a 1.8m width footway (built to NCC adoptable standards) along the Appraisal Site frontage, with private drives for the new dwellings. The design and layout of a 'Mews Court', if provided, would accord with NCC standards for a 'Mews Area' (to facilitate future NCC adoption), with a visibility splay of minimum dimensions 2.4m x 90m (in accordance with DMRB) at its junction with Hare Road.
- 4.8 It is envisaged that the proposed residential development layout within the Appraisal Site 1 curtilage would demonstrate good pedestrian and cyclist permeability that accords with 'Secure by Design' standards, and provide safe pedestrian and cycle connectivity between Middle Road and Hare Road.



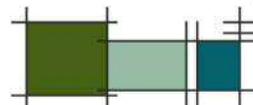
5. Potential Development – Appraisal Site 2

HELAA Comments

- 5.1 The GNLP HELAA report concluded that Appraisal Site 2 (GNLP Site 0420) is suitable for a *“Residential development of approx. 30 dwellings, with associated access and open space”*. For ease of reference, a copy of the GNLP HELAA evidence is attached at Appendix 2.
- 5.2 The transport-related GNLP HELAA ‘objections’ to proposed development within Appraisal Site 2 are cited as:
- *“Initial highway evidence has indicated that there are potential access constraints on the site, but these could be overcome through development”*; and
 - *“Subject to suitable footpath provision, any potential impact on the functioning of local roads could be reasonably mitigated.”*
- 5.3 The Highway Safety review (para 3.1 et seq above) has revealed that there are no highway safety issues to preclude residential development within Appraisal Site 2.

Potential Development

- 5.4 Broadland District Council (BDC) granted planning permission in 2016 for a residential development of eleven dwellings (BDC ref : 20161151) on the Church Road frontage of Appraisal Site 2. A copy of a planning application site location plan is attached at Appendix 5 for ease of reference.
- 5.5 The 2016 planning permission includes the provision of a new footway, which will extend along the entire highway frontage of the eleven dwelling development site, ie the new footway will extend along the eastern frontage of Hare Road from opposite ‘White Cottage’, along the Church Road frontage, and thence along the western frontage of Water Lane to opposite the boundary of no 1 St Mary’s Close.
- 5.6 It is envisaged that up to 15 dwellings may be provided along the Hare Road frontage of Appraisal Site 2 – to reflect the existing residential Hare Road properties, as illustrated within Fig 5 below.



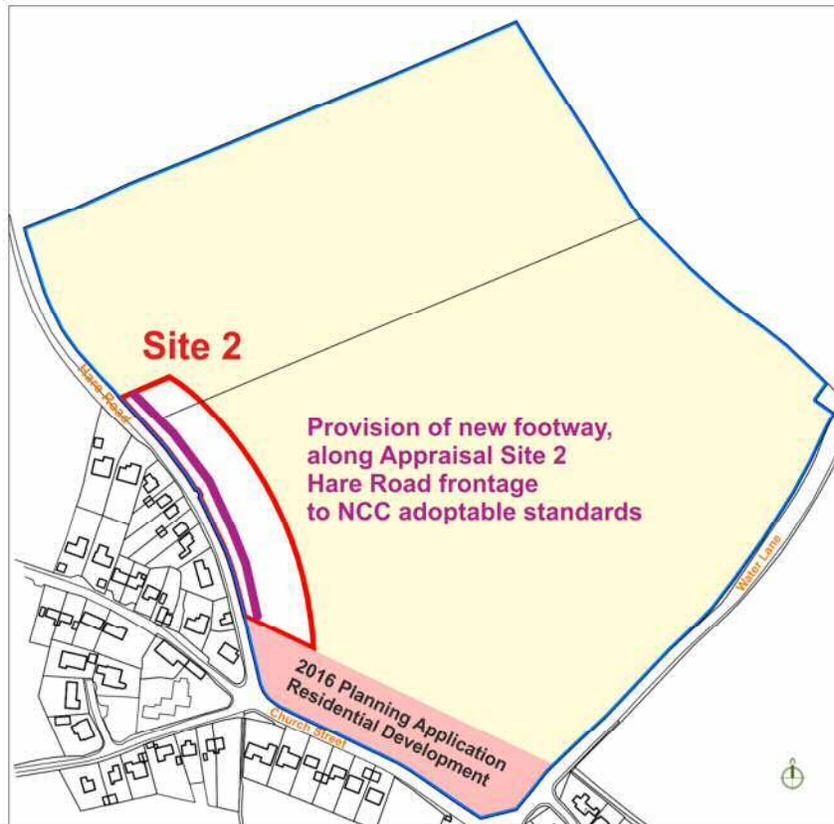
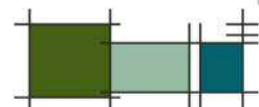


Fig 5 : Appraisal Site 2 – Proposed Vehicular Access

Vehicular Access to Appraisal Site 2

- 5.7 The design and layout of the Hare Road properties will include a 1.8m width footway (built to NCC adoptable standards) along the Appraisal Site 2 frontage, with private drives for the new dwellings.



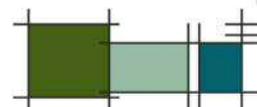
6. Summary and Conclusions

Summary

- 6.1. Orari Limited has been instructed on behalf of Mr D. Jones ('The Client') to provide a transport Access Appraisal of two sites within Great Plumstead, Norfolk.
- 6.2. The purpose of this Access Appraisal is to demonstrate whether an appropriate level of access may be provided, in principle, to each of the two Appraisal Sites to support the requirements of potential residential development within each site curtilage.
- 6.3. Both of The Client's Appraisal Sites are included within the (January - March 2018) emerging Greater Norwich Local Plan (GNLP) *Regulation 18 public consultation* documents:
 - Appraisal Site 1 occupies a greenfield site of approximately 4.2 hectares on the western edge of Great Plumstead. It is listed as site **GNLP 0441 - Land at Middle Road, Gt & Lt Plumstead** and is designated as suitable for a *"Residential development of 30 dwellings, with associated access and open space"*.
 - Appraisal Site 2 occupies a greenfield site of approximately 11 hectares on the north western edge of Great Plumstead. It is listed as site **GNLP 0420 - Land at Hare Road, Gt & Lt Plumstead** and is designated as suitable for a *"Residential development of 30 dwellings, with associated access and open space"*.
- 6.4. A qualitative highway safety assessment has been undertaken of the local Great Plumstead highway network surrounding the Appraisal Sites. It is considered that there are no significant prevailing highway safety concerns to preclude development within the two Appraisal Sites.

Appraisal Site 1

- 6.5. The review (cf para 4.1 et seq above) of the potential use of Appraisal Site 1 for a residential development of up to 30 dwellings, with vehicular access off Middle Road and Hare Road suggests that:
 - a) there are no traffic generation and highway safety issues to preclude the provision of a residential development of up to 30 dwellings within the Appraisal Site 1 curtilage;
 - b) the highway design and layout of Appraisal Site 1 would demonstrate cognisance of the reference documents listed within para 1.6 above, and accord with Manual for Streets and NCC's residential design guidance, to ensure that vehicle speeds within the Appraisal Site's curtilage do not exceed 20mph;

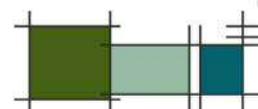


- c) the design and layout of the Middle Road properties will include a 1.8m width footway (built to NCC adoptable standards) along the Appraisal Site frontage, with private drives for the new dwellings. The design and layout of a 'Mews Court', if provided, would accord with NCC standards for a 'Mews Area' (to facilitate future NCC adoption), with a visibility splay of minimum dimensions 2.4m x 90m (in accordance with DMRB) at its junction with Middle Road.
- d) the design and layout of the Hare Road properties will include a 1.8m width footway (built to NCC adoptable standards) along the Appraisal Site frontage, with private drives for the new dwellings. The design and layout of a 'Mews Court', if provided, would accord with NCC standards for a 'Mews Area' (to facilitate future NCC adoption), with a visibility splay of minimum dimensions 2.4m x 90m (in accordance with DMRB) at its junction with Hare Road.
- e) The proposed 'Mews Court' will accord with NCC standards for a Mews Area, and have a visibility splay of minimum dimensions 2.4m x 90m (in accordance with DMRB) at its junction with Hare Road.
- f) the Appraisal Site 1 residential development layout would demonstrate good pedestrian and cyclist permeability that accords with 'Secure by Design' standards, including safe pedestrian and cycle connectivity between Middle Road and Hare Road.

Appraisal Site 2

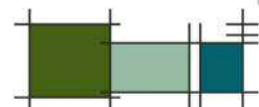
6.6 The review (cf para 5.1 et seq above) of the potential use of Appraisal Site 2 for a residential development of up to 15 dwellings with vehicular access off Hare Road, suggests that:

- a) there are no traffic generation and highway safety issues to preclude the provision of a residential development of up to 15 dwellings within the Appraisal Site 2 curtilage;
- b) the design and layout of the Hare Road properties will include a 1.8m width footway (built to NCC adoptable standards) along the Appraisal Site frontage, with private drives for the new dwellings.

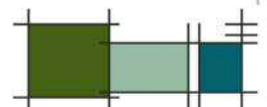


Conclusions

- 6.7 In conclusion, this Access Appraisal has demonstrated that there are no transport or highway reasons why the Client's two Appraisal Sites within Great Plumstead should not be considered suitable for promotion for development within the emerging Greater Norwich Local Plan *Regulation 18 Consultation*.
- 6.8 Moreover, there are no transport and highways reasons why the Appraisal Sites should not be allocated by Broadland District Council as follows:
- **Appraisal Site 1** (GNLP site 0441) - **Land at Middle Road, Gt & Lt Plumstead** for a residential development of up to 30 dwellings; and
 - **Appraisal Site 2** (GNLP site 0420) - **Land at Hare Road, Gt & Lt Plumstead** for a residential development of up to 15 dwellings.

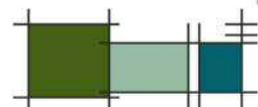


Appendices

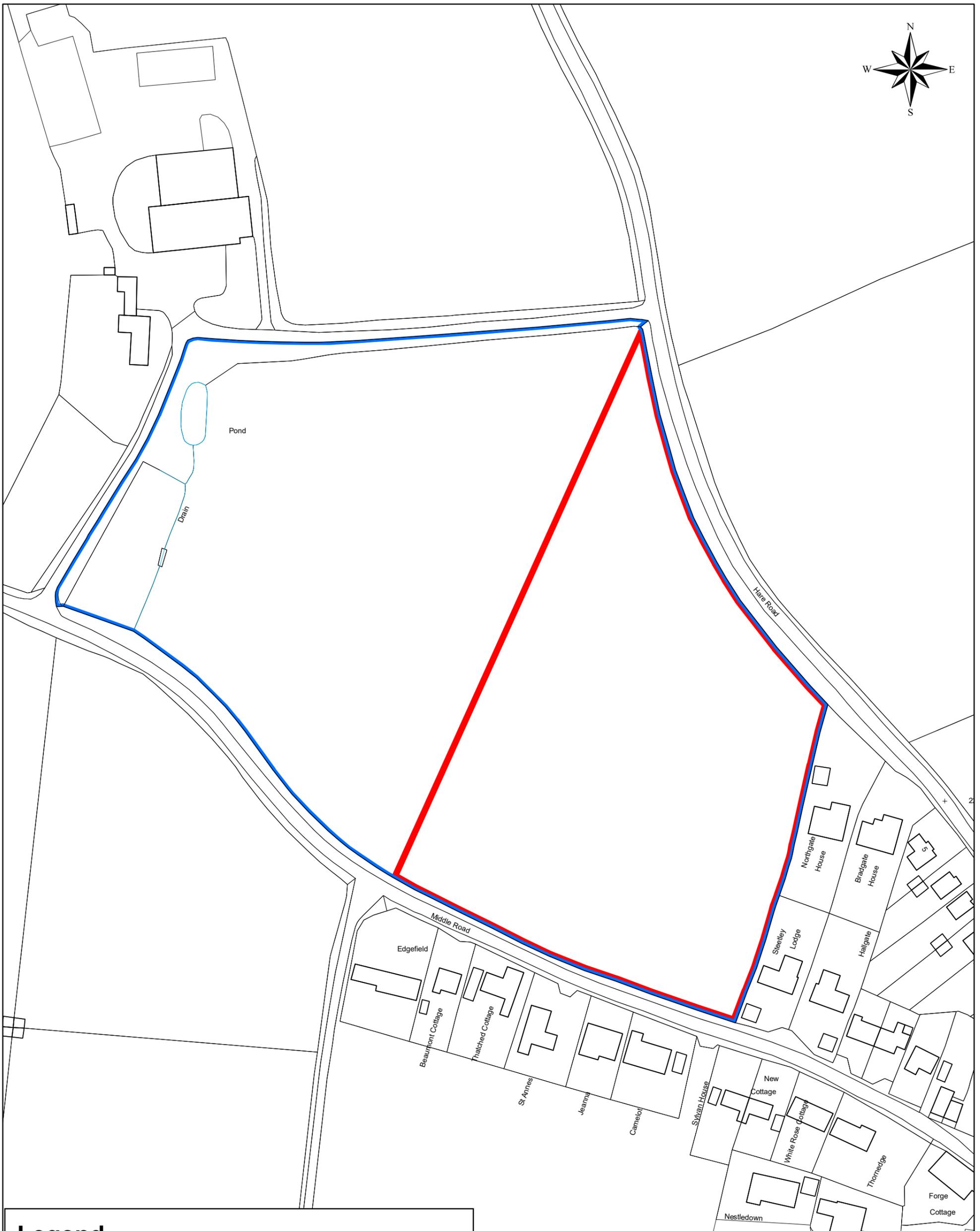


Appendix 1

Appraisal Site Location Plans



Land at Middle Road, Great Plumstead



Legend

-  Promoted Site - 1.957ha (4.835ac)
-  Land in Landowner's Control - 4.230ha (10.452ac)

O.S. Licence No: ES 100017734 This plan is based on Ordnance Survey data with sanction of the controller of HM Stationery Office. Crown Copyright Reserved.
Note: This plan is published for convenience only and although believed to be correct its accuracy is not guaranteed and it shall not be deemed to form part of the contract.

16 Upper King Street, Norwich, NR3 1HA
01603 763939 - bidwells.co.uk



BIDWELLS

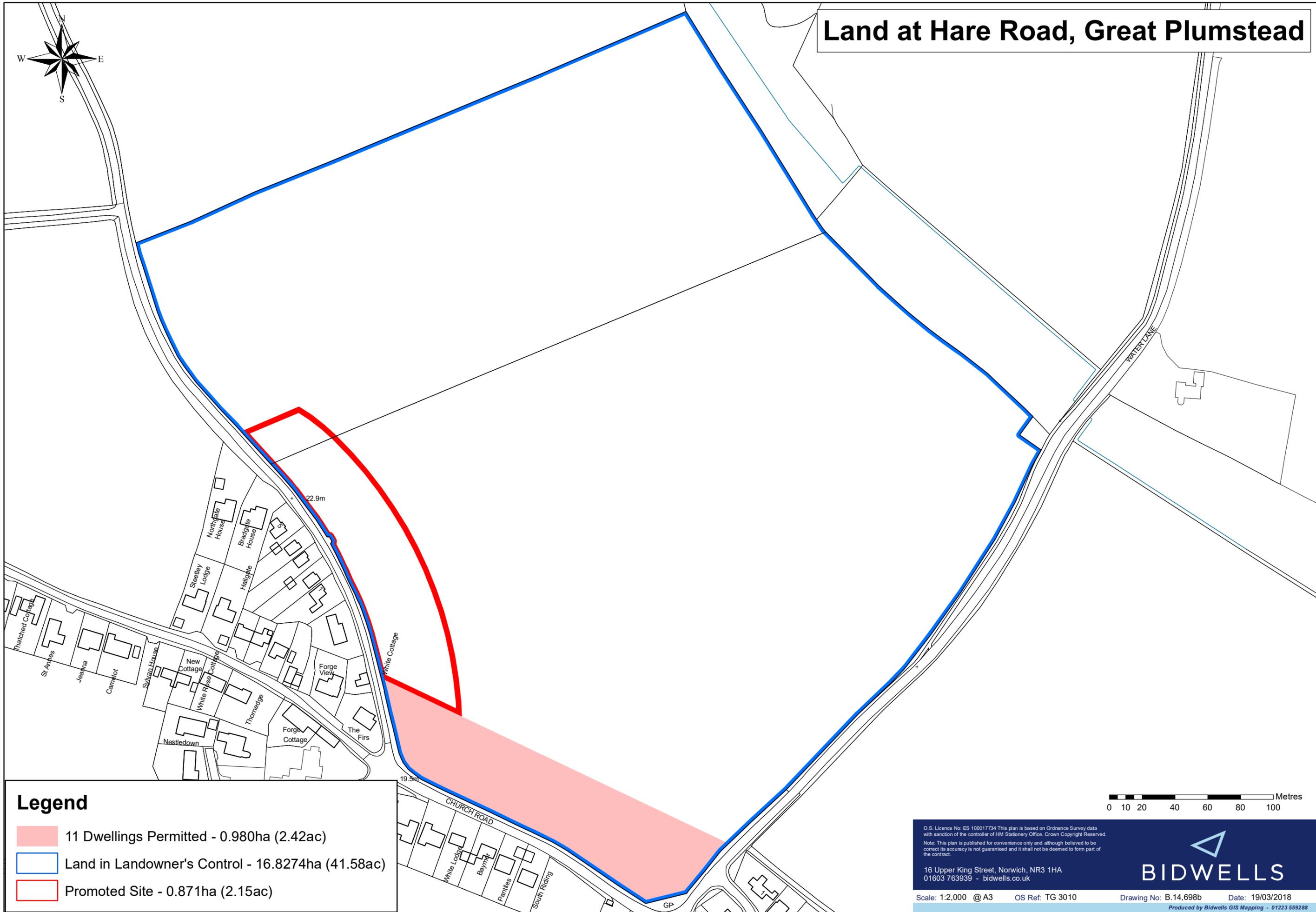
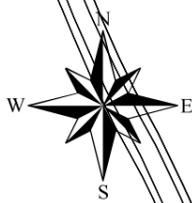
Scale: 1:1,250 @ A3 OS Ref: TG 2910

Drawing No: B.14,698a

Date: 13/03/2018

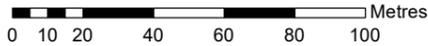
Produced by Bidwells GIS Mapping - 01223 559288

Land at Hare Road, Great Plumstead



Legend

- 11 Dwellings Permitted - 0.980ha (2.42ac)
- Land in Landowner's Control - 16.8274ha (41.58ac)
- Promoted Site - 0.871ha (2.15ac)



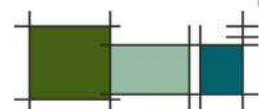
O.S. Licence No: ES 100017734 This plan is based on Ordnance Survey data with sanction of the controller of HM Stationery Office. Crown Copyright Reserved.
Note: This plan is published for convenience only and although believed to be correct its accuracy is not guaranteed and it shall not be deemed to form part of the contract.

16 Upper King Street, Norwich, NR3 1HA
01603 763939 - bidwells.co.uk

Scale: 1:2,000 @ A3 OS Ref: TG 3010 Drawing No: B.14,698b Date: 19/03/2018
Produced by Bidwells GIS Mapping - 01223 559288

Appendix 2

Extracts from GNLP HELAA



Suitability Assessment

Site reference **GNL0441**

Site Area **4.23 hectares**

LOCATION

Land at Middle Road

PROPOSED DEVELOPMENT

Residential development of approx. 30 dwellings, with associated access and open space.

District **Broadland**

CONSTRAINTS ANALYSIS

Access	Amber
Accessibility to Services	Amber
Utilities Capacity	Green
Utilities Infrastructure	Green
Contamination and Ground Stability	Green
Flood Risk	Green
Market Attractiveness	Green

IMPACTS ANALYSIS

Significant Landscapes	Amber
Townscapes	Amber
Biodiversity and Geodiversity	Green
Historic Environment	Green
Open Space and GI	Green
Transport and Roads	Amber
Compatibility with Neighbouring Uses	Green

SITE SUITABILITY CONCLUSIONS

This is a greenfield site bounded by Middle Road and Hare Road, it is adjacent to Little Plumstead, though not particularly well related to services due to lack of footpaths. Initial highway evidence has indicated that there are potential access constraints on the site, but these could be overcome through development. Also, subject to suitable footpath provision, any potential impact on the functioning of local roads could be reasonably mitigated. Other impacts include potential loss of high quality agricultural land (Grade 1), some sections within low risk of surface water flooding, landscape character and location within airport safeguarding zone. No concerns over heritage assets. There are number of constraints but as these may be possible to mitigate the site is concluded as suitable for the land availability assessment.

For the purposes of the HELAA capacity assessment this site is considered to be SUITABLE

Availability and Achievability Assessment

Availability and Achievability Conclusions

The proposer has indicated that the site is likely to be AVAILABLE in the following timescale: Immediately (timescales have not been specified by the proposer if these fields left blank)

The proposer has indicated that the site is likely to be DEVELOPABLE in the following timescale: Up to 5 years (by April 2021)

In terms of site viability, this site has been submitted by a landowner/promoter as viable for the form of development proposed and is assumed to be developable within the plan period in accordance with the timescales above (where given). Further area-wide work on viability typologies will be done as plan-making progresses and will inform decisions on viability.

Overall Conclusions for Site GNLP0441

Based on the site suitability analysis it is considered that this site is appropriate for the land availability assessment, subject to any caveats in the Suitability Conclusions.

Suitability Assessment

Site reference **GNLP0420**

Site Area **10.93 hectares**

LOCATION

Land at Hare Road

PROPOSED DEVELOPMENT

Residential development of approx. 30 dwellings, with associated access and open space.

District **Broadland**

CONSTRAINTS ANALYSIS

Access	Amber
Accessibility to Services	Amber
Utilities Capacity	Amber
Utilities Infrastructure	Green
Contamination and Ground Stability	Green
Flood Risk	Green
Market Attractiveness	Green

IMPACTS ANALYSIS

Significant Landscapes	Amber
Townscapes	Amber
Biodiversity and Geodiversity	Green
Historic Environment	Green
Open Space and GI	Green
Transport and Roads	Amber
Compatibility with Neighbouring Uses	Green

SITE SUITABILITY CONCLUSIONS

This is a greenfield site bounded by Water Lane, Church Road and Hare Road, therefore well related to services and the character of the village. Initial highway evidence has indicated that there are potential access constraints on the site, but these could be overcome through development. Also, subject to suitable footpath provision, any potential impact on the functioning of local roads could be reasonably mitigated. Other impacts include potential loss of high quality agricultural land (Grade 1), and ecology. No concerns over risk of flooding, or contamination. There are number of constraints but as these may be possible to mitigate. However, approximately 10% of the site contains permissioin 20161151 for 11 dwellings. Therefore approximately 10ha of the site is considered suitable for the land availability assessment.

For the purposes of the HELAA capacity assessment this site is considered to be **SUITABLE**

Availability and Achievability Assessment

Availability and Achievability Conclusions

The proposer has indicated that the site is likely to be AVAILABLE in the following timescale: Immediately (timescales have not been specified by the proposer if these fields left blank)

The proposer has indicated that the site is likely to be DEVELOPABLE in the following timescale: Up to 5 years (by April 2021)

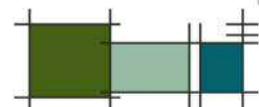
In terms of site viability, this site has been submitted by a landowner/promoter as viable for the form of development proposed and is assumed to be developable within the plan period in accordance with the timescales above (where given). Further area-wide work on viability typologies will be done as plan-making progresses and will inform decisions on viability.

Overall Conclusions for Site GNLP0420

Based on the site suitability analysis it is considered that this site is appropriate for the land availability assessment, subject to any caveats in the Suitability Conclusions.

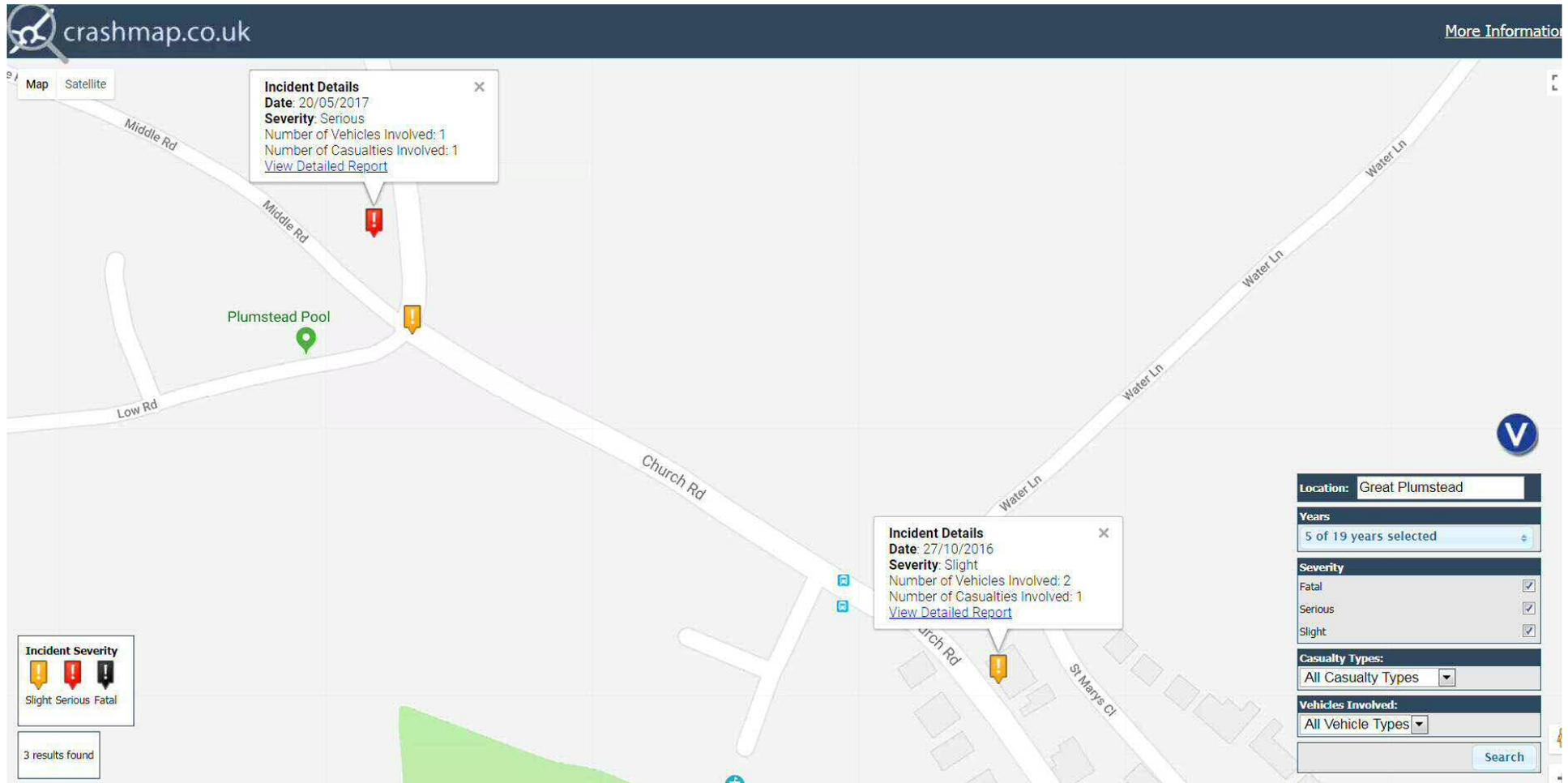
Appendix 3

Accident Data



Location of Personal Injury Accidents within Great Plumstead, Norfolk

Extract from the Crashmap website for the five years : 2013 – 2017 (inclusive)





Crash Date: Wednesday, February 04, 2015 **Time of Crash:** 9:25:00 AM **Crash Reference:** 2015360087912

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Norfolk			Number of Vehicles:	2
Local Authority:	Broadland District			OS Grid Reference:	629935 310209
Weather Description:	Other				
Road Surface Description:	Frost or Ice				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Crossroads				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)		2 Female	Unknown	Vehicle is moving off	Offside	Other	None	Other permanent object
2	Car (excluding private hire)		10 Female	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

Accident Description:

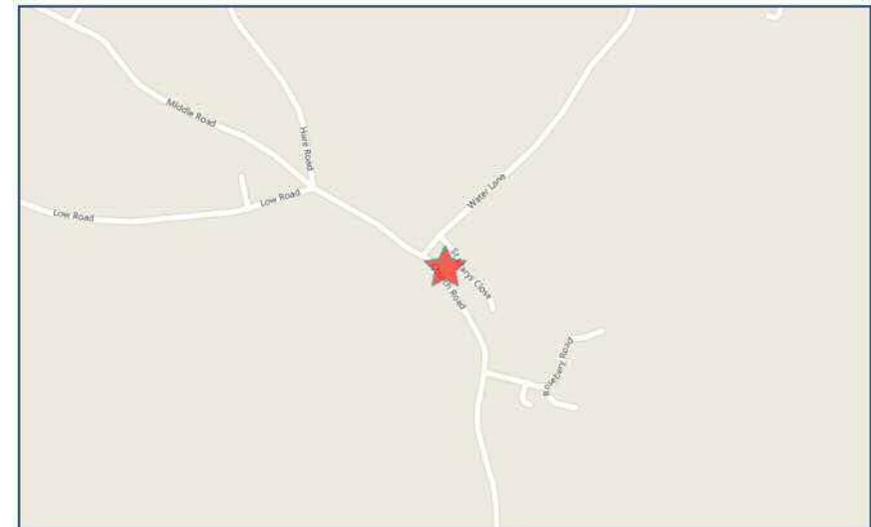
Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Crash Date: Thursday, October 27, 2016 **Time of Crash:** 2:40:00 PM **Crash Reference:** 2016360129448

Highest Injury Severity:	Slight	Road Number:	U0	Number of Casualties:	1
Highway Authority:	Norfolk			Number of Vehicles:	2
Local Authority:	Broadland District			OS Grid Reference:	630145 310097
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Good vehicles of unknown weight	-1	Unknown	Unknown	Vehicle proceeding normally along the carriageway, on a left hand bend	Did not impact	Journey as part of work	None	None
2	Bus or coach (17+ passenger seats)	7	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a right hand bend	Did not impact	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion passenger	Male	Over 75	Unknown or other	Unknown or other

Accident Description: Not Available



2017 data is provisional and is subject to change

Crash Date: Saturday, May 20, 2017

Time of Crash: 5:35:00 PM

Crash Reference: 2017360227929

Highest Injury Severity: Serious

Road Number: U0

Number of Casualties: 1

Highway Authority: Norfolk

Number of Vehicles: 1

Local Authority: Broadland District

OS Grid Reference: 629920 310242

Weather Description: Fine without high winds

Road Surface Description: Dry

Speed Limit: 30

Light Conditions: Daylight: regardless of presence of streetlights

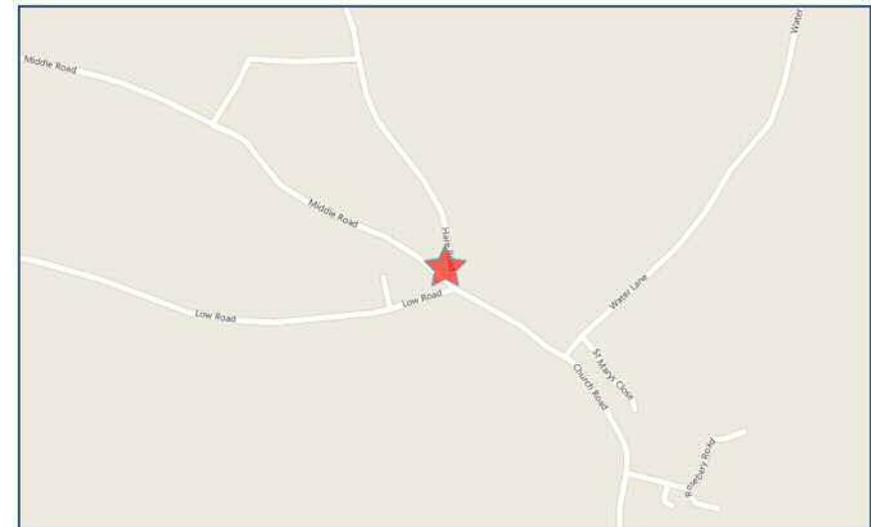
Carriageway Hazards: None

Junction Detail: Not at or within 20 metres of junction

Junction Pedestrian Crossing: No physical crossing facility within 50 metres

Road Type: Single carriageway

Junction Control: Unknown



For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions



2017 data is provisional and is subject to change

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Manoeuvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	16-24	Vehicle is reversing	Unknown	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Pedestrian	Female	45-54	Unknown or other	Unknown or other

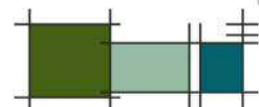
Accident Description:

Accident description text currently unavailable for this highway authority / police force

For more information about the data please visit: www.crashmap.co.uk/home/aboutthedata and www.crashmap.co.uk/home/definitions

Appendix 4

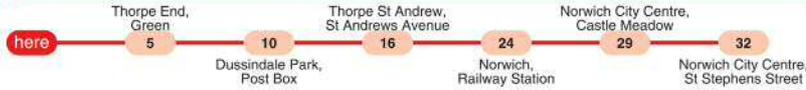
Bus Public Transport Information



Bus departures from this stop Great Plumstead adj old school

5C Little Plumstead - Norwich City Centre

Konectbus



The numbers circled indicate approximate timings in minutes from Great Plumstead, old school

Mondays to Fridays

Bus times as at 15th March 2018

Time	Service								
0721	5C	0900	5C	1100	5C	1300	5C	1500	5C
0806	5C	1000	5C	1200	5C	1400	5C	1600	5C

Saturdays

Bus times as at 17th March 2018

Time	Service														
0800	5C	0900	5C	1000	5C	1100	5C	1200	5C	1300	5C	1400	5C	1600	5C

Sundays

No Service



Next bus times on your phone

the code for this stop is **NFOGMDTW**

Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

By SMS: text the stop code to 84268. Add a space and service number for just that service.

Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).



The numbers circled indicate approximate timings in minutes from Great Plumstead, old school

Mondays to Fridays Bus times as at 15th March 2018

Time	Service	Note	Time	Service	Note
1651	5C	1	1811	5C	

Saturdays Bus times as at 17th March 2018

Time	Service	Note	Time	Service	Note	Time	Service	Note
1451	5C	2	1651	5C	1	1811	5C	

Sundays

No Service

Notes: 1 - terminates at New Rackheath, Sole & Heel 2 - terminates at Pilson Green, Broad Lane



Next bus times on your phone

the code for this stop is **NFODPAPG**

Mobile internet: Use the QR code (left) if you can, or enter the stop code at www.nextbuses.mobi

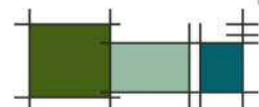
By SMS: text the stop code to 84268. Add a space and service number for just that service.

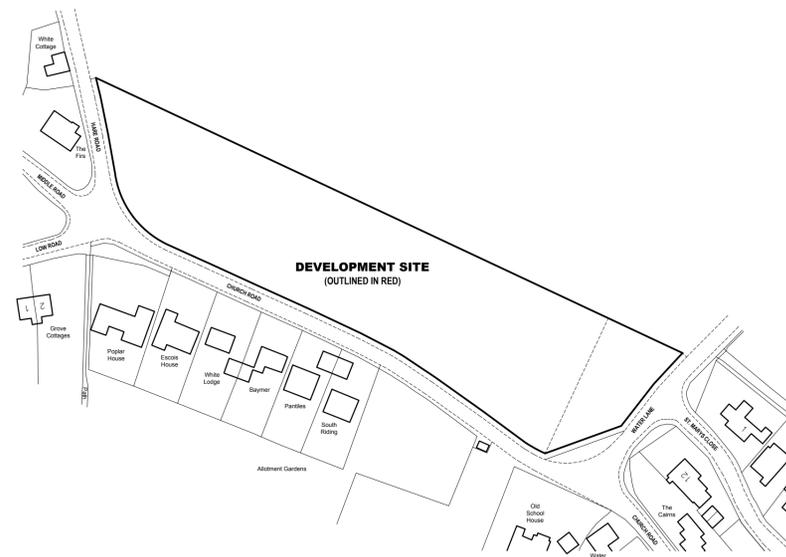
Internet enquiries incur normal mobile internet charges. SMS messages cost 25p plus your normal text message charge.

Live Departure information will be given if available (eg 3 mins) - otherwise scheduled times will be shown as clock times (eg 1007).

Appendix 5

Church Road Planning Application Site Location Plan





PLAN REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HM STATIONERY OFFICE. CROWN COPYRIGHT RESERVED. OS COPYRIGHT LICENSE No. AR 10002432

LOCATION PLAN 1: 1250



Great Plumstead



SITE PLAN 1: 500



THIS DRAWING SUPERSEDES DRAWING No: 2987.0914.B - SHEET 1 - REVISION 'A' APPROVED AT OUTLINE PLANNING STAGE UNDER BROADLAND DISTRICT COUNCIL PLANNING REFERENCE: 20151517

- General Notes:**
- This drawing must not be scaled and if in doubt ask.
 - All Contractors are to check all dimensions & levels on site prior to commencing any construction or fabrication.
 - This drawing to be checked and read in conjunction with all Engineers, Architectural, Service Engineers and any specialist drawings, together with any relevant additional Engineers specifications.
 - Where site information or adjoining building details are contrary to issued details then the Engineer is to be informed immediately.
 - No structural members are to be cut, notched, or jointed unless shown on the Engineers details. Unless otherwise noted all connections of structural members including laps & anchorages of reinforcement shall be capable of mobilising the full structural capacity of the member.
 - All bolt connections to have a minimum of 2 bolts.
 - The foundations have been designed on allowable ground pressure of 100 KN/m² & this must be confirmed on site before casting of foundations. Unless informed to the contrary in writing it has been assumed that the sub-soil is not a clay soil that has been desiccated by trees & vegetation and that there is no possibility of heave or shrinkage.
 - Under the provisions of the Party Wall etc Act 1996 if the excavations are within 3m of adjacent buildings written agreement for the works from the owner & the tenant (if applicable) of adjacent buildings must be obtained before building works commence & one month's notice must be given before building works commence. If the work applies to the party wall two months' notice must be given. Note: If foundations are deeper than normal a further notice may have to be given & agreement received. Note: If foundations, soffits, gutters, etc encroach across the boundary, a written agreement from the owner of the adjoining land / buildings must be obtained & the boundary agreed before building works commence.
 - The Construction (Design & Management) Regulations 2015. The client must make suitable arrangements for managing the project, including the allocation of sufficient time and resources.
 - The construction work can be carried out (so far as reasonably practicable) without risks to the health and safety of any person affected by the project.
 - Ensure suitable welfare facilities are provided.
 - These arrangements must be reviewed and maintained throughout the project.
 - The client must provide pre-construction information to the designer and contractor.
 - The client must ensure that a construction phase plan is in place before the construction phase starts.
 - The client must ensure that the principal designer prepares a health and safety file for the project which is suitable, regularly updated and is available for inspection.
 - The client must take reasonable steps to ensure that the principal designer and contractor complies with their duties.
 - The client must pass the health and safety file to any new owner(s)/occupier(s) and ensures that the new owner(s)/occupier(s) is aware of the nature and purpose of the file.
 - The design shown on this drawing and any associated drawing is the Copyright of Building Plans Ltd and may not be reproduced or used for any purpose whatsoever without their written consent.

DRAWING PREPARED TO SUPPORT AN 'APPROVAL OF RESERVED MATTERS PLANNING APPLICATION' TO DISCHARGE THE RELEVANT CONDITIONS APPLIED TO 'OUTLINE PLANNING PERMISSION' GRANTED UNDER BROADLAND DISTRICT COUNCIL PLANNING REFERENCE: 20151517

Revisions:

Rev:	Date:	Amendment:	Drawn:
A	25th Apr 2016	<ol style="list-style-type: none"> Rain Water Pipe (RWP) Positions to Dwellings and Bus Shelter added for Surface Water Drainage Scheme Design by Civil Engineer's Drainage Channels between Individual Drives and Parking & Turning Areas added following Norfolk County Council Highways Consultations Approximate Position of Existing Highways Surface Water Drainage Pipe To Be Replaced in Church Road added. Finished Floor Levels to GPS Datum added Anglian Water Mains Water Entry Point to Each Dwelling added 	JN

Client: **Ingram Homes**

Project: **RESIDENTIAL DEVELOPMENT**

Site Address: **LAND NORTH EAST OF: CHURCH ROAD, GREAT PLUMSTEAD, NORWICH, NORFOLK.**

Drawing Title: **SITE & LOCATION PLANS**

Scale @ A1: 1:500 + 1:1250	Date: JULY 2015
Drawn by: JN	Revision: A
Project No: 2987.0914.B	Sheet No: ARM 01

KEY:

PLOT / DWELLING TYPE / DRAWING SHEET No. KEY:

PLOT.1	3 BED DETACHED CHALET BUNGALOW TYPE: GPDCB1	DRAWING SHEET No: ARM 03
PLOT.2	3 BED DETACHED BUNGALOW TYPE: GPDB1	DRAWING SHEET No: ARM 04
PLOT.3	3 BED DETACHED BUNGALOW TYPE: GPDB2	DRAWING SHEET No: ARM 05
PLOT.4	2 BED DETACHED BUNGALOW TYPE: GPDB3	DRAWING SHEET No: ARM 06
PLOT.5	1 BED SEMI-DETACHED BUNGALOW TYPE: GPDB4A (AFFORDABLE HOUSING)	DRAWING SHEET No: ARM 07
PLOT.6	1 BED SEMI-DETACHED BUNGALOW TYPE: GPDB4B (AFFORDABLE HOUSING)	DRAWING SHEET No: ARM 07
PLOT.7	1 BED DETACHED BUNGALOW TYPE: GPDB5 (AFFORDABLE HOUSING)	DRAWING SHEET No: ARM 08
PLOT.8	3 BED DETACHED BUNGALOW TYPE: GPDB6	DRAWING SHEET No: ARM 09
PLOT.9	3 BED DETACHED BUNGALOW TYPE: GPDB2 (HANDED)	DRAWING SHEET No: ARM 10
PLOT.10	3 BED DETACHED BUNGALOW TYPE: GPDB1 (HANDED)	DRAWING SHEET No: ARM 11
PLOT.11	3 BED DETACHED CHALET BUNGALOW TYPE: GPDCB2	DRAWING SHEET No: ARM 12
	BUS SHELTER	DRAWING SHEET No: ARM 13

- REFUSE BIN STORAGE AREAS & COLLECTION POINTS KEY:**
- * BIN STORAGE AREAS FOR EACH DWELLING - SEE INDIVIDUAL DWELLING DRAWING SHEETS
 - ** BIN COLLECTION POINT FOR EACH DWELLING (COLLECTION ON BDC SCHEDULED DAY)
 - DENOTES AW MAINS WATER ENTRY POINT TO EACH DWELLING



Orari Limited

Rouen House, Rouen Road, Norwich, Norfolk NR1 1RB

tel : 077 99 637 839 | info@orari.co.uk | www.orari.co.uk

Development Transport Planning

Registered in England and Wales. Company Number : 09788669