



GHBullard & Associates LLP
Civil and Traffic Engineering Consultants

**Proposed Residential Development
Site Allocations GNLP 0298 and GNLP 0335
at Watton Road, Hingham**

Highways Statement

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P1

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-

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1. INTRODUCTION

- 1.1. This Highways Statement has been prepared by Carol Grimsey who is a Chartered Engineer and Member of the Chartered Institution of Highways and Transport, working for the Practice of G.H. Bullard and Associates, founded in 1987 and specialising in the fields of Civil, Highway and Drainage Engineering. The Practice has advised and represented Local Authorities, Private Companies and Individuals on numerous Planning and Civil Engineering matters.

2. PROPOSED DEVELOPMENT

- 2.1. This Highway Statement has been prepared to support the Local Plan sites GNLP0298 and GNLP0335 allocation submission for Stage C and Regulation 18 of the Draft Plan Consultation process.
- 2.2. The proposal is for up to 150 residential units, delivered in two phases, on approximately 6.3ha of previously agricultural land, off Watton Road, Hingham. Phase 1 GNLP 0298 and Phase 2 GNLP 0335. Refer to indicative site layout plan in **Appendix A**.
- 2.3. The highway authority in considering a future planning application for residential use, will aim to assess the development against National Planning Policy Framework (NPPF) paragraph 108 to 110, including these specific objectives:
 - *Road Safety* – That it is safe for all users
 - *Sustainability and Accessibility* – That it promotes sustainable, high-quality alternatives to the private car and to achieve developments accessible to all vehicles and people.
 - *The Impact on Highways and Transportation Infrastructure* – With the main considerations being safety and congestion.
 - *Design Quality* – That it encourages road adoption and efficient future maintenance.

3. SITE ALLOCATION

- 3.1. The following extracts are taken from 'Hingham Assessment':

Hingham is identified as a Key Service Centre in the Greater Norwich Local Plan. Local services within Hingham include a primary school, GP practice, community buildings, employment opportunities and a food shop. Hingham is well served by public transport, connecting to Wymondham and Norwich.

At the base date of the plan there are no carried forward residential allocations in Hingham and 16 dwellings with planning permission on smaller sites.

The 'Towards a Strategy' document identifies that 400-600 dwellings in total should be provided between all the Key Service Centres over the lifetime of the plan. This site assessment booklet looks in detail at the sites promoted in Hingham to determine which are the most suitable to contribute towards the overall allocation figure for the Key Service Centres

- 3.2. Stage 1 included Site reference GNLP0298, Land opposite Hingham Sports Centre, Watton Road, Hingham for residential development approx. 50-100 dwellings; and GNLP0335 for residential development approx. 100-200 dwellings.

- 3.3. At Stage 2, constraints identified in the Housing and Economic Land Availability Assessment (HELAA) sites comparison table, the site GNLP0298 was assessed as 'amber' in five out of fourteen categories, including 'access' and 'transport and roads'. No categories were assessed as 'red'. Site GNLP0335 was assessed as 'amber' in six out of fourteen categories, including 'access' and 'transport and roads'. No categories were assessed as 'red'. Refer to later Stage 6 for details.

- 3.4. Stage 3 raised the following comments:

Site GNLP0298

General comments

One objection raised concerns regarding traffic congestion, access and the impacts on the wildlife and the environment. Services are already overstretched while drainage remains a problem.

Hingham Town Council comments

There would be considerable issues regarding safe walking routes including controlled crossings along the B1108. These safety issues would also arise if housing were to be built on sites GNLP0298 and GNLP0335. There are already concerns being raised by residents living in Rectory Gardens about the lack of safe walking and crossing of the B1108 and more houses would magnify these concerns.

Site GNLP0335

General comments

Objections raised concerns regarding loss of agricultural land, expansion of town and impacts on wildlife, rural character and the environment.

Hingham Town Council comments

There would be considerable issues regarding safe walking routes including controlled crossings along the B1108. These safety issues would also arise if housing were to be built on sites GNLP0298 and GNLP0335. There are already concerns being raised by residents living in Rectory Gardens about the lack of safe walking and crossing of the B1108 and more houses would magnify these concerns.

- 3.5. Stage 4 sites discussion:

Site GNLP0298

This site is located to the west of the settlement adjacent to the current settlement boundary and opposite the sports hall. Development here would extend the settlement further west along the B1108 and access would need to be taken on to this road. A very small part of the south west corner is covered by surface water flood risk but this is unlikely to affect the developable area. The site is considered to be a reasonable alternative as there is a pedestrian route to Hingham Primary School although this would require crossing the B1108 to get to the existing footway and some maintenance may be needed.

Site GNLP0335

This site is located to the west of the settlement behind site GNLP0298, adjacent to the current settlement boundary at its eastern edge. A very small part of the site to the west is subject to surface water flood risk but this is unlikely to affect the developable area. A pedestrian route to Hingham Primary School could be provided (potentially through Rectory Gardens) but children would have to cross the B1108 to access the existing footway. Access is shown from the Watton Road but it may be that the site would rely on

vehicular access through either 0298 or 0395 to be an acceptable form of development. The site is considered to be a reasonable alternative but would make an odd, backland form of development without the allocation of site GNLP0298.

3.6. The sites were included in the shortlisted sites in Stage 5, for further assessment.

3.7. Stage 6 detailed assessment:

Site GNLP0298

HELAA Conclusion:

This site has good accessibility to services but development here would extend the settlement further into the countryside. Initial highway evidence has indicated that the local road network is unsuitable in terms of either road capacity or lack of footpath provision and there may be potential access constraints, however it may be possible to mitigate these issues. The site is at low risk of flooding but enhancement to the Water Recycling Centre and sewerage infrastructure upgrades may be required. The site is within 3,000m buffer zone to SSSI so any potential impact would need to be mitigated. There are a number of constraints but the site is considered suitable for the land availability assessment

Highways

No. Footway link from site to Hingham centre not achievable.

Development Management

This site is not suitable considered suitable for allocation of the scale of the scale proposed. Even limited frontage development constrained by issues of access and safe crossing and landscape impact.

Site GNLP0335

HELAA Conclusion:

The site appears to be landlocked behind existing properties, although access could potentially be achieved through neighbouring sites 0298 or 0395. Initial highway evidence has indicated that the local road network is unsuitable in terms of road capacity or lack of footpath provision. The site is at low risk of flooding but enhancement to the Water Recycling Centre and sewerage infrastructure upgrades may be required. The site is within 3,000m buffer zone to SSSI, within 400m of listed buildings and adjacent to the Conservation Area so any potential impact would need to be mitigated. There are a number of constraints but subject to the site coming forward with neighbouring sites it is considered suitable for the land availability assessment.

Highways

No. No feasible access to highway.

Development Management

Not considered suitable due to impacts on form and character, landscape and ability to provide satisfactory access and safe crossing.

3.8. Stage 7 went on to categorise both sites as unreasonable for the following stated reasons:

Site GNLP0298

This site is not considered to be suitable for allocation as development here would extend the settlement further west along the B1108. It is not possible to get an adequate footway link from the site into Hingham Town centre.

Site GNLP0335

This site is not considered to be suitable for allocation as it would make an odd, backland form of development without the allocation of site GNLP0298, which is also considered to be unreasonable on highway grounds.

- 3.9. Highways related issues raised to be considered further in this report are summarised:
- i. Safe access constraints;
 - ii. Safety of pedestrian crossing (including existing Rectory Gardens);
 - iii. Safe footway link (including existing Rectory Gardens); and
 - iv. Capacity/ congestion
- 3.10. This report considers the highways related issues regarding submission and allocation of sites GNLP 0298 (Phase 1) and GNLP 0335 (Phase 2) for Stage C and Regulation 18, of the Draft Plan Consultation process.

4. PLANNING HISTORY

4.1. Planning history relating to Site GNLP0298:

2018/2530 Residential development of up to 10 dwellings, reusing existing field access Highways had no objections but the planning authority was unsupportive due to housing supply, so application was withdrawn.

The Highway Authority (15 January 2019) updated consultation response observed that *'the existing field entrance access arrangement is considered as the only satisfactory means to serve the site with the current highway situation. The majority of the site is located outside of the 30 mph speed limit and there is no existing footway on this side of Watton Road. The application is for up to 10 dwellings. Whilst we are happy to accept 9 dwellings to be served from a single private drive. Should the development be 10 dwellings then an estate road constructed to adoptable standard will be required. I note that the current indicative plan shows 8 dwellings.'*

Suggested standard highway conditions included:

- the vehicular access/crossing over the verge shall be constructed in accordance with the highways specification (TRAD 4) and thereafter retained at the position shown on the approved plan;
- Surface water drainage;
- visibility splays measuring 2.4m x 120 metres westbound and 2.4m x 59m eastbound shall be provided to the access where it meets the highway; and
- on-site car parking and turning area.

2019/0827 for 5 bungalows. This proposed using the existing farm access. Highways had no objections, but planners opposed it.

The Highway Authority (26 April 2019) response observed that *'the existing field entrance access arrangement is considered as the only satisfactory means to serve the site with the current highway situation. The majority of the site is located outside of the 30 mph speed limit and there is no existing footway on this side of Watton Road'*.

Suggested standard highway conditions included:

- the vehicular access/crossing over the verge shall be constructed in accordance with the highways specification (TRAD 4) and thereafter retained at the position shown on the approved plan;
- Surface water drainage;
- visibility splays measuring 2.4m x 120 metres westbound and 2.4m x 59m eastbound shall be provided to the access where it meets the highway; and
- on-site car parking and turning area.

The Highway Authority (17 September 2019) updated consultation response noted the revised layout included providing a section of new footway on the south side of Watton Road, which it stated would be of benefit.

Suggested Conditions included submitted detailed drawings for the off-site highway improvement works and that they shall be completed to the satisfaction of LPA.

5. ROAD SAFETY

- 5.1. The development proposal is for site allocation for up to 150 residential units, across both sites on previously agricultural land, off Watton Road, Hingham. Refer Photographs 1 and 2 for roadside site frontage.



Photograph 1: Site frontage, left



Photograph 2: Site frontage, right



Photograph 3: East bound approach to village

- 5.2. The transition from 40 mph to 30 mph speed limit applies on the eastern boundary of the application site frontage, on Watton Road. As the proposed access to the development is located close to the 40 mph speed limit, access visibility splays of **2.4 m x 120 m**, in accordance with Design Manual for Roads and Bridges (DMRB) are normally

appropriate. Referring to planning history, NCC has previously suggested visibility splays measuring 2.4 m x 120 m westbound and 2.4 m x 59 m eastbound are acceptable where the proposed access meets the highway.

- 5.3. A 7-day Automated Traffic Count (ATC) has been undertaken at the site frontage. During the period 09/02/2020 and 15/02/2020 the current hourly 85th Percentile speed was found to be **39.4 mph** west bound and **38.4 mph** east bound. Refer to **Appendix B** for a summary of the ATC results for this period.
- 5.4. In accordance with the basic formula for calculating the stopping sight distance, as detailed in Design Manual for Roads and Bridges (DMRB), for an 85th Percentile speeds of 39.4 mph and 38.4 mph, visibility splays of **2.4 m x 96 m** are required towards the west and visibility splays of **2.4 m x 100 m** are required towards the east, in accordance with DMRB standards.
- 5.5. The achievable visibility in excess of this as can be seen in Photographs 4 and 5 below:



Photograph 4: Visibility West



Photograph 5: Visibility East

- 5.6. The standard 40 mph speed limit splay measurements of 2.4 m x 120 m are achievable and shown on the Access and Roads layout plan, **Appendix C**. These are in excess of those required based on measured speeds, as such the access is considered will be safe.
- 5.7. Watton Road is 6.0 m wide, which is the County standard and as such is suitable for accommodating the new access without need for road widening.
- 5.8. The proposed access will take the form of an estate minor access road. The internal site layout will propose footways to both sides of the minor access road and also provide for internal walk route towards the west, behind (and retaining) the existing hedgerow frontage.
- 5.9. There are street lit footways on the north side of Watton Road, into the village centre, with tactile pavements at side roads. There is a limited footway along the south side. There is a short section to the east of the proposed access on the south side where only a grass verge is currently provided.
- 5.10. The indicative road layout includes the provision of a section of new footway on the south side of Watton Road, which NCC has previously stated would be of benefit, refer Planning History. This would further provide for improvements to the wider existing Rectory Gardens pedestrian linkage shortfall.
- 5.11. To provide safely for pedestrians crossing to the continuous footway route on the north side, there is a proposed central reservation and dropped kerbs, for formalised pedestrian crossing facility, exact location to be agreed at application stage.

- 5.12. The proposed offsite highway mitigation works will be discussed further in the **Mitigation Section 8**.
- 5.13. The most recent five year accident record of the road network in this area is shown in **Figure 1**. This shows the locations of all RTAs in the vicinity that have been recorded in the national STATS19 database.
- 5.14. Three slight injury accidents occurred in 2014, 2015 and most recently in March 2018.

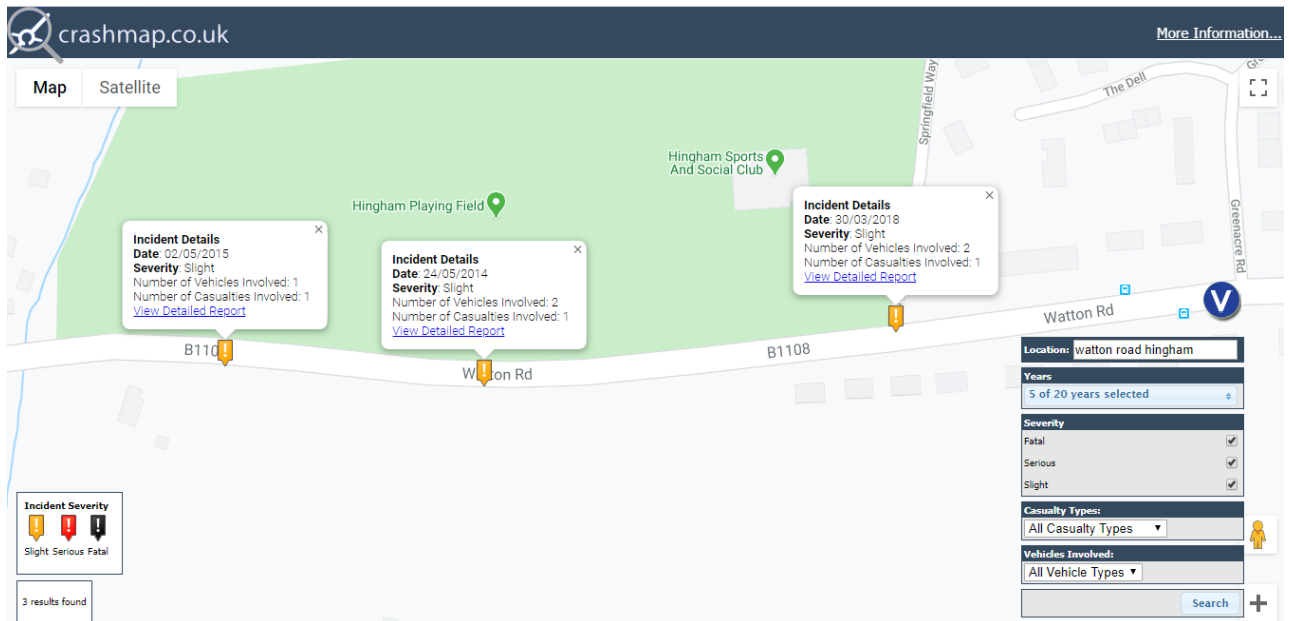


Figure 1 –Study Area and RTA Locations (Source: Crash map)

- 5.15. The random nature of the accidents does not suggest that there is an underlying particular problem that needs to be addressed within the area.

Summary and Conclusion on Road Safety

- 5.16. The standard 40 mph speed limit splay measurements of 2.4 m x 120 m are achievable and shown on the Access and Roads layout plan, **Appendix C**, as such the access is considered will be safe.
- 5.17. There is a low incidence of road injury accidents locally.
- 5.18. Vehicular and pedestrian site access is proposed with:
- 40mph standard access visibility splays;
 - Estate road minor access road, with footways to both sides; and
 - Internal pedestrian route towards the west, retaining existing hedgerow frontage.
- 5.19. Proposed offsite highways mitigation includes (refer later **Mitigation Section 8**):
- Pedestrian refuse with dropped kerb crossing Watton Road; and
 - Provision of a section of new footway on the south side of Watton Road, providing for improvements to the wider existing Rectory Gardens pedestrian linkage shortfall.
- 5.20. It is therefore concluded there are no highway safety concerns in relation to the potential provision of a sustainable residential development on the proposed site allocation.
- 5.21. Therefore, in terms of NPPF Paragraph 109, the development will not result in unacceptable impact on highway safety.

6. SUSTAINABILITY AND ACCESSIBILITY

Pedestrians

- 6.1. The site can be accessed by pedestrians using the existing footways adjacent to north side of Watton Road to the village centre.
- 6.2. Pedestrian mitigation is proposed, refer **Mitigation Section 8**.
- 6.3. The 750 m walking route to the primary school is set out in the following photographs, refer Photographs 6 – 9 for the extent within 30 mph speed limit and Photographs 10-17, within 20 mph speed limit.
- 6.4. There has previously also been reference made to the potential for an alternative walk route to the school provided via Rectory Gardens.



Photographs 6-9: Walk route towards village and school, within 30 mph speed limit.





Photographs 10- 17: Walk route towards village and school, within 20 mph speed limit.

- 6.5. There is an offsite highway works mitigation to provide footway links to connect to the existing Watton Road southern footway route. The verge is 1.8 m wide such that there is highway room available. This will be discussed further in the **Mitigation Section 8**.
- 6.6. There is also an opportunity for possible future wider pedestrian connection through the sites and new Community Woodland, to Attleborough Road (subject to additional land), refer to indicative Master plan **Appendix D**.

Bus services

- 6.7. The scheduled bus services through Hingham are, refer to Bus Timetables at **Appendix E**:

3 - Norwich - N&NU Hospital - Hingham - Watton (- Shipdham - Toftwood)	Konectbus
6 - Norwich - Wymondham - Watton (- Toftwood / Ashill / Thetford)	Konectbus
13 - Easton College - Wymondham - Watton – Shipdham	Konectbus
17 - Bradenham - Yaxham – Dereham	West Norfolk Community Transport

- 6.8. The nearest bus stops are located at Greenacre Road, 140 m to the east, refer Photographs 18 and 19.



Photographs 18 and 19: Bus stops at Greenacre Road

- 6.9. The nearest train station is located at Kimberley Park, approximately 7 km to the east. Wymondham and can be reached by bus Service 6. The railway service allows easy access to Norwich, Ipswich and London on the east coast main line.
- 6.10. Occupiers will not be dependent upon use of a private car. The site is therefore considered sustainable in transport terms.

Summary and Conclusion on Site Sustainability

- 6.11. The bus stops with regular services are within walking distance (140 m) to catch public transport, thus future occupiers will not be dependent upon use of a private car.
- 6.12. Through the proposed site layout, incorporating internal pedestrian links, proposed section of frontage footway east and central pedestrian refuse for crossing to the northern footway as proposed off site pedestrian mitigation, it is considered that this site allocation can adequately prioritised pedestrian, cyclists and access to public transport, in terms of NPPF paragraph 110.

7. THE IMPACT ON HIGHWAYS AND TRANSPORTATION INFRASTRUCTURE

- 7.1. The proposal is for up to 150 residential units.
- 7.2. A 150-dwelling development will generate approximately the following trips on opening:

	Arrivals	Departures	Two-way
AM Peak Hour	24	67	91
PM Peak Hour	74	30	104
Daily Total	543	491	1034

- 7.3. TA46/97 provides guidance on the assessment of rural roads based on physical characteristics. It is desirable that rural roads should maintain a 25% residual capacity (TA23/81).
- 7.4. A 6.0 m wide carriageway, such as Watton Road, has actual capacity for 876 vehicles per hour per direction in accordance with TA 46/97 (for assessment of Rural roads), 657 vehicles per direction is the desirable capacity. Referring to **Appendix B**, the busiest

peak hour traffic flow measured by the 7-day ATC on Watton Road was eastbound AM (07:00-08:00), where 380 vehicles were recorded (single direction flow). This represents only 57.8% of the desirable capacity. Adding proposed development trip generation of 74 vehicles per hour (single direction flow) equates to approximately 69.1% of the desirable capacity, which demonstrates there is ample reserve capacity.

- 7.5. There is also an opportunity for possible future wider vehicular (and pedestrian) connection through the sites to Attleborough Road (subject to additional land), thus avoiding the junction in the centre of Hingham which cannot be improved realistically because of listings and conservations issues, refer to indicative Master plan **Appendix D**.
- 7.6. Therefore, in terms of NPPF Paragraph 109, the development will not result in *residual cumulative impacts on the road network that would be severe*.

8. MITIGATION

- 8.1. As discussed in **Section 3 Site Allocation**, the *highways* related issues raised can be summarised as follows:
 - i. Safe access constraints- *Considered and acceptable, refer Section 5 Road Safety*
 - ii. Safety of pedestrian crossing- *refer below mitigation*
 - iii. Safe footway link (including Rectory Gardens) - *refer below mitigation*
 - iv. Capacity/ congestion- *Considered and acceptable, refer Section 7 Impacts*
- 8.2. Vehicular and pedestrian site access is proposed with:
 - i. 40 mph standard access visibility splays;
 - ii. Estate road minor access road, with footways to both sides; and
 - iii. Internal pedestrian route towards the west, retaining hedgerow frontage.
- 8.3. Proposed offsite highways mitigation includes:
 - i. Provision of a section of new footway on the south side of Watton Road, providing for improvements to the wider existing Rectory Gardens pedestrian linkage shortfall, refer Photograph 20 and Images 1 and 2 for graphical impressions of the proposed footway link, accommodated within the existing verge; and
 - ii. Pedestrian refuse with dropped kerb crossing Watton Road, refer example in Photograph 21.



Photograph 20: South side roadside footway link in front of Rectory Gardens



Images 1 and 2: Graphical Impressions of the proposed footway link



Photograph 21: Example of pedestrian refuse crossing

8.4. There is also an opportunity for possible future wider vehicular and pedestrian connections through the sites and new Community Woodland, to Attleborough Road (subject to additional land), thus avoiding the junction in the centre of Hingham which cannot be improved realistically because of listings and conservations issues, refer to indicative Master plan **Appendix D**.

9. SUMMARY

- 9.1. Mitigation has been proposed to improve safety and pedestrian use for future occupiers and also achieve wider benefits to existing residents.
- 9.2. Vehicular and pedestrian site access is proposed with:
 - i. 40 mph standard access visibility splays for safe access;
 - ii. Estate road minor access road, with footways to both sides; and
 - iii. Internal pedestrian route towards the west, retaining hedgerow frontage.
- 9.3. Proposed offsite highways mitigation includes:
 - i. Pedestrian refuse with dropped kerb crossing Watton Road; and
 - ii. Provision of a section of new footway on the south side of Watton Road, providing for improvements to the wider existing Rectory Gardens pedestrian linkage shortfall.
 - iii. There is also an opportunity for possible future wider vehicular and pedestrian connections through the sites and new Community Woodland, to Attleborough Road (subject to additional land).
- 9.4. In terms of road capacity and possibility of congestion, whilst the proposed allocations would increase the amount of traffic on the surrounding roads, there remains significant reserve capacity.

- 9.5. The proposed estate road access, with visibility splays based on 40 mph speeds together with the proposed pedestrian mitigation, including safe pedestrian refuse crossing, internal link towards the west and section of linking frontage footway east (providing wider benefits to existing residents), it is considered that the proposed development allocation will meet the Highway Authority objectives and appropriately responds to the HELAA issues previously raised. As such, there are no technical concerns in relation to highway safety, sustainability or impacts regarding these sites for allocation.
- 9.6. It follows that the proposed site allocation would comply with Paragraph 108 of the Framework in that opportunities to promote sustainable transport modes can be taken up and safe and suitable access to the sites can be achieved for all users.
- 9.7. In terms of NPPF Paragraph 109, the development allocation will not result in 'unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe'.
- 9.8. The inclusion of sites GNLPO298 and GNLPO335 should thus be considered suitable in *highways* terms for allocation in Stage C and Regulation 18 of the Draft Plan Consultation process.

Appendix A: Indicative Site Layout plan

Appendix B: ATC data summary Watton Road

Appendix C: Access and Roads layout plan

Appendix D: Indicative Master plan

Appendix E: Bus Timetable

Appendix A: Indicative Site Layout plan



Appendix B: ATC data summary – Watton Road

Summary 1 of 3

Site Name	1455
Description	B1108 Watton Rd, Hingham, TP approx 65m W Springfield Way [40MPH]
Filter Start	2020-02-09T00:00:00
Filter End	2020-02-16T00:00:00

Weekday Traffic

Capital Traffic Westbound + Average

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Mean
0000	8	0	0	4	4	1	0	0	0	0	0	0	43.1
0100	4	0	0	3	3	1	0	0	0	0	0	0	40.8
0200	4	0	0	3	3	1	0	0	0	0	1	0	41.0
0300	7	0	0	3	4	0	0	0	0	0	0	0	42.9
0400	12	0	0	7	5	0	0	0	0	0	0	0	42.1
0500	44	0	1	22	20	1	0	0	0	0	0	1	41.6
0600	72	0	0	40	28	3	1	0	1	0	1	0	37.8
0700	185	2	1	115	59	8	2	1	2	0	1	0	35.2
0800	185	0	1	111	61	8	0	0	3	0	1	0	34.9
0900	161	0	0	88	55	14	1	1	3	0	2	1	34.1
1000	162	1	1	94	53	11	1	1	3	0	2	1	33.6
1100	166	1	1	97	56	9	1	1	2	0	0	2	33.8
1200	171	1	1	107	51	9	1	0	2	0	1	1	34.6
1300	179	0	1	112	52	11	1	2	2	0	1	0	33.5
1400	200	1	3	131	55	10	1	1	2	0	1	1	34.8
1500	258	1	2	170	74	11	1	1	3	0	1	1	34.5
1600	300	0	3	204	86	7	0	0	3	0	2	1	34.3
1700	328	0	2	235	83	7	0	2	1	0	0	1	34.9
1800	206	1	1	148	52	5	0	0	1	0	1	1	35.4
1900	104	0	1	71	28	3	0	0	1	0	0	1	35.8
2000	75	0	1	49	21	3	0	0	0	0	1	0	36.3
2100	62	0	0	43	18	1	0	0	0	0	0	0	36.3
2200	40	0	1	29	10	3	0	0	1	0	0	0	36.5
2300	20	0	0	15	5	0	0	0	0	0	0	0	37.1
07-19	2501	8	17	1612	737	109	9	10	25	0	12.42	9.5	34.5
06-22	2813	8	19	1815	833	119	10	10	27	0	14.62	10.5	35.0
06-00	2873	8	20	1858	848	122	10	10	28	0	14.62	10.5	35.2
00-00	2952	8	21	1900	886	126	10	10	28	0	15.62	11.5	36.9

[illegible]

Summary 2 of 3

Site Name	1455
Description	B1108 Watton Rd, Hingham, TP approx 65m W Springfield Way [40MPH]
Filter Start	2020-02-09T00:00:00
Filter End	2020-02-16T00:00:00

Weekday Traffic

Capital Traffic Eastbound + Average

Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Mean
0000	4	0	0	2	2	1	0	0	0	0	0	0	37.6
0100	3	0	0	2	2	2	0	0	0	0	0	0	39.6
0200	3	0	0	2	2	1	0	0	0	0	0	0	41.3
0300	7	0	0	2	5	0	0	0	1	0	1	0	39.9
0400	12	0	0	4	7	1	0	0	0	0	0	0	42.2
0500	53	0	0	24	25	4	1	0	1	0	1	0	39.6
0600	146	1	2	66	65	11	0	0	0	0	2	2	34.0
0700	380	0	2	183	174	14	1	1	3	0	1	2	32.8
0800	329	0	1	156	157	11	1	0	2	0	1	1	32.6
0900	218	0	1	88	116	11	0	0	3	0	2	1	33.1
1000	169	0	1	72	85	8	2	1	2	0	1	1	33.0
1100	179	1	2	72	89	10	2	1	2	1	2	2	32.6
1200	183	1	2	73	94	10	2	0	3	0	2	2	32.8
1300	181	1	1	71	91	12	2	1	2	0	1	1	32.4
1400	210	1	0	87	107	12	1	1	2	0	1	1	31.8
1500	205	1	1	74	114	12	1	0	2	0	2	1	33.3
1600	217	1	1	92	112	11	1	0	1	0	1	1	33.0
1700	212	2	1	95	109	5	0	0	3	0	1	1	32.9
1800	124	0	1	55	66	2	0	1	2	0	0	0	33.6
1900	74	0	0	35	38	2	0	0	0	0	1	0	35.2
2000	46	0	1	23	22	1	0	0	1	0	0	0	35.9
2100	31	1	0	15	15	1	0	0	0	0	0	0	35.7
2200	21	0	0	9	12	0	0	0	0	0	0	0	36.7
2300	7	0	0	3	5	1	0	0	0	0	0	0	38.3
07-19	2607	8	14	1119	1313	120	12	6	25	1	15	14	32.8
06-22	2905	10	17	1259	1453	136	12	6	26	1	18	16	33.4
06-00	2932	10	17	1271	1470	137	12	6	26	1	18	16	33.9
00-00	3014	10	17	1306	1513	145	13	6	28	1	20	16	35.4

AV5 AM	329					
AV5 PM	212					
AV5 24h	3014					
AADT	3121	%CV	7.4%			
					VP85 ₂₄₋₇	38.4 mph
					SSD	96 m

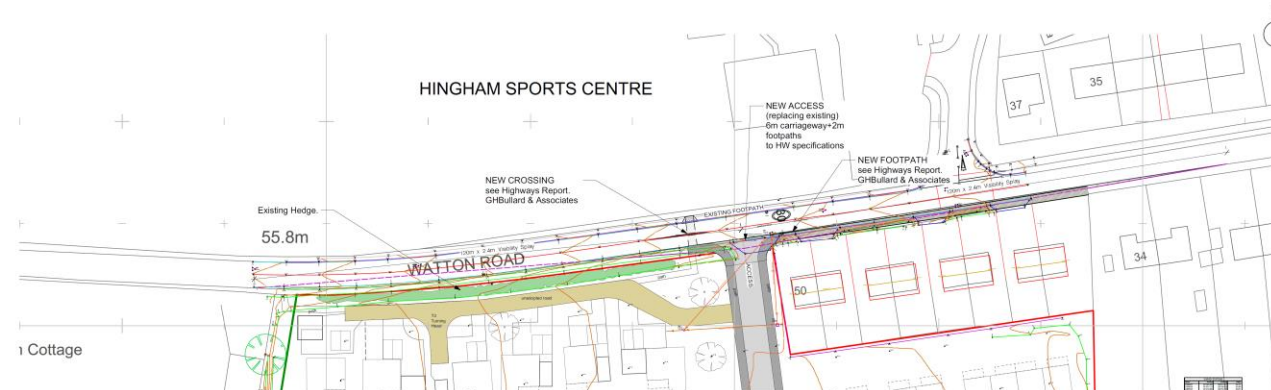
Summary 3 of 3

Site Name 1455
Description B1108 Watton Rd, Hingham, TP approx 65m W Springfield Way [40MPH]
Filter Start 2020-02-09T00:00:00
Filter End 2020-02-16T00:00:00

Weekday Traffic

Combined													
Time	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Mean
0000	12				6	6	2						40.3
0100	7				4	4	3						40.2
0200	7				5	5	2					1	41.2
0300	14				5	9				1		1	41.4
0400	24				11	13	1						42.1
0500	97			1	46	46	5	1		1		1	40.6
0600	218	1		2	106	93	14	1		1		3	35.9
0700	565	2		3	298	233	22	3	2	5		2	34.0
0800	513			2	267	218	20	1		5		3	33.8
0900	379			1	176	171	25	1	1	5		4	33.6
1000	330	1		2	166	138	19	3	2	4		3	33.3
1100	345	2		3	169	144	19	3	2	4	1	2	33.2
1200	354	2		3	179	145	19	3		4		3	33.7
1300	360	1		2	183	144	24	3	3	4		2	32.9
1400	411	2		3	219	163	22	2	2	4		2	33.3
1500	463	2		3	245	188	23	2	1	5		3	33.9
1600	517	1		4	296	198	18	1		4		3	33.7
1700	540	2		3	330	192	12		2	4		1	33.9
1800	330	1		2	204	118	7		1	3		1	34.5
1900	177			1	106	65	5			1		1	35.5
2000	121			2	72	43	5			1		1	36.1
2100	93	1			58	34	2						36.0
2200	61			1	38	22	3			1			36.6
2300	26				18	10	1						37.7
07-19	5108	16	31	2732	2050	229	21	16	50	1	28	23	33.6
06-22	5718	18	36	3074	2286	255	22	16	53	1	32	26	34.2
06-00	5805	18	37	3129	2318	259	22	16	54	1	32	26	34.5
00-00	5966	18	38	3206	2399	271	23	16	56	1	35	27	36.1
AV5 AM	513												
AV5 PM	540												
AV5 24h	5966												
AADT	6143					%CV	7.1%						

Appendix C: Access and Roads layout plan



Access and Mitigation
Scale: 1:500

DO NOT SCALE FROM THIS DRAWING

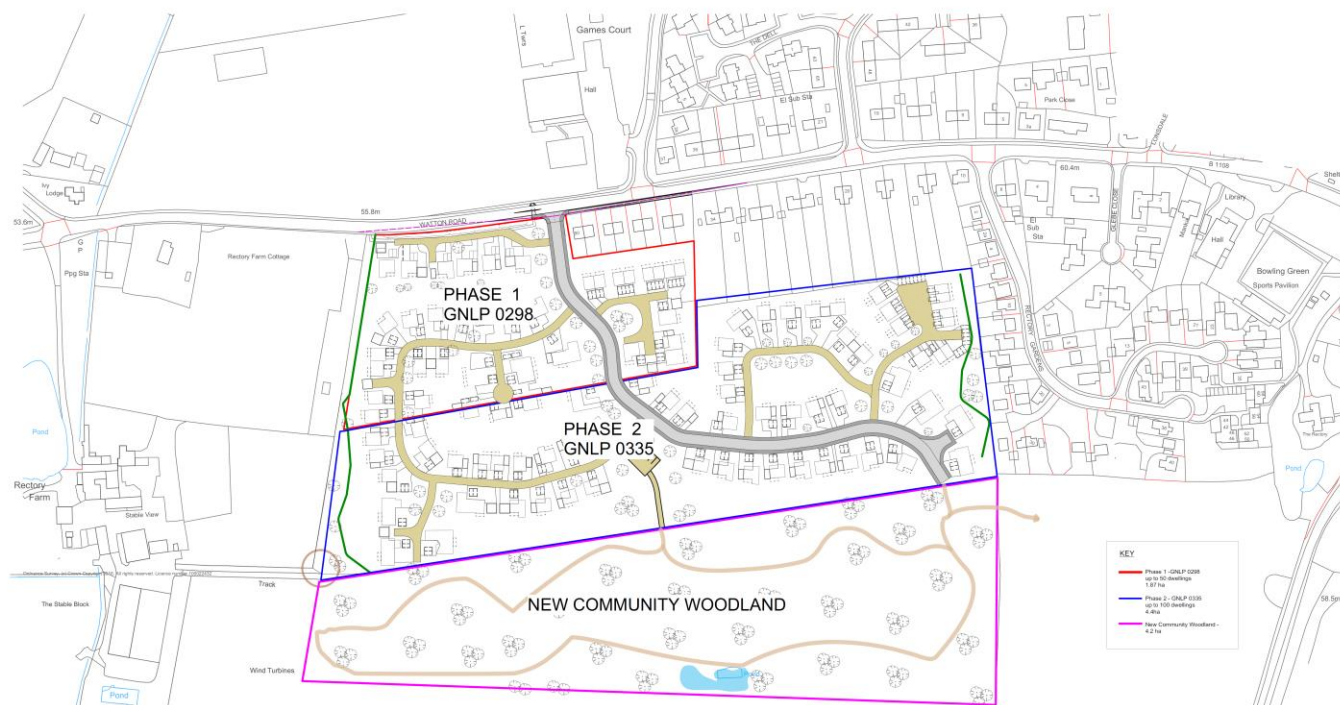
This drawing is a joint and must not be scaled except where required for planning submissions. All new and existing dimensions and areas shown on the drawings to be checked prior to commencement of work, and any discrepancies to be reported to Clapland Architects.

Any construction work carried out prior to receiving all necessary approvals is entirely at the client's risk.

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REV DATE REVISION

1	06/10/20	01
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REV DATE REVISION

PRELIM

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CONTRACT
Residential Development with New Community Woodland
Land Opposite Hingham Sports Centre
Watton rd,
Hingham

DRAWING TITLE
Access and Road Layout

SCALE: 1:500 PAPER SIZE: DRAWING NUMBER: 06
DATE: 27/03/20
DRAWN: HJ
JOB NUMBER: 1620
CHECKED: CLIENT APPROVED:
THE ABOVE DRAWING APPROVED GOVERNANCE OF ISSUED DRAWINGS

Appendix D: Indicative Master plan



DO NOT SCALE FROM THIS DRAWING

This drawing is a print and must not be scaled except where required for planning submissions. All new and existing dimensions and levels shown on the drawings to be checked prior to commencement of work and any discrepancies to be reported to Clayland Architects.

Any construction work carried out prior to receiving all necessary approvals is a liability of the client only.

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NO	DATE	NOTED	BY

Proposed Indicative Master Plan
Scale: 1:1250



Hingham Aerial View

- SITE DELIVERY**
- Phase 1: GNLP 0298 - up to 10 dwellings - 0.87 ha
 - Phase 2: GNLP 0335 - up to 10 dwellings - 4.8 ha
 - Community Woodland: Delivered with Phase 1 GNLP 0298 - 4.2 ha
 - Dwellings
 - Garage
 - Path/Road Connections
 - New Woodland

PRELIM

Clayland architects

The Glass House, Lyford Gardens,
Lyford Road, Mundford, Norfolk, IP20 5HW
info@claylandarchitects.co.uk www.claylandarchitects.co.uk

CONTRACT

Residential Development with New Community Woodland
Land Opposite Hingham Sports Centre
Watson rd,
Hingham

DRAWING 01.01
Master Plan

SCALE	1:1250	PAPER SIZE	A3	DRAWING NUMBER	REVISION
DATE	27/02/20			01	
DRAWN BY					
APP. NUMBER	1620	CHECKED		CLIENT APPROVED	

THE ABOVE DATED APPROVES THE FINAL ACCEPTANCE OF THE DRAWING

Appendix E: Bus Timetables



w: konectbus.co.uk
e: feedback@konectbus.co.uk
@konectbuses

Thetford • Watton 3 & 6 Watton • Hingham • N&NU Hospital (3) / Wymondham (6) • Norwich 3 & 6

Mondays to Saturdays (except public holidays) see code

	3	6	6	3	3	6	6	3	6	3	6	3	6	3	6	3
Ashill, Millfield	NS	NS	S	NS	S	NS	S	NS							NS	
Shipdham, opp PO		0643														
Thetford Bus Interchange		0628	0653	0658	0713			0745							1042	
Croxton, opp Church Avenue																
Thetford adj Churchill Road								0748							1045	
East Wretham opp Camp								0756							1053	
East Wretham, adj Dog & Partridge								0758							1055	
Great Hockham, opp Green								0805							1102	
Caston, opp Green								0809							1106	
Griston adj Church								0814							1111	
Wayland Academy (when open)								0823								
Watton, Post Office		0645	0700	0710	0715	0730		0828							1121	
guaranteed connection																
	6A	3	6	6	3	3	6	6	3	6	3	6	3	6	3	6
	NS	NS	S	NS	S	NS	S									
Watton, Post Office		0645	0700	0710	0715	0730	0745	0800	0830	0900	0930	1000	1030	1100	1130	1200
Carbrooke, opp Flying Fish		0650	0707	0715	0720	0735	0752	0805	0837	0907	0937	1007	1037	1107	1137	1207
Hingham, Bus Shelter		0700	0717	0726	0731	0746	0802	0816	0847	0917	0947	1017	1047	1117	1147	1217
Barnham Broom, opp PO					0741	0756				0956					1156	
Barford, B1108, opp Cock Inn		0711			0746	0801			0858		1003		1058		1203	1258
N&NU Hospital [A]		0723			0800	0815			0910		1015		1110		1215	1310
Earlham Road, Fiveways		0729			0810	0820			0916		1021		1116		1221	1316
Wicklewood, Cherry Tree			0725	0734			0810	0824		0925		1025		1125		1225
Wymondham, Melton Road			0730	0738			0815	0828		0930		1030		1130		1230
Wymondham, Cross, NatWest	0705		0740	0750			0825	0840		0940		1040		1140		1240
Wymondham, Norwich Rd, Waitrose	0708		0744	0753			0829	0843		0944		1044		1144		1243
Hethersett, B1172, Steeple Tower	0712		0749	0757			0834	0847		0949		1049		1149		1249
Newmarket Road, opp Town Close Rd	0717		0759	0806			0844	0856		0959		1059		1159		1259
Norwich, Bus Station	0728	0741	0808	0813	0830	0830	0848	0903	0930	1003	1035	1103	1130	1203	1235	1303

	3	3	6													
Thetford Bus Interchange	NS			NS			NS								1615	
Croxton, opp Church Avenue	1242			1442												
Thetford adj Churchill Road	1248						1445								1618	
East Wretham opp Camp							1453								1626	
East Wretham, adj Dog & Partridge							1455								1628	
Great Hockham, opp Green							1502								1635	
Caston, opp Green							1506								1639	
Griston adj Church							1511								1644	
Wayland Academy (when open)							1525									
Watton, Post Office		1323					1530								1654	
guaranteed connection																
	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3
Watton, Post Office	1300	1330	1400	1430	1500	1530	1600	1630	1700							
Carbrooke, opp Flying Fish	1307	1337	1407	1437	1507	1537	1607	1637	1707							
Hingham, Bus Shelter	1317	1347	1417	1447	1517	1547*	1617	1647	1717							
Barnham Broom, opp PO																
Barford, B1108, opp Cock Inn		1358		1458		1558*		1658								
N&NU Hospital [A]		1410		1510		1615		1710								
Earlham Road, Fiveways		1416		1516		1621		1716								
Wicklewood, Cherry Tree	1325		1425		1525		1625		1725							
Wymondham, Melton Road	1330		1430		1530		1630		1730							
Wymondham, Cross, NatWest	1340		1440		1540		1640		1740							
Wymondham, Norwich Rd, Waitrose	1343		1443		1543		1643		1743							
Hethersett, B1172, Steeple Tower	1349		1449		1549		1649		1749							
Newmarket Road, opp Town Close Rd	1359		1459		1559		1659		1759							
Norwich, Bus Station	1403	1430	1503	1530	1603	1635	1703	1730	1803							

Sundays & public holidays

	3	3	3	3
Watton, Post Office	0930	1130	1330	1530
Carbrooke, opp Flying Fish	0935	1135	1335	1535
Hingham, Bus Shelter	0945	1145	1345	1545
Barford, B1108, opp Cock Inn	0955	1155	1355	1555
N&NU Hospital [A]	1010	1210	1410	1610
Earlham Road, Fiveways	1014	1214	1414	1614
Norwich, Bus Station	1025	1225	1425	1625

Codes	
NS	Does not operate on Saturdays
S	Operates on Saturdays only
*	On schooldays this bus starts from Wayland Academy at 1525 and operates via Carbrooke Village (1538) then runs 5 mins later at stops marked

Extra journeys on schooldays only:		3
Watton, Norwich Road, Blenheim Grange		0830
Watton, Junior School		0840
Watton Junior School		1520
Watton, Norwich Road, Blenheim Grange		1530

Timetable commences 3 September 2018



w: konektbus.co.uk
e: feedback@konektbus.co.uk
@konektbuses

Norwich • N&NU Hospital (3) / Wymondham (6) - Hingham - Watton	3 & 6
Watton • Thetford	3 & 6

Mondays to Saturdays (except public holidays) see code

	3	3	6	3	6	3	6	3	6	3	6	3	6	3	6
	NS/A	NS													
Norwich, Bus Station [B]	0745	0815	0845	0915	0945	1015	1045	1115	1145	1215	1245	1315	1345	1415	
Norwich, St Stephens Street	0747	0817	0847	0917	0947	1017	1047	1117	1147	1217	1247	1317	1347	1417	
Newmarket Road, Town Close Rd		0821		0921		1021		1121		1221		1321		1421	
Hethersett, B1172, opp Steeple Tower		0829		0929		1029		1129		1229		1329		1429	
Wymondham, Norwich Rd, Waitrose		0834		0934		1034		1134		1234		1334		1434	
Wymondham, Cross, Big Fry		0842		0942		1042		1142		1242		1342		1442	
Wymondham, Melton Road		0844		0944		1044		1144		1244		1344		1444	
Earlham Road, Fiveways	0755		0855		0955		1055		1155		1255		1355		
N&NU Hospital [B]	0730	0804		0904		1004		1104		1204		1304		1404	
Barford, B1108, Cock Inn	0740	0814		0914		1014		1114		1214		1314		1414	
Barnham Broom, opp PO										1218				1418	
Wicklewood, Cherry Tree			0850		0950		1050		1150		1250		1350		1450
Hingham, Market Place	0750	0825	0857	0925	0957	1025	1057	1125	1157	1230	1257	1325	1357	1430	1457
Carbrooke, Shire Autos	0757	0833	0905	0933	1005	1033	1105	1133	1205	1238	1305	1333	1405	1438	1505
Watton, Crown	0807	0845	0917	0945	1017	1045	1117	1145	1217	1250	1317	1345	1417	1450	1517
guaranteed connection															
	3	6													
Watton, Crown	NS	NS				NS				NS			Sch	NSch	
Wayland Academy	0840	0927				1127				1327			1525	1530	
Griston opp Church			0936			1136				1336			1539	1539	
Caston adj Green			0940			1140				1340			1543	1543	
Great Hockham, opp PO	0855	0944				1144				1344			1547	1547	
East Wretham, opp Dog & Partridge			0951			1151				1351			1554	1554	
East Wretham, adj Camp			0953			1153				1353			1556	1556	
Croxton adj Church Ave			1000												
Thetford opp Churchill Road						1201				1401			1604	1604	
Thetford Bus Interchange		1009				1205				1405			1608	1608	

Mondays to Saturdays (except public holidays) see code

	3	6	3	6	3	6	3	6	6A
Norwich, Bus Station [B]	1445	1515	1545	1615	1645	1715	1745	1815	1910
Norwich, St Stephens Street	1447	1517	1547	1617	1647	1717	1747	1817	1912
Newmarket Road, Town Close Rd		1521		1621		1721		1821	1914
Hethersett, B1172, opp Steeple Tower		1529		1629		1729		1829	1922
Wymondham, Norwich Rd, Waitrose		1534		1634		1734		1834	1927
Wymondham, Cross, Big Fry		1542		1642		1742		1842	1934
Wymondham, Melton Road		1544		1644		1744		1844	
Earlham Road, Fiveways	1455		1558		1658		1758		
N&NU Hospital [B]	1506		1610		1710		1810		via
Barford, B1108, Cock Inn	1516		1620		1720		1820		Attleeb
Barnham Broom, opp PO					1725		1825		
Wicklewood, Cherry Tree		1550		1650		1750		1850	
Hingham, Market Place	1527	1557	1631	1657	1736	1757	1836	1857	2003
Carbrooke, Shire Autos	1535	1605	1639	1705	1744	1805	1844	1905	2010
Watton, Crown	1547	1617	1651	1717	1756	1817	1856	1917	2020
guaranteed connection									
	6	3		6	3		6		
Watton, Crown	.	.	.	1717	1756	1817	1856	1917	.
Shipdham, PO	.	.	.	.	1809	1830	1909	1930	.
Ashill, Millfield	.	.	.	1725r	.	.	.	.	.

Sundays & public holidays

	3	3	3	3
Norwich, Bus Station [B]	1030	1230	1430	1630
Norwich, St Stephens Street [BR]	1031	1231	1431	1631
Earlham Road, Fiveways	1039	1239	1439	1639
N&NU Hospital [B]	1045	1245	1445	1645
Barford, B1108, Cock Inn	1056	1256	1456	1656
Hingham, Market Place	1108	1308	1508	1708
Carbrooke, Shire Autos	1117	1317	1517	1717
Watton, Crown	1125	1325	1525	1725

Codes	
NS	Does not operate on Saturdays
S	Operates on Saturdays only
r	Drops off by request to the driver
\$	Serves Wymondham Cross, Natwest
A	On schooldays operates via Carbrooke Village (0801) then Shire Autos (0805), Wayland Academy (0820) and Watton Post Office (0825).

Extra journeys on schooldays only:	
Watton, Norwich Road, Blenheim Grange	0830
Watton, Junior School	0840
Watton Junior School	1520
Watton, Norwich Road, Blenheim Grange	1530

Timetable commences 3 September 2018