

Ms Harriet Vincett-Wilson  
City and Country  
Bentfield Place  
Bentfield Road  
Stansted, Essex CM24 8HL

Our Ref: 015/2023/002/CAG - Please quote in all correspondence.

12 February 2024

Dear Harriet,

**Wellwick, Colchester Road, St Osyth, Clacton On Sea, Essex – Appropriate Level of Junction Provision**

I refer to your request for highway advice concerning the proposed application for an additional 37 residential units on the permitted site at Wellwick, Colchester Road, St Osyth, Clacton On Sea, Essex. In particular you seek advice on appropriate level of junction type for the development quantum proposed.

**Planning History**

***Planning Reference: 20/01124/OUT***

***Location: Wellwick, Colchester Road, St Osyth, Clacton On Sea, Essex***

***Permitted Development: 190 units***

Relevant Highways Condition:

- 11 No occupation of the development hereby permitted shall take place until the following have been completed (details of which shall have been submitted to and agreed in writing by the Local Planning Authority):
- a) The highway works as shown in principle on planning application drawing number 208104/21 Rev. E dated November 2013 prepared by Waterman Boreham. Works include:
    - i) The removal of the existing access and lay-by;
    - ii) A priority junction off the B1027 to provide access to the proposal site. Junction to include 2no. 3 metre wide footways and a 160 x 2.4 x 160 metre visibility splay maintained clear to the ground at all times;
    - iii) A right turn lane at the priority junction mentioned above to include 2no. pedestrian central islands; and
    - iv) A bell mouth access off Colchester Road to provide access to the proposal site. Bell mouth to include kerbed radii and a 70 x 2.4 x 70 metre visibility splay maintained clear to the ground at all times (as shown in principle on planning application drawing number 208104/07 Rev. F dated 19 January 2012 prepared by Waterman Boreham).
  - b) Two new bus stops (to current ECC specification) on the B1027 adjacent to the proposal site (subject to agreement with the local bus service operators) AND/OR upgrade to current ECC specification the two nearest bus stops in Colchester Road.

Reason - To protect highway efficiency of movement and safety and to ensure the proposal site is accessible by more sustainable modes of transport such as public transport, cycling and walking.

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### Permitted Development

The permitted development (20/01124/OUT) provides for a development of 190 residential units. Applying typical Trip Rates for the AM and PM Peak hours and 12 hour flow, obtained from the TRICS database (Table 1) results in the following trip generations for the permitted 190 unit scheme (Table 2):

		Arrivals	Departures	Two-Way
AM Peak Hour	(08:00 – 09:00)	0.140	0.296	0.436
PM Peak Hour	(17:00 – 18:00)	0.333	0.138	0.471
12 hr Total	(06:00 – 18:59)	2.223	2.277	4.5

Table 1: Summary of TRICS 7.8.1 rates (Houses Privately Owned)

		Arrivals	Departures	Two-Way
AM Peak Hour	(08:00 – 09:00)	26.6	56.24	82.84
PM Peak Hour	(17:00 – 18:00)	63.27	26.22	89.49
12 hr Total	(06:00 – 18:59)	422.37	432.63	855

Table 2: Permitted scheme Residential Development Trips (190 units)

The permitted development takes access off B1027 Colchester Road, a Priority 2 route within the Essex Functional Hierarchy (based upon an Essex Highways report “B1027 Speed Limit Review –July 2020). As such Design Manual for Roads and Bridges (DMRB) is the appropriate highway standard to apply.

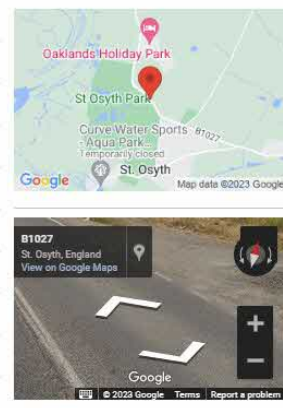
The DfT publish Manual traffic count data, summary for B1027 Colchester Road, as Figure 1 below.

**Site number: 941113**

#### Site details

Region	<a href="#">East of England</a>
Local authority	<a href="#">Essex</a>
Road name	B1027
Road classification	'B' road
Managed by	Local authority
Road type	Minor
Start junction	
End junction	
Link length	km ( miles)
Easting, northing	612198, 216548
Latitude, longitude	51.80727900, 1.07664190

#### Location



#### Annual Average daily flow

Year	Count method	Pedal cycles	Two wheeled motor vehicles	Cars and taxis	Buses and coaches	Light goods vehicles	Heavy goods vehicles	All motor vehicles
2019	Manual count	16	51	8916	35	1807	155	10964

Figure 1: DfT Manual traffic count B1027

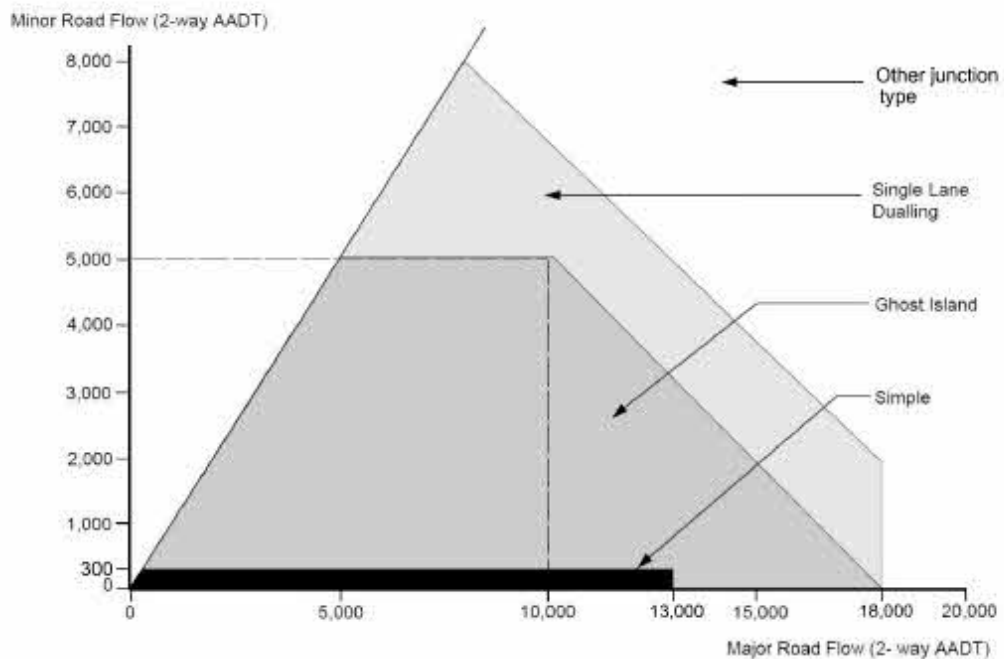
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The location of this count is approximately at the location of the proposed site access into the development site. This identifies AADF of 10,964 all motor vehicles in 2019 (pre-pandemic levels). [Source: <https://roadtraffic.dft.gov.uk/manualcountpoints/941113>]. In 2016 the AADF was 9686. This identifies a 13% increase in the 4 year period to 2019. Assuming a similar growth over this last 4 years, 2023 figures can be expected to be in the order of 12,410 (ignoring the lower growth affect, during the Covid pandemic years).

Taking the 2-way AADT flows to determine the approximate level of junction provision, with reference to DMRB *CD123 Geometric design of at-grade priority junctions and signal-controlled junctions*, Figure 2.3.1 (reproduced below as Figure 2), for a minor road two-way flow of 855 (Table 2) and a major road flow of 12,410 (Figure 1 plus 13% growth), a ‘ghost island’ priority junction is appropriate.

**2.3.1** The selection of priority junction and major road central treatment for single carriageway roads should be determined based on the standard of major road and traffic flows on both the major and minor roads. Figure 2.3.1 illustrates approximate levels of provision for varying traffic flows.

**Figure 2.3.1 Approximate priority junction provision on single carriageway roads based on flows only**



**Figure 2: CD123 Fig 2.3.2**

As part of the planning permission, Condition 11 required a priority junction off the B1027 to include a right turn lane (Planning Condition 11, Part iii).

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### Proposed development

It is proposed to seek planning permission for an additional 37 residential units in addition to the 190 units, previously consented.

Applying Trip Rates (Table 1) results in the following trip generations for the proposed additional 37 unit scheme (Table 3):

		Arrivals	Departures	Two-Way
AM Peak Hour	(08:00 – 09:00)	5.18	10.95	16.13
PM Peak Hour	(17:00 – 18:00)	12.32	5.11	17.43
12 hr Total	(06:00 – 18:59)	82.25	84.25	166.5

**Table 3:** Proposed additional Residential Development Trips (37 units)

The proposed additional 37 units adds just 16 two-way trips in the AM peak hour and 17 in the PM peak hour. This represents just one additional vehicle every 3.5 minutes, which is just 1.3% onto the (assumed 2023) two-way flow on B1027.

		Arrivals	Departures	Two-Way
AM Peak Hour	(08:00 – 09:00)	31.78	67.19	98.97
PM Peak Hour	(17:00 – 18:00)	75.59	31.33	106.92
12 hr Total	(06:00 – 18:59)	504.62	516.88	1021.50

**Table 4:** Permitted scheme and proposed additional Residential Development Trips (227 units)

With reference to DMRB CD123 Geometric design of at-grade priority junctions Figure 2.3.1 (reproduced as Figure 2), for a minor road flow of 1022 (Table 4) and a major road flow of 12,410 (Figure 1 plus 13% growth) a 'ghost island' priority junction remains the appropriate junction type.

### Summary

This letter considers the appropriate level of junction provision for the proposed application for an additional 37 residential units at Wellwick, Colchester Road, St Osyth, Clacton On Sea, Essex.

The proposed site access is off B1027 Colchester Road, a Priority 2 route within the Essex Functional Hierarchy. The permitted development of 190 units conditioned the delivery of a priority junction off the B1027, to include a right turn lane (Condition 11, Part iii of 20/01124/OUT).

The proposed additional 37 residential units will generate up to 16 two-way trips in the AM peak hour and 17 in the PM peak hour. This represents just one additional vehicle every 3.5 minutes, which is just 1.3% onto the (assumed 2023) two-way flow on B1027. This will be imperceptible and will not therefore result in unacceptable impact.

In accordance with DMRB CD123 Fig 2.3.1 two-way flow ranges, a 'ghost island' priority junction remains the appropriate junction type.

In terms of NPPF Paragraph 111, the development will not result in '*unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe*'.

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There is no evidence to suggest that this proposal will result in unacceptable impact on highway safety. We believe that the proposed development is acceptable in highway terms and meets the highway design standards and policy.

I trust this letter addresses your brief, and I have no objection to you using this document as part of any submission in relation to the above site. However, if you have any queries or wish to discuss further, please do not hesitate to contact me.

Yours sincerely



Carol Grimsey CEng CIHT  
For and on behalf of G H Bullard & Associates LLP