Project Title : 1-22 Maynard Place

Report Title Transport Technical Note :

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1.0 **INTRODUCTION**

- 1.1 Ardent Consulting Engineers (ACE) were instructed by 'JS & HBJ Conway 1994 Settlement' to prepare a Transport Technical Note (TTN) for the development of 6 new residential apartments within an additional floor at a residential development with existing ground floor commercial. The site is located at the northern edge of Station Road in Cuffley, Hertfordshire.
- 1.2 Paragraph 7.2 of HCC's Road in Hertfordshire: A Design Guide - Chapter 7: Transport Assessments' suggests that for residential developments of less 50 dwellings no formal assessment should necessarily be required with respect to highways. However, for robustness this Transport Technical Note (TTN) has been produced to demonstrate that the proposed development of up to 6 new residential flats could be suitably accommodated at the site and that it should not result in a detrimental impact to the existing operation of the highway network. In keeping with current national policy guidance, this report also considers whether sufficient opportunities exist for sustainable travel.

- 1.3 This TTN takes into account current Government policy contained within the National Planning Policy Framework [NPPF] (Department for Communities and Local Government, February 2019). It also considers current best practice advice contained in the document 'Manual for Streets' (DfT, 2007), its companion document 'Manual for Streets 2 – Wider Application of the Principles' (CIHT, September 2010), and Hertfordshire County Council's current highway design guidance contained within 'HCC's Road in Hertfordshire: A Design Guide - Chapter 4: Design Standards and Advice'.
- 1.4 A pre-application enquiry was submitted to Welwyn Hatfield District Council (WHDC) in November 2019 (application reference 6/2019/2765/PA) for proposals to erect 7 apartments at the site on a new floor. WHDC's pre-application response is provided at **Appendix A** and includes the following highway related comments: -

"In regards to the principle of development, the site is not part of an allocated housing site within the existing or proposed local plan. The erection of 7 flats within this location would make use of a previously developed site, which is accessible through sustainable modes of transport and within walking distance to amenities. Further to this there are no physical constraints on the development of this land. As such, the residential development would be considered as windfall housing and therefore Policy H2 of the District Plan and Policy SADM 1 of the Draft Local Plan are both relevant. The development in principle would therefore be in principle acceptable, subject to satisfying with other applicable policies within the development plan such as design, residential amenity, affordable housing etc.

Turning to parking, Policy M14 requires new development to accord with the Parking Standards in the Councils Supplementary Planning Guidance (SPG). The site falls within zone 4 of the council's parking zones where as a guideline, 75-100% of standards would apply.

As expressed within the Interim Policy for Car Parking Standards and Garage Sizes the Council has agreed to treat its existing car parking standards as guidelines rather than maximums. This means that higher or lower car parking standards than those set out in the SPG can be proposed (by landowners, developers, etc) and determined (by officers and elected councillors) on a case-by-case basis taking account of the

relevant circumstances of the proposal, its size context and its wider surroundings, as well as the NPPF guidance set out above.

To be in accordance with the council's parking standards, a 1 bedroom unit requires 1.25 spaces, and a 2 bedroom dwelling requires 1.5 space. The proposed new flats would provide 2x 2 bed units and 5 x 1 bed resulting in a car parking need of 9.

As discussed at the meeting, the car parking will need to take into consideration the residential units at first and second floor, as well as, the commercial units at ground floor. Currently the pre-application does not obtain this information. A car parking plan, identifying allocated spaces for all units should therefore be submitted on submission of any future planning application.

In addition to car parking, one long term cycle parking space is required for each flat."

1.5 This TTN has been produced to provide the Local Highway Authority (Hertfordshire County Council) and Local Planning Authority (Welwyn Hatfield Borough Council) with confidence that this minor development would be acceptable in terms of highway and transportation matters.

2.0 SITE DESCRIPTION

2.1 The site is located at the northern edge of the B156 (Station Road) in Cuffley. The site currently consists of ground floor commercial, 14 residential flats over twostoreys along with off-street private parking and associated garages. The site is bound by the Cuffley Village Surgery, Library and Cuffley Hall to the north, public parking and a Co-op to the east, the B156 to the south, residential properties to the west and located within a typical town centre environment. Plate 1 shows the indicative site boundary and surrounding highway network.

1-22 Maynard Place, Cuffley

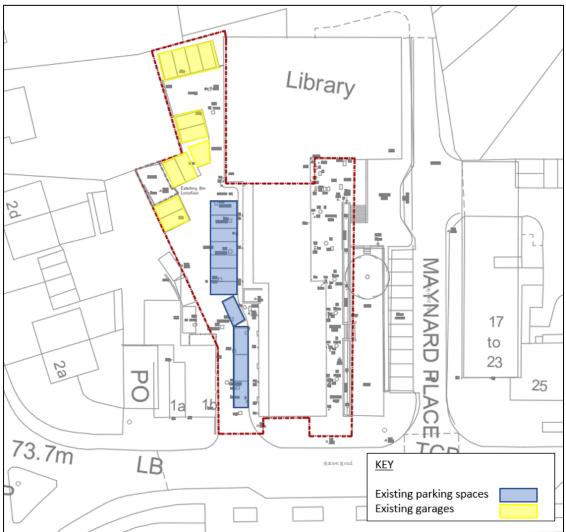


Plate 1 - Indicative site boundary and existing parking arrangement

- 2.2 The existing access serves parking for the residential flats at the western edge of the building. It is noted that a small number of staff for the ground floor commercial park within the existing car park as there is generally free space. However, no spaces are formally allocated to the commercial uses. The car park includes a total of 11 unallocated parking spaces along with 11 additional garages allocated to existing flats. Overall, the site includes a total of 22 on-site parking spaces. The access to the car park itself measures approximately 5.5 metres wide, with an 8 metres kerb radius on the eastern edge and a 3 metres kerb radius on the western edge. Furthermore, it should be noted that a total of 13 car parking spaces (of which two are marked disabled bays) are located on Mayland Road for customers of the commercial units.
- 2.3 The B156 (Station Road) is a classified 'B' road and measures approximately 6 metres wide past the site access. It is subject to 30mph and has street lighting on both sides



of the carriageway as well as footways extending along both sides ranging in width between 2 and 5 metres wide. On-street parking bays are located at the southern edge of the B156 in vicinity of the site access. These extends for approximately 52 metres (suitable to accommodate circa 9 cars) and are subject to a maximum stay of 30 minutes Monday to Saturday, between the times of 0800 and 1830 hours.

2.4 The B156 links to the B156/B157 (Plough Hill) via a priority-controlled T-junction circa 45 metres west of the site. In addition, the B156 extends for approximately 4.5km to the west, through Goffs Oak and into Churchgate.

Pedestrian Accessibility

2.5 The site is located within an established residential area within walking distance of educational facilities, employment opportunities, local amenities and public bus services and therefore pedestrian infrastructure already exists in the surrounding area. The Chartered Institution for Highways and Transportation (CIHT) document entitled 'Guidelines for Providing for Journeys on Foot' (GPJF) suggests walking distances which are relevant to a variety of journey purposes. These are reproduced in **Table 2.1** below.

| CIHT Classification | Town Centres (m) | Commuting/School/ Sightseeing (m) | Elsewhere/Local Services (m) | | |
|---------------------|---------------------|--------------------------------------|---------------------------------|--|--|
| Desirable | 200 | 500 | 400 | | |
| Acceptable | 400 | 1,000 | 800 | | |
| Preferred Maximum | 800 | 2,000 | 1,200 | | |

Table 2.1 - CIHT Recommended Walking Distances

2.6 Further to the above, the 'GPJF' document provides guidance on how to encourage pedestrian travel. Paragraph 3.31 states that:

"'Acceptable' walking distances will obviously vary between individuals and circumstances. Acceptable walking distances will depend on various factors including:

- An individual's fitness and physical ability
- Encumbrances, e.g. shopping, pushchair
- Availability, cost and convenience of alternatives transport modes
- Time savings



- Journey purpose
- Personal motivation
- General deterrents to walking".
- 2.7 For town centre trips it suggests that 800 metres is the preferred maximum walking distance, which equates to an approximate 10 minutes' walk based on a typical walking speed of 1.4 metres per second (circa 80 metres per minute). The site is located within Cuffley Town Centre, with Station Road providing access to a number of local amenities.
- 2.8 For commuting / school trips it suggests that 2 kilometres is a preferred maximum walking distance, which equates to an approximate 25 minutes' walk based on a typical walking speed of 1.4 metres per second (circa 80 metres per minute). The Cuffley School, Woodside Primary School, Goffs Oak Primary School, along with a number of employment opportunities within Cuffley and Goffs Oak are all within the 2 kilometres walking distance of the site.
- 2.9 Inspection of HCC's mapping portal confirms that there are no public footpaths that pass through the site. However, a number of traffic-free public footpaths and Bridleways are located within close proximity to site. These link the site to a number of surrounding settlements such as Cheshunt and Potters Bar. Furthermore, well maintained footways and crossings within close proximity of the site provide sufficient infrastructure to accommodate pedestrians.



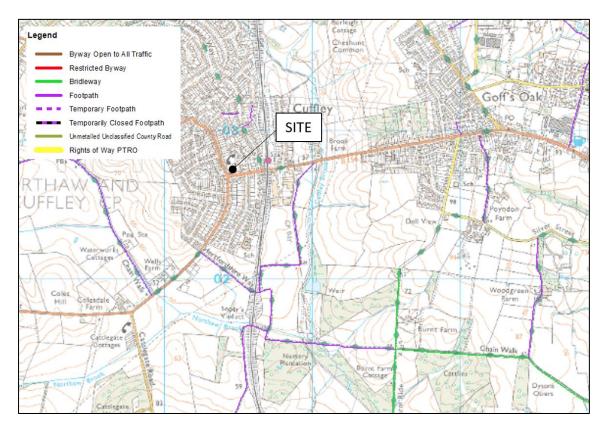


Plate 2 - Extract of HCC's Rights of Way Map

2.10 The above information clearly demonstrates that a number of surrounding educational, employment facilities and local amenities can be accessed within reasonable walking distances and the site is therefore considered to be in a reasonability sustainable location for a minor residential development.

Cyclist Accessibility

- Local Transport Note 2/08 Cycle Infrastructure Design (DfT, October 2008) states 2.11 that '...many utility cycle journeys are under three miles [5 kilometres], although, for commuter journeys, a trip distance of five miles [8 kilometres] or more is not uncommon.' [Paragraph 1.5.1, page 14].
- 2.12 It is generally recognised that a typical cycle speed of 12mph (19kph) would result in a 5-kilometre isochrone equating to a journey time of circa 15 minutes. Plate 3 shows an extract from traveltimeplatform.com shown where residents of the site can travel to / from within a 15 minutes ride.



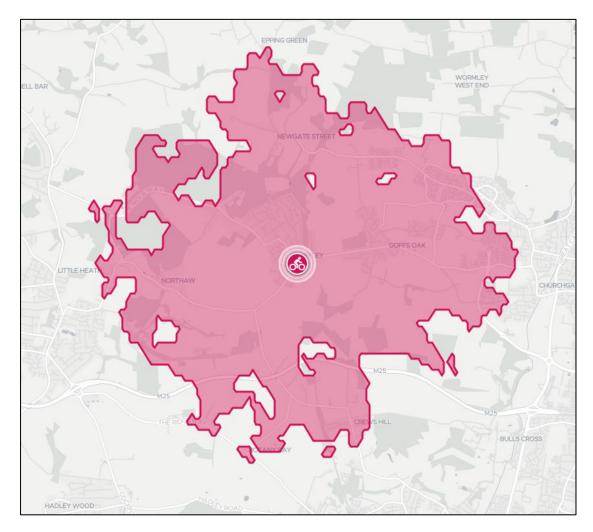


Plate 3: Extract from traveltimeplatform.com (15-minute cycle isochrone)

- 2.13 The 15-minute cycle isochrone catchment area centred on the site demonstrates that the entirety of Cuffley, Crews Hill, Northaw, Newgate Street, Goffs Oak and a section of Churchgate are all within a comfortable cycling distance of the site.
- Inspection of HCC's 'Hertfordshire Cycling Map' shows that there are no formal cycle 2.14 routes within close proximity of the site. However, a number of surrounding roads are considered suitable for on-road cycling.

Accessibility by Bus

2.15 Guidance from the Chartered Institution of Highways and Transportation (CIHT) document 'Guidelines for Planning for Public Transport in Development' indicates that ideally, a bus stop should be located within 400m from a new development.

- 2.16 The closest serviced bus stops to the site are located at the eastern edge of Plough Hill approximately 125 metres walk distance of the centre of the site; and on the western edge of Plough Hill approximately 125 metres walk distance of the site. These bus stops include flag and pole arrangements with timetable facilities and served by the public bus route 242. This bus service links the site to a number of areas such as Potter Bar, Goffs Oak, Cheshunt, Waltham Cross and provides 1 bus every 30 minutes on average.
- 2.17 An additional bus stop is located at the approximately 330 metres east of the site at the Cuffley Railway Station. This stop is served by routes 242 and 380. Bus route 380 runs at an average frequency of 1 bus every 120 minutes (off-peak only) and links the site to Hertford, Bayford, Hertingfordbury and Epping Green.
- 2.18 Taking the above information into consideration, the site is suitably served by bus with routes providing access to a mix of educational, recreational, retail, health and employment opportunities. Bus stops are considered to be within acceptable pedestrian travel distances given the nature of the site, with routes to the stops being relatively direct and pleasant to travel along.

Accessibility by Rail

- 2.19 The site is located within a 330 metres walking distance (equating to an approximate 4 minutes' walk or 1-minute cycle) from the Cuffley Railway Station. This station is managed by Great Northern and includes 18 cycle parking spaces, car parking, toilets, shops, station buffet and seating areas.
- 2.20 There are a number of services in each direction that run to / from this station, providing opportunities to travel to various locations such as Moorgate London, Hertford North, Watton-at-Stone, Harringay, Drayton Park, Highbury and Islington. This station offers opportunities for modal interchange possibilities, which access to a large number of bus routes and rail lines.

Accessibility Conclusion

2.21 The National Planning Policy Framework (NPPF) supports a presumption in favour of sustainable development. The first point within paragraph 108 of the NPPF states that: "In assessing sites that may be allocated for development in plans, or specific

- applications for development, it should be ensured that: appropriate opportunities to promote sustainable transport modes can be - or have been - taken up, given the type of development and its location".
- 2.22 The site is situated within an existing established town centre area and there are a number of amenities within acceptable distance of the site. The existing standard of pedestrian infrastructure is good, with streets surrounding the site being considered suitable for cycling within the carriageway. It has also been demonstrated that the development area is served by suitable existing bus and rail routes.
- In conclusion, the site is accessible by a variety of sustainable modes of transport and can be considered a suitable location with regards to sustainability.

Highway Safety

- 2.24 Paragraph 015 within 'Travel plans, transport assessments and statements in decision-taking' reiterates this and advises that "an analysis of the injury records on the public highway in the vicinity of the site access for the most recent three-year period, or five-year period if the proposed site has been identified as within a high accident area".
- 2.25 In accordance with the above, the 'CrashMap' website was examined (www.crashmap.co.uk) for any details of recorded Personal Injury Accidents within the past three years. This identified that there have been three recorded incidents in close proximity of the site frontage that involved pedestrians, two incidents that involved cyclists and 6 that involved vehicles only between 2016 and 2018 (2016-2018 [inclusive]).
- 2.26 Plate 4 shows the number of accidents in the local highway network surrounding the site that involved pedestrians.



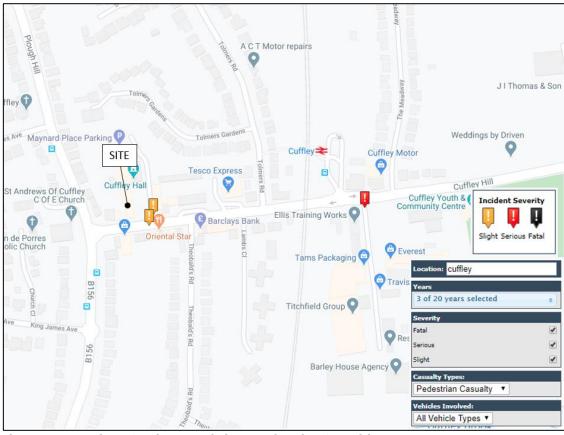


Plate 4: Extract from Crashmap website - Pedestrian Casualties

- 2.27 The extract shows that there have been three recorded incidents occur with the 3year survey period that resulted in pedestrian casualties. The first incident was located on Sopers Road approximately 300 metres east of the site. This occurred in November 2016 and was classed as 'serious' in severity. The second incident was located on Station Road in the vicinity of the site frontage. This occurred in May 2017 and was classed as 'slight' in severity. The final incident was located on Maynard Place to the west of the site. This incident occurred in January 2018 and was classed as 'slight' in severity.
- 2.28 Whilst it is unfortunate that these incidents occurred, they occurred in three separate years and do not form any cluster at a specific location. Therefore, they do not represent any obvious on-going safety problems / trends within the immediate vicinity of the site that need to be addressed as part of this minor development scheme.

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2.29 Plate 5 shows the number of accidents in the local highway network surrounding the site that involved cyclists.

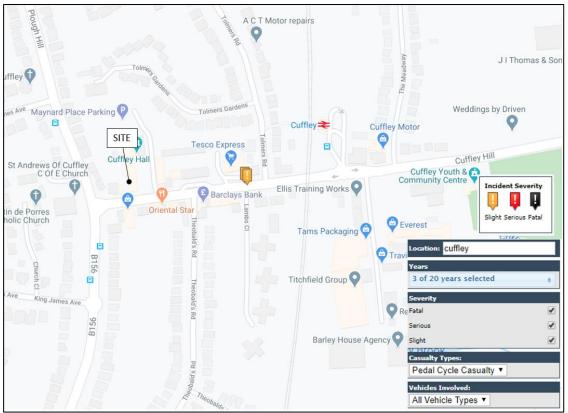


Plate 5: Extract from Crashmap website - Cyclist Casualties

- 2.30 The extract shows that there have been two recorded incidents occur with the 3-year survey period that resulted in cyclist casualties. Both incidents occurred at the Station Road/lambs Close junction, approximately 140 metres east of the site. The first incident occurred in July 2016 whilst the second occurred in June 2017. Both incidents were classed as 'slight' in severity. Two recorded incidents almost a year apart does not class as a cluster that requires further detailed assessment.
- 2.31 Of the 6 incidents that involved vehicles only, three were not considered to form a cluster. However, three vehicular related incidents did occur within close proximity to the Station Road/Maynard Place junction. The first occurred in October 2016, the second in June 2017 and the third in September 2017. All three incidents were classed as 'slight' in severity.
- Based on the above information, a total of three vehicular incidents occurred within 2.32 close proximity to an existing junction over a three-year period. These are located

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within a town centre that includes on-street parking bays and is likely to result in slow moving traffic during peak periods. At this stage it is considered that the majority of these incidents are likely to rear end shunts as a result of driver error.

2.33 From the above, it can be concluded that there are no significant highway safety concerns in the vicinity of the site that would be exacerbated by the proposed development. Therefore, no further detailed assessment or mitigating improvements are considered to be required in terms of highway safety.

3.0 PROPOSED DEVELOPMENT

3.1 The proposed development consists of 6 new residential apartments within an additional floor above the existing commercial/flats. The proposals include a total of 3 one-bed and 2 two-bed units. Plate 6 below shows an extract of the proposed site layout plan, with the complete site plan included at **Appendix B**.

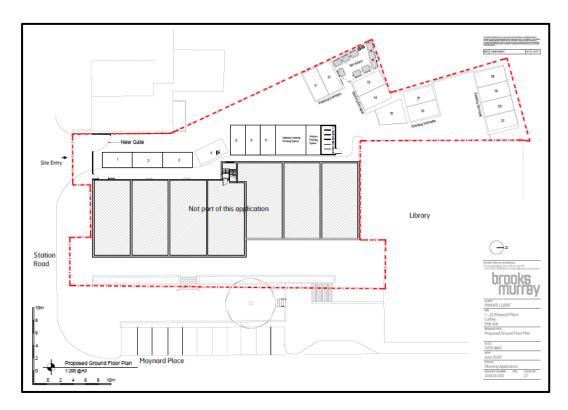


Plate 6 - Proposed Site Plan Extract



4.0 **PARKING PROVISION**

4.1 It has been confirmed that the existing car park includes 11 spaces and 11 garages. Plate 7 reiterates the existing arrangement with garages and areas where residents' cars were parked during a site visit undertaken by the team, and therefore considered to be realistic parking spaces.

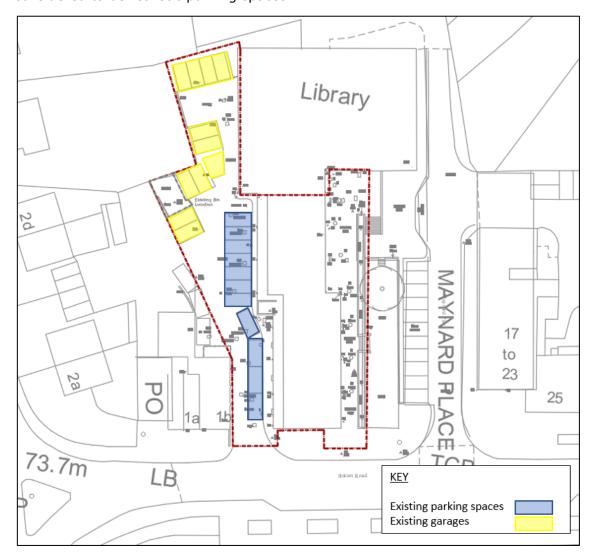


Plate 7 - Existing parking arrangement to be retained

4.2 Based on the above and information provided from the site visit, it is considered that the entire 22 spaces are suitable for use to park a car, of which 11 are within existing garages allocated to flats. Drawing Number 2000460-001C demonstrates that an average sized car can manoeuvre within the tightest spaces and garages within the existing arrangement.

- 4.3 With regards to vehicular parking, WHDC's formal response states that... "Turning to parking, Policy M14 requires new development to accord with the Parking Standards in the Councils Supplementary Planning Guidance (SPG). The site falls within zone 4 of the council's parking zones where as a guideline, 75-100% of standards would apply. As expressed within the Interim Policy for Car Parking Standards and Garage Sizes the Council has agreed to treat its existing car parking standards as guidelines rather than maximums. This means that higher or lower car parking standards than those set out in the SPG can be proposed (by landowners, developers, etc) and determined (by officers and elected councillors) on a case-by-case basis taking account of the relevant circumstances of the proposal, its size context and its wider surroundings, as well as the NPPF guidance set out above."
- 4.4 Section 9.1 of Roads in Hertfordshire: Highway Design Guide - Chapter 9 - Vehicle Parking Facilities states that... "Provision and standards of parking within developments are set by each Local Planning Authority. Details are to be found in Supplementary Planning Guidance (or similar) available on each Borough or District Council's website or from their planning department".
- 4.5 In light of the above, Welwyn Hatfield District Council's 'Interim Policy for Car Parking Standards and Garage Sizes' (August 2014) were reviewed in light of residential parking. This states that... "Government guidance no longer requires councils to set maximum car parking standards. Evidence indicates that such standards no longer meet current patterns and complexities of modern car ownership".
- 4.6 It also states that... "Hertfordshire has one of the highest rates of car ownership in the UK and the 2011 census reveals that 79% of households in Welwyn Hatfield have access to at least one car or van. Maximum standards can hamper the economic vitality of commercial activities, lead to parking problems in areas surrounding key destinations such as town centres, railway stations and employment areas and cause on-street parking and other problems in residential areas".
- 4.7 Furthermore, it states that... "The Council has therefore agreed to treat its existing car parking standards as guidelines rather than maximums. This means that higher or lower car parking standards than those set out in the SPG can be proposed (by landowners, developers, etc) and determined (by officers and elected councillors) on a case-by-case basis taking account of the relevant circumstances of the proposal,

its size context and its wider surroundings, as well as the NPPF guidance set out above. The zonal approach will continue to apply but as quidelines rather than maximums. The onus is on developers to demonstrate through transport information submitted alongside their planning applications that a greater or lesser level of car parking provision is appropriate".

- 4.8 It appears from the above information that providing higher levels on car parking at new developments has resulted in several issues within town centres. Therefore, as the proposed development is located within a highly sustainable location it is considered that these now parking guidelines figures should be kept to a minimum when applied to the development.
- 4.9 Based on the information provided within Appendix A of WHDC's parking guidance along with Cuffley being classified as a 'Zone B', the following guideline parking figures should be initial considered: -

• 1-bed units 1.25 spaces per unit; and

1.5 spaces per unit. • 2-bed units

- 4.10 Based on the above guidance and the proposed schedule of accommodation (3 x one-bed units and 3 x two-bed units), a guideline figure of 8 car parking spaces should be considered.
- 4.11 The site currently includes a total of 22 on-site parking spaces (of which 11 are garages) to serve the existing 14 residential flats, which relates to circa 1.6 spaces per unit. In light of the above guidance, the 14 existing two-bed flats should include a guideline figure of 21 spaces. Therefore, the overall development (existing and proposed combined) should include up to a maximum of 29 on-site car parking spaces.
- 4.12 However, Paragraph 2.2 of WHDC's parking guidance states that... "The new standards will normally be the starting point from which progressive reductions in on-site provision may be made based on the accessibility of the site, calculated in accordance with the principles set out in this quidance". Furthermore, Paragraph 2.4 states that... "The use of inappropriately high trip rates in parking accumulation calculations to try to justify additional parking provision will normally be challenged".



- 4.13 Further to the above, Paragraph 3.4 of WHDC's parking guidance states that... "In all new development proposals that include the provision of car parking, the car parking standards and zonal-based restraint outlined in this SPG will provide a starting point for discussions with developers on the appropriate level of car parking at each development. The general presumption is to impose the lower (most restrictive) end of each range, but having a range allows development to be tailored to particular circumstances".
- 4.14 Car Ownership statistics from the 2011 Census for the 'Northaw and Cuffley' ward have been obtained from the Nomis statistics website (www.nomisweb.co.uk). Table **4.1** below shows the results car ownership statistics for 'Flats, maisonette or apartments' that are 'Owned outright or with a mortgage or loan', including 1-3 habitable rooms.

| No. of Cars/Vans in Household | High Town | | | | |
|-------------------------------------|-----------|--|--|--|--|
| <u>1-3 rooms</u> | | | | | |
| No Cars/Vans | 30% | | | | |
| 1 Car/Van | 70% 0% | | | | |
| 2 Cars/Vans | | | | | |
| 3+ Cars/Vans | 0% | | | | |
| Average no. of vehicles per flat | 0.70 | | | | |

Table 4.1 – 2011 Census Car Ownership (Northaw and Cuffley)

- 4.15 The above details confirm that almost a third of flats do not own any cars/vans, whilst the majority of those that do own vehicles have only one car/van per unit. From the above table, it can be calculated car ownership for flats within the surrounding area to be approximately 0.70 cars/vans per flat on average. Applying this to the proposed 6-unit and existing 14-unit development, this equates to a potential demand of 14 cars overall.
- 4.16 With regards to the above information, the proposals are to provide a total of 18 car parking spaces on-site for the overall 20 residential flats, on a first come first served basis due to the limited land available within the site. Due to the land constraints within the site, it is proposed that one former parking space will be removed and replaced with on-site cycle parking in support of sustainable travel. Furthermore, a

single visitor space will be provided on-site for the residential flats, as well as a double space for delivery vehicles. Based on this provision, the site will remain in line with the parking guidance and the Census parking demand for this specific area.

- 4.17 It is noted that the existing commercial units can apply for business parking permits within the existing Controlled Parking Zone along Station Road adjacent to the site. As such, it is considered that the 3 on-site spaces the commercial uses had been using can justifiably be allocated to the the residential development.
- 4.18 Not all flats will be provided with a parking space which is in line with the parking guidance and the Census parking demand for this specific area. Furthermore, to assist with preventing unauthorised parking on-site, new gates will be provided at the car park entrance. The apartments are located within the town centre in walking distance of a number of local facilities and public transport options. They are to be aimed at young professionals who are likely to travel to places such as London via public transport during the week. Taking into consideration the good opportunities to travel by non-car modes, it is likely that many residents would travel by non-car modes anyway.
- 4.19 Due to the restricted on-site car parking area, it is considered that staff at the commercial units and some visitors of the residential units could park within the local Maynard Place 'pay and display' car park within close proximity of the site. This car park is opened to the public between 0800 and 1800 hours Monday to Friday; and 0730-1300 hours on a Saturday. The following charges apply to this car park: -

1 hour No Charge;

2 hours £0.50;

3 hours £1.00;

4 hours £1.50;

Over 4 hours £10.00.

Cycle Parking

4.20 Appendix A of WHDC's parking guidance confirms that 1 cycle parking space per residential apartment should be provided if no shed or garage is provided. The

proposals consist of 6 new residential apartments within an additional floor above the existing commercial/14 flats. The proposals include a total of 11 garages that will be allocated to specific apartments. Therefore, there is no requirement to provide cycle parking for 11 of the overall 20 flats (6 new and 14 existing units).

4.21 Based on the above and taking into account the 11 garages, the overall development requires a total of 9 cycle parking spaces. These shall be provided in the form of 5 Sheffield Cycle Stands to be sheltered and located within the site boundary but outside of the building footprint itself. As the car park is to be gated as part of the proposals, this provides an extra level of security for external cycle parking. Due to the constraints within the site, it is proposed that one of the parking spaces will be removed and replaced with on-site cycle parking in support of sustainable travel. By removing a single car parking space, the site will remain in line with the parking guidance and the Census parking demand for this specific area. It is considered that the exact location and specification of these stands shall be confirmed as part of a condition.

5.0 **HIGHWAY IMPACT**

- 5.1 The TRICS database was examined to identify suitable trip rates to calculate the potential peak hour and daily traffic movements that could be generated by the proposed residential development. The category 'Residential - Flats Privately Owned' was searched, specifying a range of between 6 and 184 dwellings (minimum to maximum available) to allow for a range of sites to review, excluding sites in Greater London, Ireland and Northern Ireland and weekend surveys, with site in 'Town Centre' locations selected. This search resulted in 3 surveys taken from 3 sites.
- 5.2 Following inspection of the details of the sites from the above search, two of the sites were deselected as they were not comparable to the proposed development, i.e. nonsimilar location (Central Manchester) and includes more public transport modes than the proposed development provides. Following a review of the remaining site, it was considered to be similar with regards to location and public transport modes in the local area.



5.3 The resulting person trip rates (per dwelling) and commensurate trip generation for the proposed development site are shown in Table 5.1 with the full output data contained within **Appendix C**.

| Site | Weekday AM Peak (08:00-09:00) | | | | day PM F :00-18:0 | | Weekday 12-hour (07:00-19:00) | | |
|---------------------------------------|----------------------------------|-------|-------|-------|----------------------|-------|----------------------------------|-------|-------|
| | Arr | Dep | Total | Arr | Dep | Total | Arr | Dep | Total |
| Person Trip Rates (per dwelling) | 0.125 | 0.425 | - | 0.350 | 0.425 | - | 2.550 | 2.600 | - |
| Trip Generation (6 residential units) | 1 | 3 | 4 | 2 | 3 | 5 | 15 | 16 | 31 |

Table 5.1: Proposed Residential Units Vehicular Trip Generation

5.4 The mode of travel for the proposed development has been determined from the 'Travel to Work' dataset provided within the 2011 specification Census database for the 'Welwyn Hatfield E00121603' Output Area (see Appendix D). This was used to identify a suitable modal split for the proposed residential use, and Table 5.2 shows this modal split along with the resulting peak hour person trips by each mode (any discrepancies in the figure are due to rounding).

| Mode | Share | Weekday AM Peak (08:00-09:00) | | | Weekday PM Peak (17:00-18:00) | | | Weekday 12-hour (07:00-19:00) | | |
|--|------------|----------------------------------|-----|-------|----------------------------------|-----|-------|----------------------------------|-----|-------|
| | | Arr | Dep | Total | Arr | Dep | Total | Arr | Dep | Total |
| Underground, Metro, Light Rail or Tram | 5.3% | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Train | 21.2% | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 3 | 6 |
| Bus | 0.9% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taxi | 0.0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Motorcycle | 0.9% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Car Driver | 65.5% | 1 | 2 | 3 | 1 | 2 | 3 | 10 | 10 | 20 |
| Car Passenger | 3.5% | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| Bicycle | 0.9% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| On foot | 1.8% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 0.0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 100.0 % | 1 | 3 | 4 | 2 | 3 | 5 | 15 | 16 | 31 |

Table 5.2 - Predicted Weekday Trip Generation by Mode

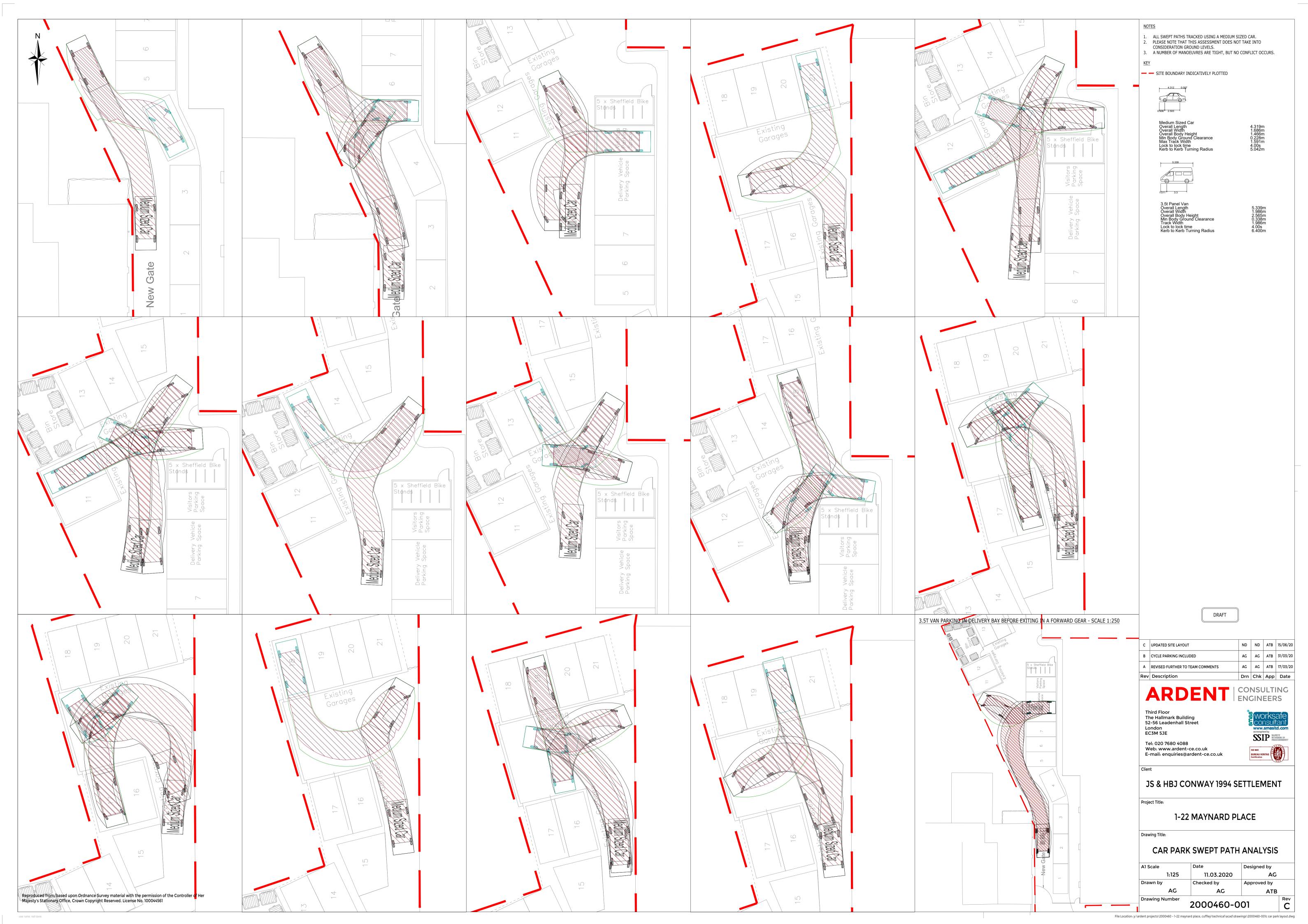
5.5 It is generally recognised that the analysis period for any proposed development should primarily address the weekday morning and evening peak periods and developments may have a significant highway impact where increases of 30 or more two-way vehicle movements occur during peak hours.

- 5.6 The above traffic generation calculations indicate that the proposed development would result in a total of 3 two-way vehicular movements during the morning and evening peak periods, with a total of 20 two-way daily movements.
- 5.7 It is considered that the increase in traffic as a result of the proposed development would not result in any detrimental impact on highway safety, or cause any congestion issues within the existing site access road (which does not for a through route) or local highway network.
- 5.8 This is backed up by guidance contained in paragraph 109, the NPPF states that: "Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe." Therefore, no further detailed assessment of the impact of these increases on the surrounding highway network would be necessary.

6.0 **SUMMARY AND CONCLUSIONS**

- 6.1 Ardent Consulting Engineers (ACE) were instructed by JS & HBJ Conway 1994 Settlement to prepare a Transport Technical Note (TTN) for the development of 6 new residential apartments within an additional floor at a residential development with existing ground floor commercial. The site is located at the northern edge of Station Road in Cuffley, Hertfordshire.
- 6.2 The proposed development seeks to provide a total of 3 one-bed units and 3 twobed units on a new floor at an existing 14-unit apartment block.
- 6.3 The proposed development would generate a total of 3 two-way vehicular movements during the peak periods, with a maximum of 20 two-way daily movements. This does not represent a significant change in traffic conditions, and does not warrant any further detailed assessment of the impact of the proposed development on the existing surrounding highway network.

- 6.4 The proposed development will generate a small increase in demand for travel by non-car modes such as walking, cycling, and public transport, which could be satisfactorily accommodated by the existing infrastructure in the vicinity of the site.
- 6.5 Inspection of the 'CrashMap' website (www.crashmap.co.uk) for the surrounding area has revealed that there are no major existing highway safety concerns in the vicinity of the site. It can be concluded that the additional traffic movements associated with the proposed development should not lead to any increased risk of collisions.
- 6.6 The proposals include an amended car parking layout providing 18 car parking spaces for the overall 20 residential flats on a first come first served basis due to the limited land available within the site. One former car parking space will be converted to provide 5 Sheffield Cycle Stands to encourage sustainable travel, whist a single visitor bays and double delivery vehicle bay will also be provided on-site. The existing parking for the commercial premises on-site will be removed as part of the proposals, noting that these units can apply for business parking permits withing the surrounding CPZ.
- 6.7 Not all flats will be provided with a parking space which is in line with the parking guidance and the Census parking demand for this specific area. The apartments are located within the town centre in walking distance of a number of local facilities and public transport options. They are to be aimed at young professionals who are likely to travel to places such as London via public transport during the week. Taking into consideration the good opportunities to travel by non-car modes, it is likely that many residents would travel by non-car modes anyway.
- 6.8 This Transport Technical Note confirms that the site is in a reasonably sustainable location. Furthermore, the potential traffic increases associated with the proposed development would not be significant and so the development would have no severe off-site impact, thus meeting the requirements of the NPPF. As a result, it is considered that the site represents good opportunity for residential development that should therefore receive the support of the local highway authority.



Appendix A WHDC's pre-application response



Colin Haigh Head of Planning

Reply To: address as below Direct Tel: 01707357000 Email: planning@welhat.gov.uk

8 January 2020

The Arts Building Morris Place London N4 3JG

Dear Sir,

Application Reference: 6/2019/2765/PA **Proposal:** Erection of 7 flats above existing **Location:** 1-22 Maynard Place Cuffley EN6 4JA

Advice: Level 3 Dwellings (7 units)

Thank you for your pre-application enquiry which was received on 7 November 2019, further to our meeting on 10th December, please find below the Council's response to your proposal.

The following response applies a similar assessment to that which would occur if the application is submitted prior to the adoption of the emerging Local Plan.

For this scheme the relevant planning documents you should be aware of include the National Planning Policy Framework 2019 (Framework), Welwyn Hatfield District Plan 2005, Welwyn Hatfield Borough Council Draft Local Plan Proposed Submission August 2016 (eLP), and supplementary planning documents such as Supplementary Design Guidance 2005 Supplementary Planning Guidance – Parking Standards 2004 and Interim Policy for Car Parking Standards and Garage Sizes 2014.

This pre-application is for the creation of a mansard roof extension to facilitate 7 flats with inset balconies, above an existing block of flats which feature commercial properties at ground floor. The proposed new flats would provide 2 x 2 Bed 3 Person units and 5 x 1 Bed 2 Person flats. The proposal also includes alterations to the existing exterior on the eastern elevation. Car parking would be provided for the dwellings to the west of the site. It is noted, that at the pre-application meeting you raised that you would also like to erect a gate to the front of the parking area to prevent non-residents from parking on the site. This will be discussed within this report also.

In regards to the principle of development, the site is not part of an allocated housing site within the existing or proposed local plan. The erection of 7 flats within this location would make use of a previously developed site, which is accessible through sustainable modes of transport and within walking distance to amenities. Further to this there are no physical constraints on the development of this land. As such, the residential development would be considered as windfall housing and therefore Policy H2 of the District Plan and Policy SADM 1 of the Draft Local Plan are both relevant. The development in principle would therefore be in principle acceptable, subject to satisfying with other applicable policies within the development plan such as design, residential amenity, affordable housing etc.

Design, Density and Layout

In terms of density, the pre-application cover letter states that the size of the site is approximately 0.16ha. As the development would total 7 additional residential units, above the existing 14, resulting in a total of 21 residential units on the site. The density of the scheme would therefore equate to a total of approximately 131 dwellings per hectare. As the site is within a central area with good accessibility modes of transport other than car the density is not objected to subject to the development not having an adverse impact on the character of the surrounding area and satisfying the design policies of the plan.

As raised at the meeting, I do have concern that the creation of a mansard roof, resulting in a four storey apartment building within the site, would fail to respect the character and context of the area and that of neighbouring buildings (.i.e. height, mass, scale). The majority of neighbouring properties along Maynard Place are two storey, with some being three storeys. A mansard roof extension of this height finished with a flat roof would potentially appear obtrusive and incongruous within the streetscene. To mitigate the dominance of the roof extension it is advised that you consider a hipped roof design. In doing so, the development would appear subservient to the existing building and less obtrusive within the streetscene.

Given that the majority of buildings are no more than 3 storeys in height, design for a taller building within this area is highly important. In terms of materials, these should be traditional and in keeping with the streetscene and the existing building. As such, the introduction of zinc and the yellow framed addition would not be supported. Further to this, the existing eastern elevation is flushed and the inset amenity spaces would detract from this design. Whilst I appreciate you were seeking to introduce amenity space for future occupiers it would not be in keeping with the current design of the building or the wider area.

Due to there being concern in relation to the height proposed, it is advised that on submission of any future planning application, cross section plans are included comparing the height of the proposed four storey building in relation to the other buildings within the wider area. This should help demonstrate the impact on the wider area.

As for the erection of a gate to control the access to the car parking this is not a common feature within the streetscene. Having said that, at the site on the corner of Station Road and Plough Hill there is a fence erected, albeit this is set back from the street scene. If a gate were to be acceptable within this location, it should be set back from the street scene. In addition to this, Hertfordshire County Highways Authority will need to be consulted to ensure they are satisfied that a controlled access into the car parking would not result in detrimental harm upon the Highway. This advice should be sought separately to this pre-application.

To conclude on the above, there is concern that the proposed design and height would not be in keeping with the character of the area, suggesting that the density is too high.

Residential Amenity

As for the impact of the development upon neighbour amenity, careful attention should also be afforded towards the siting of the apartments, which are adjacent existing residential units. Due to the proximity of the neighbouring properties, it is essential that the siting, design and scale of these buildings do not result in adverse harm upon neighbouring occupiers by way of overbearing, overlooking or a loss of light. Further to this, care should also be taken regarding the positioning of windows to ensure existing and future occupier's privacy is maintained and natural surveillance is achieved of outdoor spaces.

I would also advise that consideration is given towards the commercial units at ground floor, particularly in relation to odour and noise, to ensure that the amenity of future residential properties are protected in accordance with Policies D1, R18 and R19 of the District Plan.

You also need to demonstrate that an additional 7 units would not increase air pollution, such that it would be detrimental upon the current air quality within the area and that future/existing occupiers would not be harmed.

Car Parking and Cycle Provision

Turning to parking, Policy M14 requires new development to accord with the Parking Standards in the Councils Supplementary Planning Guidance (SPG). The site falls within zone 4 of the council's parking zones where as a guideline, 75-100% of standards would apply.

As expressed within the Interim Policy for Car Parking Standards and Garage Sizes the Council has agreed to treat its existing car parking standards as guidelines rather than maximums. This means that higher or lower car parking standards than those set out in the SPG can be proposed (by landowners, developers, etc) and determined (by officers and elected councillors) on a case-by-case basis taking account of the relevant circumstances of the proposal, its size context and its wider surroundings, as well as the NPPF guidance set out above.

To be in accordance with the council's parking standards, a 1 bedroom unit requires 1.25 spaces, and a 2 bedroom dwelling requires 1.5 space. The proposed new flats would provide 2x 2 bed units and 5 x 1 bed resulting in a car parking need of 9.

As discussed at the meeting, the car parking will need to take into consideration the residential units at first and second floor, as well as, the commercial units at ground floor. Currently the pre-application does not obtain this information. A car parking plan, identifying allocated spaces for all units should therefore be submitted on submission of any future planning application.

In addition to car parking, one long term cycle parking space is required for each flat.

Accessible Housing

In terms of other planning matters, Policy H10 of the District Plan requires at least 20% of all new dwellings on sites involving 5 or more new dwellings to meet Building Regulations Part M4(2) standards for 'accessible and adaptable dwellings' the delivery of which should be distributed across market and affordable tenures. It is considered that this proportion may vary where a proportion of dwellings are proposed to meet Part M4(3) standards for 'wheelchair user dwellings'. In addition, a proportion of dwellings should be built to lifetime homes standard. In this case, it appears there are no reasons to prevent the properties being built to this standard. Therefore, I advise you achieve lifetime homes standard on all properties.

Energy Sufficient

Where ever possible consideration should be given to the incorporation of energy efficiency measures in the development. This shall include measures to maximise energy conservation through the design of buildings, site layout and provision of landscaping and also incorporate the best practical environmental option for energy supply, in accordance with Policy R3 of the District Plan. In addition, where possible renewable energy sources should be included in accordance with Policy R4 of the District Plan.

Waste Management

Demonstration of how waste management issues are to be addressed shall be submitted, including details of the measures it be taken in the design, construction and operation of the existing building in accordance with Policy R5 of the District Plan.

Is the development likely to be approved or refused?

In terms of the principle of development this is supported, however as discussed above and at the preapplication meeting, concerns remain regarding the design and car parking provision, due to the density of the scheme proposed and lack of car parking justification. Further consideration should therefore be given to the comments above to address the concerns raised within this letter and at the pre-application meeting.

Other matters

I would suggest that you discuss the proposal with neighbours before submitting the application as we will consult them along with the Town/Parish Council once the application is received. You may also like to refer to the Council's Statement of Community Involvement when considering your pre-application consultations.

Please note that pre-application advice has not been sought from Hertfordshire County Council, Transport Programmes and Strategy, Environment Agency or the Lead Local Flood Authority as they each provide their own pre-application advice service, subject to a fee.

This advice represents my personal professional opinion and is given without prejudice to the decision of the Local Planning Authority in respect of this enquiry or any future application which may be submitted. Please note that there may be other issues which come to light when a planning application is submitted and consultations carried out.

Should you have any questions, please contact me.

Yours sincerely,

Ms Clare Howe Principal Major Development Management Officer



List 1 Information Requirements for an:

- Application for Planning Permission
- Application for Outline Planning Permission with Some Matters Reserved
- Application of Outline Planning Permission with All Matters Reserved
- Application for Planning Permission and Consent to Display Advertisement(s)
- Application for Planning Permission and Listed Build Consent for Alterations, Extension or Demolition of a Listed Building
- Application for Listed Building Consent for Alterations, Extensions or Demolition of a Listed Building; and

Information listed within 'Section 1: National Requirements' is required to be submitted with the above types of applications.

The Council formally adopted a local list for the above applications, except advertisement(s), on 14 July 2015. If you are uncertain as to the level of information required, prior to submitting your application please speak to a Development Management Officer. In instances where pre-application advice has been sought, the case officer will advise you of necessary information. If you consider that your proposal does not warrant the information detailed, please note this within your application.

2a. Drawings and Documents

Required for all major applications, which comprise:

- 10 or more dwellings, or the site area for residential development is 0.5 hectares or more
- 1000 square metres or more of floor space
- Development carried out on a site having an area of 1 hectare or more (the following requirements do not relate to householder applications on sites of more than 1 hectare)

2b. Existing and Proposed Floor Plans

Required for all applications including change of use

All plans to be drawn at a minimum scale of 1:50, or 1:100. Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or scale bar and paper size.

They should show clearly the proposed works in relation to what is already there, highlighting any structures to be demolished.

Policy Driver and where to get more advice:

Planning Practice Guidance – www.planningguidance.planningportal.gov.uk/

2c. Existing and Proposed Elevations

Required for all applications involving building work, alterations to buildings or display of advertisements

All plans to be drawn at a minimum scale of 1:50, or 1:100. Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size. All sides of the proposal must be shown and these should indicate, where possible, the proposed building materials and the style, materials and finish of windows and doors. Blank elevations must also be included, if only to show that this is in fact the case.

They should show clearly the proposed works in relation to what is already there, highlighting any structures to be demolished, and the relationship to neighbouring buildings.

Where a proposed elevation adjoins another building or is in close proximity, the drawings should clearly show the relationship between the buildings, and detail the positions of the openings on each property.

If your application is for a change of use and no change is proposed to the external elevations a statement must be included to state that no external changes are proposed.

Policy Driver and where to get more advice:

Planning Practice Guidance – www.planningguidance.planningportal.gov.uk/

2d. Existing and Proposed Sections and Floor Levels

Required for all applications involving building work, alterations to buildings or display of advertisements when the proposal includes or involves a change in ground levels

All plans to be drawn at a minimum scale of 1:50, or 1:100 with a bar scale (horizontally and vertically) showing a cross section(s) through the proposed building(s). Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated where appropriate with dimensions or scale bar and paper size. They should show clearly the proposed works in relation to what is already there, highlighting any structures to be demolished. The drawings may take the form of contours, spot levels or cross or long sections as appropriate.

Policy Driver and where to get more advice:

Planning Practice Guidance – www.planningguidance.planningportal.gov.uk/

2e. Existing and Proposed Roof Plans

Required for all applications involving alterations to the roof layout

All plans to be drawn at a minimum scale of 1:50, or 1:100. Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size. They should show clearly the proposed works in relation to what is already there, highlighting any structures to be demolished.

Policy Driver and where to get more advice:

Planning Practice Guidance – www.planningguidance.planningportal.gov.uk/

2f. Landscaping Plan

Required for: Examples include: Increase in bedroom numbers; Proposals reducing on-site parking provision; Increase in commercial floorspace; Houses in multiple occupation; Forecourt parking.

Plans and elevations

Submit existing and proposed layout plans to scale, annotated with dimensions or a scale bar and paper size, showing:

Areas of hard and soft landscaping

- Location and type of boundary treatment for example gates, walls, fences, railings
- Location, type and spread of trees on the site and on pavement.
- Existing and proposed changes of levels

An indication as to how the hard standing will be drained.

2g. Topographical Survey

Required for major applications and sloping sites

Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size.

2h. Outline Planning Permission

Required for outline planning applications. These applications are generally only appropriate for new build developments outside conservation areas and are not appropriate for changes of use, or for proposals which are within or adjacent to a conservation area or involve development to or adjacent to a listed building

Where access is a reserved matter there is a requirement to indicate where access points to the development would be situated.

If access is to be determined at the outline stage all transport matters must be dealt with in detail, including the submission of a Transport Impact assessment where necessary.

The Council reserves the right to request further information in the form of e.g. indicative drawings and other supplementary documents, if it is not possible to determine the application on the reserved matters indicated (Article 5 of the Town and Country Planning (Development Management Procedure) (England) Order 2015.

Policy Driver and where to get more advice: Town and Country Planning (Development Management Procedure) (England) Order 2015

2i. Plant and Flue Drawings

Required for installation of plant, flues, ventilation, extraction or air conditioning equipment.

Plans, elevations and sections

- Show equipment, ducting and acoustic enclosures or screening on plans, elevations and sections
- Show the location of neighbouring windows on drawings cross referenced to the acoustic report

Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size.

2j. Shop Fronts or ATMs

Required for shop fronts

Plans, elevations and sections

- Section of security grilles or shutters, if proposed, indicating the location of the shutter box and canopy
- If the proposal affects the access to the upper floors in any way, ground floor plans showing separate access to upper floors
- For proposals including the installation of ATM's, details of height (for disabled access) and details of any illuminated adverts

Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size.

If advertisements are shown on the plans, these may require a combined planning permission and advertisement consent application.

Policy Driver and where to get more advice:

- Policies D1 and D2 of the Welwyn Hatfield District Plan 2005
- Policy CS9 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 7

2k Basements or Excavations

Required for basements or excavations

Plans, elevations and sections

- Existing and proposed sections
- Show light wells and window dimensions on sections

If the proposed works to the basement extend to the front and rear of the property show the distance between basement and boundary on plans and section.

Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size.

Policy Driver and where to get more advice:

- Policies D1 and D2 of the Welwyn Hatfield District Plan 2005
- National Planning Policy Framework, Section 7

2l Parking Plan

Required for all new development which would result in a change in parking requirements or loss of parking provision

Plans and elevations

Submit existing and proposed layout plans to scale showing:

- Details of existing and proposed parking provision including disabled and cycle parking
- Areas of hard and soft landscaping,
- An indication as to how the hard standing will be drained,
- Garage provision, to include information showing the garage is large enough to accommodate a vehicle in accordance with the Interim Parking Standards, November 2014

Plans should be proportionate to the nature and size of the proposal, titled and numbered, annotated with dimensions or a scale bar and paper size.

Policy Driver and where to get more advice:

- Policies M14, D1 and D2 of the Welwyn Hatfield District Plan 2005
- Supplementary Planning Guidance Parking Standards Adopted January 2004
- Interim Policy for Car Parking Standards and Garage Sizes, August 2014
- Policies CS1 and CS9 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 4

Statements and Reports

3a Affordable Housing Statement

Required for proposals of 25 or more new residential units or on sites of 1 hectare or greater.

Submit an affordable housing statement. The statement will need to include:

- The mix of private and affordable units with numbers of habitable rooms and/or bedrooms
- If you are proposing different levels or types of affordability or tenure for different units you should explain this clearly and fully
- If you are proposing affordable housing that is not policy compliant, a viability statement will need to be submitted

You should also show the location of the affordable units and the number of habitable rooms and/or bedrooms, and/or the floor space of the units on the floor plans.

Policy Driver and where to get more advice:

- Policy H7 (Affordable Housing) of the Welwyn Hatfield District Plan 2005
- Policies CS7 and CS20 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 12

3b Air Quality Assessment

The Council may require an applicant to submit an Air Quality Assessment for proposals that would:

- Include housing and is within or adjoining an Air Quality Management Area;
- Require an Environmental Statement;
- Require a Transport Assessment;
- Result in increased traffic congestion, or create a change in traffic volumes or vehicle speed;
- Significantly alter the traffic composition in an area (i.e. bus stations, HGV Parks etc);
- Include proposals for new car parking (>300 spaces) or coach/ lorry parks; or
- Have an effect on sensitive areas such as ecological sites, or areas previously defined as having poor air quality (including Air Quality Management Areas)

This assessment should indicate the change in air quality resulting from the proposed development and outlining appropriate mitigation measures as necessary.

Policy Driver and where to get more advice:

- Policy R18 of the Welwyn Hatfield District Plan 2005
- National Planning Policy Framework, Section 11
- Further advice may be obtained from the Council's Environmental Health Services department

3c Archaeological Assessment

Required for proposals involve a new building or the disturbance of ground within an Area of Archaeological Significance, and/or where the development would have an impact on a site which has, or may have, archaeological interest of over 0.5ha.

For all applications involving the disturbance of ground within an Area of Archaeological Significance as defined in the development plan, or other archaeological notification areas that might be published (including Scheduled Monument data), or in other areas in the case of a major development proposal or significant infrastructure works, an applicant may need to commission an assessment of existing archaeological information and submit the results as part of the Heritage Statement. This assessment may comprise the results of a desk based assessment and/or the results of an archaeological evaluation of the site.

Policy Driver and where to get more advice:

- R29 of the Welwyn Hatfield District Plan 2005
- Policy CS11 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section12

Further information on existing archaeology, as well as other archaeological information and advice can be obtained from the Natural, Historic and Built Environment Team at Hertfordshire County Council.

3d Bin Stores / Recycling Facilities

Required for all new development which would result in the need for new or additional bin storage or recycling facilities

A scaled plan indicating the location of bin stores and details of the materials, design and type of enclosure to be used. The plan should include elevations with dimensions.

Policy Driver and where to get more advice:

- Policy R5 of the Welwyn Hatfield District Plan 2005
- Houses in Multiple Occupation, Supplementary Planning Document, February 2012
- Policy CS1 of the Emerging Core Strategy, November 2012

3e Biodiversity Survey/Report

May be required where your proposed development is part of, or located next to, a site designated for its biodiversity value, where it supports other locally significant habitat interest or may affect protected species or the potential for them.

For sites where protected species are known to exist, you will need to accompany your planning application with a biodiversity survey and report.

For other sites, where protected species are believed to be present and would be affected by the development, a phase 1 survey is recommended is undertaken which should be submitted with the application.

A biodiversity survey and report (Phase 1 Habit Survey) should include the following information:

- Details about the existing biodiversity interests and protected species found on the development site (including any possible impacts that the new development may have on them)
- Details of any proposed measures to prevent mitigate or compensate for the possible impacts of the proposed development

Where necessary, an appropriate ecological survey (e.g. walkover, Phase 1 Habitat Survey, National Vegetation Classification or protected species) should include details of any statutory or non-statutory sites, other existing biodiversity interests and protected species or potential for them found on the development site. These will include any significant wildlife habitats or features and any species or potential for them protected under the Wildlife and Countryside Act 1981, Conservation of Habitats and Species Regulations 2010 (as amended by 2012 (Regulations) or the Protection of Badgers Act 1992.

Details of any proposed measures necessary to prevent, mitigate or compensate for the possible impacts of the proposed development on both habitats and species will also be required. These may need to include details for long term maintenance and management.

This applies to those types of development requiring an EIA and an Environmental Statement as well as to those where any locally valuable habitats or protected species is involved.

Without appropriate surveys, when required, the application may be refused planning permission for insufficient information.

Policy Driver and where to get more advice:

- Policy CS11 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 11
- BS42020:2013 Biodiversity. Code of practice for planning and development
- Planning Practice Guidance, Natural Environment, Planning Portal

It is advisable for applicants to seek advice on the scope of the assessment from the local Natural England office (Natural England, Harbour House, Hythe Quay, Colchester, Essex, CO2 8JF; Tel 01206 796666; email: consultations@naturalengland.org.uk).

Further advice may be found in: www.planningguidance.planningportal.gov.uk/, DEFRA Circular 01/2005 and Planning for Biodiversity and Geological Conservation: A Guide to Good Practice.

Further guidance and the Protected Species Trigger List may be found in Association of Local Government Ecologists (ALGE) document on Validation of Planning Applications – Template for Biodiversity and Geological Conservation, http://www.alge.org.uk/publications/index.php; and Publicly Available Specification (PAS) 2010:2006. Planning to halt the loss of biodiversity. Biodiversity Conservation standards for planning in the UK. Code of Practice. British Standards Institute.

3f Chalk Mining

Required for those in Hatfield on University of Hertfordshire, College Lane Campus

When a development is proposed within these areas, it is necessary for a chalk mine risk assessment to be undertaken. Developers should contact Development Management prior to submitting an application to clarify the risk. Details, including the following will be required to undertake the assessment:

- Site Address
- Land use
- Access types of highway being provided and/or might be affected by the development, for example 'A' roads, major local road, minor, footpaths etc
- Services provided/impacted upon (electricity, gas, water etc), national supply, local service, industrial level, domestic level, minor drainage and telecoms.

This assessment, undertaken by the planning authority will determine the level of risk as a result of the proposed development.

Where the risk is established to be 'very high' or 'high' a Geophysical Technical Survey' report will be need to be undertaken and submitted with the planning application to enable the consideration of the risk to be undertaken.

Policy Driver and where to get more advice:

National Planning Policy Framework, Section 11

3g Character Analysis and Appraisal

Required for all new build

Provide a contextual statement that demonstrates a clear understanding and analysis of the local character of the area. The statement should demonstrate how your proposal will make a positive contribution to protecting and enhancing the local character of the area.

Policy Driver and where to get more advice:

- Policies D1, D2 and RA10 of the Welwyn Hatfield District Plan 2005 and Supplementary Design Guidance 2005
- Policy CS9 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 7

3h Contaminated Land Assessment

Required for applications to re-develop or significantly change the use of a piece of land which could potentially be contaminated as a result of current or historic use

Dependent on the site and the end use and the potential for contamination to affect the development proposals, it may be a requirement that a Site Investigation and Risk Assessment and Remediation Strategy need to be submitted with the application

The amount of information required should be sufficient to determine the existence or otherwise of the contamination, the nature of the contamination, risks it may pose to human health and controlled waters and whether these can be satisfactorily reduced to an acceptable level.

Policy Driver and where to get more advice:

- Policy R2 of the Welwyn Hatfield District Plan
- National Planning Policy Framework, Section 11
- Advice may be obtained from the Council's Environment Health Services section

3i Cycle Parking

Required for all new build and change of use.

Details of proposed cycle parking, including a plan to scale showing location; numbers of stands, elevations of proposed cycle covers and materials to be used.

Policy Driver and where to get more advice:

- Policy M6 of the Welwyn Hatfield District Plan 2005 and Supplementary Planning Guidance Parking Standards Adopted January 2004
- Policies CS1 and CS9 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 4

3j Daylight and Sunlight Assessment

Required for major applications where there is a potential adverse impact upon the current levels of sunlight/daylight enjoyed by adjoining properties or buildings, including associated gardens or amenity space.

Applications where the application site itself is subject to potential adverse impact from adjoining buildings or features or where one part of the development is affected by another part of the same development.

A daylight, vertical sky component, sunlight availability and shadow study should be undertaken and assessed against the criteria set out in the BRE document.

The information included should be sufficient to determine:

- The existing and expected levels of daylight, sunlight and overshadowing on neighbouring properties
- The measures that will be taken to mitigate against the expected impact of the proposed development

Policy Driver and where to get more advice:

- Policy D1 of the Welwyn Hatfield District Plan 2005
- Supplementary Design Guidance, February 2005
- Policy CS9 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 9

Site Layout Planning for Daylight and Sunlight 'A guide to good practice' (BRE) 2011 http://www.bre.co.uk/

3k Economic Statement

Required for major developments, excluding householders which are major developments by virtue of the site area

Applications may need to be accompanied by a supporting statement of any regeneration benefits from the proposed development, including: details of any new jobs that might be created or supported; the relative floorspace totals for each proposed use (where known); any community benefits; and reference to any regeneration strategies that might lie behind or be supported by the proposal.

This will assist in demonstrating the economical benefits associated with sustainability.

3I Energy Statement

Required for 10 or more dwellings

Statement to demonstrate how the proposal will maximise energy conservation through means such as renewable energy or low carbon sources

Policy Driver and where to get more advice:

- Policy R3 of the Welwyn Hatfield District Plan 2005
- Policy CS1 and CS10 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 10
- Advice may be obtained from Building Futures: http://www.hertslink.org/buildingfutures/

3m Environmental Statement

Required for developments that: are listed under Schedule 1 and may be required for developments defined within Schedule 2 of The Town and Country Planning (Environmental Impact Assessment) (Amendment) Regulations 2015

You should request a screening opinion before submitting a planning application if the development meets or exceeds the thresholds defined within Schedule 1 and 2 of the Regulations to determine if an EIA is required. Other developments below this threshold may also require a screening opinion. Further guidance is provided within the National Planning Policy Guidance.

The Regulations provide a checklist of matters to be considered for inclusion in the Environmental Statement and require the developer to describe the likely significant effects of a development on the environment and to set out the proposed mitigation measures e.g. air quality assessment.

Where an EIA is required, this should be in the form set out in Schedule 4 of the Regulations.

Policy Driver and where to get more advice:

The Town and Country Planning (Environmental Impact Assessment) Regulations 2011

National Planning Practice Guidance

3n Financial Viability Assessment

Required form major developments that do not offer planning obligations in accordance with the Council's Supplementary Planning Document on Planning Obligations, February 2012 and Hertfordshire County Council's Planning obligation guidance – toolkit for Hertfordshire.

Applicants are required to provide evidence and firm assurances demonstrating the reliability of the submitted financial viability information. This shall take the form of a robust open book appraisal.

Information may be found in the Council's Planning Obligations Supplementary Planning Document, February 2012, Section 4, page 34, paragraph 4.12 'Viability'.

Policy Driver and where to get more advice:

- Policies H10 (Affordable Housing) and D9 (Access and Design for People with Disabilities) of the Welwyn Hatfield District Plan 2005
- Policy CS7 of the Emerging Core Strategy November 2012
- Planning Obligations Supplementary Planning Document, February 2012
- National Planning Policy Framework, Section 8
- Section 106 affordable housing requirements (April 2013, Communities and Local Government)

3o Flood Risk Assessment (FRA)

Required for Planning applications for development proposals of one hectare or greater in Flood Zone 1 and all development proposals located in Flood Zones 2 and 3 should be accompanied by a Flood Risk Assessment (FRA).

The FRA should identify and assess the risks of all forms of flooding to and from the development and demonstrate how these flood risks will be managed, taking climate change into account. The FRA should identify opportunities to reduce the probability and consequences of flooding. The FRA should include the design of surface water management systems including Sustainable Drainage Systems (SuDS) and address the requirement for safe access to and from the development in areas at risk of flooding.

The FRA should be prepared by an applicant in consultation with the local planning authority with reference to their published local development documents and any Strategic Flood Risk Assessment. The FRA should form part of an Environmental Statement when one is required by the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

A Strategic Flood Risk Assessment has also been prepared for the Local Planning Authority (May 2009). This identifies a number of areas across the Borough that are vulnerable to flooding from sewers, groundwater, overland flow and artificial sources. It is therefore necessary for applicant's to contact the planning department to establish if the location of their development might be affected by any of these sources, and if so, whether a FRA will be required and/or sustainable drainage systems.

Policy Driver and where to get more advice:

National Planning Policy Framework, Sections 2 and 3

3p Heritage Statement Appraisal and/or Heritage Impact Statement

Required for all listed building consent applications and / or developments affecting Registered Park & Garden or Locally Listed Park & Garden

You must provide information about:

- the significance of the architectural and historical interest and character of the building or structure or park and garden;
- the principles of and justification for the proposed works; and
- the impact of the proposal on the special interest of the listed building or structure and/ or park and garden, its setting and the setting of adjacent listed buildings.

The information should explain:

- the sources that you have considered;
- the expertise that you have consulted; and
- the steps that have been taken to avoid or minimise any adverse impacts on the significance of the building.

The type and amount of detail required will vary according to the particular circumstances of each application.

Policy Driver and where to get more advice:

- Policies CS11 and CS13 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 12
- Policy R28 of the Welwyn Hatfield District Plan 2005
- https://www.historicengland.org.uk/advice/planning/

3q Landscape Strategy

Required for all applications, the amount/level of information will vary depending upon the scale of the development as well as its location.

All development proposals should be considered in terms of their landscape / urban context, to ensure that the best possible design solution, responding to the local character, delivering a high quality living environment is achieved.

The type and depth of information required for each development proposal will vary according to the landscape and visual effects of the development, and their significance. In some cases it may be necessary to engage with a landscape professional, with the relevant skills and expertise to consider landscape and visual issues.

A Landscape Strategy should include:

- a landscape statement to demonstrate an understanding of how the proposed development will conserve and enhance local character;
- a site survey and analysis to include information on levels/geology and soils/drainage /ecology/existing vegetation and trees/access and circulation/services/views into, within and out of site/site boundaries/important site features/ any other environmental constraints and opportunities;
- a tree survey / tree protection plan / arboricultural method statement, trees should be considered in line with BS 5837:2012 'trees in relation to design, demolition and construction recommendations';
- for developments that would affect the setting of a designated heritage asset, how this would be preserved and/or enhanced
- a Landscape Masterplan to show:
- general arrangement of hard and soft landscape, to include new planting and trees, boundary treatments and lighting etc.
- landscape details (with reference to all relevant British Standards) including hard surfacing material;
- levels (to include cross sections);
- specifications;
- construction details;

- planting plan and schedule (including species, tree and plant sizes, numbers and planting densities); and management schedule.

Policy Driver and where to get more advice:

- Guidance on hiring a landscape professional can be found on the Landscape Institute website (http://www.landscapeinstitute.org/registered practices/
- National Planning Policy Framework, Section 11
- 'Guidelines for Landscape and Visual Impact Assessment' (Third edition) Landscape Institute and Institute of Environmental Management and Assessment 2013
- Policies R17, D2 and RA10 of the Welwyn Hatfield District Plan 2005

3r Lighting Assessment

Required for all major applications and those including floodlighting.

Schemes involving floodlighting will provide an assessment that will cover such matters as:

- Light spillage;
- Hours of illumination;
- · Light levels;
- Column heights;
- Specification and colour treatment for lamps and luminaires;
- The need for full horizontal cut-off:
- No distraction to the highway;
- Levels of impact on nearby dwellings;
- Use of demountable columns;
- Retention of screening vegetation;
- · Use of planting and bunding to contain lighting affects a tree; and
- Where applicable, impact(s) upon biodiversity.

Policy Driver and where to get more advice:

- Guidance on hiring a landscape professional can be found on the Landscape Institute website (http://www.landscapeinstitute.org/registered practices/
- National Planning Policy Framework, Sections 7 and 11
- 'Guidelines for Landscape and Visual Impact Assessment' (Third edition) Landscape Institute and Institute of Environmental Management and Assessment 2013
- Policy R20 of the Welwyn Hatfield District Plan 2005

3s Marketing Assessment

Required for relevant non policy compliant proposals (e.g. change of use of employment land)

This will need to show that real efforts have been made, without success, to continue the present use or to find compatible alternative uses for the site. The marketing should be carried out by a suitable firm of chartered surveyors or estate agents who have a good knowledge of both property and the local, national, or niche market, as appropriate.

Marketing should then be properly and extensively undertaken, including placing advertisements in all relevant journals, both locally, and/or, if appropriate nationally or via the internet. Professional advice from the selling agent is essential. All enquiries and inspections should be recorded, and a proper audit trail kept, so that it can be demonstrated that every reasonable effort has been made to find a purchaser for the property.

Assuming normal market conditions, the minimum period of active marketing would be 12 months. The emphasis is on active marketing rather than merely placing the property's details on a website after an initial advertising campaign.

Policy Driver and where to get more advice: Welwyn Hatfield District Plan 2005 – non policy compliant proposals

3t Noise and vibration assessment

Required for applications with issues of disturbance, or are considered to be noise and/or vibration sensitive development

A Noise and Vibration Impact Assessment which is recommended is prepared by a suitably qualified practitioner is required. The assessment should outline the potential sources of noise and/or vibration generation, and how these may have a negative effect on local amenity. The assessment should also outline how the developer intends to overcome these issues.

Policy Driver and where to get more advice:

- National Planning Policy Framework
- Policy R19 of the Welwyn Hatfield District Plan 2005
- Welwyn Hatfield Council, Environmental Health Department: e.health@welhat.gov.uk or 01707 357242

3u Open Space Assessment

Required for applications with open space

Application proposals should be accompanied by plans showing any areas of existing or proposed open space within or adjoining the application site. Planning consent is not normally given for development of existing open spaces which local communities need. However, in the absence of a robust and up-to-date assessment by a local authority, an applicant for planning permission may seek to demonstrate through an independent assessment that the land or buildings are surplus to local requirements.

For applications specifically involving playing fields, the following information is required:

- The size of the existing playing field and how much of the playing field is affected by the proposal (in ha or m²);
- Existing site plan, clearly showing the layout of the winter and summer pitches including safety margins at a minimum 1:1000 scale;
- Proposed site plan, showing how any proposed new buildings and other works are likely to impact on the existing pitch layout. Any realignment of pitches should also be shown;
- Copy of any relevant correspondence, supporting statement or submission, including when last used, used by whom, in addition to what formal sports provision is being proposed if any), including replacement facilities;
- Any information of alternative sport and recreational provision.

Policy Driver and where to get more advice:

Further guidance from Sport England can be downloaded from their website at www.sportengland.org

3v Planning obligation(s) / Draft Head(s) of Terms

Required for all major applications

This could include brief draft heads of terms for a section 106 agreement or unilateral undertaking, as well as include title and solicitor details. Applicants should clarify the Local Planning Authority's requirements in preapplication discussions and confirm any planning obligations that they agree to provide in brief heads of terms.

Policy Driver and where to get more advice: Further advice is available in Circular 1/97: Planning Obligations

3w Planning Statement and Additional Supporting Information

Required for all major applications

The planning statement should explain the principles of and justification for the proposed works. The type and amount of detail required will vary according to the particular circumstances of each application.

You should submit information explaining how the proposed development accords with policies in the Local Plan and Supplementary Planning Documents/Guidance and any development briefs.

You should also include details of any pre application consultation you have carried out in accordance with Welwyn Hatfield's Statement of Community Involvement 2013.

The planning statement should also include for all major residential and commercial developments details of how crime prevention has been considered and opportunities to design-in community safety with the proposals. Early contact with the Crime Prevention Design Advisor of Hertfordshire Constabulary is essential to obtain relevant local advice on designing out crime in the built environment.

Policy Driver and where to get more advice:

Guidance may be found on the Secured by Design website http://www.securedbydesign.com where there
are design guides that can be downloaded and also a 3D interactive guide. The local Crime Prevention
Design Advisor for Hertfordshire can be contacted at cpds@herts.pnn.police.uk.

3x Retail Assessment

Required for Retail Impact Assessments are required for any application for a main town centre use (or an extension to a use) which would be in an edge-of-centre or out-of-centre location and which is not in accordance with an up-to-date development plan.

The requirements for an assessment are set out at paragraph 26 of the National Planning Policy Framework

An assessment should include the need for development, whether it is of an appropriate scale, whether there are any sites closer to a centre for the development, whether there are any unacceptable impacts on existing centres and whether the location is accessible.

Policy Driver and where to get more advice:

- Policies CS5, CS14, CS16 and CS20 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Section 2

3y Schedule of Works

Required for structural alterations to a listed building or demolition of a listed building or other heritage asset

Where you are proposing to remove any part of the building/heritage asset including ceilings, partitions, fixtures and fittings, indicate the location, extent and character of the items to be removed on the existing elevations, plans and sections and cross referenced to a schedule of works.

If major repair works are proposed provide a supplementary schedule of works and method statement which explains the principles for the proposal.

Structural plans are required when demolition of a designated heritage asset is proposed on the grounds it is structurally unsound.

The schedule of works is required in addition to the requirements detailed under 'Heritage Statement'.

Policy Driver and where to get more advice:

National Planning Policy Framework

3z Statement of Community Involvement (SCI)

Required for all developments

Applicants for larger developments should consult with the local community prior to making a planning application, and to provide details of this consultation.

Policy Driver and where to get more advice:

• Further information can be found in Welwyn Hatfield Council's Statement of Community Involvement 2013

3zi Structural Survey

Required for a structural survey will be required in the following circumstances:

- The demolition or conversion of listed buildings
- Conversion of buildings in the countryside to any other use (including commercial, tourism and residential), to demonstrate that they are capable of conversion without major alterations or rebuilding

A full structural engineers survey by a suitably qualified professional. This should include each of the following where appropriate:

- General description and age of building
- Condition structural integrity, foundations, damp proofing, walls, joinery, timbers, roof structure and roof covering
- Assessment of repairs necessary to ensure retention of the building
- Assessment of structural and other alterations necessary to implement the proposed conversion
- Assessment of percentage of building that needs to be rebuilt including walls and timbers
- Opinion as to the suitability of building for proposed conversion
- Photographs are often helpful but not essential
- A schedule of works necessary to preserve the building
- A schedule of works necessary to carry out the applicant's proposals (including those necessary to meet building regulation approval)

Policy Driver and where to get more advice:

- Policy RA17 of the Welwyn Hatfield District Plan 2005
- Policy CS11 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework

3zii Sustainable Drainage Systems and Foul Sewage Assessment

Required for all major developments

Plans and details shall be submitted to ensure that sustainable drainage systems for the management of runoff are pt in place, unless demonstrated to be inappropriate. Applications for development should also demonstrate that there is adequate capacity both on and off the site to serve the development and that it would not lead to adverse amenity impacts for existing or future users in the form of internal and external sewer flooding or pollution of land and water courses.

Appraisals and reports may be required to ascertain whether the proposed development will lead to overloading of existing water and/or waste water infrastructure. Where there is a capacity constraint, as identified by Thames Water, the developer shall provide a detailed water and/or drainage strategy informing what infrastructure is required, where, when and how it will be delivered.

When the proposed development results in any changes/replacement to the existing system or the creation of a new system, scale plans of the new foul drainage arrangements will also need to be provided. This will include a location plan, cross sections/elevations and specification. If connection to any of the above requires crossing land that is not in the applicant's ownership, other than on a public highway, then notice may need to be served on the owners of that land.

Policy Driver and where to get more advice:

- Policies R7 and R9 of the Welwyn Hatfield District Plan 2005
- Policy CS11 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework. Sections 10 and 11
- Hertfordshire County Council, Lead Local Flood Authority floodandwatermanagement@hertfordshire.gov.uk

3ziii Transport Statements, Transport Assessments and Green Travel Plans

Required for:

Transport Statement - development affecting a trunk road with between 50 and 80 units Transport Assessment – 80 or more units Green Travel Plans – In accordance with Hertfordshire's Travel Plan Guidance for

Business and Residential Development

Transport Assesment and Transport Statement

Where a development might have an impact on a trunk road, requirements are set out within Department for Transport Circular 02/2007, Planning and the Strategic Road Network. The guidance can be found at www.highways.gsi.gov.uk.

It is recommended that where a development may have an impact on a Trunk Road that the Highways Agency is consulted regarding the preparation of any scoping document as necessary, prior to the submission of an application.

Information required in the assessment will include all existing and proposed commercial and residential vehicular and pedestrian movements to and from the site. Loading areas and arrangements for manoeuvring, servicing and parking of vehicles should also be clearly identified. It should describe and analyse existing transport conditions, how the development would affect those conditions and any measures proposed to overcome any problems.

A travel plan should outline the way in which the transport implications of new development will be managed in order to ensure that there is the least environmental, social or economic impact. Developers should state how new occupiers of or customers to the development will use alternative means of travel that do not involve private vehicle use. Clear targets should be included to enable the Travel Plan to be monitored and reviewed.

Residential Travel Plans to encourage car sharing or other alternative means of travel other than by private single occupancy trips.

New developments will be expected to encourage cycling through the inclusion of safe cycle routes and parking for cycles. New routes should link with existing or proposed cycle paths. Contributions may be required for off-site facilities. Appropriate secure waterproof storage and changing/shower facilities should be provided within developments. These details should be provided within the application and on plan, as appropriate.

Policy Driver and where to get more advice:

- Department of Transport/Communities and Local Government document Guidance on Transport Assessment (March 2007)
- Guidance may be found at Department for Transport Circular 02/2007, Planning and the Strategic Road Network. The guidance can be found at www.highways.gsi.gov.uk
- Hertfordshire County Council, http://www.hertsdirect.org/services/transtreets/devmanagment/greentravelplans1/
- Policies M2, M3 and M6 of the Welwyn Hatfield District Plan 2005

3ziv Ventilation / Extraction Equipment

Will be required for all applications relating to the sale or preparation of cooked food, shops requiring extracting equipment and launderettes

Applications will be required to provide details of the method and appearance of measures to deal with ventilation and extraction, including sound power levels of machinery, odour abatement and types of filters to be used. Due to the potential disturbance and loss of amenity to residents within the vicinity, prior to determining the suitability of the equipment and whether any further attenuation works are required, a British Standard 4142:2014 assessment is recommended is carried out. This assessment is designed to evaluate the likelihood of complaints that may arise from the introduction of an industrial type of noise to an area. A suitably competent person is recommended completes this assessment.

Policy Driver and where to get more advice:

- Policy CS20 of the Emerging Core Strategy, November 2012
- National Planning Policy Framework, Sections 7, 11 and 12
- Welwyn Hatfield Council, Environmental Health Department, e.health@welhat.gov.uk or 01707 357242

3v Visual Impact Assessment

Will be required to support an application where there is a potential adverse impact from the visual effects from the proposed development

The following guidance outlines the appropriate methodology for carrying out Visual Assessments. 'Guidelines for Landscape and Visual Impact Assessment' (Third edition) Landscape Institute and Institute of Environmental Management and Assessment 2013

Policy Driver and where to get more advice:

- Policies D2 and RA10 of the Welwyn Hatfield District Plan 2005
- Policy CS20 of the Emerging Core Strategy, November 2012
- Welwyn Hatfield Landscape Character Assessment, April 2005
- Supplementary Design Guidance, February 2005
- National Planning Policy Framework, Sections 77, 11 and 12

3vi Summary Statement

| Required for an | y planning app more than 20 | lication when pages shall b | reports and see submitted. | surveys excee | d 100 pages. | A summa |
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Welwyn Hatfield Borough Council Validation Requirements for Planning Applications **Section 1: National Requirements**

Note: one copy only for all applications whether submitted electronically or on paper

1a. Application Form

Required for all applications, with the exception of prior approvals, discharge of conditions, works to trees

Guidance on how to fill out these forms can be found at the Planning Portal web site: www.planningportal.gov.uk

1b. Site Location Plan

Required for all applications, except non material amendments and discharge of conditions when it clear from the application which development the proposal relates to

A site location plan at a scale of either 1:1250 or 1:2500 which identifies the site and the surrounding area and shows at least two roads and the north point. In exceptional circumstances plans of other scales may also be required. The site should be outlined in red and any other land owned by the applicant in blue. It should include land necessary to carry out the proposed development (e.g. land required for access to the site from a public highway, visibility splays, car parking and open areas around buildings.

Applications which have been submitted with unlicensed Ordnance Survey mapping will be accepted, but a request will made to the agent/applicant for an appropriate plan to be provided. .

Site location (1:1250 and 1:2500) and block plans (1:500) may be obtained from the Planning Portal http://www.planningportal.gov.uk/planning/applications/plans or from Land Registry by calling 0844 8921111.

Policy Driver and where to get more advice:

- Town and Country Planning (Development Management Procedure) (England) Order 2015
- Planning Practice Guidance www.planningguidance.planningportal.gov.uk/

1c. Site Plan/Block Plan

Required for all applications, except non material amendments and discharge of conditions when it clear from the application which development the proposal relates to

The site plan should be drawn at an identified standard metric scale (1:500 or 1:200). It should accurately show: the direction of North; the proposed development in relation to the site boundaries and other existing buildings on site, with written dimensions including those to the boundaries or and include a bar scale, drawn both horizontally and vertically.

The following may be required, unless these would **not** influence or be affected by the proposed development:

- All the buildings, roads and footpaths on land adjoining the site including access arrangements
- · All public rights of way crossing or adjoining the site
- The position of all trees on the site, and those on adjacent
- The extent and type of any hard surfacing

Boundary treatment including walls or fencing where this is proposed

Policy Driver and where to get more advice:

Planning Practice Guidance – www.planningguidance.planningportal.gov.uk/

1d. Ownership Certificate (A,B,C or D as applicable)

Required for all applications except for approval of reserved matters, discharge or variation of conditions, tree works, prior approval, lawful development certificates and express consent to display an advertisement must include the appropriate certificate of ownership

If part of your proposal overhangs or forms a party wall on your neighbours land you are required to submit certificate B and serve notice on the landowner. For this purpose an 'owner' is anyone with a freehold interest, or leasehold interest the unexpired term of which is not less than 7 years.

Policy Driver and where to get more advice:

- Town and Country Planning (Development Management Procedure) (England) Order 2015
- Planning Practice Guidance www.planningguidance.planningportal.gov.uk/

Guidance on how to fill out these forms can be found at the Planning Portal web site: www.planningportal.gov.uk

1e. Appropriate Fee

Required for all applications (exemptions)

Most applications attract a fee, set by Central Government. Your application must be accompanied by the correct fee; it will not be considered valid if a fee is not submitted with the forms and plans. Please refer to the planning portal website for details: www.planningportal.gov.uk/pins/FeeCalculatorStandalone

Please make any cheques payable to 'Welwyn Hatfield Borough Council' and ensure the site address is written on the back of the cheque, or alternatively payment may be accepted by credit or debit card or through the Planning Portal when the application is submitted electronically.

There are exemptions when no fee is required, such as, applications to provide access or facilities for disabled persons; or the re-submission of applications received within a year of the decision date, or withdrawal date, where the applicant has not previously benefited from a free go for that site. The proposal description needs to be similar in nature to the previous application.

If you wish to clarify the fee please contact Development Management before submitting your application.

1f. Design and Access Statement

Required for all major developments and applications within conservation areas which comprise:

- Provision of one or more dwellinghouse
- Building or buildings where the floorspace to be created is 100m² or more

These are required to explain the design concepts and principles which have informed the proposed development, and to demonstrate how context has informed their scheme. An explanation of the approach taken to access and how any consultation on access issues has been taken into account is to be stated.

Policy Driver and where to get more advice:

Town and Country Planning (Development Management Procedure) (England) Order 2015

1g. Personal and Sensitive Information

Requested for all application types

It is requested that any personal or sensitive information is removed / redacted from applications/reports etc. prior to their submission. Such information includes signatures, personal phone numbers, personal email addresses and photographs containing images of children and vulnerable adults and vehicle registration numbers.

Applications will not be invalidated if they have such information, however it might lead to a slight delay in its registration.

1h. Format of Submissions

Requested for those not submitted in full through the Planning Portal

It is requested, when an application and associated plans and documents are not submitted through the Planning Portal that the application should be submitted in the form of 1 hard copy of all plans and documents and 1 electronic copy on CD. Information on the CD shall be divided into 3 folders of information/documentation as follows:

- A. Application form, covering letter, design & access statement and planning statement
- B. All plans
- C. All other relevant documents
 - No bigger than 10Mb (applies to each and all documents/files),
 - No signatures on any document (or if they do have to be included only on one page). Initials are acceptable.
 - No vehicle registration plates and no children in the images. If either is included, they should be redacted.

1i. Do Not Scale

Requested for all applications with plans submitted

It is necessary to determine the size of developments proposed as part of planning applications. We are therefore unable to accept any drawing(s) with 'Do Not Scale' or similar on drawings and plans. Drawings and plans with such a disclaimer will not be accepted.

1j. Drawing Numbers

Requested for all applications with plans submitted

Any drawing submitted is required to have a drawing number on the plan. Plans without a drawing number will not be accepted. Please also consider drawing numbers when providing any revisions. The amended plan should always be identifiable with a new number. This is normally provided with an 'A' for the first amendment, 'B' for the second, 'C' for the third and so forth.

Where information is submitted both in paper and on CD, please ensure that the information on both correspond with one another. Please ensure that files are not security locked. Please label each document with a clear description as to its contents.



Leaflet to be Read in Conjunction with Pre-application Advice

Welwyn Hatfield Borough Council encourages all applicants to seek pre-application advice at the earliest possible opportunity prior to the submission of a planning application.

The relevant areas for you to read have been annotated on the following pages.

Planning Policy

The following comprise the plans and policies against which planning applications submitted to the Council will be determined:

National:

• National Planning Policy Framework https://www.gov.uk/government/policies/making-the-planning-system-work-more-efficiently-and-effectively/supporting-pages/national-planning-policy-framework

County

- Hertfordshire Waste Core Strategy and Development Management Policies
 Document, adopted 5 November 2012
 http://www.hertsdirect.org/services/envplan/plan/hccdevplan/wasteplan/wstdevfrmrk/adptwstlocpln/
- Hertfordshire Minerals Local Plan 2002-2016, adopted 27 March 2007 http://www.hertsdirect.org/services/envplan/plan/hccdevplan/mlp/

Development Plan for Welwyn Hatfield:

Welwyn Hatfield District Plan 2005
 http://www.welhat.gov.uk/index.aspx?articleid=463

Supplementary Planning Documents:

- Welwyn Hatfield District Plan, Supplementary Design Guidance, February 2005 http://www.welhat.gov.uk/CHttpHandler.ashx?id=1076&p=0
- Welwyn Hatfield District Plan Review, Supplementary Planning Guidance Parking Standards, Adopted January 2004 http://www.welhat.gov.uk/CHttpHandler.ashx?id=1075&p=0
- Welwyn Hatfield Borough Council, Houses in Multiple Occupancy, Supplementary Planning Document, February 2012



http://www.welhat.gov.uk/index.aspx?articleid=3969

• Welwyn Hatfield Borough Council, Planning Obligations, Supplementary Planning Document, February 2012 http://www.welhat.gov.uk/index.aspx?articleid=3970 Refer to page 9 of this advice leaflet for further information.

Local guidance:

- Digswell Character Appraisal, January 2004 http://www.welhat.gov.uk/CHttpHandler.ashx?id=1077&p=0
- Welwyn Garden City Guide to shopfront and advertisement design, September 2013 http://www.welhat.gov.uk/CHttpHandler.ashx?id=7089&p=0
- Welwyn Garden City Conservation Area Appraisal, September 2007 http://www.welhat.gov.uk/CHttpHandler.ashx?id=1794&p=0
 The Local Plan

The Local Plan will set out the Council's vision, objectives, delivery strategy, site allocations [housing] and development management policies for new development in the borough to at least 2030 and will eventually replace the saved policies in the Welwyn Hatfield District Plan 2005. Included on the Council's website is the timetable, evidence base and sustainability appraisal. The documents are all available on the Council's website http://www.welhat.gov.uk/index.aspx?articleid=455

If you would like to be involved or notified as the Local Plan progresses please register at http://consult.welhat.gov.uk/common/register.jsp

Statement of Community Involvement

The Statement of Community Involvement, adopted 3rd December 2013 http://www.welhat.gov.uk/index.aspx?articleid=459 provides guidance on the level and type of consultations we would expect to be carried out by developers for different types of application.

For all applications, developers might it helpful to discuss the proposal with the local town or parish council before submitting the application as they are consulted on planning applications. Their contact details may be found on the Council's website http://www.welhat.gov.uk/index.aspx?articleid=1152.

Environment Agency

The Environment Agency provides site-specific pre-application advice and would like to hear from you if your proposed development site is:

- in flood zones 2 or 3;
- close to a watercourse:
- on potentially contaminated land;

- handling waste or hazardous substances, or;
- one hectare or more.

The Environment Agency (EA) will highlight any issues as part of a free 'preliminary opinion'. The preliminary opinion will inform you of the site constraints within our remit; any documents that you will need to submit at the planning application stage; plus any further assessments, licenses or consents that you will require from the EA. As a minimum the Environment Agency will require a site plan and a brief description of the proposed use.

Any additional technical advice (including pre-application or post-permission) provided outside of the preliminary opinion - such as site visits, meetings or document reviews are now chargeable. Further details are available on the Environment Agency website: http://www.environment-agency.gov.uk/research/planning/33580.aspx.

For sites within Welwyn and Hatfield please send your enquiry to SPHatfield@environment-agency.gov.uk.

The Environment Agency's role in development and how they can help Combining their expertise with Natural England and the Forestry Commission, the Environment Agency has produced guidance that explains their roles in new developments. 'Building a Better Environment' provides initial information to help you make the most of new development for people and the environment, and how they can help you through the process. The EA will also signpost to more technical advice, including consents and permits you might need.

What's in your backyard?

The Environment Agency offers a range of detailed maps – 'What's in your backyard?' http://www.environment-agency.gov.uk/homeandleisure/37793.aspx_ – to show various environmental constraints that may affect your development. Maps include:

- groundwater aquifers;
- groundwater Source Protection Zones (SPZs);
- flood maps –including new flood risk maps and surface water flooding maps;
- river quality;
- historic landfill sites.

Public Health & Protection Department

The Councils Environmental Health Team (EHT) provides, through the planning department, site specific pre-application advice on environmental matters that may affect the development. The EHT also provides advice and recommendation to ensure that a development does not cause an adverse environmental impact nearby sensitive receptors.

The EHT would like to hear from you if the proposed development:

- 1. Is on or is neighbouring former commercial or industrial land
- 2.Is in close proximity to any source of pollution such as industry, railway lines, or major roads
- 3. If the development includes commercial operations such as restaurants and takeaways.

4.Is likely to generate emissions of smoke, fumes, gasses, dust, odour, light, noise and vibration.

In accordance with the Council's policy on pre-application advice the EHT is happy to provide free informal verbal advice. However, formal pre-application advice shall be charged in accordance with Council's pre-application fee structure.

Land Contamination

In addition to the above Environment Agency requirements, the Councils Public Health and Protection department also has an interest in the land under Part IIA of the environmental Protection Act 1990. The Council will assess whether, in the light of the type of contamination, the proposed development will be suitable and whether there are likely to be any unacceptable risks to health or the environment arising from its development or its future occupation. The responsibility for decontamination rests with the developer or owner. The Council will normally require developers to undertake a full investigation of contamination on such sites and undertake the necessary remediation measures, if necessary by imposing conditions on planning permissions. To assist developers in this regard the following guide has been prepared to assist developers http://www.welhat.gov.uk/CHttpHandler.ashx?id=511&p=0

Air Quality

Any major developments that will result in significant increases in road traffic and or development that releases emissions into the environment may be required to assess the impact of the development on local air quality. Guidance on whether or not an air quality assessment will be necessary can be found at *Environmental Protection UK Development Control: Planning for Air Quality (2010 Update)*. This document is readily available on the Institute of Air Quality Management (IAQM) website. The EHT will expect that the development will take into account AQ and shall prevent or mitigate sensitive receptors to poor air quality. Methods to reduce the need to travel and promotion of smarter and clearer transport options will also be required in the form of a Low emission strategy (LES) in support of the development. Further information on LES can be found at http://www.lowemissionstrategies.org/

Noise & Vibration

The EHT will require a noise and vibration survey and/or assessment to support the application where;

- the development has potential to raise background noise levels and or cause disturbance to local residents and businesses, and/or
- the development is located to high ambient noise levels from neighbouring industrial or commercial operations, roads and railway lines.

The EHT will be able to provide advice on the scope of the survey and the standards expected to ensure that the future occupiers are protected from adverse levels of noise.

Odour

The EHT will require an assessment to be made should the development lead to emissions that may emit an odour. If it is likely that significant impact may occur mitigation measures will be expected to ensure that emissions are not detrimental to the amenity of the environment. Further guidance can be found on the Institute of Air Quality Management (IAQM) website (Guidance on the assessment of odour for planning 2014).

For smaller commercial developments such as restaurants and takeaways and odour impact assessment is unlikely to be necessary. However, it may be necessary to include details of extraction, filtration and odour abatement systems with the planning application. The EH team will be able to advice in relation to this. Further advice can be sought at HYPERLINK "http://www.welhat.gov.uk • Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems

Light

Any lighting associated with a development should be approved by the EHT. Lighting can have an adverse impact on surrounding residents and under extreme circumstance can lead to statutory nuisance action under Part III of the Environmental Protection Act 1990. Advice on lighting can be found at the Institute of lighting Professionals website, www.theilp.org.uk *Guidance notes for the reduction of Obtrusive Light*

Protected Species

The presence of protected species is a material consideration in the determination of a planning application, in accordance with National Planning Policy Framework, Natural Environment & Rural Communities (NERC) Act 2006 (section 40), Wildlife and Countryside Act 1981 as well as Circular 06/05.

Protected species such as great crested newts, otters, dormice and bats benefit from the strictest legal protection. These species are known as European Protected Species (EPS) and the protection afforded to them derives from the EU Habitats Directive, in addition to the above legislation. Water voles, badgers, reptiles, all wild birds, invertebrates and certain rare plants are protected to a lesser extent under UK domestic law (NERC Act and Wildlife and Countryside Act 1981).

Where there is a likelihood of protected species being present on a site, we will require a phase 1 ecological survey to be undertaken to establish if there are any protected species present or not. If species are found, further surveys may be required. This will depend upon whether the species would be affected as a result of the development. Further information on the considerations may be found on the Council's website http://www.welhat.gov.uk/index.aspx?articleid=4055.

Heritage Assets

Heritage assets include listed buildings, historic parks and gardens, conservation areas and archaeology. In proposing a development that might affect such an asset, consideration should be given to:

- the significance of the architectural and historical interest and character of the building, structure, or designated area;
- the principles of and justification for the proposed works; and
- The impact of the proposal on the special interest of the listed building or structure, its setting and the setting of adjacent listed buildings, or on the designated area.

Information should be supplied with the application which explains:

- the sources that you have considered:
- the expertise that you have consulted; and
- The steps that have been taken to avoid or minimise any adverse impacts on the significance of the building or designated area.

The type and amount of detail required will vary according to the particular circumstances of each application. You can provide this information in the design and access statement, where one is required, as part of the explanation of the design concept. If you are not required to submit a design and access statement then you should provide this information in a separate written statement. Consideration of any application will be in the context of the National Planning Policy Framework, Chapter 12, in addition to other local or national guidance.

It is recommended that expert advice is sought from a professional historic advisor, for example through the Institute of Historic Building and Conservation.

Sustainable Development

Sustainability is at the heart of the National Planning Policy Framework. District Plan policies SD1 (Sustainable Development) and R3 (Renewable Energy) are also applicable. Advice and guidance on how developments might be improved to enhance their sustainable design may be found on the Building Futures Website http://www.hertslink.org/buildingfutures//.

Validation Checklist

The Council has adopted Local Planning Application Validation Checklists. This details the information that is required to be submitted in order to provide a valid application. The lists are divided into different development categories – householder, commercial and residential development, advertisements and signs, listed building consent and works to trees. If you have sought pre-application advice, the case officer will have provided you with a checklist of the information that is required to be submitted.

All applications are subject to the national requirements.

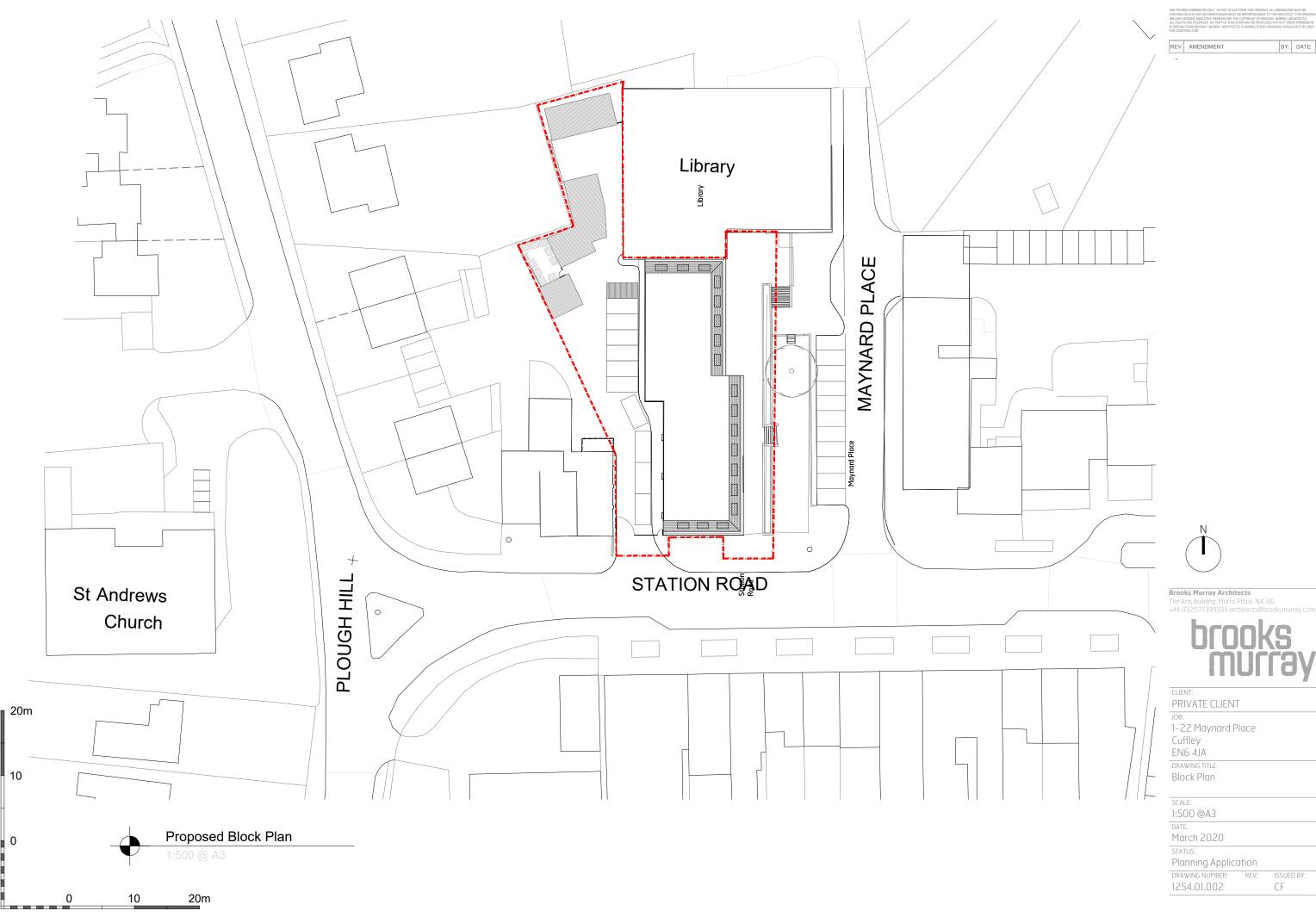
Contact Us

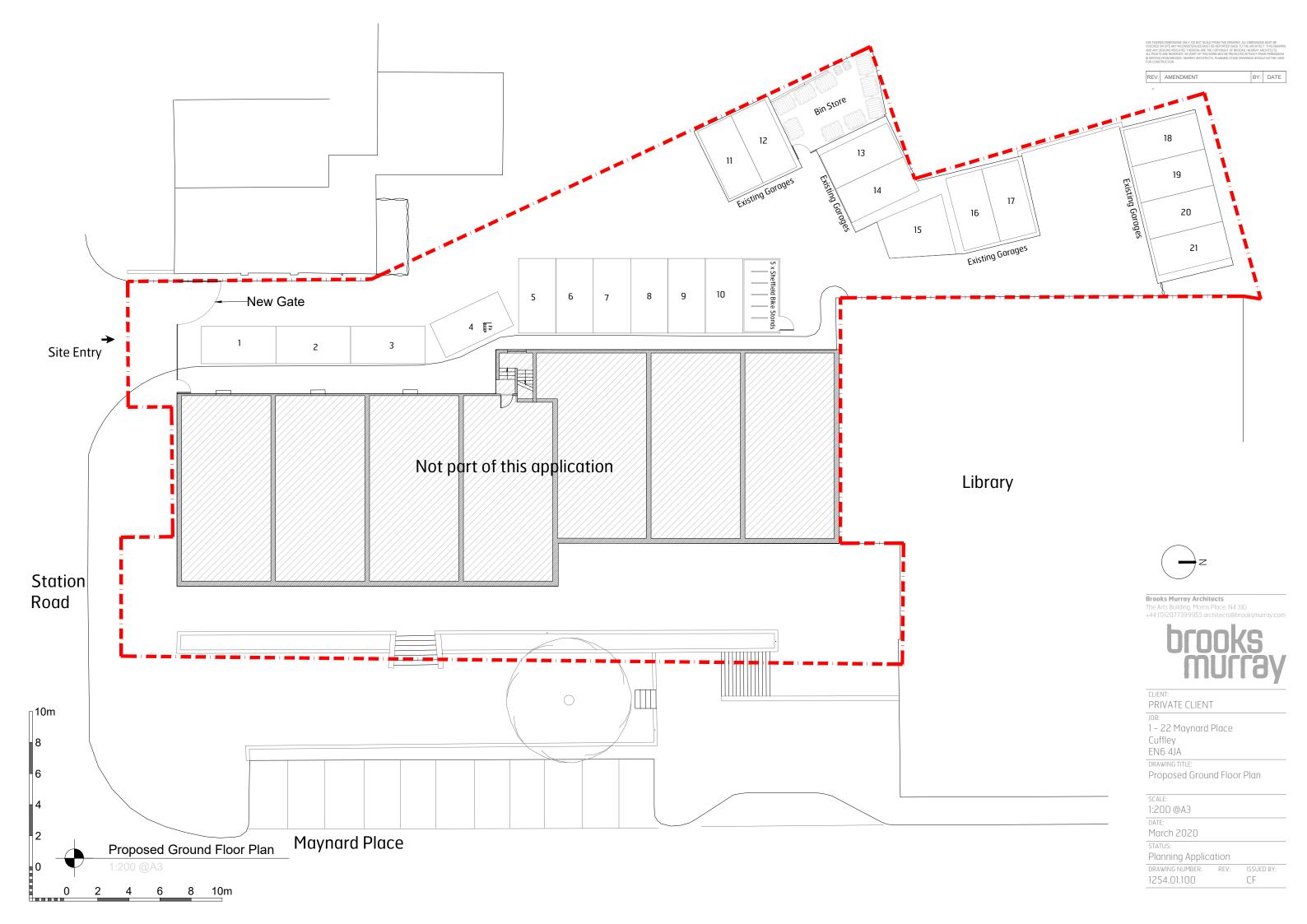
Should you have queries regarding the contents of any of this leaflet, then please either contact the Planning Officer who provided you with the pre-application advice; or, if you have obtained a copy of this leaflet direct from the Council's website, please call the duty planning officer on 01707 357573.



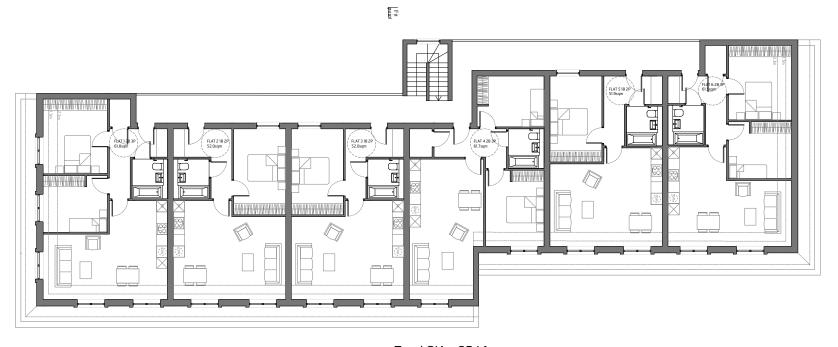


Appendix B Proposed Site Layout Plan





REV. AMENDMENT BY: DATE



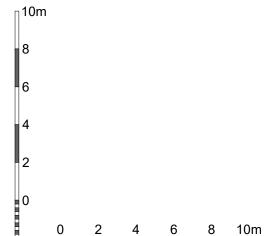
Total GIA - 354.1sqm

3 x 2B 3P

3 x 1B 2P



Proposed Third Floor Plan





Brooks Murray Architects The Arts Building, Morris Place, N4 3JG

CLIENT:
PRIVATE CLIENT

1-22 Maynard Place

EN6 4JA

DRAWING TITLE:

Proposed Third Floor Plan

SCALE: 1:200 @A3

DATE:

March 2020 STATUS:

Planning

DRAWING NUMBER: REV: ISSUED BY: 1254.01.104 CF

Appendix C
TRICS Output Data

Licence No: 437201

Page 1

Ardent Consulting Engineers Suite 207, One Alie Street London E1 8DE

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES

Selected regions and areas:

08 NORTH WEST

GM GREATER MANCHESTER 2 days
NORTH
CB CUMBRIA 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings Actual Range: 20 to 154 (units:) Range Selected by User: 6 to 184 (units:)

Parking Spaces Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 13/11/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Thursday 2 days Friday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 3 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Built-Up Zone 3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

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Wednesday 04/03/20 Page 2

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Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000 3 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000 1 days 500,001 or More 2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 2 days 1.1 to 1.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 3 days

This data displays the number of selected surveys with PTAL Ratings.

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LIST OF SITES relevant to selection parameters

1 CB-03-C-01 BLOCK OF FLATS CUMBRIA

KING STREET CARLISLE

Town Centre Built-Up Zone

Total Number of dwellings: 40

Survey date: THURSDAY 12/06/14 Survey Type: MANUAL
2 GM-03-C-02 BLOCK OF FLATS GREATER MANCHESTER

WHITWORTH STREET W.

MANCHESTER

Town Centre Built-Up Zone

Total Number of dwellings: 154

Survey date: THURSDAY 13/10/11 Survey Type: MANUAL
B GM-03-C-03 BLOCK OF FLATS GREATER MANCHESTER

FAIRFIELD STREET MANCHESTER

Town Centre Built-Up Zone

Total Number of dwellings: 20

Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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RANK ORDER for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL VEHICLES

Ranking Type: TOTALS Time Range: 08:00-09:00

Under 6 Surveys Included, 15th/85th Percentile Not Highlighted

Median Values Mean Values

 Arrivals:
 0.050
 Arrivals:
 0.050

 Departures:
 0.125
 Departures:
 0.096

 Totals:
 0.175
 Totals:
 0.146

| | | | | | | | | Trip Rate (Sorted by Totals) | | Park Spaces | |
|------|------------|----------------|------------|--------------------|--------|-----|----------|------------------------------|------------|-------------|--------------|
| Rank | Site-Ref | Description | Town/City | Area | DWELLS | Day | Date | Arrivals | Departures | Totals | Per Dwelling |
| 1 | GM-03-C-03 | BLOCK OF FLATS | MANCHESTER | GREATER MANCHESTER | 20 | Fri | 14/10/11 | 0.100 | 0.150 | 0.250 | 0.70 |
| 2 | CB-03-C-01 | BLOCK OF FLATS | CARLISLE | CUMBRIA | 40 | Thu | 12/06/14 | 0.050 | 0.125 | 0.175 | 1.07 |
| 3 | GM-03-C-02 | BLOCK OF FLATS | MANCHESTER | GREATER MANCHESTER | 154 | Thu | 13/10/11 | 0.000 | 0.013 | 0.013 | 0.65 |

Licence No: 437201

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

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Wednesday 04/03/20

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Page 1

SITE DETAILS FOR CB-03-C-01

Site Reference: CB-03-C-01 Multi-Modal Site

Created: Version: 7.2.3 09/02/15 Latitude/Longitude: 54.88918, -2.92813

Suite 207, One Alie Street

03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED Land Use Type:

Region/Area NORTH/CUMBRIA

Description: **BLOCK OF FLATS** Street: KING STREET

District:

Ardent Consulting Engineers

Town: CARLISLE Post Code: CA1 1SR

Planning Authority:

Town Centre Location Sub Category: Built-Up Zone

Use Class: C3

Population within 500m: 3100

Population within 1 Mile: 25,001 to 50,000 Population within 5 Miles: 75,001 to 100,000

Car ownership within 5 Miles: 1.1 to 1.5

Public Transport Provision Summary

| Day | Period | Total buses/trams | Total Trains | Total |
|---------------|-----------|-------------------|--------------|----------|
| | | within 400m | within 1000m | Services |
| Monday-Friday | 0700-1900 | 500 | 72 | 572 |
| Monday-Friday | 0700-1000 | 144 | 16 | 160 |
| Monday-Friday | 1600-1900 | 120 | 16 | 136 |
| Saturday | 0700-1900 | 396 | 64 | 460 |
| Sunday | 0700-1900 | 112 | 30 | 142 |

Is site associated with a travel plan: No

If not, are there any plans to implement

a Travel Plan in the future? No

Is survey data available before the implementation of the Travel Plan?

Is the location of the site hilly or flat: Flat Urban Regeneration: Yes

0.21 hect Site area Number of dwellings 40 Housing Density 666.67

No. of developments for this Site: 1 No. of survey Days for this Site: 1

Comments

The site was previously a cinema and warehouse, with some of the original building feature still present at the site. The residential developments are located quite close to Carlisle town centre, making the site very accessible by public transport. Local amenities close to the site include various house, hotels, restaurants and bars. The site only has the one access point for all modes.

Bus (or tram) site accessibility

- 3. Is there at least 1 bus (or tram) stop within the site frontage or within 400m of the site frontage? : Yes
- 4. If yes to question 3, where it is necessary to cross a road between the development and the stop, is there a conveniently placed crossing facility? : Yes
- 5. If yes to question 3, are there at least 2 buses (or trams) per hour (per direction between 0700 and 1900) with routes serving significant areas of population within a 5 kilometre radius? (Mon-Sat): Yes
- 6. If yes to question 5, what are the service characteristics? (please complete the outline information below)

| Destination (town/area) | Number per hour | Approx. journey time |
|--------------------------|-----------------|----------------------|
| Harraby via City Centre | 8 | 20 |
| Belle Vue via City Centr | 5 | 15 |
| St Ann's Hill via City C | 4 | 15 |
| Carleton Clinic | 3 | 15 |

Rail accessibility

- 7. Is there at least one railway station within 1 kilometre radius of the site?: Yes
- 8. If yes to question 7, is pedestrian access to the station satisfactory?: Yes

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Suite 207, One Alie Street London E1 8DE

Licence No: 437201

11. Please enter general comments/views about the relevance, quality and importance of public transport services relating to this development.

The railway station has various limited train services stopping at the station.

Design features encouraging non-car modes

12. Pedestrians

The site is located within good proximity to the town centre.

13. Pedal cycles

None

14. Public transport

The site is located within good proximity to local bus routes and railway stations.

Design features encouraging non-car modes

| Road Network Distance to Local Deve | elopments |
|--|----------------|
| Year of Analysis | 2014 |
| Nearest Primary School | 0.3 kilometres |
| Nearest Secondary School | 0.8 kilometres |
| Nearest Local Shop/Corner Shop | 0.3 kilometres |
| Nearest Main Supermarket | 0.5 kilometres |
| Nearest Doctors Surgery | 0.3 kilometres |
| Nearest Hospital with Minor Injuries/A & E | 1.9 kilometres |
| Nearest Sports/Leisure Centre | 0.5 kilometres |

| Census Data | |
|--|-----------|
| Year of Census | 2011 |
| Census Output Area/Data Zone | E00097093 |
| Number of people employed within Census Output Area | 260 |
| Number of households within Census Output Area | 187 |
| Number of people living within Census Output Area | 386 |
| Area of Census Output Area (hectares) | 50.00 |
| Population density within Census Output Area (per hectare) | 7.70 |

SITE DETAILS FOR CB-03-C-01

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SITE PHOTO



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CB-03-C-01 Multi-Modal survey site

Licence No: 437201

Trade name: THE PICTURE HOUSE

Site area (h/a):
Site area excluding public
open spaces (h/a):
0.21
0.06

Open since 2007

Occupied dwellings 40
Unoccupied dwellings 0
Total dwellings 40

Housing Density 666.67
Privately owned units 40
Non-Privately owned units 0

Name of nearest site SPENCER HOUSE

Distance to nearest similar site 1.0 Km

Average Bedrooms Per Unit 2
No of units with 1 bedroom 0
No of units with 2 bedrooms 40
No of units with 3 bedrooms 0
No of units with 4+ bedrooms 0
Total bedrooms 80
Unit Density 190.5

Residential unit types

Site reference:

| | Private | Non-Private | Total |
|-----------------------|---------|-------------|-------|
| Detached houses | 0 | 0 | 0 |
| Semi-detached houses | 0 | 0 | 0 |
| Terraced houses | 0 | 0 | 0 |
| Bungalows | 0 | 0 | 0 |
| Flats (in houses) | 0 | 0 | 0 |
| Flats (in blocks) | 40 | 0 | 40 |
| Town Houses | 0 | 0 | 0 |
| Other (specify below) | | | |

Other:

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Wednesday 04/03/20 PARKING DETAILS FOR SITE CB-03-C-01

Suite 207, One Alie Street London E1 8DE Ardent Consulting Engineers Licence No: 437201

Multi-Modal survey site

Page 5

On-Site parking

43 Total no. of parking spaces Parking Spaces Per Hectare 204.762 Parking Spaces Per dwelling 1.075 Arrivals Per Parking Space 1.09

Number of spaces

On-Street 0 Driveway 0 Garages 0 Communal parking spaces 43

General Comments on Parking

The site is gated and all parking spaces are allocated to apartments or visitors.

Types of servicing vehicle parking taking place

on-site (internal, within specified bays or otherwise)

No

off-site (on-street, in designated loading/servicing bays)

No

off-site (in restricted areas e.g. double yellow lines)

Off-Site parking details

Is there off-site parking available

Yes

Off-Site parking included in the counts

Yes

Free On-Street parking available nearby

If yes, considered easy to find a space

No

If prepared to pay, easy to find somewhere to park off-site all day

Parking restrictions

Area subject to parking restrictions (controlled parking zone - CPZ)

Yes, Only Some Parts of the Area

Permitted on-street parking for non-residents available within this CPZ

Yes, All Day

If yes, time limited for non-residents

Yes

Charges for non-residents parking if permitted

Off-Street parking

Off-Street parking available Yes, Public Off-Street Parking is Available

Approx. available spaces 1000

Parking located within a control parking zone (CPZ)

Yes

Charges for this Off-Street parking

Yes, All Day

100 Charge amount Charge period Hour

Park & Ride

Park & Ride Type Facility providing relevant means of accessing the site

No

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Ardent Consulting Engineers Suite 207, One Alie Street London E1 8DE Licence No: 437201

Site reference: CB-03-C-01 Survey date: 12/06/14 Day of week: Thursday

Multi-Modal survey site

Vehicles surveyed: Total vehicles Survey type: Manual Count AM weather: Hot and Clear PM weather: Hot and Clear

Initial car park occupancy: 20 Final car park occupancy: 21

BRACKETED ACCUMULATION FIGURES ARE NOT ABSOLUTE

Parking Capacity 49% (43 On-Site Spaces)

Data proportions in %

 Motor cars
 78
 Motor cycles
 0
 Public service
 0

 Light goods
 11
 OGV (1)
 0
 OGV (2)
 0

 Taxis
 11

Servicing Vehicles count recorded No

| | | 5 | | |
|-------------|--------|--------|-----------|---------------|
| Time | Arr 47 | Dep 46 | Totals 93 | Parking Accum |
| 00:00-01:00 | | | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | 3 | 6 | 9 | 17 |
| 08:00-09:00 | 2 | 5 | 7 | 14 |
| 09:00-10:00 | 2 | 0 | 2 | 16 |
| 10:00-11:00 | 1 | 3 | 4 | 14 |
| 11:00-12:00 | 2 | 3 | 5 | 13 |
| 12:00-13:00 | 2 | 1 | 3 | 14 |
| 13:00-14:00 | 5 | 5 | 10 | 14 |
| 14:00-15:00 | 2 | 3 | 5 | 13 |
| 15:00-16:00 | 2 | 2 | 4 | 13 |
| 16:00-17:00 | 11 | 4 | 15 | 20 |
| 17:00-18:00 | 7 | 8 | 15 | 19 |
| 18:00-19:00 | 8 | 6 | 14 | 21 |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | | | |
| 23:00-24:00 | | | | |

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Ardent Consulting Engineers Suite 207, One Alie Street Page 7

London E1 8DE Licence No: 437201

CB-03-C-01

Survey date: 12/06/14

Day of week: Thursday

Site reference: CE Multi-Modal survey site Vehicles surveyed: Taxis

| Time | Arr 5 | Dep 5 | Totals 10 | Accumulation |
|-------------|-------|-------|-----------|--------------|
| 00:00-01:00 | | | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | 1 | 1 | 2 | (0) |
| 08:00-09:00 | 0 | 1 | 1 | (-1) |
| 09:00-10:00 | 0 | 0 | 0 | (-1) |
| 10:00-11:00 | 0 | 0 | 0 | (-1) |
| 11:00-12:00 | 1 | 1 | 2 | (-1) |
| 12:00-13:00 | 1 | 1 | 2 | (-1) |
| 13:00-14:00 | 0 | 0 | 0 | (-1) |
| 14:00-15:00 | 0 | 0 | 0 | (-1) |
| 15:00-16:00 | 0 | 0 | 0 | (-1) |
| 16:00-17:00 | 1 | 0 | 1 | (0) |
| 17:00-18:00 | 1 | 0 | 1 | (1) |
| 18:00-19:00 | 0 | 1 | 1 | (0) |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | | | |
| 23:00-24:00 | | | | |

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Licence No: 437201

CB-03-C-01

Site reference: CE Multi-Modal survey site Vehicles surveyed: LGV Survey date: 12/06/14 Day of week: Thursday

| Time | Arr 5 | Dep 5 | Totals 10 | Accumulation |
|-------------|-------|-------|-----------|--------------|
| 00:00-01:00 | | · · | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | 0 | 1 | 1 | (-1) |
| 08:00-09:00 | 0 | 0 | 0 | (-1) |
| 09:00-10:00 | 0 | 0 | 0 | (-1) |
| 10:00-11:00 | 1 | 1 | 2 | (-1) |
| 11:00-12:00 | 0 | 0 | 0 | (-1) |
| 12:00-13:00 | 0 | 0 | 0 | (-1) |
| 13:00-14:00 | 1 | 1 | 2 | (-1) |
| 14:00-15:00 | 0 | 0 | 0 | (-1) |
| 15:00-16:00 | 0 | 0 | 0 | (-1) |
| 16:00-17:00 | 3 | 2 | 5 | (0) |
| 17:00-18:00 | 0 | 0 | 0 | (0) |
| 18:00-19:00 | 0 | 0 | 0 | (0) |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | _ | | |
| 23:00-24:00 | | | | |

TRICS 7.6.4 141219 B19.28 Database right of TRICS Consortium Limited, 2019. All rights reserved Wednesday 04/03/20 SURVEY DAY DETAILS FOR CB-03-C-01 / 04
Ardent Consulting Engineers Suite 207, One Alie Street Page 9

London E1 8DE Ardent Consulting Engineers Licence No: 437201

Site reference: CB-03-C-01 Survey date: 12/06/14 Day of week: Thursday

Multi-Modal survey site

People Surveyed: Car/LGV/Motorcycle occupants

This count consists of car occupants, light goods vehicle occupants, motorcycle riders and OGV occupants Taxi drivers and drivers of private vehicles picking up/dropping off passengers at the site are excluded from the count

| Time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Arr 56 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Dep 56 | Totals 112 | Accum |
|-------------|---|---|---|---|---|---|---|--------|---|---|---|---|---|---|---|--------|------------|-------|
| 00:00-01:00 | | | | | | | | | | | | | | | | · | | |
| 01:00-02:00 | | | | | | | | | | | | | | | | | | |
| 02:00-03:00 | | | | | | | | | | | | | | | | | | |
| 03:00-04:00 | | | | | | | | | | | | | | | | | | |
| 04:00-05:00 | | | | | | | | | | | | | | | | | | |
| 05:00-06:00 | | | | | | | | | | | | | | | | | | |
| 06:00-07:00 | | | | | | | | | | | | | | | | | | |
| 07:00-08:00 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 7 | 9 | (-5) |
| 08:00-09:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | (-6) |
| 09:00-10:00 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | (-4) |
| 10:00-11:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | (-6) |
| 11:00-12:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 6 | 9 | (-9) |
| 12:00-13:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | (-10) |
| 13:00-14:00 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 13 | (-9) |
| 14:00-15:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | (-9) |
| 15:00-16:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | (-9) |
| 16:00-17:00 | 8 | 1 | 0 | 1 | 0 | 0 | 0 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 18 | (1) |
| 17:00-18:00 | 6 | | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 12 | 18 | (-5) |
| 18:00-19:00 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 11 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 17 | (0) |
| 19:00-20:00 | | | | | | | | | | | | | | | | | | |
| 20:00-21:00 | | | | | | | | | | | | | | | | | | |
| 21:00-22:00 | | | | | | | | | | | | | | | | | | |
| 22:00-23:00 | | | | | | | | | | | | | | | | | | |
| 23:00-24:00 | | | | | | | | | | | | | | | | | | |

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Ardent Consulting Engineers Suite 207, One Alie Street Page 10

London E1 8DE Licence No: 437201

CB-03-C-01

Site reference: CE Multi-Modal survey site

People Surveyed: Pedestrians Survey date: 12/06/14 Day of week: Thursday

| Time | Arr 46 | Dep 48 | Totals 94 | Accumulation |
|-------------|--------|--------|-----------|--------------|
| 00:00-01:00 | | | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | 1 | 1 | 2 | (0) |
| 08:00-09:00 | 2 | 13 | 15 | (-11) |
| 09:00-10:00 | 2 | 1 | 3 | (-10) |
| 10:00-11:00 | 3 | 4 | 7 | (-11) |
| 11:00-12:00 | 4 | 4 | 8 | (-11) |
| 12:00-13:00 | 2 | 1 | 3 | (-10) |
| 13:00-14:00 | 3 | 5 | 8 | (-12) |
| 14:00-15:00 | 7 | 2 | 9 | (-7) |
| 15:00-16:00 | 3 | 7 | 10 | (-11) |
| 16:00-17:00 | 6 | 4 | 10 | (-9) |
| 17:00-18:00 | 8 | 5 | 13 | (-6) |
| 18:00-19:00 | 5 | 1 | 6 | (-2) |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | | | |
| 23:00-24:00 | | | | |

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Ardent Consulting Engineers Suite 207, One Alie Street Page 11

London E1 8DE Licence No: 437201

Site reference: CE Multi-Modal survey site CB-03-C-01 Survey date: 12/06/14 Day of week: Thursday

People Surveyed: Public transport Users

| Time | Arr 0 | Dep 0 | Totals 0 | Accumulation |
|-------------|-------|-------|----------|--------------|
| 00:00-01:00 | | | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | | | | |
| 08:00-09:00 | | | | |
| 09:00-10:00 | | | | |
| 10:00-11:00 | | | | |
| 11:00-12:00 | | | | |
| 12:00-13:00 | | | | |
| 13:00-14:00 | | | | |
| 14:00-15:00 | | | | |
| 15:00-16:00 | | | | |
| 16:00-17:00 | | | | |
| 17:00-18:00 | | | | |
| 18:00-19:00 | | | | |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | | | |
| 23:00-24:00 | | | | |

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Ardent Consulting Engineers Suite 207, One Alie Street Page 12

London E1 8DE Licence No: 437201

Site reference: CE Multi-Modal survey site CB-03-C-01 Survey date: 12/06/14 Day of week: Thursday

People Surveyed: Total Rail Passengers

| Time | Arr 1 | Dep 0 | Totals 1 | Accumulation |
|-------------|-------|-------|----------|--------------|
| 00:00-01:00 | | | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | 0 | 0 | 0 | (0) |
| 08:00-09:00 | 0 | 0 | 0 | (0) |
| 09:00-10:00 | 0 | 0 | 0 | (0) |
| 10:00-11:00 | 0 | 0 | 0 | (0) |
| 11:00-12:00 | 0 | 0 | 0 | (0) |
| 12:00-13:00 | 0 | 0 | 0 | (0) |
| 13:00-14:00 | 0 | 0 | 0 | (0) |
| 14:00-15:00 | 1 | 0 | 1 | (1) |
| 15:00-16:00 | 0 | 0 | 0 | (1) |
| 16:00-17:00 | 0 | 0 | 0 | (1) |
| 17:00-18:00 | 0 | 0 | 0 | (1) |
| 18:00-19:00 | 0 | 0 | 0 | (1) |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | | | |
| 23:00-24:00 | | · | · | |

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Ardent Consulting Engineers Suite 207, One Alie Street London E1 8DE Page 13

Licence No: 437201

Site reference: CE Multi-Modal survey site CB-03-C-01

People Surveyed: Total people Survey date: 12/06/14 Day of week: Thursday

| Time | Arr 102 | Dep 104 | Totals 206 | Accumulation |
|-------------|---------|---------|------------|--------------|
| 00:00-01:00 | | | | |
| 01:00-02:00 | | | | |
| 02:00-03:00 | | | | |
| 03:00-04:00 | | | | |
| 04:00-05:00 | | | | |
| 05:00-06:00 | | | | |
| 06:00-07:00 | | | | |
| 07:00-08:00 | 3 | 8 | 11 | (-5) |
| 08:00-09:00 | 5 | 17 | 22 | (-17) |
| 09:00-10:00 | 4 | 1 | 5 | (-14) |
| 10:00-11:00 | 4 | 7 | 11 | (-17) |
| 11:00-12:00 | 7 | 10 | 17 | (-20) |
| 12:00-13:00 | 3 | 3 | 6 | (-20) |
| 13:00-14:00 | 10 | 11 | 21 | (-21) |
| 14:00-15:00 | 10 | 5 | 15 | (-16) |
| 15:00-16:00 | 6 | 10 | 16 | (-20) |
| 16:00-17:00 | 20 | 8 | 28 | (-8) |
| 17:00-18:00 | 14 | 17 | 31 | (-11) |
| 18:00-19:00 | 16 | 7 | 23 | (-2) |
| 19:00-20:00 | | | | |
| 20:00-21:00 | | | | |
| 21:00-22:00 | | | | |
| 22:00-23:00 | | | | |
| 23:00-24:00 | | | | |

Ardent Consulting Engineers Suite 207, One Alie Street London E1 8DE Licence No: 437201

Calculation Reference: AUDIT-437201-200304-0335

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : C - FLATS PRIVATELY OWNED

MULTI-MODAL VEHICLES

Selected regions and areas:

09 NORTH

CB CUMBRIA 1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings Actual Range: 40 to 40 (units:) Range Selected by User: 6 to 184 (units:)

Parking Spaces Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/11 to 13/11/18

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Thursday 1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count 1 days
Directional ATC Count 0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

1

Selected Locations:

Town Centre

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Built-Up Zone

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3 1 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

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Wednesday 04/03/20 Page 2

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Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000

1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

75,001 to 100,000

1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

1.1 to 1.5

1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No

1 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present

1 days

This data displays the number of selected surveys with PTAL Ratings.

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Wednesday 04/03/20 Page 3

Ardent Consulting Engineers Suite 207, One Alie Street London E1 8DE Licence No: 437201

LIST OF SITES relevant to selection parameters

1 CB-03-C-01 KING STREET CARLISLE **BLOCK OF FLATS**

CUMBRIA

Town Centre Built-Up Zone

Total Number of dwellings: 40

Survey date: THURSDAY 12/06/14 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

| | Site Ref | Reason for Deselection |
|---|------------|------------------------|
| | GM-03-C-02 | not similar |
| [| GM-03-C-03 | not similar |

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Licence No: 437201

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI - MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| | | ARRIVALS | | | DEPARTURES | , | | TOTALS | |
|---------------|------|----------|-------|------|------------|-------|------|--------|-------|
| | No. | Ave. | Trip | No. | Ave. | Trip | No. | Ave. | Trip |
| Time Range | Days | DWELLS | Rate | Days | DWELLS | Rate | Days | DWELLS | Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 1 | 40 | 0.075 | 1 | 40 | 0.150 | 1 | 40 | 0.225 |
| 08:00 - 09:00 | 1 | 40 | 0.050 | 1 | 40 | 0.125 | 1 | 40 | 0.175 |
| 09:00 - 10:00 | 1 | 40 | 0.050 | 1 | 40 | 0.000 | 1 | 40 | 0.050 |
| 10:00 - 11:00 | 1 | 40 | 0.025 | 1 | 40 | 0.075 | 1 | 40 | 0.100 |
| 11:00 - 12:00 | 1 | 40 | 0.050 | 1 | 40 | 0.075 | 1 | 40 | 0.125 |
| 12:00 - 13:00 | 1 | 40 | 0.050 | 1 | 40 | 0.025 | 1 | 40 | 0.075 |
| 13:00 - 14:00 | 1 | 40 | 0.125 | 1 | 40 | 0.125 | 1 | 40 | 0.250 |
| 14:00 - 15:00 | 1 | 40 | 0.050 | 1 | 40 | 0.075 | 1 | 40 | 0.125 |
| 15:00 - 16:00 | 1 | 40 | 0.050 | 1 | 40 | 0.050 | 1 | 40 | 0.100 |
| 16:00 - 17:00 | 1 | 40 | 0.275 | 1 | 40 | 0.100 | 1 | 40 | 0.375 |
| 17:00 - 18:00 | 1 | 40 | 0.175 | 1 | 40 | 0.200 | 1 | 40 | 0.375 |
| 18:00 - 19:00 | 1 | 40 | 0.200 | 1 | 40 | 0.150 | 1 | 40 | 0.350 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 1.175 | | | 1.150 | | | 2.325 |

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

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Parameter summary

Trip rate parameter range selected: 40 - 40 (units:)
Survey date date range: 01/01/11 - 13/11/18

Number of weekdays (Monday-Friday): 1
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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Licence No: 437201

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED MULTI-MODAL TOTAL PEOPLE Calculation factor: 1 DWELLS BOLD print indicates peak (busiest) period

| | | ARRIVALS | | | DEPARTURES | | TOTALS | | | |
|---------------|------|----------|-------|------|------------|-------|--------|--------|-------|--|
| | No. | Ave. | Trip | No. | Ave. | Trip | No. | Ave. | Trip | |
| Time Range | Days | DWELLS | Rate | Days | DWELLS | Rate | Days | DWELLS | Rate | |
| 00:00 - 01:00 | | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | | |
| 07:00 - 08:00 | 1 | 40 | 0.075 | 1 | 40 | 0.200 | 1 | 40 | 0.275 | |
| 08:00 - 09:00 | 1 | 40 | 0.125 | 1 | 40 | 0.425 | 1 | 40 | 0.550 | |
| 09:00 - 10:00 | 1 | 40 | 0.100 | 1 | 40 | 0.025 | 1 | 40 | 0.125 | |
| 10:00 - 11:00 | 1 | 40 | 0.100 | 1 | 40 | 0.175 | 1 | 40 | 0.275 | |
| 11:00 - 12:00 | 1 | 40 | 0.175 | 1 | 40 | 0.250 | 1 | 40 | 0.425 | |
| 12:00 - 13:00 | 1 | 40 | 0.075 | 1 | 40 | 0.075 | 1 | 40 | 0.150 | |
| 13:00 - 14:00 | 1 | 40 | 0.250 | 1 | 40 | 0.275 | 1 | 40 | 0.525 | |
| 14:00 - 15:00 | 1 | 40 | 0.250 | 1 | 40 | 0.125 | 1 | 40 | 0.375 | |
| 15:00 - 16:00 | 1 | 40 | 0.150 | 1 | 40 | 0.250 | 1 | 40 | 0.400 | |
| 16:00 - 17:00 | 1 | 40 | 0.500 | 1 | 40 | 0.200 | 1 | 40 | 0.700 | |
| 17:00 - 18:00 | 1 | 40 | 0.350 | 1 | 40 | 0.425 | 1 | 40 | 0.775 | |
| 18:00 - 19:00 | 1 | 40 | 0.400 | 1 | 40 | 0.175 | 1 | 40 | 0.575 | |
| 19:00 - 20:00 | | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | | |
| Total Rates: | | | 2.550 | | | 2.600 | | | 5.150 | |

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Appendix D

Census Residential Travel to Work Data

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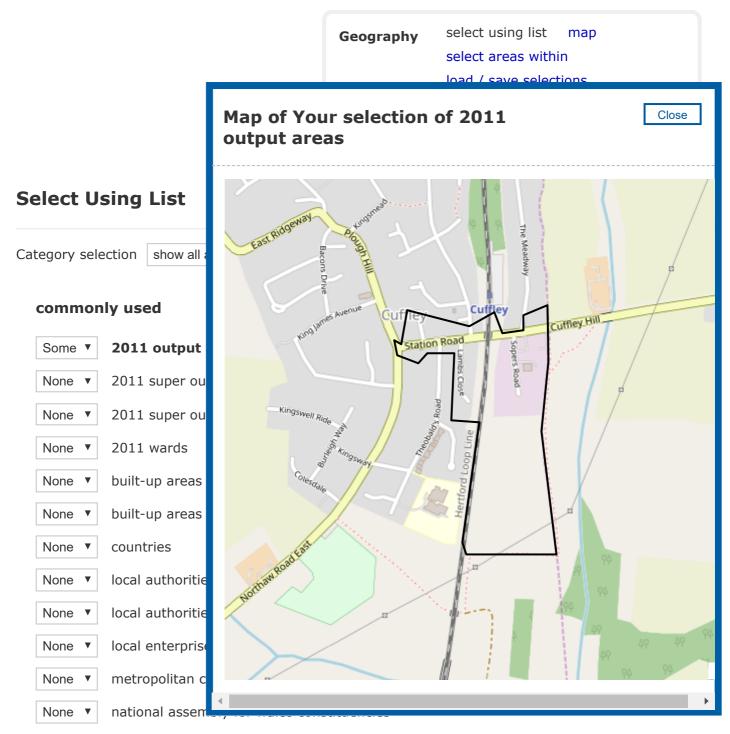
official labour market statistics



QS703EW - Method of Travel to Work (2001 specification) Change dataset

Population: All usual residents aged 16 to 74

Unit of measure: Persons



None ▼ national assembly for wales electoral regions

None ▼ parishes 2011

None ▼ parliamentary constituencies 2010

None ▼ regions i

postcode

None ▼ postcode areas

None ▼ postcode districts

None ▼ postcode sectors i

health areas



QS703EW - Method of Travel to Work (2001 specification)

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population All usual residents aged 16 to 74

units Persons

area type 2011 output areas

| area name | name E00121603 | | | AM | | | PM | | | TOTAL | | |
|---------------------------------|----------------|--------|---|----|---|---|----|---|----|-------|----|--|
| | | | Α | D | T | Α | D | Т | Α | D | Т | |
| Method of Travel to Work | 2011 | | 1 | 3 | 4 | 2 | 3 | 5 | 15 | 16 | 31 | |
| Underground, metro, light rail, | tı 6 | 5.3% | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | |
| Train | 24 | 21.2% | 0 | 1 | 1 | 0 | 1 | 1 | 3 | 3 | 6 | |
| Bus, minibus or coach | 1 | 0.9% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Taxi | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Motorcycle, scooter or moped | 1 | 0.9% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Driving a car or van | 74 | 65.5% | 1 | 2 | 3 | 1 | 2 | 3 | 10 | 10 | 20 | |
| Passenger in a car or van | 4 | 3.5% | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | |
| Bicycle | 1 | 0.9% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| On foot | 2 | 1.8% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other method of travel to work | 0 | 0.0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 113 | 100.0% | 1 | 3 | 4 | 2 | 3 | 5 | 15 | 16 | 31 | |

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.