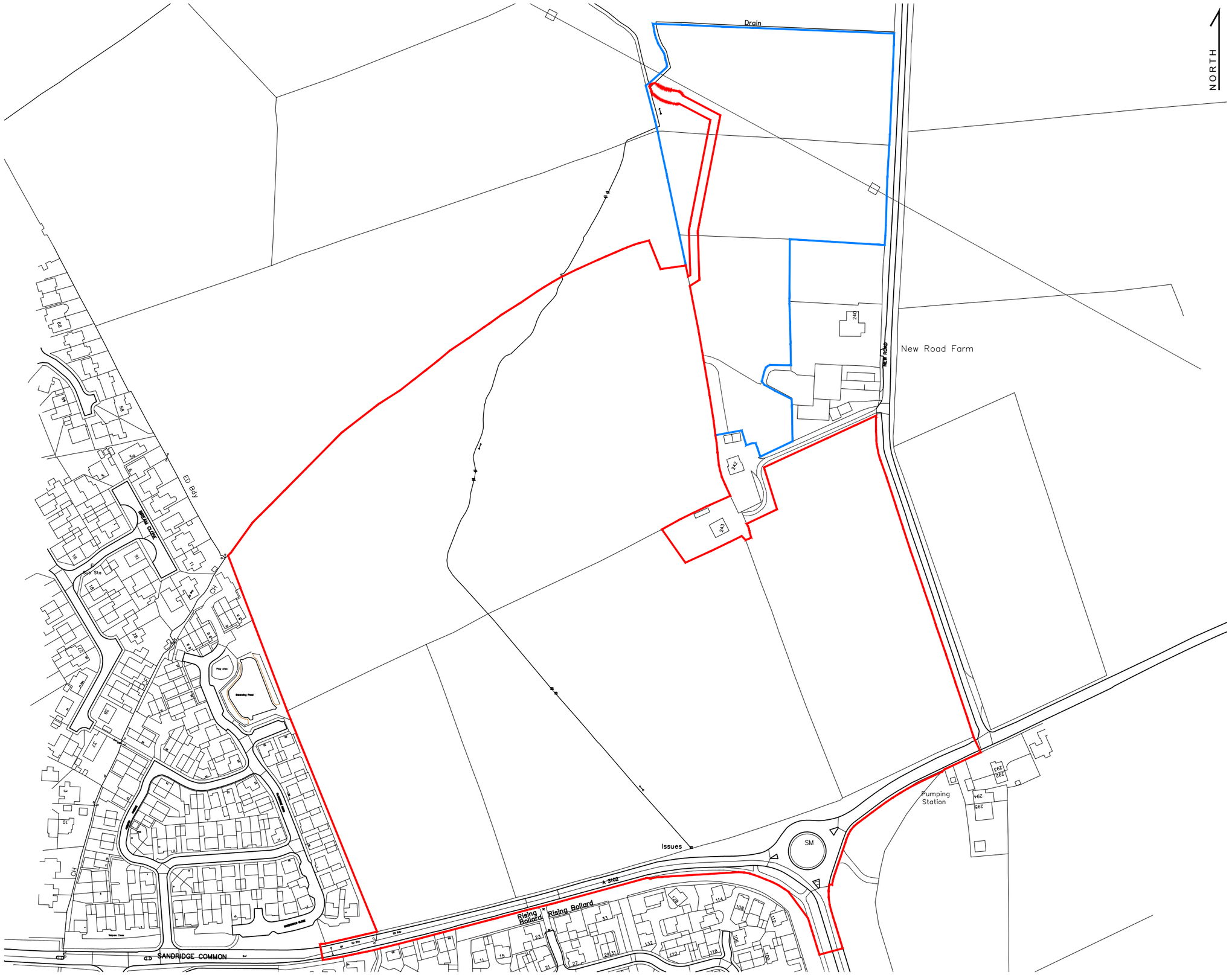
Appendix 1.1 Location plan



Melksham, Land off Sandridge Common

0m 25 50 75 100 125 150 175 200m
1:2500

BLOOR HOMES LIMITED
UNIT 7, LATHAM ROAD, SWINDON, SN25 4DL
TELEPHONE: 01793 835600

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THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION.

Key

- Application Boundary
- Extent of land within applicants ownership

REVISION.

A	Land within applicants ownership added to layout.	17/10/24	MW
B	Updated in line with planning layout (1001C).	22/10/24	MW
C	Updated in line with planning layout (1001D).	25/10/24	MW

Land off Sandridge Common
Melksham

Location Plan

DATE: **11/09/24**
SCALE: **1:2500 @ A3**
DRAWN: **MW**
CHECKED:

BLOOR HOMES

DRAWING NO. SW164-PD-1000C

Appendix 1.2 Illustrative layout



Status **DRAFT**

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Client: Bloor Homes Limited

Project title: Land off Sandridge Common, Melksham

Drawing title: Illustrative Masterplan

Scale:	1:2500@A3
Date:	24.09.2025
Drawn by:	DR
Checked by:	MV
Drawing no.:	-
Revision:	-

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Appendix 1.3 Screening request to Local Authority

26 February 2023

Our Ref: NM/22.147

Wiltshire Council
Bythesea Road
Trowbridge
Wiltshire
BA14 8JN

Dear Sir/Madam,

LAND AT NEW FARM, MELKSHAM

THE TOWN & COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017
ENVIRONMENTAL IMPACT ASSESSMENT – SCREENING OPINION REQUEST

I am writing on behalf of my Client, Bloor Homes South West, who control land at New Farm, Melksham.

In anticipation of a forthcoming planning application, I formally apply to Wiltshire Council as the relevant Local Planning Authority, to provide a Screening Opinion as to whether an Environmental Impact Assessment will be required for the proposed development. This letter and its attachments comprise the application request.

In accordance with Regulation 6(2) of the Town & Country Planning (Environmental Impact Assessment) Regulations 2017, I provide the following information:

- A site location plan.
- A description of the development, including:
  - its physical characteristics and whether any demolition work is proposed; and
  - a description of the location of the development, with regard to the environmental sensitivity of the areas likely to be affected.
- A description of the aspects of the environment likely to be significantly affected by the development.
- A description of the likely significant effects of the proposed development on the environment resulting from:
  - the expected residues and emissions and the production of waste where relevant; and
  - the use of natural resources, in particular soil, land, water and biodiversity.
- Other information, including features of the proposed development or any measures envisaged to avoid or prevent what otherwise might have been significant adverse effects on the environment.

Site Description

Land at New Farm, Melksham, measures approximately 17 hectares. It is located approximately 2.5km to the north east of Melksham town centre. It is irregular in shape and its boundaries comprise:

- **To the west** – a mature hedgerow and trees. Residential development is located further to the west.
- **To the east** – mature hedgerows and trees. Buildings associated with New Road Farm are located beyond the hedgerows. Open countryside is located further to the east.
- **To the south** – mature hedgerow and boundary enclosures, including a field gate. The A3103 (Sandridge Common) is located beyond the hedgerow. Residential development and open countryside are located further to the south.
- **To the north** - mature hedgerow, with open countryside beyond.

Mature hedgerows and trees divide the subject site into six separate field parcels. At present, it is predominately used for agricultural purposes.

There are no built structures on the site.

An industry compliant BS5837:2012 tree survey has been undertaken on the site and along its boundaries. It has shown that the site contains the following tree and hedgerow features:

Table 1: Summary of the Arboricultural and Hedgerow Features within the Subject Site

Categorisation	Category A	Category B	Category C
Tree	1	4 trees and 3 tree groups containing approximately 30 trees.	1 tree and 3 tree groups containing approximately 29 trees.
Hedgerow	0	0	6 hedgerows which are approximately 2.9km in length.

There are no Public Rights of Way that cross the subject site, but there are a number in close proximity to it. These include:

- **MELW60** – which is a footpath that runs broadly north east to south west and is located to the north of the subject site;
- **MEDK45** – which is located to the west of the western edge of Public Right of Way MELW60 and extends to Sherwood Avenue. It runs broadly north east to south west; and
- **MELK103** – which is located to the south of the south west corner of the subject site and to the south of the A3102. It runs in a broadly southernly direction and connects the footway on the southern side of the A3102 with Public Right of Way MELK104.

The site is considered to be within a broadly acceptable walking distance of a range of services and facilities, including:

- Retail facilities, including a convenience store located approximately 1.3km to the west of the centre of the subject site. A number of supermarkets are found within Melksham, just over 3km to the west.
- Employment opportunities, including within the town centre, around Bath Road and at Bowerhill Industrial Estate.
- Education facilities, including the River Mead School and Nursery, which is located under 2km to the north west of the site. Secondary school provision is found under 4km to the south.
- Public transport provision, including a bus service on the A3103. The closest bus stop is located approximately 500m to the west of the site. It is served by bus service X76 which provides a connection once a day in both directions between Bath and Marlborough during the week. Additional bus services route through the existing residential development to the west and include bus services 14, 271 and 273. Bus service 14 provides a generally hourly service to Melksham Town Centre and other destinations within the settlement including supermarkets and the community hospital. Bus services 271 and 273 provide a connection to a range of destinations within Melksham, including supermarkets, employment opportunities (the town centre and Bowerhill Industrial Estate), as well as destinations further afield, including Bath and Devizes. Together, they provide a generally twice hourly service during the week and on Saturdays, with a less frequent service on a Sunday. Melksham Railway Station is located under 3km from the subject site. Located on the Great Western Railway Line, the Railway Station provides services to a range of destinations, including Trowbridge, Chippenham, Swindon and Westbury.

In terms of the Development Plan, Core Strategy Inset Map 10 identifies that the subject site is located outside the settlement framework for Melksham and is therefore located within the open countryside.

Core Policy 1 identifies Melksham as being a second tier market town (second of five settlement tiers). Market towns are identified as having ***"the potential for significant development that will increase the jobs and homes in each town in order to help sustain and where necessary enhance their services and facilities and promote better levels of self-containment and viable sustainable communities."***

Planning History

A review of the Council's online planning system indicates that there is no relevant planning history associated with the subject site.

Development Proposals

The development will comprise:

- Up to 350 dwellings, including affordable housing;
- A day nursery (Use Class E(f));
- Primary access from the existing A3102/Easternway roundabout junction;
- Secondary access from the A3102;
- Pedestrian and cycle access points from the A3102 and Gladstone Road;
- Provision of public open space, including play space;
- Provision of green infrastructure;
- Sustainable drainage systems; and
- Associated infrastructure.

The development will be focused to the south and west of the application site, with open space providing a soft edge to the development to the north.

As there are no existing structures on the site, no demolition works are required.

Requirement for an Environmental Impact Assessment

As set out above, this Screening Request is made pursuant to the Town & Country Planning (Environmental Impact Assessment) Regulations 2017 (the 2017 Regulations), which requires planning applications for forms of development within certain categories specified in Schedules 1 and 2 of the 2017 Regulations to be accompanied by an Environmental Statement. Whilst all development that falls within Schedule 1 will require the submission of an Environmental Statement, this is not mandatory for development listed in Column 1 of Schedule 2. Instead, for development listed in Column 1 of Schedule 2, it will be for the Local Planning Authority to make its own formal determination of whether or not there are likely to be ***"significant effects on the environment by virtue of factors such as its nature, size or location."*** If it is concluded that the proposed development would lead to significant effects on the environment by virtue of such factors as its nature, size and location, then an Environmental Statement would be required.

The proposed development set out above does not fall within Schedule 1 of the 2017 Regulations, for which an Environmental Impact Assessment would be mandatory. The proposed development is instead considered to be an urban development project and therefore it falls within Schedule 2, 10, (b) of the 2017 Regulations.

The proposed development, which is for up to 350 dwellings on approximately 17 hectares of land, exceeds the relevant exclusion thresholds and criteria set out within the second column of the 2017 Regulations (the development is for more than 150 dwellings and the site exceeds 5ha). This does not however mean that it constitutes Environmental Impact Assessment development. Rather, the Local Authority must decide whether the proposed development is likely to provide ***"significant effects on the environment by virtue of factors such as its nature, size or location."***

In determining whether the proposed Schedule 2 development will provide a significant environmental effect, the 2017 Regulations require that the following criteria must be considered:

- The characteristics of the development;
- The location of the development; and
- The characteristics of the potential impact.

Each criterion is assessed in turn below, having regard to the 'selection criteria for screening Schedule 2 development' set out in Schedule 3 of the 2017 Regulations.

Characteristics of the Development

The components of the development, which are described above, are to be accommodated in the proposed application site, which measures approximately 17 hectares.

The proposed development would see the current agricultural fields being developed for new housing, roads, drainage, and open space, with construction activities being undertaken for a period of time not expected to be longer than five years.

Once complete, the proposed development would be consistent with the character and density of Melksham's residential environs, to the east and south of the subject site.

The character of the subject site will therefore change as a consequence of the proposed development. There will be a loss of undeveloped land and certain landscape features within the site. This could have an effect on wildlife habitats but considered masterplanning would limit this, and as

set out below, it is anticipated that a net gain in biodiversity would result.

Construction processes would be typical for this type of development, involving the below ground excavation for foundations, the laying out of drainage and services, the above ground erection of dwelling houses, the creation of roads and footpaths and the laying out of areas of open space, amenity areas and new planting.

During the construction period, a site compound will be erected which would house the site office and welfare services, site equipment, material for the development, and materials to service on-site equipment. A temporary concrete batching plant would also be located on the site. Deliveries to the site would occur during the construction period and these would include Heavy Goods Vehicles. Construction activities will be controlled through a Construction Traffic Management Plan. Both delivery hours and working hours would be controlled by planning condition.

It is expected that construction materials will accord with necessary standards and best practice to minimise the use of natural resources.

Building standards are governed by the Building Regulations and British Standards and the proposed development will need to adhere to these.

Pollution and risk of accidents arising from construction will be controlled via a Construction Environment Management Plan. Therefore, if carried out in accordance with the relevant health and safety procedures, the development will not increase pollution, nuisance or the risk of accidents above an accepted level. The operational phases of development will not create levels of pollution or nuisance over the appropriate environmental standard.

In addition, the development will not involve the uncontrolled use, storage, transport, handling or production of substances or materials which could be harmful to people or the environment.

The dwellings built will be occupied during the construction period on a phased basis and permanently thereafter. The population of the development is expected to be in the order of 812 persons, which would represent an increase of 4.5% in Melksham's population[1].

Future occupants will place demands on social and community infrastructure, such as schools and healthcare, have economic effects on the local economy, and their day-to-day activities will increase the use of local highway infrastructure and public transport. Increases in car movements could give rise to noise and air quality effects but these would be of a level commensurate with any traffic increases more generally.

Cumulation with Other Existing Development and/or Approved Development

There a number of larger scale developments committed at Melksham, both that are allocated within the Development Plan and that benefit from planning permission. These include:

Wiltshire Core Strategy (2015):

- No allocations were made at the settlement.

Wiltshire Housing Site Allocations Development Plan Document (February 2020):

- No allocations were made at the settlement.

[1]2021 Census data for Melksham.

Joint Melksham Neighbourhood Plan (2021):

- One allocation is proposed for approximately 18 dwellings, on land at Middle Farm, Whitley. This allocation is at a settlement which is physically divorced from Melksham.

Sites Benefitting from Planning Permission: The latest housing monitoring information is set out in the Local Planning Authority's Housing Land Supply Statement, which whilst published in April 2022, has a base date of April 2021.

It sets out that there are the following commitments at Melksham:

- **Land South of Western Way, Bowerhill, Melksham** (Ref: W16.1123) – which had 22 committed dwellings outstanding at the base date;
- **Land South of Western Way, Melksham** (Ref: W18.4477) – which had 99 committed dwellings outstanding at the base date;
- **Land East of Spa Road, Melksham** (Ref: 18/04644/REM) – which had 345 committed dwellings outstanding at the base date;
- **Bowden Guest House, 25 - 27 Beanacre Road, Melksham** (Ref: W17.10015) - which had 10 dwellings outstanding at the base date;
- **Land East of Semington Road, Melksham** (Ref: W17.1251) – which had 33 dwellings outstanding at the base date;
- **3 Lowborne, Melksham** (Ref: W13.7076) **–** which had 17 dwellings outstanding at the base date;
- **Land East of Semington Road, Melksham** (Ref: 20/01938/OUT) **-** which had 144 dwellings outstanding at the base date; and
- **Park Farm, Seend Cleeve, Melksham (**Ref: 20/02213/FUL) – which had 11 dwellings outstanding at the base date.

Given the base date of this monitoring work, significant progress is likely to have been made on a number of these commitments. For instance, the Council's assessment work suggests that for monitoring year 2021/22 alone, 168 dwellings should have been completed from the above sites.

In addition to the above, the monitoring work identified that a number of small sites also benefitted from planning permission, which together, would provide a further 53 committed dwellings at Melksham.

The Location of the Development

Existing and Proposed Land Use

Whilst the subject site is currently classed as undeveloped greenfield land, the development of the area for residential purposes is deemed appropriate in this location as the proposal would serve as an extension to the eastern environs of Melksham and provide additional housing opportunities at the town.

The Relative Abundance, Availability, Quality and Regenerative Capacity of Natural Resources (Including Soil, Land, Water and Biodiversity) in the Area and its Underground

In order to obtain information regarding the location of the development and the environmental sensitivity of geographic areas likely to be affected by it, a desk-based assessment has been undertaken to identify environmental designations located in close proximity to the subject site. This assessment has been undertaken using a range of sources including: (1) the Council's on-line mapping system; (2)

Historic England's on-line mapping; and (3) DEFRA's Magic web-based interactive tool. This has been, where required, supplemented by work undertaken by the prospective applicant's consultant team.

Given the scale of development, the geographic area likely to be affected will be localised. The desk based assessment work therefore applies the following assessment distances:

- 10km - Ramsar sites, Special Protection Areas and Special Areas of Conservation;
- 2km – national and local nature reserves and Sites of Special Scientific Interest; and
- 1km – all other identified environmentally sensitive areas likely to be affected.

The results of this assessment work are set out in Appendix 2 of this letter.

Air Quality and Emissions: The site is not located within an Air Quality Management Area and there are no Air Quality Management Areas within close proximity of the site.

Soil and Land: The subject site is previously undeveloped, agricultural land. Whilst a detailed agricultural land classification report will support the forthcoming planning application, DEFRA's online database suggests that the subject site is Grade 3b agricultural land. Consequently, it is not considered to be best and most versatile agricultural land. The majority of land surrounding Melksham is of a similar quality and in some instances is better (Grades 1, 2 and 3a).

Flood Risk: The Environment Agency Flood Map for Planning identifies that the majority of the application site is located within Flood Zone 1. Consequently, it is outside the 1 in 1000-year extent of fluvial flooding (0.1% annual exceedance probability) and is therefore at low risk.

There is however a water course that runs broadly south to north centrally within the application site. This water course is a Main River. It conveys flows north from a culvert along the site's southern boundary.

A second water course conveys flows east through the centre of the site from the balancing pond from the existing residential development to the west. A land drain is also located on the site's eastern boundary and conveys flows to the north.

Environment Agency mapping identifies that there are areas of surface water flow pathways crossing the site, which broadly accord with the aforementioned watercourses. However, this information is considered to be based on a ground model and does not take the conveyance capacity of the watercourse channel, the existing land drainage within the site or the highway drainage into account. It also does not consider the impact of the recently completed development to the west, which includes attenuation basins.

Biodiversity: The site comprises six fields of grazed modified grassland. The fields are divided by a network of hedgerows, most of which are species poor except for one species-rich hedgerow which runs along the northern boundary of the site. Ditches run alongside most hedgerows. As described above, there are some trees present on site, the majority of which are associated with the western boundary hedgerow and the farm buildings to the east. However, a single veteran oak is present in the northern-most field. A small area of bare ground, which is used for agricultural storage, lies adjacent to the off-site farm buildings. Watercourses also run through the site.

A potential badger sett was observed within the hedgerow along the site's northern boundary.

In overall terms, the habitats supported by the site are of overall low ecological value and offer significant opportunities for ecological enhancement through the delivery of an integrated public open

space and drainage strategy.

As set out in Appendix 2, the site is not subject of any nature conservation designations. There are however, the following international, national and local designated sites of importance for biodiversity within the study area:

Internationally Designated Sites

- A component of the Bath and Bradford-upon-Avon Special Area of Conservation (SAC) lies approximately 9.2km to the north west of the subject site. However, the site is not located within any of the 'core areas' associated with the SAC.

Nationally Designated Sites

- Whilst there are no Sites of Special Scientific Interest (SSSI) within 2km of the subject site, it lies within the Impact Risk Zone of the Spye Park SSSI, a component of which lies approximately 2.46km to the north east. However, residential developments are not listed as being likely to have an impact on the SSSI at this distance.

Local Wildlife Sites

The following non-statutory sites (Local Wildlife Sites – LWS) are located within 2km of the site:

- Bristol Avon River LWS – c.1.5km to the west;
- Eighteen Acre Plantation LWS – c.1.7km to the east;
- Hanging Wood LWS, c. 1.9km to the east;
- Conigre Mead WWT Reserve LWS, c. 2km to the west; and
- Morass Wood LWS, c. 2km to the east.

Protected species surveys in respect of bats, badgers, breeding birds, dormouse and water vole are being undertaken in line with best practice. They will be used to inform suitable mitigation strategies and, if necessary, licensing.

Transport and Traffic: As set out above, the subject site benefits from good accessibility to a wide range of services, facilities and employment opportunities. They can be accessed by sustainable modes of transport, including on foot, by bicycle and by public transportation. The closest bus stops are located approximately 500m to the west of the site, whilst the Railway Station is located under 3km to the west. These facilities are located within a reasonable walking and cycling distance, which allows genuine opportunities for active travel and the use of public transport.

Arboriculture: The site's arboricultural value is described in Table 1 above.

Landscape and Visual: As set out in Appendix 2, the site is not located within an Area of Outstanding Natural Beauty and there is no such designation within 1km of the subject site. Similarly, it is not located within a Special Landscape Area, although a Special Landscape Area is located approximately 800m to the east.

Its visual envelope is generally limited to its immediate surroundings and its boundaries are contained by mature hedgerows and trees. Views of the subject site are mainly from local receptors. The site is subject to some existing urbanising influences because of its location on the edge of Melksham.

Cultural Heritage: As confirmed in Appendix 2 of this Screening Request, there are no Scheduled

Monuments or other designated heritage assets within the subject site. The site also is not located within a Conservation Area. No Registered Parks and Gardens or World Heritage Sites are within the site, or the surrounding area (1km).

The closest listed building is Blackmore House, which is Grade II listed. It is located approximately 470m to the south east and is divorced from the site by built development, the A3103 and landscaping.

Melksham Conservation Area is the closest conservation area, which is, at its closest point, located approximately 1km to the south west of the site.

Noise: The noise environment across and in proximity to the site is dominated by traffic noise and particularly the A3102. This is not considered to be a road that experiences high traffic volumes. This is likely to result in the attainment of the British Standard thresholds for residential development.

Minerals: The subject site is not located within a Minerals Resource Zone, an Other Naturally Occurring Resource Zone, or a Minerals Safeguarding Area.

Sensitive Areas: The 2017 Regulations define sensitive areas as being:

- SSSIs;
- National Parks;
- The Broads;
- Properties appearing on the World Heritage List;
- Scheduled Monuments;
- Areas of Outstanding Natural Beauty; and
- European sites.

The site does not fall into any of these designations and none of these designations are found within the site.

The Absorption Capacity of the Natural Environment

The proposed development is not located within or close to: wetlands; river mouths; coastal zones and the marine environment; mountain and forest areas; nature reserves and parks; and areas in which there has already been a failure to meet the environmental standards, laid down in legislation and relevant to the project, or in which it is considered that there is such a failure.

As indicated above, two watercourses cross the site.

Types and Characteristics of the Potential Impacts

The following section of this Screening Request sets out the potential environmental impacts concerning: construction; air quality and emissions; waste; soil and land; flood risk and drainage; biodiversity; transport and access; arboriculture; landscape and visual; cultural heritage; human beings; noise; minerals; and further considerations. Each is addressed in turn below.

Construction: Temporary construction works will be typical of a proposed development of this character and, with the implementation of a Construction Environmental Management Plan as is customary, they are not expected to give rise to any significant environmental effects. More specific detail on the anticipated construction phase impacts are set out below.

Air Quality and Emissions: There is the potential for emissions from the project during the construction

and operational phase.

During the construction phase, there is the potential for emissions from construction vehicles and machinery, as well as dust. Such impacts, which would be temporary, could be mitigated through the use of industry best practices, including the dampening of stockpiles of material, ensuring that plant machinery is well maintained and measures are taken to ensure that plant machinery is shut down when not in use. This could be secured through a Construction Environment Management Plan.

In the operational phase, the principal emissions are likely to result from vehicles associated with the development. However, as set out above, the site is sustainably located and therefore residents are likely to use sustainable modes of travel (walking, cycling and public transport) to access services, facilities and employment. The movement towards low and zero emission vehicles could also help to reduce transport emissions further.

In terms of the dwellings themselves, it is likely that they will be constructed to Future Homes Standards. Any new homes built under these new Building Regulations standards will therefore need to be zero carbon ready, which means that they will immediately be able to benefit from the decarbonisation of the electricity grid.

Waste: As is the norm with all urban development projects, waste will be produced within the construction phase. It will be managed and disposed of by the developer's chosen contractor in accordance with the national and local planning policy for waste. It will be suggested to the Local Planning Authority that should the forthcoming application be approved, a pre-commencement condition requiring the submission and approval of a Site Waste Management Plan / Construction Environment Management Plan should be added to the decision notice. This will ensure any impacts associated with construction waste are minimised.

During the operational phase, it is anticipated that Wiltshire Council will be responsible for waste collections. Adequate space will be provided within the scheme to ensure that:

- waste collection points can be provided; and
- refuse vehicles can access all refuse collection points proposed within the site.

Soil and Land: The development will involve previously undeveloped, agricultural land. As set out above, DEFRA's online database suggests that the subject site is not best and most versatile agricultural land. The majority of land surrounding Melksham is of a similar quality and in some instances is better (Grades 1, 2 and 3a).

In any event, approximately 40% of the site will not be developed and will instead form part of the project's public open space and landscape scheme. However, it will result in the permanent loss of previously undeveloped land in the areas of the site proposed for development.

Flood Risk and Drainage: The drainage strategy for the proposed development will be designed in accordance with Building Regulations requirements, which require rainwater runoff to be discharged into one of the following, listed in priority order: (1) a soakaway or another infiltration system; (2) a watercourse; or (3) a sewer.

Initial technical work suggests that infiltration is unlikely to be feasible due to the low infiltration potential of the site. Consequently, the current design proposal seeks to accommodate a series of detention basins, which will outfall into the on-site watercourse. Swales and a piped system will convey water into these basins.

The basins will be designed to accommodate the 1 in 100-year storm event, plus an allowance for climate change (45%). Discharge rates will be restricted to the existing greenfield run-off rate as a minimum, although it is hoped that a betterment will be achieved to reduce flows downstream, in comparison to the pre-development situation.

The use of sustainable drainage systems will improve the quality of water discharge from the site.

Appropriate buffers, which, other than crossing points, will be undeveloped, will be afforded to the watercourses.

Biodiversity: As set out above, protected species surveys are ongoing and they will be used to inform suitable mitigation strategies and if necessary, licensing.

The design of the proposed development will be formed with the following overarching objectives:

- To conserve biodiversity in accordance with the mitigation hierarchy (avoid, mitigate and, as a last resort, compensate);
- To demonstrate a minimum level of 10% net gain for biodiversity through the restoration of ecological features and the creation of new habitats in locations that contribute to enhancing ecological networks; and
- To provide a long-term strategy for the sensitive management of habitats and species.

The masterplan will seek to achieve these objectives by:

- retaining and buffering all hedgerows where possible, incorporating them into multi-functional green infrastructure;
- creating and restoring ecological networks, by bolstering retained hedgerows with additional planting and providing dark corridors for nocturnal wildlife;
- creating new ponds and providing links between them as part of the sustainable drainage system strategy;
- creating areas of structural planting within the public realm, generating new opportunities for a variety of species;
- if feasible, providing an appropriate buffer where development would be restricted to the badger sett (if confirmed); and
- securing long-term benefits to nature through a sensitive management plan.

Subject to the implementation of the recommended measures for habitat retention, creation and enhancement, no significant reduction in the ecological interest of the site or its surrounds is likely to arise as a result of its development. It is therefore concluded that, beyond the normal requirements to avoid impacts on protected species and maintain key elements of the habitat resource of the site and its surrounds, there appear to be no overriding nature conservation constraints that would preclude the development of the site. Consequently, no significant effects on biodiversity are predicted.

Transport and Access: The masterplan will be designed in a manner to promote active travel. Whilst likely to be a matter reserved for future consideration, the masterplan will ensure that the network of internal streets are designed to promote low vehicular speeds, which will create a suitable environment for pedestrians and cyclists. Dedicated pedestrian and cyclist access points are proposed onto the A3102 and to Gladstone Road. A Travel Plan could also be secured by planning condition or obligation.

The proposals include a primary access from the existing roundabout on the A3102/Eastern Way

roundabout. A second junction, which is likely to take the form of a priority T Junction with or without a ghost island right turn lane, is proposed to the west of the existing roundabout. These vehicular access points will be designed in a manner to ensure that they will not result in an unacceptable impact on highways safety.

It is not envisaged that the proposed development will result in a severe impact on the road network. As such, the transport and access impacts resulting from the development will not lead to a significant environmental effect.

Arboriculture: As set out above, an industry-compliant tree survey has been undertaken of the site and its boundaries. A number of arboricultural and hedgerow features have been identified. Whilst every step will be taken to ensure, where feasible, that they could be retained within the development proposals, there remains the possibility that in order to ensure a high-quality development, some of these features might need to be removed, or partially removed. Any necessary removal will be determined in due course after a robust masterplanning exercise has been undertaken and will be set out in an Arboricultural Impact Assessment.

Should any losses be required, mitigation and enhancement will be provided.

Accordingly, the proposed development will not have a significant adverse impact on the existing arboricultural value of the site and could even have a positive effect.

Landscape and Visual: Landscape features can be accommodated as part of a sensitive landscape-led masterplan, such that new development would not have a significant effect on landscape character. Development will be focused in the southern and western areas of the subject site, adjacent to Melksham's existing residential envelope.

Cultural Heritage: Given the distance between the application site and the designated historic assets identified within the study area and the intervening built development and landscaping, it is not anticipated that the development will result in substantial harm to any of the designated historic assets. At worst, the proposed development will result in a less than substantial harm, but for the reasons previously set out, it is more likely that the development will have no effect on the significance of any designated asset. This impact of the development will be established in a Heritage Impact Assessment which will support the planning application.

Human Beings: The proposed development will give rise to an increase in the number of people who live in Melksham, however in the context of the size of the settlement this is not considered significant. The future local residents will place demands on local community facilities, but this increase would not be of a scale disproportionate to the role and function of Melksham as a second tier market town, and could be mitigated in the normal fashion through developer contributions.

Noise: It is not envisaged that there will be any unacceptable levels of noise that will result from the development. At this stage of the process it is also not anticipated that the site is located within an area where it is likely to be particularly sensitive to noise. If necessary, this will be demonstrated in a Noise Assessment which will accompany the planning application.

Minerals: As indicated above, the subject site is not located within a Minerals Resource Zone, an Other Naturally Occurring Resource Zone, or a Minerals Safeguarding Area. Its development will therefore not have any effect on minerals resources.

Further Considerations: The economic impact of the development proposal would be beneficial in terms of the temporary employment generated by the proposals during the construction stage. The potential nursery will also provide employment opportunities over the lifetime of the development. In terms of social benefits, the proposed development would also provide additional affordable housing within the County. Planning obligations will ensure mitigation is provided as appropriate.

The development would also:

- extend over a relatively small geographic area;
- have no transfrontier effects;
- not be of a significant magnitude or complexity;
- have a typical probability of impact to that of other urban development projects; and
- have a similar duration, frequency and reversibility to other urban development projects.

Cumulative Impacts: A list of other ongoing projects in Melksham is set out above. It is considered that these committed developments have all been assessed through the planning process and appropriate mitigation measures will have been identified for them. It is unlikely therefore that cumulative impacts would arise that would result in likely significant effects that would warrant an Environmental Impact Assessment in this instance.

Other Matters

It is instructive to note that the indicative capacity of the proposed application site (up to 350 dwellings) is significantly lower than the indicative screening threshold provided within the Environmental Impact Assessment section of the Planning Policy Guidance. This guidance states that for urban development projects, Environmental Impact Assessment is unlikely to be required for sites that have not previously been intensively developed unless the scheme, amongst other criteria, would have significant urbanising effects in a previously non-urbanised area ***"e.g. a new development of more than 1,000 dwellings."***

Conclusion

On the basis of the information provided above, it is considered that the proposed development does not fall within Schedule 1 of the 2017 Regulations and although it is Schedule 2 development, it is not ***"likely to have significant effects on the environment by virtue of factors such as its nature, size or location."***

Accordingly an Environmental Statement should not be required.

Planning Application Technical Information

Whilst an Environmental Impact Assessment for the proposed development should not be required, it should be noted that the potential impacts will be assessed through the following technical assessments which will accompany the application:

- Planning Statement;
- Design and Access Statement;
- Flood Risk Assessment and Drainage Strategy;
- Transport Assessment;
- Ecological Assessment;
- Arboricultural Assessment;
- Landscape Visual Assessment;
- Heritage Assessment;
- Agricultural Land Assessment; and
- Noise Assessment (if required).

This technical work will provide a full understanding of the environmental impacts of the proposed development and will meet national and local planning application validation requirements. It is considered that this evidence will not identify an environment impact that would be considered as being significant within the context of the 2017 Regulations.

Conclusions

In our opinion, having regard to the above, the proposed development does not fall within Schedule 1 and although it is Schedule 2 development, it is not ***"likely to have significant effects on the environment by virtue of factors such as its nature, size or location."*** Accordingly, the development should not be considered as being Environmental Impact Assessment development and an Environmental Statement should not be required.

I trust that you find this Screening Request to be in order. I note that, in accordance with Regulation 6(6), your Authority has three weeks from receipt in which to adopt a Screening Opinion.

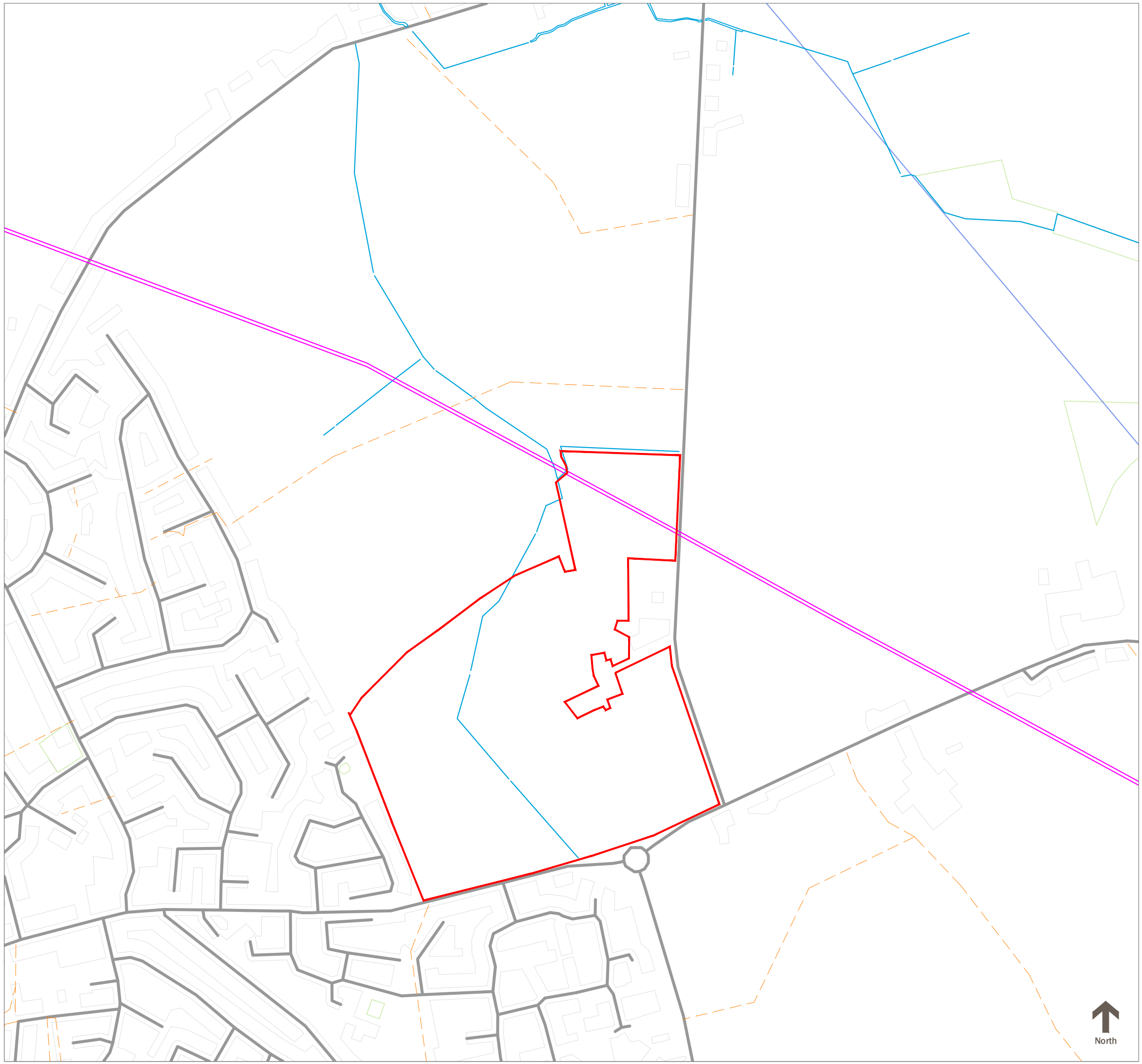
If you require any further information, please do not hesitate to contact me.

Your sincerely,



Neil Mantell
Director

Appendix 1 – Site Location Plan



TETRA TECH

www.tetratecheurope.com

Key

Site boundary (16.8 ha)

PRELIMINARY ISSUE

Document control

Rev	Description	Date	Dwn	Chk	App
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

Land at New Farm, Melksham

Bloor Homes

Site Boundary Plan

TTE Proj No	Drwn by	Date	Ch'ked by	Date	Appr'd by	Date	Scale @ A3	Suitability
B039133	LR	Jan'23	SE	Jan '23	SE	Jan '23	1:5000	S0
Client Proj No	**Originator**	**Vol/System**	**Level/Location**		**Type/Code**	**Role**	**Number**	**Revision**
PRJ01	TTE	00	ZZ		DR	UD	001	P00

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Appendix 2 – Environmentally Sensitive Areas Likely to be Affected by the Project

Topic	Designations	Reference	Distance from the Subject Site (KM)
Conservation Areas	Melksham Conservation Area.		Approximately 1km to the south west at its closest point.
Listed Building	1. 8 Church Lane (Grade II); 2. Church of St Andrew (Grade II); and 3. Blackmore House (Grade II).	1. 1021697; 2. 1286098; and 3. 1364118.	1. Approximately 560m to the west. Built development and landscaping is located between the asset and the subject site. 2. Approximately 600m to the west. Built development and landscaping is located between the asset and the subject site. 3. Approximately 470m to the south east. Built development, the A3103 and landscaping is located between the asset and the subject site.
Scheduled Ancient Monuments	No features found in search.		
Registered Parks and Gardens	No features found in search.		

World Heritage Site	No features found in search.		
Green Belt	No features found in search.		
Local Wildlife Sites	Five LWS are within 2km of the site as follows: • Bristol Avon River LWS, c. 1.5km west; • Eighteen Acre Plantation LWS, c. 1.7km east; • Hanging Wood LWS, c. 1.9km east; • Conigre Mead WWT Reserve LWS, c.2km west; and • Morass Wood LWS, c. 2km east.		
National Nature Reserve	No features found in search.		
Ramsar Sites	No features found in search.		
Special Protection Areas	No features found in search.		
Special Area of Conservation	A component of the Bath and Bradford on Avon Bats SAC. However, the site is not located within the Core Area of the SAC.		Approximately 9.2km to the north-west.
Sites of Special Scientific Interest	There are no SSSIs within 2km of the site. The site is however within the Impact Risk Zone for the Spye Park SSSI, but residential developments are not listed as likely to have an impact on the SSSI at this distance.		The Spye Park SSSI is located approximately 2.46km to the north east.

Area of Outstanding Natural Beauty	No features found in search.
Special Landscape Area	Located approximately 800m to the east.
National Park	No features found in search.

Appendix 1.4 Screening opinion from Local Authority

Wiltshire Council

WILTSHIRE COUNCIL SCREENING OPINION

11 July 2023

Policies: Town and Country Planning (Environmental Impact Assessment) Regulations

Planning Reference: PL/2023/01584

Description: No description was provided but from within the submission the proposal is for up to 350 dwellings, a day nursery, new primary and secondary access from the A3102, pedestrian and cycle access, public open space, green infrastructure, SUDs and associated infrastructure

Site: Land at New Farm, Melksham SN12 7QY

The application site comprises approximately 17 hectares of agricultural land (where the majority of the site is categorised as grade 3A and 3B; good and moderate use, with the western edge identified as 'urban') associated with New Farm. It is located on the eastern side of Melksham between a residential housing estate on the eastern edge of Melksham and New Road to the west. The site is enclosed by the A3102 to the south. To the north are open fields, up to Woodrow Road, where application 21/01629/OUT for 150 dwellings was withdrawn). See map extract below showing the proposed site outlined in blue.

No Public footpaths run through the site although MELW60 runs parallel to the north approximately 80m away at its shortest point and up to 300m away at its furthest point.

Further to the south east is Blackmore Farm where application PL/2022/01864 (scoping request) was submitted to Wiltshire Council for 650 dwellings and a primary school. The applicants self-determined that due to the size of the proposal it would constitute EIA development and that an Environmental Statement would be required. The Council fully agreed with when providing the scoping opinion. This has also led to the submission of PL/2023/01949 (with Environmental Statement) on the same site and is of yet undetermined.



A Special Landscape Area – saved policy C3 from the West Wiltshire District Plan 1st Alteration 2004 is approximately 570m to the east. The North Wessex Downs AONB is approximately 7km to the east.

There are 4 ancient woodlands within 2.2km to the east with further concentrations of ancient woodlands to the east and north east within 2.4-6km away. There are also 4 SSSI within 3.4km of the site to the north east.

The site is within the Melksham Open Clay Vale Landscape Character Area.

There are no listed buildings on the site, and it lies outside any Conservation Area. The Melksham conservation area is approximately 960m to the west (within the town centre area).

There are only 4 grade II listed buildings in proximity (two of which are 360m to the west within the town) and Blackmore House approximately 300m to the east. Woodrow House Farm house and its railings are approximately 710m to the north. Therefore, it is only Blackmore House and Woodrow House Farm to which this proposed development could have an affect of their settings.

Environment Agency mapping indicates that the majority of the Site is within Flood Zone 1 although flood zone 2 cuts through the middle of the site. Flood zone 3 is to the north of the site. There is further evidence from the Wiltshire Council Strategic Flood Risk Assessment (SFRA) of a risk of 1 in 30 year surface water flooding through the middle of the site and at its western and southern boundaries. The 'surface area' of these extend with the 1 in 100 year and 1 in 1000 year maps. Fortunately, the SFRA does not identify this area at being at risk from Ground water flooding.



1 in 30



1 in 100



1 in 100

Relevant Planning History:

The site has no previous planning permissions.

Is the development listed in Schedule 1? No

Is the development listed in Schedule 2? Yes – The development proposals set out within this screening opinion are considered to fall within Schedule 2, specifically 10 (infrastructure projects) (b) urban development projects.

Does it meet any of the relevant Schedule 2 thresholds/criteria? No – The proposal is seeking more than 150 dwellings on a parcel of land than exceeds 5 hectares in size. As such, the proposed residential development would exceed the relevant thresholds set out in Column 2 of Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

Is the development in a 'sensitive area'? No – The EIA regulations define a "sensitive area" within Part 1, Regulation 2(1) as any of the following:

(a) land notified under section 28(1) (sites of special scientific interest) of the Wildlife and

Countryside Act 1981;
(b) a National Park within the meaning of the National Parks and Access to the Countryside Act 1949;
(c) the Broads;
(d) a property appearing on the World Heritage List kept under article 11(2) of the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage;
(e) a scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979;
(f) an area of outstanding natural beauty designated as such by an order made by Natural England under section 82(1) (areas of outstanding natural beauty) of the Countryside and Rights of Way Act 2000 as confirmed by the Secretary of State;
(g) a European site;

Following a review of the constraints of the site, the proposed development area is lot located within any of the above listed special areas.

Taking account of the selection criteria in Schedule 3, is the development likely to have significant effects on the environment? (Regulation 5(4) of the 2017 Regulations).

Wiltshire Council has, in determining whether the development as proposed is likely to have significant effects on the environment, taken into account the characteristics and location of the site and proposed development and the relevant selection criteria in Schedule 3 to the Regulations based on the information contained submitted as part of this request for screening as received on 28 February 2023. I apologise for the delay in getting this to you.

Paragraph: 017 Reference ID: 4-017-20170728 of the Planning Practice Guidance (PPG) states that *"'screening' is a procedure used to determine whether a proposed project is likely to have significant effects on the environment"* and continues stating that *"if the project is listed in Schedule 2, the local planning authority should consider whether it is likely to have significant effects on the environment"*.

Paragraph: 018 Reference ID: 4-018-20170728 of the PPG requires local planning authorities to consider the criteria contained in Schedule 3 of the 2017 Regulations, and states:

Not all of the criteria will be relevant in every case. Each case should be considered on its own merits in a balanced way. When the local planning authority or Secretary of State issues its opinion they must state the main reasons for their conclusion with reference to the relevant criteria listed in Schedule 3. Where it is determined that the proposed development is not Environmental Impact Assessment development, the authority must state any features of the proposed development and measures envisaged to avoid, or prevent what might otherwise have been, significant adverse effects on the environment (emphasis added by officers)

Paragraph: 018 continues stating that:

Only a very small proportion of Schedule 2 development will require an Environmental Impact Assessment. While it is not possible to formulate criteria or thresholds which will provide a universal test of whether or not an assessment is required, it is possible to offer a broad indication of the type or scale of development which is likely to require an assessment. It is also possible to provide an indication of the sort of development for which an assessment is unlikely to be necessary. To aid local planning authorities to determine whether a project is likely to have significant environmental effects, a set of indicative thresholds[1] and criteria have been produced. See the indicative thresholds and criteria. The table also gives an indication of the types of impact that are most likely to be significant for particular types of development.

As referred to in the above paragraph, a table containing indicative screening thresholds has been provided in Paragraph: 058 Reference ID: 4-058-20150326. Within this table, the following

[1] Indicative Screening Thresholds - gov.uk

thresholds are included: *"which have not previously been intensively developed: (i) area of the scheme is more than 5 hectares; or (ii) it would provide a total of more than 10,000 m2 of new commercial floorspace; or (iii) the development would have significant urbanising effects in a previously non-urbanised area (e.g. a new development of more than 1,000 dwellings)"* and requires the *"physical scale of such developments, potential increase in traffic, emissions and noise"* to be key issues to consider when the LPA is assessing screening opinions.

In this instance, the opinion of the local planning authority is that the development **does** require an Environmental Impact Assessment for the following reasons when assessed against the criteria contained in Schedule 3:

1. Characteristics of Development: Schedule 3, Paragraph 1 states that the characteristics of development must be considered with particular regard to the following:

(a) The size and design of the whole development: The proposed development would occupy an area of c17ha containing up to 350 dwellings on a greenfield site located outside the settlement boundary for Melksham and Bowerhill Village. It is not considered that the site represents previously developed land. No design or layout details of the proposed development have been submitted for review as part of this screening opinion and thus this cannot be considered.

(b) Cumulation with other existing development and/or approved development:

Paragraph 024 Reference ID: 4-018-20170728 of the PPG states that "*each application should be considered on its own merits. There are occasions, however, when other existing or approved development may be relevant in determining whether significant effects are likely as a consequence of a proposed development. The local planning authorities should always have regard to the possible cumulative effects arising from any existing or approved development*."

Your supporting statement provides the following list of applications;

- **Land South of Western Way, Bowerhill, Melksham** (Ref: W16.1123) – which had 22 committed dwellings outstanding at the base date;
- **Land South of Western Way, Melksham** (Ref: W18.4477) – which had 99 committed dwellings outstanding at the base date;
- **Land East of Spa Road, Melksham** (Ref: 18/04644/REM) – which had 345 committed dwellings outstanding at the base date;
- **Bowden Guest House, 25 - 27 Beanacre Road, Melksham** (Ref: W17.10015) - which had 10 dwellings outstanding at the base date;
- **Land East of Semington Road, Melksham** (Ref: W17.1251) – which had 33 dwellings outstanding at the base date;
- **3 Lowborne, Melksham** (Ref: W13.7076) – which had 17 dwellings outstanding at the base date;
- **Land East of Semington Road, Melksham** (Ref: 20/01938/OUT) - which had 144 dwellings outstanding at the base date; and
- **Park Farm, Seend Cleeve, Melksham (**Ref: 20/02213/FUL) – which had 11 dwellings outstanding at the base date.

However, the list excludes Land at Blackmore Farm PL/2023/01949 for 650 dwellings. I appreciate that this application was submitted after the submission of this screening request (and has not been determined) but it is a very relevant application – that is also EIA development – on land that is only 40m away from this screening application site.

This proposed development is for up to 350 dwellings and this alone would not exceed the 1000 threshold guidance contained within the PPG, however it is necessary to consider the cumulative impact of this proposed development together with other existing and approved developments in the locality of the site. Three residential developments have been previously approved and are currently in the process of being constructed and therefore the council is of the opinion that

there would be cumulative effects arising from the proposed development in combination with other developments to the east of Melksham and the impact of this is significant enough to trigger the need for an EIA.

(c) The use of natural resources, in particular land, soil, water and biodiversity:

Land and soil: The proposal would result in the loss of some Grade 3 agricultural land, but as the proposed development would be residential it would not have such an impact on the land and soil to require an EIA alone.

Water: The majority of the site is located within Flood Zone 1, though a brook runs through the site associated with Flood Zones 2 (and flood zone 3 to the north of the site). There is also the identified surface water issues on the site.

No details of how surface run-off from the proposed development would be managed and no evidence that infiltration testing has been carried out on-site to confirm whether SUDs would work on this site has been submitted as part of this screening opinion. However, the council's drainage department have commented to say that they are of the view that a separate EIA would not be necessary to address drainage/flood risk issues.

Drainage Officers have however stated "*A site-specific Flood Risk Assessment (FRA) is required for this application. The site-specific FRA should demonstrate that the site is not adversely affected by flood risk from different sources, and how the flood risk from all sources will be managed without increasing flood risk to the development itself or elsewhere. It should also outline the proposed drainage strategy for the site."*

Biodiversity: The site is not covered by any specific local or national biodiversity designations, but the site is currently undeveloped farmland bounded by existing hedgerows. The site also contains a watercourse. No details have been submitted as part of this screening opinion to confirm what ecological survey work has been undertaken or whether any protected species have been identified on-site.

The council's ecology department have provided comment on this screening opinion and have stated that the "*There are several trees on site, most of which are located along the western boundary or are associated with the farm buildings to the east. A single veteran oak is located in the northern most field. A water course runs through the site south to north and there is an area of bare ground adjacent to the offsite farm buildings.*

Wiltshire Council also has records of great crested newts (GCN) and otter within the surrounding area. The area around Melksham is known to support a large meta population of GCN and there are several ponds within 500m of the site, the closest being the balancing pond adjacent to the western boundary and a pond approximately 247m to the south east."

The comments from ecology continue, stating that "*Any future planning application must be accompanied by a full Ecological Impact Assessment (EcIA) and fully comply to relevant National and Core Policy. To conform with current policy (NPPF and Core Policy 50) the development must demonstrate no net loss of functional habitat for biodiversity and must provide biodiversity net gain (BNG). The Screening Opinion request letter states that the proposed development would provide, as a minimum, 10% BNG. The strategy for provision of both no net loss and BNG could be secured through provision of a Landscape and Ecological Management Plan, submitted with any future planning application and accompanied by calculations using the Biodiversity Metric 3.1 or current version*."

(d) The production of waste: As with most developments, it is usual for there to be some waste produced during the construction phase. This should be managed on-site via an approved Construction Environment Management Plan with any potential dwellings being provided with sufficient waste disposal facilities, which should be managed through legal obligations and planning conditions where necessary. Due regard must be given to the Wiltshire and Swindon Waste Core Strategy (Policy WCS5) which establishes a Waste Hierarchy that reflects national

policy in that it seeks to prevent and limit waste in the first instance.

(e) Pollution and nuisances: The construction phase of the development would likely result in the temporary storage of fuels, vehicles and materials, which should be stored and used in accordance with construction best practice methodology to minimise the risks to the soil and also to surrounding watercourses and groundwater.

The subject site contains the watercourse, as such pollution prevention measures must be put in place to ensure that the waterbodies are not contaminated or polluted.

The construction phase would generate noise and lighting maybe required on-site during the construction phase of development. The hours of construction and use of external lighting can be controlled by the imposition of a planning conditions and the approval of a Construction Environmental Management Plan (CEMP) at application stage.

(f) The risk of major accidents and/or disasters relevant to the development concerned: The proposed development is considered to hold potential for accidents that relate to the normal risks associated with construction work. These should be managed in the appropriate way within industry standard guidelines by the appointed site manager.

A Construction Transport Management Plan (CTMP) should be submitted with any future planning application, which details points of access and egress for the construction phase, cleaning facilities, routing plans, swept path analysis, visibility splays at junctions, restrictions to timing of vehicle movements, and temporary parking restrictions for example, so the impact of the construction phase of the development can be robustly assessed on the wider highway network.

(g) The risks to human health: There are existing residential properties in proximity to the site. The proposal subject to this screening is also for residential use and it is considered unlikely to result in any significant risk to human health over and above the risks already assessed in relation to pollution, accidents and highway safety in the preceding sections.

2. Location of the Development: Schedule 3, Paragraph 2 requires particular regard to be given to the following:

- *(a) The existing and approved land use;*
- *(b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground;*
- *(c) The absorption capacity of the natural environment, paying particular attention to the following areas—*
    - *i. wetlands, riparian areas, river mouths;*
    - *ii. coastal zones and the marine environment;*
    - *iii. mountain and forest areas;*
    - *iv. nature reserves and parks;*
    - *v. European sites and other areas classified or protected under national legislation;*
    - *vi. areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;*
    - *vii. densely populated areas;*
    - *viii. landscapes and sites of historical, cultural or archaeological significance.*

The subject site is considered to be open countryside, with agricultural use and views extending to the north and east of the site. However, the overall amount of open countryside has been significantly eroded over the last 10+ years, with the edge of Melksham expanding quite significantly to the west and south of the site. Therefore, the relative abundance and availability of natural resources e.g. land and soil has been affected by the recent development.

Whilst the subject site is not located in a sensitive area or covered by any designations, it is within 600m to the west of Special Landscape Area 5 *The higher land of Spye and Bowood*

Parklands. Whilst no public rights of way pas through the site MELW60 runs to the north and MELW27 and MELW26 run to the south and east. Therefore, these changes can be seen and appreciated over a large area.

The designated Melksham Conservation Area boundary is located over just under 1km from to the west, the closest listed building to the site is considered to be the Grade II Blackmore House located c.295m from the site to the east, with the Morass Wood and Hanging Wood ancient woodlands are both located c1.6km to the east of the subject site. Due to these designations being some distance from the subject site, it is unlikely that any proposal would give rise to significant environmental effects, though it is considered that any landscape and visual impact assessment adequately assesses the impact of the proposal on all designations (both heritage and environmental) as part of a future planning application.

The council's ecology department have noted that whilst the subject site is not covered by any wildlife designations, "*the following protected sites (designated under the Wildlife & Countryside Act 1981 (as amended) and or The Conservation of Habitats and Species Regulations (2017) and therefore 'sensitive areas' under the intended meaning in the EIA Regulations) are located within the following search areas:*

European designated sites: 10km

- *Bath and Bradford on Avon Bats SAC approximately 8.8km to the north west of the site.*

Nationally designated sites: 5km:

- *Spye Park SSSI approximately 2.5km to the north east of the site;*
- *Seend Cleeve Quarry SSSI approximately 3.5km to the south east of the site;*
- *Seend Ironstone Quarry and Road Cutting SSSI approximately 3.6km to the south east of the site*

There are no County Wildlife Sites (CWS) within 1km of the site."

In addition, the aerial photographs the council has access to show the site to contain existing hedges and trees along the field boundaries. The council's ecology department have commented to say that *"hedges are Natural England Priority Habitats, of high biodiversity value and are likely to support protected and notable species. Hedges are also recognised for their function as important corridors essential for species movement and maintenance of population status.*

There is an area of running water priority habitat (listed under Section 41 of the NERC Act 2006) on site as the Clackers Brook runs east-west through the centre of the site. There are no additional areas of priority habitat adjacent to the site however, there are several areas of priority habitat within 1km of the site including:

- *Deciduous woodland; and*
- *Running Water"*

It is acknowledged that the proposed development would have potential to generate some local biodiversity effects however, it is not considered that these would be significant in terms of the definition of the EIA regulations. Any future application should be accompanied by a full Ecological Impact Assessment (EcIA) for the potential effects of the development on species and their habitat to be identified and assessed.

3. Types and Characteristics of the Potential Impact: Schedule 3, paragraph 3, states that the likely significant effects of the development on the environment must be considered in relation to the above criteria with regard give to:

(a) The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected);
(b) The nature of the impact;
(c) The transboundary nature of the impact;

(d) *The intensity and complexity of the impact;*
(e) *The probability of the impact;*
(f) *The expected onset, duration, frequency and reversibility of the impact;*
(g) *The cumulation of the impact with the impact of other existing and/or approved development;*
(h) *The possibility of effectively reducing the impact.*

In assessing the proposal against the above, the proposed development would result in a further urbanising to the east of Melksham from future residential development on what is currently open countryside used for agricultural purposes. Furthermore, it is the last parcel of land between Melksham's urban edge and New Road. The proposed development in-combination with other developments would form an extension to the town. Whilst some impacts of the proposed development could be controlled and mitigated through a future planning application, the proposed quantum of new housing on this particular side of Melksham is considered significant.

Whilst the 650 dwellings on Blackmore Farm are yet to be determined, the salient fact is that the applicants self determined that their application was EIA development due to the cumulative impacts of recent development. At 350 dwellings, this proposal is not far behind.

Whilst officers acknowledge that the scheme alone does not meet the 1,000 dwelling threshold, the council's landscape officer has provided comment on this screening opinion stating that the cumulative development to the east of Melksham "*the risk of piecemeal development of individual sites of this urban extension to the east of Melksham that individually do not meet the threshold of EIA, that is at great risk of being planned in an appropriate manner without ensuring appropriate civil, environmental, and civic infrastructure. To claim that each of these developments can on their own mitigate their individual impacts to the existing communities and environment does not respond to the wider cumulative impacts of such a scale of development on local facilities, and the wider landscape*."

Therefore it is submitted that this development is a further urban extension to what has already been urban extensions to the settlement. The land of Spa Road, South Western Way, and East of Semington Road have permitted (and are under construction) a total of 810 dwellings, with one application yet to be determined for up to a further 650 dwellings. The proposal set out within this screening opinion is for up to an additional 350 dwellings to the east of the town.

Your screening letter acknowledges that each scheme identified will have appropriate mitigation measures identified for them but it is considered that the cumulative impact of the proposed housing on the surrounding environment including the landscape character and visual impacts may be greater and require more mitigation than the impacts of the individual developments itself.

Whilst it is appreciated that only existing and approved development can be considered when assessing cumulative effects, it is noted that a number of existing planning approvals already exist to the east of Melksham, with the development proposed as part of this screening opinion further increasing the quantum of housing on this side of the town. Screening opinions can also be updated and should the 650 dwellings at Blackmore Farm be approved, this can change the status of existing screening opinions. Therefore, even if WC considered this not to be EIA development on cumulative grounds (and for the avoidance of any doubt this is considered to be EIA development) should Blackmore Farm be approved, an ES could still be requested at a later date, as screenings can also be undertaken at any time of a live application. As we don't know when your application could be submitted, there is a chance that Blackmore Farm could have progressed quite significantly by then. Furthermore, whilst the Wiltshire Council Local Plan is only at pre-submission phase, Blackmore Farm is an allocated site in the draft. Therefore some progress could be reasonably expected on this site by the time, if and when any application is submitted on this site.

Furthermore, this cumulative development which abuts the locally designated 'higher land of Spye and Bowood Parklands' Special Landscape Area which is covered by saved policy (C3) from the West Wiltshire Local Plan. This could well trigger NPPF para 174a) as local landscape

designations can be regarded as valued landscapes and thus the cumulative effect of developing housing out to the east of Melksham in the rural buffer between the existing settlement boundary and the SLA could have a detrimental impact on that SLA.

There are concerns regarding the combination of existing and proposed development (such as this proposal) resulting in an urban encroachment into this currently open countryside part of the eastern side of Melksham, where developments of this nature have become characteristic due to the overall cumulative impact. A further encroachment into the countryside is likely to be detrimental to the character and appearance of the wider landscape. As such, the landscape officer suggests above that whilst individual proposals are likely to provide mitigation for their own impacts, a more joined up collaborative approach to delivering mitigation may provide better outcomes.

Conclusion: The proposed residential development is seeking up to 350 new dwellings. The majority of the proposal's impacts would not be of wider significance for the purposes of Environmental Impact Assessment in terms of size and nature, but because of the cumulative landscape impact due to the quantum of housing on the eastern side of Melksham through already approved planning applications in addition to the proposed number of dwellings as part of the scheme subject to this screening opinion, forming an urban extension to the east of Melksham, it is considered to have the potential to result in significant impacts on the locality and wider area. On this basis the proposed development would therefore require an EIA in this instance.

Appendix 1.5 Scoping request to Local Authority

ENIVRONMENTAL STATEMENT SCOPING REPORT

Land at New Road Farm, Melksham

July 2024

LRM PLANNING LIMITED

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1 Introduction

1.1 Bloor Homes (the Applicant) intend to submit a planning application for residential led mixed use development of the land at New Road Farm, Melksham. This Site has been identified within the Regulation 19 consultation document of the Local Plan Review as an emerging allocation for residential development.

ENVIRONMENTAL IMPACT ASSESSMENT

1.2 The Town and Country Planning Act 1990 ('the Act') requires that a person wishing to develop land or change its use seeks planning permission from the Local Planning Authority ('the LPA').

1.3 Certain types of development are categorised as Environmental Impact Assessment Development ('EIA Development') because of their nature, size or location as defined by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ('the Regulations). In such instances, an applicant is required to undertake an Environmental Impact Assessment (EIA).

1.4 EIA is the process of assessing the environmental impacts of the development project. The Planning

1.5 Practice Guidance describes EIA as follows:

> *"The aim of is to protect the environment by ensuring that when a LPA is deciding whether to grant planning permission for a project which is likely to have significant environmental effects on the environment, it does so in the full knowledge of the likely significant effects, and takes this into account in the decision making process. "The aim of Environmental Impact Assessment is also to ensure that the public are given early and effective opportunities to participate in the decision-making procedures."*
> (Paragraph: 002 Reference ID: 4-002-20140306)

1.6 Planning applications for EIA Development must be accompanied by an Environmental Statement (ES). The ES is the document reporting the EIA and must be provided to the LPA as part of its consenting process.

SCREENING

1.7 In February 2023, pursuant to Regulation 6(1), Bloor Homes submitted a Screening Request to Wiltshire Council as the LPA in this instance. The purpose of the Screening request was for the LPA to determine whether the proposed development was considered to be EIA development.

1.8 On the 11th July 2023, the LPA issued its Screening Opinion in accordance with Regulation 6(6).

1.9 In its opinion, the majority of the proposal's impacts would not be of wider significance for the purpose of EIA.

1.10 However, the LPA are also of the opinion that:

> *"…the cumulative landscape impact due to the quantum of housing on the eastern side of Melksham through already approved planning applications in addition to the proposed number of dwellings as part of the scheme subject to this screening opinion, forming an urban extension to the east of Melksham, it is considered to have the potential to result in significant impacts on the locality and wider area. On this basis the proposed development would therefore require an EIA in this instance."*

1.11 As such, the LPA's formal Screening Opinion is that proposed development is EIA Development.

SCOPING

1.12 Regulation 15(1) enables a person who is minded to make an application for EIA Development to ask the LPA to state in writing their opinion as to the scope and level of detail of information to be provided in the required ES (a 'Scoping Opinion').

1.13 The Applicant had previously submitted a request for a Scoping Opinion (Reference number: PL/2023/0900) which was valid from the 16th October 2023. Since that submission was made the Applicant has been in detailed discussions with the Local Planning Authority and have reduced the area and amount of development proposed to reflect the emerging allocation in the Local Plan. In addition, it is now proposed that a Full Application is submitted.

1.14 In seeking a Scoping Opinion, the applicant is required to provide *inter alia* the following information:

- a brief description of the nature and purpose of the development, including its location and technical capacity; and
- an explanation of the likely significant effects of the development on the environment.

1.15 This Scoping Report has been prepared to provide the information required by the Regulations so that the LPA can provide its opinion of the information to be provided in the ES; accordingly, it is structured as follows:

- section 2 describes the Site and its surroundings;
- section 3 describes the Proposed Development;
- section 4 provides an overview of the methodology to be employed in conducting the EIA and how this will be reported in the ES;
- section 5 proposes the intended Scope of the EIA. and by reference to the LPA Screening Opinion identifies the subject matters to be reported in the ES and describes the proposed methodologies for assessments specific to those environmental topics;
- sections 6 to 9 identifies the subject matters to be reported in the ES and describes the proposed methodologies for assessments specific to those environmental topics;
- section 10 identifies the matters which the applicant intends to scope out of the ES where there is no likely significant effect arising when considered in combination with the cumulative effect of nearby developments;
- section 11 discusses Cumulative Effects; and
- section 12 provides the structure and broad content of the ES.

1.16 The LPA are invited to consider this Scoping Report and to consult appropriate bodies or organisations and to adopt its Scoping Opinion thereafter. Regulation 15(4) requires the LPA to adopt its Scoping Opinion within 5 weeks of receiving the applicant's request.

2 The site and its surroundings

2.1 This Section describes the Site and its context.

THE SITE

2.2 The Site measures approximately 13.06 hectares as set out on the accompanying Site Location Plan (Appendix 1). It is located approximately 2.5km to the north east of Melksham town centre, and is irregular in shape. Its boundaries comprise:

- **to the west** – mature hedgerows and trees. Residential development is located further to the west;
- **to the east** – mature hedgerows and trees. Buildings associated with New Road Farm are located beyond the hedgerows. Open countryside is located further to the east;
- **to the south** – mature hedgerow and boundary enclosures, including a field gate. The A3103 (Sandridge Common) is located beyond the hedgerow. Residential development and open countryside are located further to the south; and
- **to the north** – mature hedgerow, with open countryside beyond.

2.3 Mature hedgerows and trees divide the Site into several separate field parcels. At present, it is predominantly used for agricultural purposes.

2.4 There are no built structures on the Site.

2.5 An industry compliant BS5837:2012 tree survey has been undertaken on the Site and along its boundaries. It has shown that the Site contains the following tree and hedgerow features:

CATEGORISATION	CATEGORY A	CATEGORY B	CATEGORY C
Tree	1 tree	4 trees and 3 tree groups containing approximately 30 trees.	1 tree and 3 tree groups containing approximately 29 trees.
Hedgerow	0	0	6 hedgerows which are approximately 2.9km in length

2.6 There are no Public Rights of Way (PRoW) that cross the subject site, but there are a number in close proximity to it. These include:

- **MELW60** – which is a footpath that runs broadly north east to south west and is located to the north of the subject site;
- **MEDK45** – which is located to the west of the western edge of PRoW MELW60 and extends to Sherwood Avenue. It runs broadly north east to south west; and
- **MELK103** – which is located to the south of the south west corner of the Site and to the south of the A3102. It runs in a broadly southernly direction and connects the footway on the southern side of the A3102 with PRoW MELK104.

2.7 A review of the Council's online planning system indicates that there is no relevant planning history associated with the Site.

LOCAL CONTEXT

2.8 The Site is considered to be within an acceptable walking distance of a range of services and facilities, including:

- retail facilities, including a convenience store located approximately 1.3km to the west of the centre of the subject site. A number of supermarkets are found within Melksham, just over 3km to the west;
- employment opportunities, including within the town centre, around Bath Road and at Bowerhill Industrial Estate
- education facilities, including the River Mead School and Nursery, which is located under 2km to the north west of the Site. Secondary school provision is found approximately 4km to the south; and
- public transport provision, including a bus service on the A3103. The closest bus stop is located approximately 500m to the west of the Site. It is served by bus service X76 which provides a connection once a day in both directions between Bath and Marlborough during the week. Additional bus services route through the existing residential development to the west and include bus services 14, 271 and 273. Bus service 14 provides a generally hourly service to Melksham Town Centre and other destinations within the settlement including supermarkets and the community hospital. Bus services 271 and 273 provide a connection to a range of destinations within Melksham, including supermarkets, employment opportunities (the town centre and Bowerhill Industrial Estate), as well as destinations further afield, including Bath and Devizes. Together, they provide a generally twice hourly service during the week and on Saturdays, with a less frequent service on a Sunday. Melksham Railway Station is located under 3km from the subject site. Located on the Great Western Railway Line, the Railway Station provides services to a range of destinations, including Trowbridge, Chippenham, Swindon and Westbury.

2.9 Core Policy 1 identifies Melksham as being a second tier market town (second of five settlement tiers). Market towns are identified as having ***"the potential for significant development that will increase the jobs and homes in each town in order to help sustain and where necessary enhance their services and facilities and promote better levels of self-containment and viable sustainable communities."***

2.10 Wiltshire Council have published the draft Wiltshire Local Plan for formal consultation (Regulation 19), ending 22nd November 2023. The document identifies the Site as an emerging allocation for residential development at Melksham.

3 Proposed Development

3.1 This Section describes the Proposed Development.

3.2 Bloor Home's proposed development comprises a residential led scheme, consisting of the following:

- up to 300 dwellings, including affordable housing;
- a day nursery (Use Class E(f));
- primary access from the existing A3102/Easternway roundabout junction;
- secondary access from the A3102;
- pedestrian and cycle access points from the A3102 and Gladstone Road;
- provision of public open space, including play space;
- provision of green infrastructure;
- sustainable drainage systems; and
- associated infrastructure.

3.3 The development will be focused to the south and west of the Site, with open space providing a soft edge to the development to the north. A development framework plan is included at appendix 2.

3.4 As there are no existing structures on the Site, no demolition works are required.

4 Methodology

4.1 This section describes the broad methodology proposed to undertake the EIA and to present the conclusions in the ES.

EUROPEAN UNION DIRECTIVE 2011/92/EU (AS AMENDED BY 2014/52/EU)

4.2 EIA is a procedure required under the above EU Directives to assess the effects of certain public and private projects on the environment. Article 2 requires, before development consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects on the environment. Article 8 states that such an assessment is to be duly taken into account in the development consent procedure.

TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2017

4.3 The EIA Directive is enacted into English Legislation in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017.

4.4 The Regulations apply to two types of projects:

Schedule 1 Projects for which an EIA is required in every case; and

Schedule 2 Projects for which an EIA is required only if the particular project in question is judged likely to give rise to significant environmental effects.

4.5 Schedule 3 outlines the selection criteria for screening Schedule 2 development. In this instance it has been deemed that the Proposed Development does constitute Schedule 2 Development under the terms Urban Infrastructure Project under Schedule 2 (10)(b) because of its relationship to nearby development and potential cumulative effects that arise between the two.

4.6 Schedule 4 prescribes information to be included in the Environmental Statements.

ENVIRONMENTAL TOPIC AREAS

4.7 Regulation 4(2) states that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors:

- population and human health;
- biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC (34) and Directive 2009/147/EC(35);
- land, soil, water, air and climate; and
- material assets, cultural heritage and the landscape

4.8 The EIA process is intended to consider only likely significant effects. The EIA Screening Opinion adopted by the LPA is on the basis that the proposed development in combination with local development proposals give rise to potential significant effects in terms of the following:

- the landscape and visual effects of the proposed development in combination with local development proposals.

4.9 This environmental topic area provides the broad scope of the EIA, alongside other topics which the applicant's consultant team consider require scoping into the ES. It follows that certain other environmental topic areas can be scoped out of the EIA. This is discussed in Section 5.

CRITERIA TO ASSESS ENVIRONMENTAL EFFECTS

4.10 The main focus of the EIA process is the prediction and evaluation of the impact of the proposed development on the relevant aspects of the environment. The results and credibility of an EIA depend largely on the methodologies used to assess and determine the effect of a project. Assessing the significance of impacts relies on the interaction between:

a. The sensitivity of the environmental receptor; and

b. The magnitude of change to that environmental receptor.

4.11 The Sensitivity of a Receptor / Resource (determined by evaluating a receptors susceptibility to change and value) can be analysed from the baseline information and may be summarised and classified in a table, a rudimentary example of which is provided at Table 4-1.

TABLE 4-1: SENSITIVITY OF ENVIRONMENTAL RECEPTOR / RESOURCE

SENSITIVITY	RECEPTOR
High	The receptor/resource has little ability to absorb change without fundamentally altering its present character, or is of international or national importance.
Moderate	The receptor/resource has moderate capacity to absorb change without significantly altering its present character, or is of high importance.
Low	The receptor/resource is tolerant of change without detriment to its character, is of low or local importance.

4.12 Magnitude of Change is the extent to which the Proposed Development will result in a change to an environmental receptor or resource. When assessing the magnitude of change, the scale, duration, timing and extent of effects, as well as the degree of certainty in the prediction of impacts and the likelihood of irreversible changes occurring should all be considered. Table 4-2 defines the type of change and magnitude.

TABLE 4-2: MAGNITUDE OF CHANGE TO ENVIRONMENTAL RECEPTORS / RESOURCE

MAGNITUDE OF IMPACT	CRITERIA FOR ASSESSING IMPACT
Major	Total loss or major/substantial alteration to key elements/features of the baseline (pre development) conditions such as the post development character/composition/attributes will be fundamentally changed.
Moderate	Loss or alteration to one or more key elements/features of the baseline conditions such that the post development character/ composition/attributes of the baseline will be materially changed.
Minor	A minor shift away from baseline conditions. Change arising from the loss/ alteration will be discernible detectable but not material. The underlying character/composition/attributes of the baseline condition would be similar to the pre development circumstances/situation.
Negligible	Very little change from baseline conditions. Change barely distinguishable, approximating to a 'no change' situation.

4.13 Table 4-3 provides a matrix showing impact significance derived from sensitivity and magnitude of change.

TABLE 4-3: MATRIX OF SIGNIFICANCE OF ENVRIONMENTAL EFFECTS

MAGNITUDE OF IMPACT	SENSITIVTY OF RECEPTOR / RESOURCE		
	High	Moderate	Low
Major	Major	Major-Moderate	Moderate-Minor
Moderate	Major	Moderate-Minor	Minor
Minor	Moderate-Minor	Minor	Minor-Negligible
Negligible	Negligible	Negligible	Negligible

4.14 There is no statutory definition of 'significance'. In this ES the general significance criteria are outlined and defined in Table 4-4 below.

TABLE 4-4: DEFINITION OF SIGNIFICANCE OF ENVIRONMENTAL EFFECTS

SIGNIFICANCE OF IMPACT	DEFINITION
Major	An effect which in isolation could have material influence on the decision-making process.
Moderate	An effect which on its own could have moderate influence on decision making, particularly when combined with other similar effects.
Minor	An effect which on its own is likely to have a minor influence on decision making, but when combined with other effects could have more material influence
Negligible	An effect which on its own or in combination with other effects will not have an influence on decision making.

4.15 Impacts can be both positive / beneficial or negative / adverse.

4.16 It should be noted that where there is topic specific guidance, these methodologies have been appointed within those specific chapters and are set out in this Scoping Report.

MITIGATION

4.17 Intrinsic to the EIA process is the development of mitigation measures and their incorporation into the proposed development.

4.18 Mitigation measures are divided into three broad categories as set out in Table 4-5.

TABLE 4-5: TYPES OF MITIGATION MEASURES

TYPES OF MITIGATION	EXAMPLES
Inherent mitigation	Measures designed into the scheme and certain to be delivered e.g. the provision of structural landscaping, habitat creation, community infrastructure shown on the parameter plans.
Standard mitigation	Measures which are not commonplace as part of such development proposals and to which there is a high degree of certainty that they will be provided e.g. the preparation of a Construction Environmental Management Plan.
Actionable mitigation	Measures that will be secured by a controlling mechanism as part of a planning permission e.g. planning condition or planning obligation or other legal instrument.

4.19 Within each topic chapter, Inherent and Standard Mitigation Measures will be considered as part of the assessment of environmental impacts, and Actionable Mitigation is included as part of the Residual Impact Assessment.

THE SPATIAL SCOPE OF THE ASSESSMENT

4.20 The geographical or spatial scope of the EIA has had regard to both the physical extent of the proposed development defined by the Site and the nature of the baseline environment, which in certain instances extends beyond the Site.

4.21 The spatial scope of each topic will be set out in the individual chapter. Some assessments will be limited to the Site or its immediate surroundings, while others extend across a wider area.

THE TEMPORAL SCOPE OF THE ASSESSMENT

4.22 Potential significant environmental effects are considered for both the construction phase and the operational phase. The broad timescales are shown in Table 4-6.

TABLE 4-6: TEMPORAL SCOPE OF ASSESSMENT

STAGE	TIMELINE
Commencement of Development – site preparation, clearance, and ground works and engineering works	2026
Completion of construction of houses and laying out of green infrastructure and engineering works	2033
Operational Phase	100 years
Decommissioning	N/A

4.23 The terminology for defining periods of time will be as follows unless specified differently in individual chapter:

- short term 0-5 years
- medium term 5-15 years
- long Term 15+

CONSULTATION

4.24 Throughout the preparation of the EIA, information will be gathered from a number of relevant range of organisations with whom the applicant will consult. In each of the environmental topic sections organisations are listed who shall be consulted as part of preparing this EIA.

CONSIDERATION OF ALTERNATIVES

4.25 Part 2 of Schedule 4 of the Regulations states that information to be included in the ES should include 'a description of the reasonable alternatives studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option.'

4.26 The National Planning Practice Guidance note on EIA states that 'where alternative approaches to development have been considered, the Environmental Statement should include a description of the reasonable alternatives studied which are relevant to the proposed development.'

4.27 In this instance, the following reasonable alternatives have been identified:

- the do-nothing option: This would mean that development of New Road Farm was not considered further.
- a different design approach: This would mean that a different configuration of development is assessed.

ENVIRONMENTAL TOPIC CHAPTERS

4.28 The structure of each Environmental Topic Chapter is shown on Table 4-7.

TABLE 4-7: STRUCTURE OF ENVIRONMENTAL TOPIC CHAPTERS

SECTION	SCOPE/CONTENTS
Introduction	Outlines the scope of the individual chapter and the nature of the potential environmental impacts to be considered.
Potential effects	Summarises the likely potential effects of the proposed development on the topic chapter.
Assessment methodology	Refers to the specific methodology used within the chapter and is structured around the following headings: study area; consultation; legislative / planning policy context; assessment of process; assessment criteria; sources of information; assumptions; and assessment limitations
Baseline conditions	The section provides more detailed topic specific information to describe the character of the Site and its environs (the study area). This baseline situation describes the quality of the interests on the Site as they relate to this environmental topic. This description serves as a comparative measure against which changes arising from the construction and operational phases of the proposed development can be assessed or predicted. This will identify the sensitivity of environmental receptors (i.e. high, moderate or low by reference to Table 1).
Inherent and standard mitigation	A summary description of those 'inherent' and 'standard' mitigation measures which primarily address the scope to avoid, reduce or remedy adverse environmental impacts or enhance the beneficial aspects arising from the construction and operational periods of the proposed development relating

	only to the Topic Chapter. Actionable mitigation is considered in the assessment effects to establish residual effects.
Assessment of environmental impacts	The identification and assessment of the nature, extent, magnitude of change that the proposed development will have on individual receptors (ie major, moderate, minor, negligible, by reference to Table 2). By employing the sensitivity of the receptor and magnitude of change, the significance of environmental effects (including any, direct or indirect effects), which arise as a result of the construction and operational periods of the proposed development will be determined. This assessment will consider inherent and standard mitigation (e.g. strategic landscaping, habitat creation etc that is part of the proposed development).
Actionable mitigation	The identification of actionable mitigation employed where applicable to reduce the negative effects of the proposed development.
Residual impact assessment	This section will identify Residual Effects: A description and assessment of significance of any effects that will remain after the inherent, standard and actionable mitigation measures are applied. These effects will be determined to be Substantial/Major, Moderate, Minor and Negligible.
Cumulative effects	The identification and assessment of the nature, extent, magnitude and significance of inter-project effects (i.e. different effects on the same receptor/resource).
Summary	Overall Summary and conclusions of the assessment.

THE ENVIRONMENTAL STATEMENT

The ES will be comprised of four Volumes as follows:

- Volume 1: Non Technical Summary
- Volume 2: Main Text
- Volume 3: A3 Figures and Drawings
- Volume 4: Technical Appendices.

4.29 Whilst copies of the ES will be submitted with the application, they will be available to purchase.

5 Scope of the Environmental Statement

5.1 The following sections of the Scoping Report provides information about the potential effects of the proposed development on the environmental topics derived from the LPA's view in its Screening Opinion.

5.2 The LPA's Screening Opinion identifies the following potential effect arising from the development:

a. the landscape and visual effects of the proposed development in combination with nearby committed development.

5.3 Alongside this, it is proposed that the following topics are proposed to be included in the ES:

a. Socio-economic and human health;

b. Transport, accessibility and movement; and

c. Biodiversity.

5.4 These individual topic areas are discussed in the following chapters.

5.5 Other environmental topic areas not listed above are discussed in chapter 10 to explain the rationale for them being scoped out.

6 Socio-economic and human health

INTRODUCTION

6.1 This chapter of the ES Scoping Report considers likely significant socio-economic effects of the proposed development and has been produced by Hardisty Jones Associates.

SUMMARY OF WORK UNDERWAY

6.2 There is no previous survey or assessment relevant to the topic of socio-economics.

BASELINE AND KEY ISSUES

Geographical scope

6.3 The assessment of socio-economic effects would primarily consider three geographical areas. These would be subject to review as part of the assessment, to ensure they remain appropriate. The selection of geographic impact areas would be appropriate to each of the receptors. The three geographical areas proposed are:

- site level effects, setting out the gross direct impacts of the proposed development within the red line area;
- local level effects, based on the Melksham area, taking into account the immediate vicinity of the Site; and
- wider effects, based on the relevant strategic planning area.

LEGISLATIVE CONTEXT

6.4 There is no relevant legislation specific to the assessment methodology for socio-economic effects.

6.5 The assessment should consider a range of national and local policy including:

- National Planning Policy Framework (NPPF), Ministry of Housing, Communities and Local Government (2023).
- Planning Practice Guidance, Department for Levelling Up, Housing and Communities and Ministry of Housing, Communities and Local Government (continually updated).
- Wiltshire Core Strategy, Wiltshire Council (2015).
- Local Plan review (Reg 19) (under consultation).
- Strategic Housing and Economic Land Availability Assessment, Wiltshire Council (2017).
- Wiltshire Infrastructure Delivery Plan 3, Wiltshire Council (2016).

BASELINE

6.6 Baseline data collection would take the form of desktop analysis drawing on established data sources such as those published by the Office for National Statistics (ONS) and locally maintained information on matters such as education and health infrastructure and capacity (e.g. maintained by the Local Educational Authority and NHS). A summary of indicators and sources likely to be included are set out within Table 6-1 below. This list is not exhaustive.

TABLE 6-1 SUMMARY OF BASELINE DATA SOURCES

SOURCE	DATASET/DOCUMENT
ONS, Census 2011	KS101EW - Usual resident population
ONS, Census 2011	QS418EW - Dwellings
ONS, Census 2021	TS001 - Number of usual residents in households and communal establishments.
ONS, Census 2021	RM204 - Number of Dwellings
ONS, House price to residence-based earnings ratio	Ratio of lower quartile house price to lower quartile gross annual (where available) residence-based earnings
ONS, Business Register and Employment Survey	Open access
ONS, Annual Survey of Hours and Earnings	Resident analysis full-time workers.
ONS, Annual Survey of Hours and Earnings	Workplace analysis full-time workers.
ONS Annual Population Survey	Model based estimates of unemployment
ONS, Claimant count	Claimant Count by sex and age
Department for Education	School capacity 2022/23 academic year
Wiltshire Council, 2015	Wiltshire Core Strategy
NHS Digital	General Practice Workforce
ONS	2018-based household projections for local authorities and higher administrative areas within England
Ministry of Housing, Communities & Local Government, 2019	English indices of deprivation 2019

Site level

6.7 The Site comprises approximately 17 ha of agricultural land associated with New Road Farm. According to DEFRA, the majority of the Site is categorised as Grade 3B; good and moderate use, with the western edge identified as 'urban'. It is located on the eastern side of Melksham between a residential housing estate on the eastern edge of Melksham and New Road to the west. The Site is enclosed by the A3102 to the south.

6.8 The Site is within proximity of the PRoW network, including footpath MELW60 to the north of the Site, and MELK103 and MELW26 to the south and south-east respectively, providing sustainable and active links to the wider area. National Cycle Route (NCR) 403 extends through Melksham and along Woodrow to the north of the Site, accessed via New Road, connecting Melksham and the Site to the wider cycle network.

Local level

6.9 Census 2021 data reports there are 18,076 residents in Melksham[1], and 7,767 households.

6.10 Retail facilities, including a convenience store located approximately 1.3km to the west of the centre of the subject Site. A number of supermarkets are found within Melksham, just over 3km to the west.

6.11 Employment opportunities, including within the Town Centre, around Bath Road and at Bowerhill Industrial Estate.

6.12 The Proposed Development is located within the primary school catchment area for Forest and Sandridge Church of England Primary School, which is located approximately 1.6km to the south of the Site. The Proposed Development is located within the secondary school catchment area for Melksham Oak Community School Secondary, which is approximately 3.2km to the south of the Site.

6.13 There are currently three GP surgeries approximately 1.6km from the Site. Melksham Community Hospital is approximately 3.2km from the Site. Melksham CAHMS (located at the community hospital) provides a specialist service that helps children and young people who are struggling with a range of different mental health issues. The hospital also provides radiography, podiatry, physiotherapy, wheelchair services, and a number of other outpatient services. A team of community nurses are also based there. This facility does not offer inpatient care and does not offer a minor injuries unit.

6.14 Public transport provision, including a bus service on the A3102. The closest bus stop is located approximately 500m to the west of the Site. It is served by bus service X76 which provides a connection once a day in both directions between Bath and Marlborough during the week. Additional bus services route through the existing residential development to the west and include bus services 14, 271 and 273. Bus service 14 typically provides an hourly service to Melksham Town Centre and other destinations within the Settlement including supermarkets and the community hospital. Bus services 271 and 273 provide connections to a range of destinations within Melksham, including supermarkets and employment opportunities (the town centre and Bowerhill Industrial Estate), as well as destinations further afield, including Bath and Devizes. Together, they typically provide a twice hourly service during the week and on Saturdays, with a less frequent service on a Sunday. Melksham Railway Station is located under 3km from the subject Site. Located on the Great Western Railway Line, the Railway Station provides services to a range of destinations, including Trowbridge, Chippenham, Swindon and Westbury.

6.15 NCR 403 which runs 650m north of the Site, along Woodrow Road, connecting with NCR 4 to the south of Melksham and on to Great Bedwyn, through the North Wessex Downs Area of Outstanding Natural Beauty ("AONB").

POTENTIAL MITIGATION

6.16 The Community Infrastructure Levy ("CIL") associated with the Proposed Development can be considered within additional mitigation.

6.17 The proposed nursery would, as a former D1 Use Class, fall within the 'all other uses' part of the Charging Schedule for Wiltshire and would attract a CIL rate of £0 per sq.m.

6.18 The Council's 2022 Community Infrastructure Funding Statement confirms that the following types of infrastructure relevant to socio-economics could be funded from CIL receipts from this development proposal:

- infrastructure projects identified through the Local Highways and Footpaths Improvement Groups ("LHFIG") that provide for pedestrian and cycle improvements; and

1 *2022 parish definition.*

- library provision.

6.19 School capacity and healthcare capacity implications arising as a result of the resident population associated with the Proposed Development would be mitigated via CIL or financial contributions.

PROPOSED ASSESSMENT METHODOLOGY

6.20 The methodology set out in Chapter 4 of this Scoping Report will comprise the methodology used for this topic.

CONSULTATIONS

6.21 Potential consultees to be engaged to inform the assessment of potential socio-economic effects include:

- Local Education Authority (Wiltshire Council) to confirm approach to mitigation of pupil product; and
- local NHS representatives to confirm approach to mitigation of primary care need.

ASSESSMENT OF EFFECTS

6.22 Set out below is a summary of the receptors expected to be subject to potential impacts associated with the proposed development:

Construction phase

6.23 As a result of significant capital investment in construction activity there are anticipated to be a number of socio-economic effects. Construction phase impacts and effects are anticipated to be focused on the following receptors:

- construction related employment, measured in person years of employment (this is a measure used in order to capture the short term and trade based nature of much construction activity). Significance of effect would be assessed at the district level; and
- wages, measured in pounds sterling. Significance of effect would be assessed at the district level.

6.24 The construction sector at large operates in a manner that can respond flexibly to changes in conditions. If a scheme is brought forward where labour demands cannot immediately be met from within the local construction sector, there are three likely outcomes:

- the scheme will be delayed until the local construction sector can meet the required labour demands;
- labour can be brought in from further afield in order to deliver the scheme sooner; and
- the local construction sector can increase capacity to meet demand.

6.25 Combined with the limited value of construction sector employment within strategic planning policy, it is estimated at this stage that the sensitivity of the receptor could be low-medium.

6.26 A construction phase of 7 years would be considered medium term. Construction phase impacts are typically temporary and intermittent. This indicates the magnitude of impact could be estimated as low-medium, depending on the scale of change compared to the baseline environment.

6.27 Given the potential for significant effects, this impact should be scoped in.

Operational phase

6.28 Once constructed the delivery of new homes (including affordable homes) as well as a range of employment generating uses and community infrastructure would give rise to socio-economic effects. Operational phase impacts and effects are expected to be focused on the following receptors:

POPULATION

6.29 Population increase due to additional resident population. This would consider likely changes to the scale and profile of the population of the impact areas. Significance of effect would be assessed at the local and district level.

6.30 It is reasonable to assume that population growth has been factored into strategic planning decisions. Dwellings have been delivered in Wiltshire in recent years and there are plans for additional housing to meet planned population growth in the future. At this stage, the sensitivity of the receptor is therefore estimated as low.

6.31 Population growth can have both beneficial and adverse effects, with the overall impact largely contingent on various factors such as infrastructure, resources, and planning.

6.32 On the one hand, population growth can stimulate economic activity and development. An increased population can lead to higher demand for goods and services, which can attract businesses, create jobs, and generate revenue for the local authority. Additionally, a growing population can contribute to cultural diversity, enriching the social fabric and fostering a vibrant community.

6.33 On the other hand, population growth can place a strain on resources and infrastructure where appropriate planning is lacking. Sufficient transportation, healthcare, and educational capacity can become more challenging to provide as a population expands.

6.34 Effective planning for these factors is a key determinant of whether effects associated with population growth should be considered beneficial or adverse in nature. Investment in infrastructure and sustainable development approaches are necessary to ensure the benefits of population growth are maximised while minimising potentially adverse effects. Collaboration between developers, local authorities, community stakeholders, and public bodies is essential to create a well-managed environment that accommodates growth while maintaining the quality of life for residents.

6.35 At this stage of the assessment, population impacts are considered to be 'neutral' (as opposed to beneficial or adverse).

6.36 Whilst the sensitivity of the receptor is estimated as low, and the magnitude of the impact is considered to be neutral, this impact should be scoped in as it informs the assessment of subsequent impacts e.g. education and healthcare.

HOUSING RECEPTORS

6.37 Provision of new housing. This would consider the delivery of new housing against identified needs. Significance of effect would be assessed at the district level.

6.38 Provision of new affordable housing. This would consider the delivery of new affordable housing against identified needs. Significance of effect would be assessed at the district level.

6.39 Delivery of housing, in particular affordable housing, is a priority policy of any Local Plan. Further analysis of housing delivery rates and affordability ratios would be required in order to estimate the sensitivity of the receptor.

6.40 The proposed development would contribute towards the identified emerging local housing need for Wiltshire, Chippenham HMA and Melksham. Further analysis compared to existing baseline conditions would be required to estimate the magnitude of impact.

6.41 Given the uncertainty with regards to the sensitivity of the receptor and the magnitude of impact, this impact should be scoped in.

EMPLOYMENT RECEPTORS

6.42 Employment. This would consider new employment capacity, measured in full time equivalent (FTE) jobs. Analysis would take account of additionality factors (deadweight, leakage, displacement, substitution and multipliers). Significance of effect would be assessed at the site, local and district level.

6.43 Wages. This would be based on the assessment of employment effects. Significance of effect would be assessed at the site, local and district level.

6.44 Economic growth, including increased employment opportunities and earnings for residents, is a priority policy of any Local Plan. Further analysis of economic activity rates, unemployment rates, and skills would be required in order to estimate the sensitivity of the receptor.

6.45 The proposed development would accommodate some employment capacity which would support some wage generation for local residents. The contributors to this employment capacity would be the nursery and home-based businesses. At this stage the magnitude of impact is estimated to be negligible.

6.46 Given the magnitude of impact is estimated to be negligible, this impact can be scoped out.

COMMUNITY RECEPTORS

6.47 Education capacity. This would consider both the demand for educational infrastructure arising from the assessed population, and the supply of new capacity through the proposed development. Significance of effect would be assessed at the Site and local level.

6.48 Education services are a priority policy of any Local Plan. Further analysis of school places, expansion plans, and pupil projections would be required in order to estimate the sensitivity of the receptor.

6.49 At this stage, it is not possible to estimate the magnitude of impact without conducting a detailed assessment of the potential pupil product associated with the Proposed Development.

6.50 Given the uncertainty with regards to the sensitivity of the receptor and the magnitude of impact, this education impact should be scoped in.

6.51 Healthcare capacity. This would consider both the demand for healthcare infrastructure arising from the assessed population, and the supply of new capacity through the proposed development. Significance of effect would be assessed at the Site and local level.

6.52 Healthcare services are a policy priority of any Local Plan. Further analysis of healthcare resourcing (staff) would be required in order to estimate the sensitivity of the receptor.

6.53 At this stage, it is not possible to estimate the magnitude of impact without conducting a detailed assessment of the potential resident population associated with the Proposed Development.

6.54 Given the uncertainty with regards to the sensitivity of the receptor and the magnitude of impact, this education impact should be scoped in.

6.55 Other community services capacity (including open space and outdoor recreation). Significance of effects would be assessed at the Site and local level.

6.56 Provision of open space and outdoor recreation facilities is a policy priority of any Local Plan. Further analysis of the local provision of open space and outdoor recreation facilities would be required in order to estimate the sensitivity of the receptor.

6.57 At this stage, it is not possible to estimate the magnitude of impact without conducting a detailed assessment of the potential resident population associated with the Proposed Development (number of people is an important input with regards to open space quantity standards).

6.58 Given the uncertainty with regards to the sensitivity of the receptor and the magnitude of impact, this education impact should be scoped in.

CUMULATIVE EFFECTS ASSESSMENT

6.59 The following cumulative schemes have been identified as relevant to the Proposed Development.

TABLE 6-2 CUMULATIVE SCHEMES

REFERENCE	SCHEME	DWELLINGS
W16.1123	Land South of Western Way, Bowerhill, Melksham	22
W18.4477	Land South of Western Way, Melksham	99
18/04644/REM	Land East of Spa Road, Melksham	447
WI 7.10015	Bowden Guest House, 25-27 Beanacre Rd, Melksham	10
WI 7.1251	Land East of Semington Road, Melksham	33
W13.7076	3 Lowborne, Melksham	17
20/01938/0UT	Land East of Semington Road, Melksham	144
20/02213/FUL	Park Farm, Seend Cleeve, Melksham	11
PL/2023/11188	Land at Blackmore Farm	500
PL/2022/08504	Land South of Western Way, Melksham,	210
	Total	1,391

6.60 A screening exercise would be carried out for the topic of socio-economics in order to determine a short list of projects that should be considered within the cumulative effects assessment (CEA). Screening criteria would be applied as follows:

- physical overlap: consideration of project location would assist in determining whether there is a realistic prospect of physical/spatial overlap with the proposed development;
- temporal overlap: consideration of project timing would assist in determining whether there is a realistic prospect of overlap during either the construction or operation phases;
- conceptual overlap: consideration of whether or not a cumulative project would result in impacts which would effect receptors relevant to the topic of socio-economics; and
- data confidence: consideration of whether or not there is sufficient information available on a cumulative project for its inclusion in the CEA to be of material value to the assessment.

6.61 If a cumulative project meets all of the above screening criteria, it should be screened into the CEA.

SUMMARY

6.62 This scoping assessment determines that socio-economic effects should be scoped into the EIA, with the following impacts recommended to be scoped in:

- construction phase: employment and wages; and

- operation phase: population, housing, and community.

6.63 The following impact is recommended to be scoped out:

- operation phase: employment.

7 Transport, accessibility and movement

7.1 This chapter has been produced by Paul Basham Associates and sets out the assessment criteria/methodology, the existing traffic/transport baseline conditions, the potential impacts and effects resulting from the proposed development as well as potential mitigation measures.

ASSESSMENT CRITERIA AND METHODOLOGY

7.2 To assess the feasibility of the proposed development, the following work is being completed in parallel to the ES Scoping process through a pre-application scoping exercise which has been submitted to Wiltshire Council (WC) highways:

- review of multi-modal trip rates;
- review of trip distributions onto the local road network;
- review of committed developments to be included within the baseline assessment scenario; and
- review of junctions to be affected by the proposed development.

7.3 A Transport Assessment will be prepared as a separate document to be submitted with the planning application with relevant key findings from the assessment work to be included as an appendix to the Environmental Statement.

LEGISLATIVE CONTEXT

7.4 The process of Environmental Impact Assessment is governed by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. These regulations apply the WU directive 'on the assessment of the effects of certain public and private projects on the Environment' (usually referred to as the Environmental Impact Assessment Directive) required to be considered within the Town Planning System in England. In terms of transport and highways impacts there are no specific pieces of legislation, only guidance.

PLANNING POLICY AND GUIDANCE

7.5 This section of the report considers the transport related national and local policy under which the Site will be assessed.

National Planning Policy

7.6 The National Planning Policy Framework (NPPF), most recently updated in December 2023 sets out the Government's planning policies for England and how these are expected to be applied. Paragraph 11 of the NPPF sets out that there is a 'presumption in favour of sustainable development'.

7.7 The Framework also states that all developments that generate significant amounts of movement should be required to provide a travel plan and a transport statement or transport assessment so that the likely impacts of the proposals can be assessed.

7.8 Paragraph 115 of the Framework states that 'development should only be prevented or refused on highway grounds if there would be an unacceptable impact on highway safety or the residual cumulative impacts on the road network would be severe'.

7.9 Paragraph 116 of the Framework identifies that with regards to transport, the development should:

- give priority first to pedestrian and cycle movements, both within the scheme and with the neighbouring area; and second – so far as possible – to facilitating access to high quality public transport services, and appropriate facilities that encourage public transport use;

- address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
- create places that are safe, secure and attractive – which minimize the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- allow for the efficient delivery of goods and access by service and emergency vehicles; and
- be designed to enable charging of plug in and other ultra-low emission vehicles in safe, accessible and convenient locations.

7.10 Therefore, development should provide opportunities to promote sustainable transport with priority given to pedestrians and cyclists, should create places that are safe, secure and attractive for all users, including those with disabilities, provide sufficient access for service, emergency and delivery vehicles, encourage plug-in and ultra-low vehicles through design and should only be prevented where the impact on highway safety is unacceptable or the residual impacts on the road network would be severe.

Local Planning Policy

7.11 Relevant local planning policy includes Wiltshire's Core Strategy, Wiltshire Local Transport Plan and Wilshire Council Local Plan Review.

7.12 Wiltshire's Core Strategy was adopted in January 2015 and sets out policies for strategic planning up until 2023. There are several core policies which relate to the proposed development which looks to deliver 2,240 homes within Melksham, provide affordable housing, meet the housing needs, help reduce the need to travel and support sustainable movements, locate developments so travel needs are reduced and ensure developments provide appropriate mitigation measures to offset any adverse impact on the transport network.

7.13 Wiltshire Local Transport Plan (LTP3) (2011-2026) sets out relevant policies and objectives to achieve environmental and financial sustainability. There are a variety of policy objectives relevant to this Site which look to support and promote a choice of sustainable transport, minimize traffic delays and disruption, reduce the need to travel, reduce barriers to transport and improve the resilience of the transport system.

7.14 Whilst an emerging policy, Wiltshire Council's Local Plan Review, received Full Council approval on 18th July meaning the plan has now moved to the final public pre-submission consultation which commenced 27th September 2023. Within the recent publications 'Planning for Melksham' (July 2023) Site 17: Land north of A3102 is included which is the Site subject to this ES Scoping Chapter. The document outlines the development as being capable of delivering approximately 285 dwellings and a 100-space nursery and states that access is possible via a fourth arm off the existing roundabout on the A3102. The document also confirms that 'the Site is reasonably well connected to the town centre' and 'residents would be able to easily visit the town centre through sustainable transport modes' (page 23).

Guidance and Best Practice

7.15 'Manual for Streets' was adopted in March 2007 by the Department of Transport and replaced Design Bulletin 32 and Places for Streets and Movement. Manual for Streets has a focus on residential, lightly trafficked streets, but many of the key principles can be applicable to other types of streets and it is the responsibility of the user to ensure its application is appropriate. The manual provides guidance about the design, construction, adoption and maintenance of new and existing residential streets.

7.16 'Manual for Streets 2 – wider application of the principles' (September 2010) acts as a companion guide to 'Manual for Streets' and extends its practices beyond just residential streets to cover urban and rural situations increasing its applicability. Manual for Streets 2 provides more background and scenarios which are applicable to transport planning and fill the gap in some design guidance, in

particular the gap between Manual for Streets and the Design Manual for Roads and Bridges (DMRB).

7.17 Local Transport Note 1/20 provides guidance to local authorities on delivering high quality cycle infrastructure. The scope of the document is limited to design matters such as planning for cycling, space for cycling within highways, transitions between dedicated cycle infrastructure and normal carriageway conditions, signage, construction and maintenance and cycle parking, storage and equipment.

BASELINE DATA COLLECTION

7.18 The following information and data has been collected thus far to consider the highway impact:

- trip rates, obtained from TRICS data;
- traffic distributions from adjacent planning application 15/12454/OUT;
- traffic data of the local road network obtained from traffic surveys in February 2024; and
- public Rights of Way Mapping.

7.19 Further information will be required to support the detailed Transport Assessment once the scope is agreed through the highways pre-application process.

7.20 The DfT's Transport Analysis Guidance (TAG) on Data Sources and Surveys (January 2014) advice states that 'surveys should be carried out during a 'neutral' or representative, month, avoiding main and local holiday periods, local school holidays and half terms, and other abnormal traffic periods. National experience is that the following Monday to Thursdays can be neutral: late March and April (excluding the weeks before and after Easter); May (excluding the Thursday before and all of the week of each Bank Holiday); June; September (excluding school holidays or return to school weeks); all of October, and all of November (provided adequate lighting is available).

7.21 Liaison is ongoing with Wiltshire Council highways through the pre-application process to agree a baseline position and there may be requests for further traffic surveys.

PROPOSED ASSESSMENT METHODOLOGY

7.22 The assessment methodology has been informed by guidelines issued by the Institute of Environmental Management and Assessment (IEMA), specific to this topic. These guidelines suggest that the following rules should be applied when considering the scope and extent of the environmental assessment:

- highway links where traffic flows are predicted to increase by at least 30% should be included within the assessment (or where the number of HGVs is predicted to increase by 30%); and
- areas that are considered to be especially sensitive to increases in traffic volumes should be included where traffic flows are predicted to increase by at least 10%.

7.23 These guidelines are formed on the basis that, in environmental terms, a 30% increase in traffic flow on a standard highway link is considered to be a 'significant' impact. An increase in traffic flow of less than 10% however would not be discernible to road users as background traffic flows can fluctuate by this amount on a daily basis.

7.24 The exception to this is where a transport link can be considered to be within a sensitive area, such as adjacent to a school, hospital, nursing home or where residential properties front onto the link and pedestrian activity is high.

7.25 The IEMA guidelines refer to the assessment of the proposed development's impact on link flows by establishing the overall 'without proposed development' and 'with proposed development' two-way flows for the links preceding the junctions' arms subject to a material increase.

7.26 The IEMA Guidelines for 'Environmental Assessment of Traffic and Movement' (July 2023) suggests that assessment should be carried out for the 'scope in' areas regarding the following effects:

- severance of communities: Severance is the perceived division that can occur within a community when it becomes separated by major transport infrastructure. In general terms according to the IEMA Guidelines a 30% change in traffic flow is likely to produce a 'slight' change in severance, with 'moderate' and 'substantial' changes occurring at 60% and 90% respectively;
- driver and Passenger Delay: Delay to drivers generally occurs at the site entrance, on highways passing the development site, at other key intersections along the highway and at side roads where the ability to find gaps in the traffic may be reduced;
- non-Motorised User Delay: The delay incurred by pedestrians and cyclists is generally a direct consequence of their ability to cross roads. Delays incurred by public transport users can be a consequence of more vehicles being on the road;
- non-Motorised User Amenity: The term amenity is broadly defined as the relative pleasantness of a journey and is considered to be affected by traffic flow, traffic composition and pavement width/separation from traffic. A suggested threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow (or HGV component) is halved or doubled;
- fear and intimidation on and by road users: The extent of fear and intimidation is dependent on the total volume of traffic, the heavy vehicle composition, vehicle speeds and the proximity of traffic to people. Fear and intimidation is not limited, cars, lorries, motorcycles and buses but also includes horses, cycles, mobility scooters, e-scooters and e-cycles. Whilst there are no commonly agreed thresholds, the July 2023 IEMA guidelines outlines traffic flow and speed values to generate a degree of hazard score and total hazard score to outline the level of fear and intimidation between small, moderate, great and extreme;
- road User and Pedestrian Safety: This establishes the effect on the road safety record of the adjoining road network. Whilst a calculation of road accident rates can be completed, an assessment of collision clusters is more common which identifies any emerging patterns or factors that could be exacerbates by traffic or movement generation; and
- hazardous/large loads: Such impacts should be considered where developments involve the transportation of dangerous and hazardous loads by road. Where required, the assessment should clearly outline the estimated number of composition of such loads. Where the number of movements are considered significant the assessment should include a risk or catastrophe analysis.

7.27 The above would be assessed through percentage impact assessments of increases in traffic flow as a result of the proposed development in the assessment area and through junction modelling assessments undertaken as part of the TA. Pre-application discussions will be undertaken with the local highway authority (Wiltshire Council) to ensure that the scope of assessment proposed in the Transport Scoping Note is applicable. In addition to the ES, a Transport Assessment and Framework Travel Plan will be prepared to support the planning application.

7.28 The magnitude of the effects must be examined in order to determine whether they are considered to be 'significant'. The IEMA guidelines imply that there are no simple rules or formulae that can be applied to determine the magnitude of such effects. Therefore, a professional judgement must be made, based upon the information and data available.

7.29 The ES will assess the likely significant effects of a development and these impacts can generically be classified as being;

- adverse, beneficial or neutral;
- short, medium or long term;
- direct or indirect; and
- permanent or temporary

7.30 To assess significance, two factors need to be considered, the magnitude of change and the sensitivity of the receptor.

- magnitude of change identifies the extent of the impact from the original baseline conditions of the Site or surrounding area (the scale of impact) and is measured as high, medium, low or negligible; and
- sensitivity of receptor identifies the receptors which could be impacted by the proposed development and judges how vulnerable the receptor is to the impact and is based largely on professional judgement.

7.31 The following table shows initial significance criteria, with significance being measured as major, moderate, minor or negligible.

TABLE 7-1 SIGNIFICANCE CRITERIA FOR HIGHWAYS IMPACT

MAGNITUDE OF IMPACT	THRESHOLD	CRITERIA FOR ASSESSING IMPACT
Major	>30%	Total Loss or major / substantial alteration of key of the pre-development conditions such that the post development character will be fundamentally changed.
Moderate	10% to 30%	Loss or alteration to one or more key elements of the baseline conditions such as that post development character of the baseline will be materially changed.
Minor	5% to 10%	A minor shift away from baseline conditions. Change arising from the loss / alteration will be noticeable but not material. The underlying character of the baseline condition will be similar to the pre-Project situation.
Negligible	<5%	Very little change from baseline conditions. Change barely distinguishable, approximating a 'no change' situation.

7.32 The percentage increase in traffic levels over existing levels due to the proposed development will be used as the criteria for magnitude of change.

7.33 The sensitivity of receptor will be graded according to the development type. It is reasonable to assume that this would apply to the environment around the buildings as well as the type of building itself. Examples of receptors and their sensitivity are summarised in the below table:

TABLE 7-2 HIGHWAYS RECEPTORS

SENSITIVITY	EXAMPLES OF RECEPTORS
High	Roads near to sensitive uses including hospitals, residential streets, shared surfaces and accident blackspots
Moderate	Residential distributor roads, congested junctions, roads with poor pedestrian facilities and unsegregated cycleway
Low	Roads fronting commercial uses such as offices, retail and leisure uses
Negligible	Road access to warehouses, factories and farm land

7.34 The ES Transport Chapter will therefore consider the transport impacts based on the magnitude of impact and sensitivity of the receptors.

7.35 The outcome of evaluation against these criteria will be used to make a judgement on the magnitude of each effect at each identified location in terms of magnitude and sensitivity. For example, a dwelling (on a distributor road) incurring an increase in traffic of 5% - 10% would be classified as having a long term minor adverse impact. Any impacts of moderate and above are considered to be significant in EIA terms.

7.36 In order to judge the impact of the proposed development against the above criteria, this is undertaken as a two stage process – one prior to the implementation of mitigation measures and one following the implementation of mitigation measures.

Geographical Scope

7.37 The scope of assessment will involve the key highway junctions and links within proximity of the Site. A scope had been proposed within the Transport Scoping Note to be discussed with Wiltshire Council highways and proposes the following junctions:

- A3012/Eastern Way/Site Access Roundabout;
- Eastern Way/Cranesbill Road Roundabout;
- Eastern Way/Snowberry Lane/Rosemary Way Roundabout;
- Spa Road/Snowberry Lane/Campion Drive Roundabout;
- A3102/Church Lane/Blackmore Road Double Mini Roundabouts;
- A3102/Forest Road Double Mini Roundabouts; and
- Lowbourne/High Street/Bank Street.

Temporal Scope

7.38 The assessment work will consider the construction phase, the year of opening (operation) and 5 years post application submission, as per the IEMA guidance. This forms the future baseline.

Committed Development

7.39 At this stage, the following developments are proposed as 'committed' which are to be agreed by Wiltshire Council through the highways pre-app scoping exercise:

- Land At Blackmore Farm, Melksham (PL/2023/01949).

7.40 Only one development is proposed due to the survey data being obtained when other sites in the locale are at full occupation and thus the traffic surveys completed would have already accounted for this traffic. This forms the cumulative assessment.

BASELINE ENVIRONMENT

7.41 To understand the baseline traffic conditions within the local area, traffic counts have been undertaken to identify the volume of traffic on the surrounding links. Alongside obtaining this data, the TA completed as part of PL/2023/01949 has been reviewed to understand what baseline data may be available in the public domain. The scope of junctions that should be assessed at the planning application are aligned with those assessed as part of the aforementioned application and have been proposed with Transport Scoping Note and therefore confirmation from Wilshire Council is required.

7.42 In terms of the local highway network, the development proposes access from the A3012/Eastern Way Roundabout through the provision of a fourth arm. The A3012 measures circa 7m in width in proximity of the Site, operates a 40mph speed limit and is provided with footways on the southern side for its majority in proximity of the development. To the west the A3012 connects with Melksham Town Centre and to the east to the A342.

POTENTIAL ENVIRONMENTAL IMPACTS AND EFFECTS

7.43 The potential highway impacts of the proposed development that the above methodology will assess include the following:

7.44 Construction Impacts and Effects: Construction vehicle routing may impact on more sensitive areas of the network and the assessment will consider whether areas sensitive to traffic will be subject to increased traffic flow and/or increase in HGVC movements.

7.45 Occupation Impacts and Effects: The traffic generated by the proposed development may impact upon the vehicles utilising the surrounding local highway in the assessment area, resulting in the potential for increase delay and queuing.

7.46 Occupation Impacts and Effects: The proposed amendments to the roundabout to accommodate the access has the potential to have a detrimental effect on the operational safety of the highway network. A Stage 1 Road Safety Audit will be undertaken on any junction designs to identify and address any highway safety concerns to ensure any changes are safe for all highway users.

MITIGATION ENVISAGED

7.47 To mitigate construction impacts, a Construction Traffic Management Plan (CTMP) would be provided (likely secured by planning condition) to identify a set route for construction vehicles, likely to require construction vehicles to route to and from the west via the A350.

7.48 It is envisaged that highway mitigation may be required at junctions (and links) that are severely impacted by traffic from the proposed development. This could take the form of delivering highway improvements, or a financial contribution towards improvements to be implemented by Wiltshire Council, if required.

7.49 The exact nature of the mitigation will be determined once the level of impact has been identified but is likely to involve alterations to existing junction arrangements rather than significant changes to the network. This would be set out in more detail within the full ES and Transport Assessment.

8 Biodiversity

INTRODUCTION

8.1 This chapter has been produced by GE Consulting and outlines the scope of ecological surveys and assessment that will form a key element of the EIA. It also sets out a summary of relevant ecological information that is currently available.

8.2 Ecology has been scoped into the EIA due to the quantum of development as well as the potential scale of impact upon protected species and priority/ important habitats which may be present within the Zone of Influence (ZoI).

8.3 The purpose of the Ecology chapter of the EIA will be to identify and assess the likely significant effects of the proposed development in terms of ecology and nature conservation.

ASSESSMENT CRITERIA & METHODOLOGY

LEGISLATIVE CONTEXT, TECHNICAL GUIDANCE AND BEST PRACTICE

Legislative Context

8.4 The ecological assessment will take into consideration the following legislation and planning policies relating to nature conservation:

- The Conservation of Habitats and Species Regulation 2017 (as amended);
- Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment and Rural Communities (NERC) Act 2006;
- The Protection of Badgers Act 1992;
- The Environment Act 2021;
- National Planning Policy Framework 2023;
- Local Planning Policy; and
- UK Post-2010 Biodiversity Framework.

Guidance and Best Practice

8.5 The ecological assessment will be undertaken in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland (2018). It will also take into account the following guidance and best practice:

- British Standard BS42020: Biodiversity - Code of Practice for Planning and Development; and
- Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System. Government Circular 06/05.

8.6 Other guidance that is specific to individual receptors or assessment methods will be used, and referenced, where appropriate (e.g. Bat Survey Guidelines).

Baseline Data Collection

8.7 The following survey work is being undertaken to inform the assessment. All surveys are in accordance with best practice guidance.

TABLE 8-1: BASELINE DATA COLLECTION METHODS AND TIMINGS.

SURVEY TYPE	METHOD AND TIMINGS
Desk-based study	2023 – Wiltshire and Swindon Biological Record Centre (WSBRC) 2km search extended to 4km for bats. Online resources such as magic.gov.uk also consulted.
Habitat and badger survey	2023 – UKHAB survey, condition assessment (BNG) and badger survey.
Bat activity (walked transects) & automated detector surveys	2023 – monthly surveys between April and October inclusive. Automated detectors (4) deployed for 5 nights each month.
Breeding birds	2023 – monthly in April to June inclusive.
Dormouse	2023 – 100 tubes to ensure full coverage.
Riparian mammals	2023 – two surveys as per guidance, one in May and one in September.

PROPOSED ASSESSMENT METHODOLOGY

8.8 The approach taken to the assessment of ecological effects will follow CIEEM's Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland 2018 (updated April 2022). It will also accord with the methodology set out in Chapter 4 of this Scoping Report.

8.9 The Ecology ES chapter will form the ecological assessment and be supported by Technical Appendices detailing the desk study results, consultation, survey methodologies and results (including figures, tables, photographs and maps).

8.10 The importance and sensitivity of ecological features will be determined based on CIEEM Guidelines. Whilst the legal protection afforded to habitats and species does not necessarily reflect actual biodiversity value, the assessment methodology will fully acknowledge statutory requirements, policy objectives, rarity, rate of decline and local or intrinsic nature conservation value. Features not meeting the criteria of being 'important' within CIEEM's frame of reference will be scoped out of the assessment as it will be considered that impacts upon them are unlikely to be significant (in terms of legislation, policy or nature conservation value).

8.11 The potential effects of the Proposed Development on important ecological features will be characterised according to the following characteristics: positive or negative, extent, magnitude, duration, frequency and timing, and reversibility.

8.12 The chapter will include measures to avoid, mitigate or compensate for likely adverse effects, either by sensitive design or applied techniques, and will outline measures to enhance biodiversity, as well as the requirement for associated monitoring.

8.13 A Biodiversity Net Gain assessment in accordance with the DEFRA Statutory Biodiversity Metric will be undertaken and included with the assessment.

Geographical Scope

8.14 The assessment will include the habitats, species and designated sites within the proposed development site, plus the ZoI of the development.

8.15 The ZoI describes the area over which construction and operational activities associated with the Proposed Development could influence identified ecological features.

8.16 The ZoI varies for different ecological features depending on its sensitivity to an environmental change. Therefore, the study area will be increased beyond the Site's boundary to include an additional 10km for International/European designated sites, 2km for statutory and non-statutory sites designated for nature conservation, 4km for bat roosts, 2km for other mobile species (such as birds) and 30m for badger.

Temporal Scope

8.17 The assessment will cover the construction and occupation phases of the Proposed Development.

Cumulative Effects

8.18 The cumulative effects on ecological features will be assessed in combination with other committed developments in the area. This will include major schemes that either have planning permission or are in the process of being implemented, as well as major planning applications which have been submitted and are likely to come forward.

BASELINE ENVIRONMENT

8.19 The following ecological features have been identified and will be subject to further assessment and survey as appropriate and in line with nationally recognised best practice guidance (where this exists);

- Bath & Bradford on Avon Bats Special Area of Conservation (SAC) lies c. 9.2km to the north-west. The Site is not in any consultation zones for this SAC;
- Five Local Wildlife Sites (LWSs) lie within 2km of the site;
- Bristol Avon River LWS, 1.5km west;
- Eighteen Acre Plantation, c. 1.7km east;
- Hanging Wood LWS, c. 1.9km east;
- Conigre Mead WWT Reserve LWS, c. 2.0km west;
- Morass Wood LWS, c. 2.0km east;
- Habitats of higher intrinsic ecological value on site comprise native hedgerows (Habitats of Principal Importance (S41) and a stream;
- Habitats of lower intrinsic ecological value on site comprise modified grassland;
- Foraging/ commuting bats – surveys complete. Analysis of surveys undertaken indicates the Site is used by a number of common species as well as rarer (Annex II species) of bat;
- Badgers – likely present for foraging/ commuting. Potential sett along the northern boundary (located within dense hedgerow therefore visibility greatly reduced) however this area is proposed to be open space therefore no impacts are anticipated within 20m of the hedgerow;
- Breeding birds – surveys complete. The Site supports a range of notable/ amber/ red Birds of Conservation Concern: redshank, stock dove, lesser black-backed gull, whitethroat, dunnock, woodpigeon, wren, house sparrow and greenfinch within the grassland and bordering hedgerows. No confirmed breeding on Site however pairs of blackbirds, dunnock and great tit were observed during the surveys;
- Dormice – Surveys complete. Dormouse have been confirmed present on Site; and
- Water vole – Surveys complete. No evidence observed.

POTENTIAL ENVIRONMENTAL IMPACTS & EFFECTS

Construction Impacts and Effects

8.20 Potential impacts from the development during the construction period includes loss of and damage (i.e. pollution, root compaction) to habitats of biodiversity value. In addition, there is potential for protected species to be killed, injured or disturbed and their resting and/ or breeding places destroyed or damaged.

8.21 Due to the distances involved and reasons for designation, no impacts on the statutory or non-statutory sites described above are expected.

Occupation Impacts and Effects

8.22 Potential impacts from the development during the operational phase include potential disturbance to retained habitats and species, including inappropriate management, lighting, cat predation, fragmentation of habitats and increased recreational disturbance. This could lead to decreased populations of species using the site.

8.23 Designated sites and their associated features are unlikely to be impacted as a result of the development.

CONSULTATION

8.24 The Site is not located in any consultation zones therefore consultation with relevant statutory bodies is not required.

SCOPING SUMMARY

8.25 The ecology chapter of the ES will follow CIEEM's Guidelines for Ecological Impact Assessment. It will identify and assess the likely significant effects of the proposed development in terms of ecology and nature conservation both alone and in-combination with other projects and plans and include measures to mitigate likely adverse effects.

9 Landscape and Visual

INTRODUCTION

9.1 The ES Chapter will be produced by The Environmental Dimension Partnership Ltd (EDP). It will consider landscape and visual matters by outlining the existing and baseline conditions of the Site and in the surrounding area, review the relevant policy framework, consider the impacts of the proposed development on baseline conditions and, where necessary, propose mitigation measures.

9.2 Landscape and visual effects are independent but related issues. Landscape effects relate to changes to the landscape fabric and the features contained within the landscape that determine its character; visual effects relate to the appearance of such changes within views and the resulting effect on visual amenity.

9.3 The landscape and visual assessment will examine the current onsite landscape and visual baseline conditions and evaluate the Site in its broader context with reference to sensitive visual receptors, landscape designations and published landscape character. The assessment process will involve an ongoing analysis of the likely landscape and visual effects of the evolving development proposals and, where 'significant' impacts cannot be avoided through an iterative design process, will recommend additional mitigation measures.

9.4 This should be read in conjunction with the following plans:

- environmental Planning Context (Plan EDP 1);
- published Landscape Character Assessments (Plan EDP 2); and
- findings of Visual Appraisal (Plan EDP 3).

RELEVANT POLICY AND GUIDANCE

9.5 The development site falls within the Wiltshire Council Local Planning Authority (LPA) area.

Wiltshire Core Strategy 2015 – 2026

9.6 The statutory development plan relevant to the Site comprises the Wiltshire Core Strategy (WCS) 2015 – 2026, adopted on 20 January 2015. The following policies are considered relevant:

- Core Policy 51 – Landscape: Development proposals should "protect, conserve and where possible enhance landscape character" and any negative impacts should be appropriately mitigated through "sensitive design and landscape measures";
- Core Policy 52 – Green Infrastructure: Development proposals should "make provision for the retention and enhancement of Wiltshire's green infrastructure network". Proposals should seek to enhance this by incorporating further links into this network; and
- Core Policy 57 – High Quality Design and Local Distinctiveness: Any development proposal should demonstrate "a strong sense of place" and is expected to "be complementary to the locality". Proposals should provide a positive response to the local landscape and townscape features.

9.7 An area to the west of the Site is designated as a 'Special Landscape Area' (SLA). This policy is a 'saved policy' from the West Wiltshire Local Plan and included in the Wiltshire Core Strategy. An SLA is defined as an area of locally designated, high landscape quality. The Site is not located within the SLA.

Wiltshire Council Local Plan

9.8 The WCS is currently under review, known as the Local Plan Review, and will set out a vision and framework for Wiltshire for the period to 2038. The publication of the plan for pre-submission consultation has launched in September 2023 ending 22 November. In the meantime, the Wiltshire Council Local Plan 'Planning for Melksham' (July 2023) provides a guide to how the Local Plan

Review will replace the Wiltshire Core Strategy. This document identifies a number of Place Shaping Priorities (PSP) for the town, including PSP8 Green and Blue Infrastructure: "Deliver improvements to the town's green and blue infrastructure networks, optimising their accessibility and ecological capital, connecting communities and contributing to mitigating and adapting to climate change".

9.9 The Sustainability Appraisal of potential sites for new homes identifies the Site as Site 17 (Land to the north of A3102), noting that this Site ranked third in it is overall sustainability and performing well against the PSPs. The Planning for Melksham (July 2023) identifies the following in relation to the Site:

"Introduction of new green and blue infrastructure through the development will be required, incorporating new woodland and/or tree planting.
The site contributes to the separation of Melksham from the distinctive wooded, greensand hills to the east and north-east. Hedgerows and trees should be retained and enhanced as part of a mature landscape framework and landscape buffers should form an appropriate, transitional settlement edge to the rural landscape.
The site contains a tributary watercourse flowing from the south of the site north towards the River Avon. A sufficient buffer should be allowed either side of this watercourse and protection, maintenance and enhancement should be provided for habitats such as hedgerows, trees and water features within and along the boundaries of the site alongside other ecologically valuable habitat/features."

Joint Melksham Neighbourhood Plan 2020 – 2026

9.10 The Joint Melksham Neighbourhood Plan was adopted in July 2021 prepared by Melksham Town and Melksham Without Parish Council. The following policies are relevant to the Site in landscape terms:

- Policy 12: Green Infrastructure;
- Policy 13: Biodiversity;
- Policy 16: Trees and Hedgerows; and
- Policy 17: Landscape Character.

WORK IN PROGRESS

9.11 Work to date has been undertaken in accordance with the principles embodied in the 'Guidelines for Landscape and Visual Impact Assessment – Third Edition (LI/IEMA, 2013)' (GLVIA3) and other best practice guidance.

9.12 A Site appraisal and baseline review has already been undertaken, including;

- familiarisation with the study area, and review of the extent of the study area;
- a data trawl of relevant environmental and planning designations;
- field assessment to understand how the actual baseline condition of the Site compares with the published LCAs;
- a visual appraisal, including identification of potential visual receptors and identification of key representative viewpoints; and
- a consideration of design issues and potential for mitigation.

LANDSCAPE

Landscape Designations and Other Considerations

9.13 Landscape related designations and policy considerations within 3km of the Site are shown within Plan EDP 1. In summary:

- national landscape designations: The Site does not lie within a nationally designated landscape;
- local landscape designations: The Site is not located within any locally designated landscape; and
- other landscape-related designations: The Site does not lie within any other designated area, such as Green Belt, a green wedge or other policy area.

9.14 Whilst heritage and archaeological matters are considered separately within this ES, heritage assets can influence the visual character of the landscape and enrich its historic value. The following heritage assets are considered relevant:

- Melksham Conservation Area, lies approximately 980m west of the Site; and
- Seven listed buildings are located within 1km of the Site. These are:
    - Grade II listed Woodrow House Farmhouse approximately 590m to the north of the Site;
    - Gate Piers and Garden Walls to Front of Woodrow House Farmhouse approximately 590m north of the Site;
    - Grade II listed Forest Farmhouse approximately 780m north of the Site;
    - Grade II listed Granary to Forest Farmhouse;
    - Grade II listed Blackmore Farm approximately 300m east of the Site;
    - Grade II listed 8 Church Lane approximately 310m west of the Site; and
    - Grade II listed Church of St Andrew approximately 400m west of the Site.

9.15 Whilst ecological matters are considered separately within this ES, it is noted that there are several Sites of Special Scientific Interest (SSSI) more than 2.5km north-east of the Site.

9.16 Furthermore, a number of arboricultural matters relevant to the Site and the study area are noted as follows:

- there are no arboricultural features within the Site beyond the boundary hedgerows with intermittent hedgerow tree cover. There are several tree groups and lines of trees within hedgerows within the wider landscape;
- where the Site abuts residential development, there are trees of varying quality and species selection present in back gardens;
- Morast Wood Ancient Woodland lies approximately 1.58km to the east of the Site;
- Hanging Wood Ancient Woodland lies approximately 1.54km to the east of the Site; and
- Basin Covert Ancient Woodland lies approximately 1.97km to the east of the Site.

9.17 A review of the Wiltshire Council online interactive rights of way map reveals the following public rights of way (PRoW) within 1km of the Site (refer to Plan EDP 3):

- the closest PRoW to the Site is footpath MELW60, approx. 50m north of the Site at its closest point;
- MELW59 approx. 400m north of the Site;
- MELW61 approx. 500m north of the Site;

- MELW47 approx. 700m north east of the Site;
- MELW40 approx. 550m east of the Site;
- MELW26 approx. 200m east of the Site;
- MELW27 approx. 250m south-east of the Site;
- MELW27 approx. 270m south of the Site; and
- several shorter footpaths exists within the settlement of Melksham.

9.18 There are no areas of Open Access Land (CRoW Act 2000) close to the Site.

Landscape Character

9.19 At a national-level, the Site and its surroundings fall within National Character Area (NCA) 117 'Avon Vales, described as "an undulating, low-lying landscape of mixed, predominantly pastoral agriculture and small limestone-built towns, cut by the River Avon and its tributaries."

9.20 At a sub-regional level the Site is covered by both the Wiltshire County Landscape Character Assessment (LCA) (2005) and the West Wiltshire District Landscape Character Assessment (2007). The baseline landscape character is derived from the most recent of these assessments, which identifies the Site within the Landscape Type (LT) 12: Open Clay Vale which contains the open lowland centred on the floodplains of the Rivers Thames and Avon.

9.21 This LT is further subdivided into Landscape Character Area. These are discrete geographic areas that possess the common characteristics described for the LT. The Site lies within LCA 12B: Avon Open Clay Vale, which is illustrated on EDP Plan 2 and described as:

"Avon Open Clay Vale is an extended area following the course of the River Avon from Great Somerford in the north to Bradford on Avon in the south. As well as the Avon the area is characterised by the presence of other rivers, tributary streams, lakes, and, to the south, the Kennet and Avon Canal. The Avon Open Clay Vale is a level, open area with views to the higher ground of the Limestone Ridge to the east. Land is predominantly intensively managed permanent pasture with some arable and small isolated pockets of meadow (such as Sutton Lane Meadow SSSI). Hedgerows, gappy or low flailed in places, enclose fields of varying size. There are sparse hedgerow trees plus willows lines (some pollarded) marking the waterways and poplar shelter belts. Sections of the area remain rural and tranquil despite major routes travelling through (the M4, A350, A342) plus railway lines in cuttings and embankments and the visual influence of modern large scale development on the edges of Chippenham, Trowbridge and Melksham. This urbanising influence is particularly prevalent to the south of the area while the northern section is more akin to area 12A with scattered settlement of small brick and stone built villages and farmsteads."

9.22 At a local level, the Local Landscape Character Neighbourhood Plan Evidence Base Report (EBR) forms part of the evidence base to support content and policies in the adopted Joint Melksham Neighbourhood Plan. The EBR brings together evidence on landscape character and setting, including information from the Wiltshire Local Plan's evidence base in order to identify specific character areas surrounding Melksham. The Site falls within 'Area 3: Open Clay Vale'.

9.23 At a site level, key landscape characteristics can be summarised as follows:

- an agricultural landscape with ten irregularly shaped field parcels contained by managed hedgerows on all sides;

- limited tree cover along the Site's boundaries, mainly on the western edge where the Site abuts residential gardens;
- low lying, flat landscape and bisected by a ditch in its centre;
- along the western boundary are residential dwellings, and a farmstead with agricultural buildings is located in the centre of the eastern boundary; and
- where boundary vegetation has grown less vigorously or there are gaps in the hedgerow, the Site is open and visually connected with the local landscape and townscape.

Summary

9.24 In summary, the landscape character receptors to be assessed within the Landscape and Visual Impact Assessment (LVIA) include:

- the Site and its immediate Context, including any notable landscape features;
- LCA 12B: Avon Open Clay Vale; and
- Area 3: Open Clay Vale.

9.25 The main character and valuable fabric of the Site is to be found in the hedgerow boundaries and the existing watercourse in the centre of the Site. The Site is not publicly accessible and therefore has no recreational value. Due to its location on the settlement edge, the Site is strongly influenced by the existing built form. The settlement edge location means perceptually the Site is impacted by the adjacent housing and poor-quality boundary treatments, and therefore has a partly urbanised character.

Visual Amenity

9.26 As a result of the low lying, flat topography and visual containment by a strong framework of hedgerows and trees, notably to the south and east and built development to the north and west, the findings of the visual appraisal indicates that the Site is relatively visually contained. A Zone of Primary Visibility (ZPV) has been identified, informed by a digital Zone of Theoretical Visibility (ZTV), and extends as follows:

- to the north the ZPV extends across local fields and beyond PRoW to the north of the Site. Vegetation along field boundaries creates a layering effect beyond approximately 300m from the Site and restricts visibility of the Site;
- to the south, the Site's boundary is gappy in places and lower, allowing views into the Site. The ZPV is contained by the line of built development to the south and extends south along Eastern Way and across local fields. Residential built form on the A3102 to the south east of the Site screens the Site in views and influences the ZPV, which extends to approximately 250m south;
- to the east, the ZPV extends into fields which are in agricultural use and not served by publicly accessible footpaths. There are views into the Site from A3102 where the road slopes up slightly. The ZPV extends to approximately 150m east; and
- to the west the Site is visually contained by built form within the settlement edge of Melksham.

9.27 Within the ZPV and wider area, the people ('receptors') likely to experience visual change as a result of the proposed development can be considered as falling into a number of discernible groups. These are summarised below:

- users of PRoW: Footpath MELW60 to the north of the Site, Bridleway MEWLW26 to the south-east;
- Road Users on New Road: to the north-east of Melksham New Road connects to the A3102 in the south and Woodrow Road in the north;
- Road Users on the A3102: to the south of the Site and the main approach to Melksham from the east;

- Road Users along rural minor lanes present in the local landscape; and
- residents: a group of dwellings on the settlement edge to the west of the Site, a group of dwellings within Melksham to the south of the Site, isolated dwellings on the boundary of the Site and residential dwellings along the A3120 to the south-east of the Site.

9.28 A number of viewpoints that are considered representative of the nature of the views from each receptor group have been identified, informed by the digital ZTV and field assessment. These are illustrated on the Findings of Visual Appraisal Plan EDP 3. They are listed as follows:

- view from footpath MELW60 – east;
- view from footpath MELW60 – west;
- view from New Road;
- view from A34102 – east;
- view from footpath MELW26;
- view from footpath MELK104 and Eastern Way;
- view from A3102 – west;
- view from A3102 within Melksham looking east;
- view from Bridleway SEEN55;
- view from Woodrow Road and MELW59; and
- view from footpath LAC037.

9.29 Views to the Site from the east and south-east (photoviewpoint EDP 5 as shown within Plan EDP 3) are restricted due to intervening landform and woodland, limiting views towards the Site in the middle distance. Similarly, in views from the south residential built form restricts views and due to the predominantly flat landform and existing vegetation there are only filtered views from further afield. Vegetation also creates a layering effect in long distance views which restricts views beyond the middle distance from the south. From within the settlement of Melksham views along the A3102 looking east are dominated by existing dwellings, which are a mixture of bungalows and 2-2.5 storey detached and semi-detached houses (Photoviewpoint EDP 8 as shown within Plan EDP 3), restricting views of the Site from this location.

9.30 Long range views from the north (photoviewpoint 11 as shown within Plan EDP 3) of the Site are limited. The intervening vegetation provides an effective visual screen which limits visibility across the landscape. Similarly, long distance views to the south east are restricted because of the flat topography and intervening layered hedgerows and tress. At photoviewpoint EDP 9 (within Plan EDP 3) there are no views of the Site from this location. As a result, it is suggested that photoviewpoints EDP 9 and 11 (within Plan EDP 3) are scoped out of the LVIA, in consultation with the LPA.

Summary

9.31 In summary, the visual receptors to be assessed within the LVIA include users of the local PRoW network, users of the local road network and local residents. They are represented by photoviewpoints within Plan EDP 3.

POTENTIAL MITIGATION

9.32 Mitigation measures to avoid adverse landscape and visual effects and to reduce likely effects will be embedded into the scheme design as the proposals progress. At this stage in the development process, potential mitigation that should be considered in landscape and visual terms includes (but not limited to) the following:

- creation of a landscape buffer along the north-eastern edge of the Site, and the retention of hedgerows and trees. This would serve to screen the proposed scheme and additionally screen the settlement edge of Melksham in views from the north, providing a transitional settlement edge to the rural landscape;
- alignment of the proposed built form with the larger scale buildings along the eastern boundary and leave an area of open space alongside the isolated dwelling along this boundary. This would emulate local patterns of built form. Any new built form to address the existing built form to the west and south-west;
- set back of built form on the south-eastern corner to allow for tree planting and an enhanced woodland corridor to soften the transition between the settlement edge and the landscape;
- introduction of tree line roads within the proposed development area, contributing to the local level GI; and
- creation of a green corridor located around the existing watercourse, strengthening the character of this landscape feature.

PROPOSED ASSESSMENT METHODOLOGY

9.33 EDP's methodology for undertaking the LVIA follows the guidelines set out in the third edition of Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Management and Assessment, 2013). This will be used as a basic approach and amended as necessary to cover specific site issues. The detailed methodology for the LVIA and its assessment of effects is included at Appendix 2 and will be agreed with the LPA''s landscape officer, including the final selection of viewpoints to form the basis of the assessment.

9.34 To establish the baseline and potential limit of material effects a broad study area will be adopted, enabling the geographical scope of the assessment to be defined, and to provide the wider geographical context of the study. The first stage of the assessment is to establish the baseline conditions of the Site and surrounding area, which would include identifying the landscape character and key features of the landscape and whether any landscape designations affect the Site. Sources examined for the desktop study will include:

- local planning policy;
- landscape and heritage designations;
- Natural England's NCAs;
- district and local-level LCAs;
- Natural England's Natural Area Profile;
- Public Rights of Way;
- local OS maps; and
- aerial photographs.

9.35 The second stage of the LVIA would seek to describe and make a judgement on:

- effects on the Landscape Character: The effects which may arise as a result of the proposed development on discrete character areas and/or character types comprising features that may possess a particular quality or merit. In this case, the effects on the historic landscape will be considered and cross referenced with the Archaeology and Heritage assessment; and
- visual effects: Effects that may arise as a result of the proposed development on views from visual receptors, such as users of local rights of way, and upon the amenity value of the views from surrounding areas.

9.36 As part of the development proposals, measures to mitigate any visual impacts and enhance the landscape value and visual quality of the area are integral to architectural and landscape design

work and particularly pertinent to the proposed development. The approach of the developer is to produce a scheme of a high architectural and landscape quality and design, taking full account of the setting of the Site, particularly the Site's relationship with the wider rural landscape to the east. If any adverse visual impacts are identified through the assessment, mitigation measures will be considered such as through choice of scale, massing, materials and finishes; landscape strategy; and screening during demolition and construction.

9.37 Finally, an assessment of any residual effects which may arise following the incorporation of mitigation measures will be undertaken. The evaluation of residual effects will be considered for Day 1 and Year 15 and allows for the consideration of the screening effects of screen planting that will be incorporated as mitigation for the development.

IMPACT ASSESSMENT

9.38 Taking account of the above, the assessment of the effects of the proposed development on the landscape and visual amenity will evaluate the environmental consequences of the development in terms of its effects on the character and quality of the landscape, key public views and visual amenity.

9.39 The possible adverse effects arising from the development proposal are anticipated to be as follows:

- effects upon the landscape character of the Site, its immediate context, and landscape elements within the Site;
- effects on the local and sub-regional landscape character; and
- effects upon the visual amenity of local residents, users of the PROW and road users in the local context of the Site.

9.40 It is anticipated that potential significant adverse effects from the development of the Site will be limited to the effects on the local landscape character and immediate landscape.

CUMULATIVE ASSESSMENT

9.41 In terms of the cumulative impacts arising from the development of other identified residential sites within the area (notably Land to the east of Melksham), the baseline will explain as far as it is known, the scale/extent of other likely development which may add cumulatively to changes in landscape and visual baseline. The methodology for cumulative assessment, allocated and other residential sites to be included, and representative cumulative photo viewpoints will be agreed with the LPA's planning officer prior to commencement of the assessment.

SUMMARY

9.42 In summary, the landscape and visual amenity baseline associated with the proposed residential development on land north of Eastern Way, Melksham has been reviewed. As a result of this baseline review and consideration of potential effects and mitigation measures available, it is recommended that landscape and visual amenity be examined in the subsequent Environmental Impact Assessment.

9.43 As part of this request for a 'Scoping Opinion' submitted to the local planning authority, consultation on identified landscape receptors and key representative viewpoints is requested prior to commencement of the next stage of the impact assessment.

10 Matters scoped out

10.1 The EIA process should be focused on likely significant environmental effects arising from the proposed development. For completeness, and in line with the screening opinion, the Applicant proposes not to include land, soil, the climate, material assets, cultural heritage, light, heat and radiation, waste, accidents and disasters, and technologies and substances used within the EIA. The reasoning for this is set out in the following paragraphs.

AIR QUALITY

10.2 It is considered unlikely that there would be significant effects relating to air quality as a result of the proposed development and so this topic shall be "Scoped Out" of the EIA. Instead, a standalone air quality assessment will be prepared by Air Quality Consultants, to accompany the submission of the planning application.

Summary of Work Underway

10.3 Work has commenced on gathering baseline information for the air quality assessment, as detailed below.

Baseline and Key issues

10.4 The Site currently comprises of agricultural land. It is bounded by Sandridge Common (A3102) to the south, New Road and agricultural buildings and fields to the east, agricultural fields to the north and residential properties to the west.

10.5 A search of the UK Pollutant Release and Transfer Register website[2] has not identified any significant industrial or waste management sources that are likely to affect the proposed development, in terms of air quality.

10.6 Wiltshire Council has declared eight Air Quality Management Areas (AQMAs) for exceedances of the annual mean nitrogen dioxide (NO2) air quality objective, and the proposed development is located approximately 8 km to the northwest of the closest AQMA, 'Devizes AQMA'.

10.7 Wiltshire Council operates three automatic monitoring within its administrative boundary, with the closest monitoring site (ID: 'AM3') located approximately 9 km to the southeast of the proposed development, at which distance the measured concentrations are not considered representative of conditions found at the Site. AM3 is also located within the Devizes AQMA so is expected to experience higher concentrations than at the proposed development site.

10.8 The Council also operates a number of nitrogen dioxide monitoring sites using diffusion tubes prepared and analysed by Somerset Scientific Services (using the 20% TEA in water method), with three diffusion tube monitoring sites located within 2.5 km of the Site.

10.9 Annual mean results for the years 2017 to 2021 are summarised in Table 10-1.

10.10 The monitoring locations are shown in Figure 10-1. The monitoring data have been taken from Wiltshire Council's 2022 Annual Status Report3. While 2020 and 2021 results have been presented for completeness, they will not be relied upon in any way as they will not be representative of 'typical' air quality conditions due to the impact of the Covid-19 pandemic on traffic volumes and thus pollutant concentrations.

2 Defra (2023) UK Pollutant Release and Transfer Register

3 Wiltshire Council (2022) 2022 Air Quality Annual Status Report (ASR)

TABLE 10-1 SUMMARY OF ANNUAL MEAN NO2 MONITORING (2017-2021) (µG/M3)

SITE ID	SITE TYPE	LOCATION	2017	2018	2019	2020	2021
35	Roadside	Melksham N	38.6	37.4	32.9	27.0	29.0
36	Kerbside	Beanacre	-	-	-	14.7	17.9
37	Roadside	Granville Road, Melksham	-	-	-	19.8	19.1
Objective			**40**				

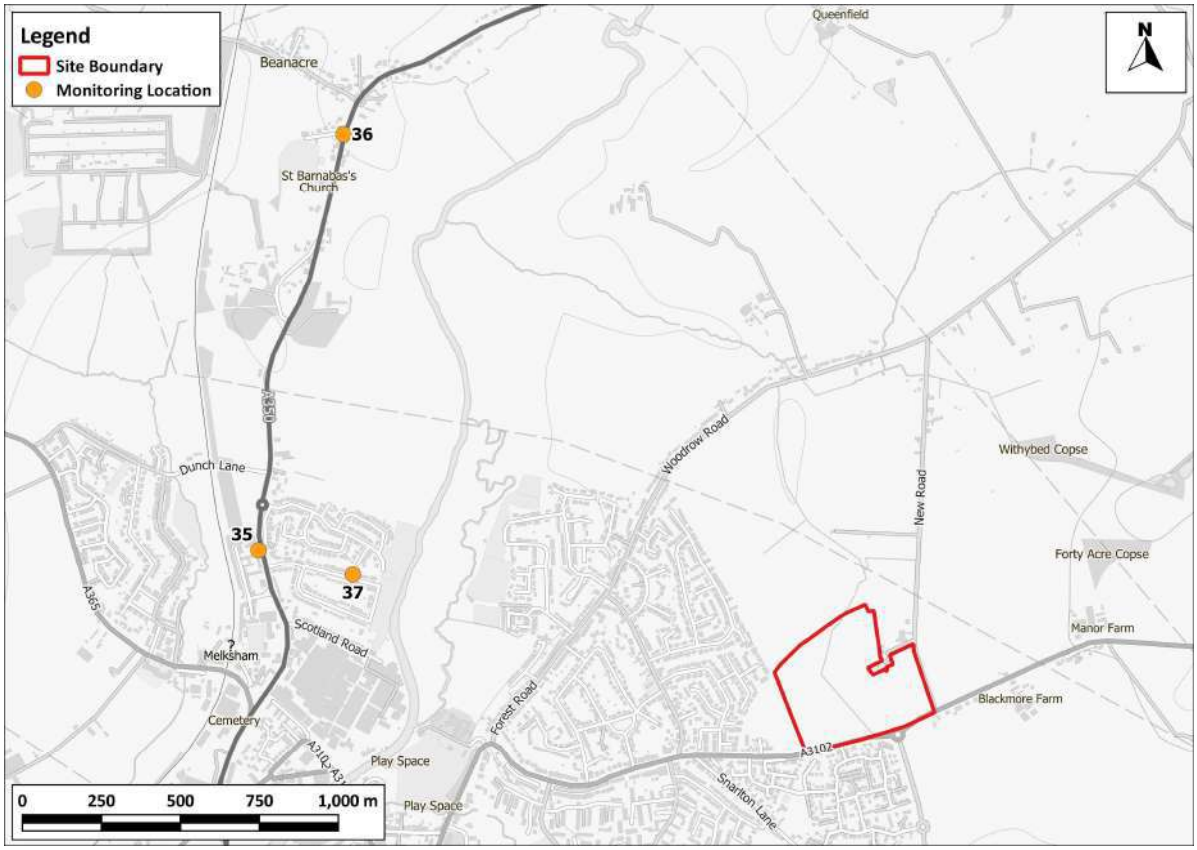


FIGURE 10-1 MONITORING LOCATIONS AND THE APPLICATION SITE BOUNDARY

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10.11 As shown in

10.12 Table 10-1, no exceedances of the annual mean nitrogen dioxide objective were measured at the diffusion tube monitoring sites within the vicinity of the proposed development. Concentrations at the Site are expected to be lower than at the monitoring sites on the A350 (35 and 36); according to

the DfT4, Beanacre Road (A350) experienced an approximate flow of 24,000 daily vehicles (as an Annual Average Daily Traffic (AADT) flow) in 2019. Meanwhile, the proposed development is located along Sandridge Common (A3102), which experienced an approximate flow of 8,000 daily vehicles in 2019. As such, annual mean nitrogen dioxide concentrations in the vicinity of the proposed development are expected to be lower than monitored at sites 35 and 36.

10.13 All measured annual mean nitrogen dioxide concentrations have remained well below 60 µg/m3 [5] in all years, indicating that the 1-hour mean nitrogen dioxide objective is unlikely to have been exceeded6.

10.14 Wiltshire Council monitors PM10 and PM2.5 concentrations at all three automatic monitoring stations, within its administrative boundary; however, as previously mentioned, none of these monitoring sites are in close proximity to the proposed development and are located within AQMAs. Therefore, concentrations measured at these sites are not considered representative of conditions at the Site. Nonetheless, PM10 and PM2.5 concentrations at these sites were below the respective objectives between 2017-20213.

Likely findings

CONSTRUCTION PHASE

10.15 It is anticipated that dust and particulate matter emissions produced during enabling and construction activities would be controlled through the implementation of a Construction Environmental Management Plan (CEMP). This CEMP will be informed by the Institute of Air Quality Management's (IAQM's)[7] 'Guidance on the assessment of dust from demolition and construction'[8] and would include mitigation measures, such as screening stockpiles of materials, deployment of windbreak netting and dampening exposed soils as appropriate, with requirements set out for ongoing monitoring and liaison with the local community and Wiltshire Council.

10.16 These embedded mitigation measures would be considered an integral part of the proposed development and would be detailed within the CEMP subject to condition. Therefore, the effects of dust and particulate matter emissions on nearby residential receptors are unlikely to be considered significant and will not be considered within the air quality assessment to be submitted for planning.

OPERATIONAL PHASE

10.17 The proposed development energy strategy is expected to include an all-electric solution (such as heat pumps and solar photovoltaics (PV)) and should not include any gas-fired combustion plant. As such, there would be no significant effects associated with onsite energy generation so energy plant emissions would not need to be considered within the air quality assessment.

10.18 The proposed development consists of approximately 300 residential dwellings and a nursery so is expected to result in additional vehicular movements on the local road network, which has the potential to increase concentrations of pollutants at nearby sensitive receptors, such as residential properties adjacent to the A3102. In accordance with Wiltshire Council's draft Air Quality Supplementary Planning Document (SPD)9, as the proposed development is not:

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4 DfT (2022) Road traffic statistics

5 Measurements across the UK have shown that the 1-hour nitrogen dioxide objective is unlikely to be exceeded at locations where the annual mean concentration is below 60 µg/m3.

6 Defra (2022) Review & Assessment: Technical Guidance LAQM.TG22 August 2022 Version

7 The IAQM is the professional body for air quality practitioners in the UK.

8 IAQM (2016) Guidance on the Assessment of Dust from Demolition and Construction v1.1

9 Wiltshire Council (2023) Air Quality Supplementary Planning Document (SPD)

- located in an area with annual mean nitrogen dioxide concentrations of more than 38 µg/m3 (as demonstrated by concentrations monitored in the vicinity of the proposed development as presented above); and
- expected to reduce average speeds by more than 10 km/h, significantly alter congestion or involve substantial infrastructure changes, the proposed development would be classed as a "Type 2" development. As such, only an exposure mitigation (i.e., qualitative) assessment is required, and a quantitative, concentration assessment is not considered necessary. The guidance states the "need for detailed quantitative air quality/emissions assessments is eliminated for all but the largest developments and those sites which present significant exposure risks to new or existing receptors on the site". Therefore, in accordance with Wiltshire's draft SPD, as no quantitative assessment is required, the impacts associated with additional traffic generation from the proposed development are not expected to be significant.

Next Steps

10.19 Based on the above, it is anticipated that the topic of Air Quality can be "Scoped Out" the EIA for the proposed development. Next steps involve AQC liaising directly with Wiltshire Council to agree the proposed methodology for the air quality assessment after which will accompany the planning application. The air quality assessment will be undertaken by Air Quality Consultants Ltd (AQC) and will cover the potential effects associated with the operation of the proposed development on local air quality, as well as air quality conditions at the Site for future residents and users.

NOISE AND VIBRATION

10.20 This section prepared by BY Acoustics considers the potential scope of any noise assessment forming part of an EIA for the proposed development.

10.21 Given that the likely outcome of any such assessment would be a negligible or, at worst, a minor effect, it is considered appropriate to scope out noise. The reasons are set out below.

Summary of work underway

10.22 Irrespective of whether noise is scoped out of the EIA, an assessment will be carried out to establish the parameters for any built-in mitigation to be included within the proposed development (such as enhanced glazing). This is to ensure that future occupants are provided with suitable living conditions in terms of noise. Such an assessment will rely upon the baseline being quantified (see below).

Baseline and key issues

10.23 A noise survey will be conducted at the Site to quantify the prevailing noise levels. Its primary purpose will be to inform assessments of external building fabric and ventilation, as well as consideration of garden noise levels at proposed dwellings. It will also help to define the baseline in the event that noise is scoped in.

10.24 If noise were to be scoped in, the EIA would consider the following aspects:

- temporary noise effects during construction
- permanent noise effects due to changes in traffic flows on nearby public roads

10.25 No other potential noise effects have been identified (and nor are any anticipated to be).

Likely findings

10.26 Temporary noise effects during construction are normally controlled through means of a suitable Construction and Environmental Management Plan or similar, which can be stipulated by planning condition. Any residual effects are normally negligible or minor – and temporary.

10.27 Changes in 18-hour traffic flows on public roads due to the development (and cumulatively, in combination with other consented development) are unlikely to be much more than 25%. All else

being equal, an increase in traffic flow of 25% equates to a change in noise level of only 1 dB, which is negligible. Even a doubling in traffic flow would result in an increase in noise levels of only a 3 dB, which is minor.

10.28 In advance of trip rates or distribution being agreed with Wiltshire Council, and in advance of any evidence-based assessment, the project transport planner has indicated that the vehicular trips associated with the Site would not result in a 100% increase (double) on any junctions within the proposed scope of assessment. The transport planner has also indicated that vehicular trips associated with the Site could increase to around 25% at junctions within the scope. However, junction trip rates do not necessarily translate to 18-hour traffic flows, so even if a trip rate increase of around 25% were to be assessed for particular junctions, the associated 18-hour traffic flow increases on relevant road links could be less than 25%.

10.29 Taking account of the above, it is very unlikely that a noise assessment would indicate effects any more significant than Minor.

Next steps

10.30 Considering that the likely findings are that any noise effects will be negligible (or minor at worst), without the need for any mitigation (other than construction noise control which would be implemented as a normal part of a CEMP or similar and controlled by planning condition), it is appropriate to scope out noise.

10.31 The next step will be to confirm that noise is to be scoped out. If so, then the site noise survey can proceed with the sole aim of informing assessments of external building fabric, ventilation and garden noise levels at proposed dwellings.

WATER AND FLOOD RISK

Intro

10.32 A Flood Risk Assessment and Outline Drainage Strategy has been prepared. The report includes an assessment of the surface water drainage requirements of the Site and details the flood risk and how this could be managed and mitigated to allow the Site to be developed in support of the full planning application.

Summary of work underway

10.33 A flood risk assessment and outline drainage strategy are being prepared. As part of the Flood Risk Assessment, we are undertaking modelling works. We are also deriving a surface water management strategy for the development proposed to manage and reduce the flood risk posed by surface water runoff from the Site comprising of above ground detention basin discharging to the watercourse within the Site.

Baseline and key issues

10.34 The Environment Agency flood map shows most of the Site is located within Flood Zone 1; outside the 1 in 1000-year probability of fluvial (river) flooding (0.1% Annual Exceedance Probability [AEP]), at 'low' risk. However, the extent of the watercourse within the Site is within Flood Zone 2; Flood Zone 2 is land between the 1 in 100-year (1% AEP) and 1 in 1000-year (0.1% AEP) probability of fluvial flooding, at 'medium' risk. There is a Main River conveying flows north through the centre of the Site. At this point in time the Main River has not been modelled. There is also a secondary watercourse conveying flow east from the adjacent development and into the Main River described above. There are large amounts of surface water inundating the Site on the Environment Agency's complex surface water flood mapping. We are modelling the watercourse to ascertain whether the mapping is accurate, as we believe the water will be contained within channel and not flood across the Site as currently shown.

Likely findings

10.35 The results of the modelling are to be confirmed as this is currently being built and undertaken. The surface water management strategy is likely to be contained within 3 or 4 detention basins with runoff restricted to QBAR rates. This provides a betterment (reduction) in runoff when compared to existing undeveloped conditions, where runoff is uncontrolled across all return periods.

Next steps

10.36 There are no designated Sites within the Site or its immediate vicinity, nor within 5km downstream of the receiving watercourse. The Site is not located above a source protection zone (SPZ) or sensitive aquifer. The watercourse is within a catchment of poor ecological status. Water quality and runoff rates will be improved through the implementation of SuDS across the Site with restricted discharge rates (QBAR). There are therefore no identified sensitive receptors that would not be suitably mitigated against. Based on the above we believe that we can scope out the ES for Water Environment.

LAND AND GROUND CONDITIONS

10.37 A Geotechnical and Geo-Environmental Site Investigation has been undertaken and is included at Appendix 3. This demonstrates that the land comprises agricultural land of Oxford Clay Formation. No superficial deposits are indicated to be present. The ground stability hazard conditions are either 'very low' or 'no hazard', aside from one area of potential for shrinking or swelling clay which is of moderate hazard.

10.38 There are two areas of potential infill land at a small pond and small watercourse on the western boundary of the Site. These would not affect the delivery of development on site or have a potential significant environmental impact.

10.39 The report concludes that no remedial measures are considered necessary in respect of contaminants. Whilst Radon measures are not required, the report does conclude that for ground gas areas of Amber 1 category, precautions should be installed in plots located directly over the infilled pond unless further investigation and risk assessment demonstrate that this is not required.

10.40 The outcomes of the report demonstrate that there would not be a significant environmental impact and that this topic should be scoped out of the ES.

SOIL AND AGRICULTURAL LAND

10.41 The entire Site comprises Grade 3b agricultural land, as set out on DEFRAs mapping, thus development will not result in the loss of best and most versatile agricultural land. As set out in the LPA's Screening Opinion there will be loss of some Grade 3 agricultural land, however this loss would not require an EIA. Therefore, it is proposed this topic is scoped out.

THE CLIMATE

10.42 The EIA Directive requires that EIA shall identify, describe and assess… the direct and indirect effects of a project on the… interaction between: human beings, fauna and flora, soil, water, air, climate, the landscape, material assets and cultural heritage. Schedule 4 of the Regulations requires consideration of the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change.

10.43 In this instance, the proposed development is likely to produce additional greenhouse gas emissions from the construction of the residential dwellings (embedded carbon) and during the operation phase in the form of energy consumption arising from the occupation of dwellings and transport related emissions during the construction and operational phase. All new development will contribute to greenhouse gas emissions.

10.44 The UK Government's legal obligations to reduce carbon emissions are enshrined in the Climate Change Act 2008 (as amended in 2019) to achieve net zero by 2050. (2030, energy white paper). In 2019 the Government indicated that "as part of the journey to 2050 we have committed to

introducing the Future Homes Standard in 2025". It goes on to acknowledge that "Homes – both new and existing – account for 20% of emissions…New homes being built now and in the next 5-10 years will still exist in 2050 and therefore we must ensure that the energy efficiency standards we set for them put us on track to meet the 2050 target".

10.45 The 2021 Building Regulations require a 31% reduction in carbon dioxide emissions against Part L 2013. The Future Homes Standard, delivered through the 2025 change, will equate to a 75-80% reduction in carbon dioxide emissions compared to Part L 2013. The new homes which comprise the proposed development will therefore be built to these higher standards and thus will achieve a reduction in carbon emissions and contribute towards the Government's legal commitment to achieve net zero by 2050. The proposals will comply with the relevant requirements in this regard.

10.46 Therefore, it is considered there will not be a significant environmental effect in respect of climate change, and this matter should be scoped out.

MATERIAL ASSETS

10.47 When regarding the proposed development and material assets it is considered that the Utilities Assessment will assess the capacity in the local infrastructure networks. A standalone chapter of the ES will be assessing any potential significant impact in respect of transport, and as set out in this section waste is proposed to be scoped out of the ES.

10.48 It is considered that the proposed development will not give rise to any potentially significant environmental impact in respect of material assets, and that ES and submission documents will assess matters relating to infrastructure, transport and waste.

CULTURAL HERITAGE

Introduction

10.49 An initial assessment including background research and site visit was undertaken by HCUK Group in April 2023. A full Heritage Impact Assessment will be undertaken as the next stage. This will be submitted as part of the planning application in accordance with Paragraph 194 of the National Planning Policy Framework.

10.50 The Heritage Impact Assessment will address the potential effects of the proposals on the settings and significance of designated and (if identified by the Local Planning Authority) any non-designated heritage assets in accordance with Historic England's GPA3 guidance on setting.

10.51 There are no listed buildings on the Site, and it lies outside of the Conservation Area. The nearest Conservation Area is approximately 960m to the west (within the town centre area).

10.52 There are four Grade II listed buildings in close proximity to the Site, two of which are 360m to the west within the town centre area, Blackmore House is approximately 300m to the east, and Woodrow House Farm and its railings is approximately 710m to the north.

10.53 As set out in the LPA's Screening Opinion due to the distance between the Site and the Listed Buildings it is unlikely that any proposal would give rise to significant environmental effects.

Baseline

10.54 An initial background research and site visit was undertaken by HCUK in April 2023 in good weather.

10.55 Prior to the site visit there were a number of designated heritage assets within the vicinity of the Site which were deemed potentially susceptible to impacts due to their relative proximity:

10.56 Woodrow House Farmhouse (Grade II) and Gate piers and garden walls (separately listed as Grade II) situated c.670m to the northwest;

- Blackmore House (Grade II) situated c. 340m to the east;
- Church of St Andrew (Grade II) situated c. 400m to the west;

- 8 Church Lane (Grade II) situated c.340m to the west; and
- the Melksham Conservation Area, c.1km to the west of the Site (at Hampshire Place boundary).

10.57 Following the initial assessment it is evident that Blackmore House, the Church of St Andrew, 8 Church Lane and the Melksham Conservation Area have no intervisibility with the Site and possess no historical association with the land which comprises the Site.

10.58 In accordance with Step 1 of the GPA3 settings assessment these assets can therefore be scoped out of further assessment and are not considered to be susceptible to impact by the proposals, which would not be capable of causing an effect within their settings which could harm their significance.

10.59 Only Woodrow House Farmhouse (and associated gate piers and garden walls) is considered to be potentially susceptible to impact. The house is orientated towards Woodrow Road, and from in front of its gates there is a clear view of the Site when looking south-eastward. The historic mapping and archival information, including the Melksham Parish Tithe and apportionment, show no direct link between the farmhouse and the land which comprises the Site, however, the information contained within the apportionment is not conclusive, and suggests a collective ownership and occupation of the land at the time. It is also evident that even if Woodrow House Farmhouse is not associated with the land historically, as surrounding agricultural land it does more broadly possess a character which is in-keeping with this historic farmstead and which affords its better appreciation.

10.60 However, there is a substantial physical and experiential separation between the farmhouse and the closest boundary of the Site, and with appropriate landscaping at the northern boundaries it is likely any view of the proposed housing would be filtered. It is also noted that the existing modern housing which forms the current eastern edge of Melksham forms part of the view from this asset, and as such the introduction of additional residential development would not be entirely out of character.

10.61 Overall, with the provision of a degree of landscape buffer/ screening to soften the northern edge of the proposed development, it is not considered that the level of change posed within the setting of Woodrow House Farmhouse would be sufficient to cause any level of harm to its significance.

Scoping

10.62 While the forthcoming Heritage Impact Assessment will fully assess any potential effect on the setting of these Listed Buildings, it is evident from the initial stages undertaken to date that there will be no significant environmental effect on cultural heritage, and this topic should be scoped out.

LIGHT

10.63 In accordance with relevant legislation and guidance a detailed Lighting Strategy will be prepared at the Reserved Matters stage to minimise effects from light intrusion, sky glow and glare.

10.64 Any future Lighting Strategy will be considerate of the outcomes of the bat surveys currently underway for the applicant's ecologist.

10.65 A suitably worded planning condition attached to the outline planning permission will secure this detailed Lighting Strategy which will be submitted and agreed with the Local Planning Authority.

10.66 It is not expected that the lighting impacts from the proposed development will give rise to potential significant environmental impacts.

HEAT AND RADIATION

10.67 The scheme does not include any significant source of heat or radiation. Therefore, it is considered that this topic should be scoped out of the ES.

WASTE

10.68 Waste will be generated through construction and by future residents of this Site, although waste production will be limited in line with the Wiltshire and Swindon Waste Core Strategy Policy WCS5. The Council will collect municipal waste as the waste authority.

10.69 The provision of appropriate waste storage and collection within a new development is normally secured by way of planning condition alongside a Construction and Environmental Management Plan during the construction phase, this is highlighted within the LPA's Screening Opinion.

10.70 The impacts can be managed by appropriate controls/conditions re waste management. The impact would be unlikely to be significant subject to these controls and design.

10.71 For the above reasons, the potential effect of the proposed development on waste can be scoped out of the EIA and does not need to be reported in the ES.

ACCIDENTS AND DISASTERS

10.72 The residential led mixed-use scheme does not include any hazardous uses, nor is the site location within an area at risk of disasters for example land instability or contamination. The LPA's Screening Opinion sets out how the proposed development is considered to hold potential for accidents that relate to the normal risks associated with construction work. These should be managed in the appropriate way within industry guidelines by the appointed site manager. Similarly, a Construction Traffic Management Plan will be secured through a planning condition attached to the outline planning permission.

10.73 There is an area of Flood Zone 2 within the Site, however no built development will be located within this area, and it be suitably addressed through the Water and Flood Risk ES chapter and the Flood Risk Assessment and Drainage Strategy which will accompany the planning application.

10.74 There are no significant environmental effects through the construction and operational phase in respect of accident and disasters. Therefore, it is considered that this topic should be scoped out.

TECHNOLOGIES AND SUBSTANCES

10.75 The proposed development does not include any technologies or substances that could have a potentially significant environmental impact; therefore, it is considered that this topic should be scoped out.

SUMMARY

10.76 Table 12-1, in chapter 12 below, presents a summary of the proposed scope of the EIA having regard to the purpose of the assessment in considering the potential cumulative effect of the proposed development.

11 Cumulative effects

11.1 The EIA Regulations require an ES to include cumulative effects. A specific Chapter in the ES will consider Type 1 cumulative effects.

11.2 Type 1 effects arise from the proposed development itself where sensitive receptors are subject to various effects. The combined effects of individual effects resultant from the development upon a set of defined sensitive receptors (i.e. intra-project effects). For example, human beings might be affected by changes in the noise environment and changes in visual amenity which together could result in an adverse or greater effect than the effect in isolation.

11.3 Type 2 effects are a result of changes to the baseline as a consequence of the proposed development in combination with reasonably foreseeable projects within the local area.

11.4 All consented schemes will form part of the baseline for the assessment and therefore cumulative impact will consider local plan allocations and local undetermined planning applications.

12 The Environmental Statement

12.1 The table below provides a summary of the ES which is to be prepared by the Applicant and to be submitted with the planning application.

TABLE 12-1: SUMMARY OF ENVIRONMENTAL STATEMENT CHAPTERS

CHAPTER	SCOPE/CONTENTS
Introduction	Summary information regarding the Site, the proposed development and the ES.
Methodology	An explanation of the general methodology employed in preparing the ES.
The Site	A description of the Site and surrounding area.
The proposed development	A description of the proposed development and its components.
Alternatives	The consideration of alternative design options.
Socio-economic and human health	An assessment of the potential effects of the proposed development on population and human health.
Transport, accessibility and movement	An assessment of the potential effects of the proposed development in terms of vehicle trips, public transport, cycling and pedestrians (severance, driver delay, pedestrian and cyclist delay, accidents and safety).
Biodiversity	An assessment of the effects of the proposed development on biodiversity, including habitats and protected species.
Landscape and visual impact	An assessment of the landscape and visual effects of the proposed development.
Cumulative and interactive effects	Considers the combined residual effects on individual environmental receptors – Type 1 effects
Summary of impacts	This chapter provides a summary of the technical assessments of each topic matter and a conclusion as to the environmental effects of the proposed development.

Appendix 1: Site Location Plan

Legend:

Site Location Boundary - 13.96Ha

New Road

A3102 - Sandridge Common

Gladstone Road

Eastern Way

Status **DRAFT**

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Client:	Bloor Homes
Project title:	Land at New Farm, Melksham
Drawing title:	Site Location Plan
Scale:	1:2500@A3
Date:	04.06.2024
Drawn by:	DR
Checked by:	DR
Drawing no.:	001
Revision:	-

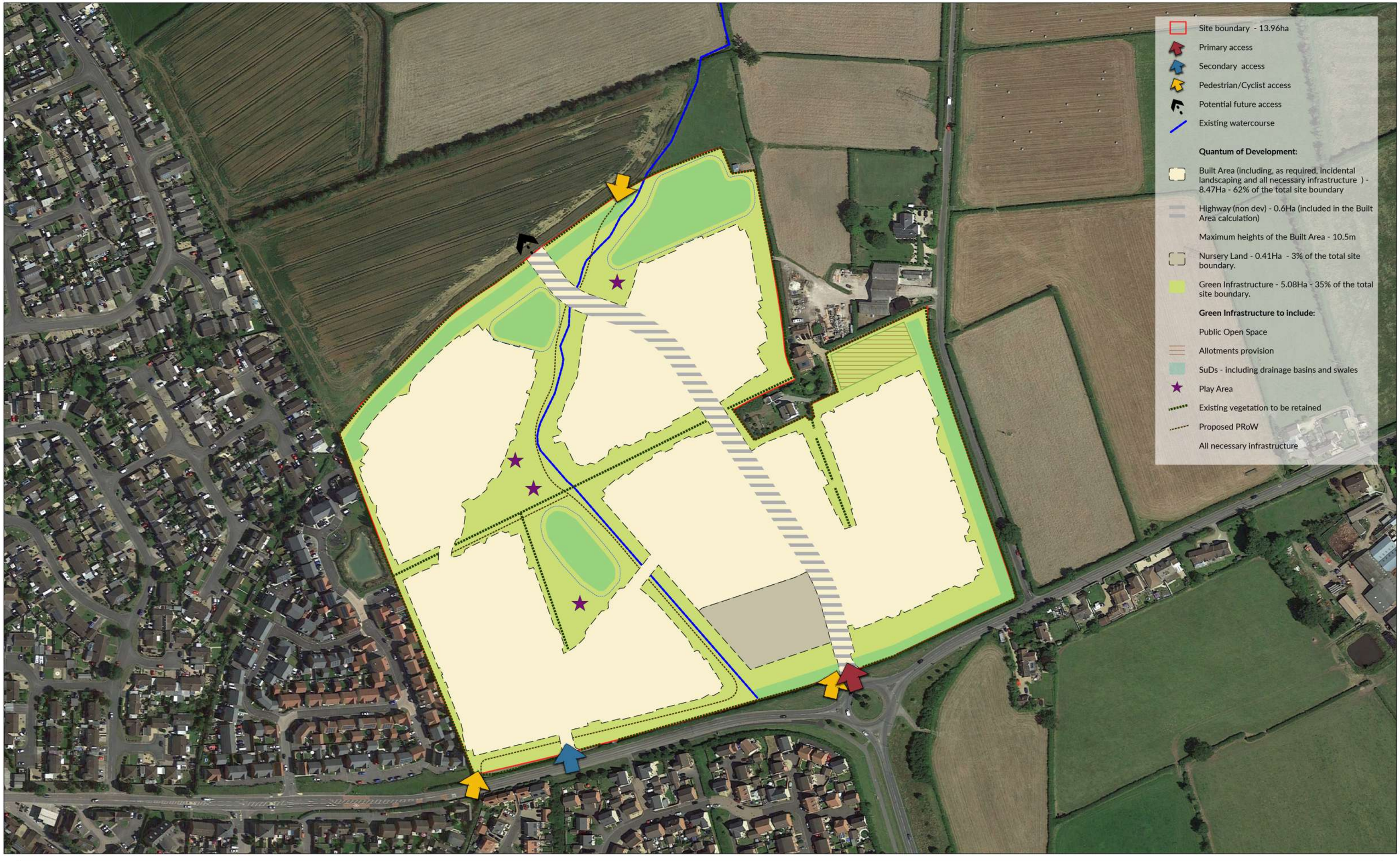
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Appendix 2: Framework Plan



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Project title: Land at New Road Farm Melksham

Drawing title: Parameter Plan

Scale:	1:2500@A3
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Drawn by:	DR
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Appendix 3: Landscape and Visual Methodology

Appendix EDP 1
EDP LVIA Assessment Methodology

Introduction

A2.1 This section provides a methodology for landscape and visual impact assessment as used by EDP.

Methodology

A2.2 The assessment methodology for assessing landscape and visual effects prepared by EDP is based on the following best practice guidance:

- Guidelines for Landscape and Visual Impact Assessment – Third Edition (LI/IEMA, 2013);
- An Approach to Landscape Character Assessment (Natural England 2014); and
- Landscape Institute Technical Guidance Note (TNG) 06/19 Visual Representation of Development Proposals (17 September 2019).

A2.3 Other reference documents used to understand the baseline position in landscape terms comprise published landscape character assessments appropriate to the site's location and the nature of the proposed development.

A2.4 The nature of landscape and visual assessment requires both objective analysis and subjective professional judgement. Accordingly, the following assessment is based on the best practice guidance listed above, information and data analysis technique, it uses quantifiable factors wherever possible and subjective professional judgement where necessary, and is based on clearly defined terms.

Landscape Assessment

A2.5 Landscape effects derive from changes in the physical landscape fabric that may give rise to changes in its character and how this is experienced. These effects need to be considered in line with changes already occurring within the landscape and which help define the character of it.

A2.6 Effects upon the wider landscape resource, i.e. the landscape surrounding the development, requires an assessment of visibility of the proposals from adjacent landscape character areas, but remains an assessment of landscape character and not visual amenity.

Visual Assessment

A2.7 The assessment of effects on visual amenity draws on the predicted effects of the development, the landscape and visual context, and the visibility and viewpoint analyses, and considers the significance of the overall effects of the proposed development on the visual amenity of the main visual receptor types in the study area.

Identifying Landscape and Visual Receptors

A2.8 This assessment has sought to identify the key landscape and visual receptors that may be affected by the changes proposed.

A2.9 The assessment of effects on landscape as a resource in its own right draws on the description of the development, the landscape context and the visibility and viewpoint analysis to identify receptors, which, for the proposed development may include, but not be limited to, the following:

- The landscape fabric of the development site;
- The key landscape characteristics of the local context;
- The 'host' landscape character area that contains the proposed development;
- The 'non-host' landscape character areas surrounding the host character area and may be affected by the proposals (where relevant); and
- Landscape designations on a national, regional or local level (where relevant).

A2.10 The locations and types of visual receptors within the defined study areas are identified from Ordnance Survey maps and other published information (such as walking guides), from fieldwork observations and from local knowledge provided during the consultation process. Examples of visual receptors may include, but not be limited to, the following:

- Settlements and private residences;
- Users of National Cycle Routes and National Trails;
- Users of local/regional cycle and walking routes;
- Those using local rights of way – walkers, horse riders, cyclists;
- Users of open spaces with public access;
- People using major (motorways, A and B) roads;
- People using minor roads; and

- People using railways.

Assessment of Landscape and Visual Effects

A2.11 The assessment of effects on the landscape resource includes consideration of the potential changes to those key elements and components that contribute towards recognised landscape character or the quality of designated landscape areas; these features are termed landscape receptors. The assessment of visual amenity requires the identification of potential visual receptors that may be affected by the development. As noted, following the identification of each of these various landscape and visual receptors, the effect of the development on each of them is assessed through consideration of a combination of:

- Their overall sensitivity to the proposed form of development, which includes the susceptibility of the receptor to the change proposed and the value attached to the receptor; and

- The overall magnitude of change that will occur - based on the size and scale of the change, its duration and reversibility.

Defining Receptor Sensitivity

A2.12 A number of factors influence professional judgement when assessing the degree to which a particular landscape or visual receptor can accommodate change arising from a particular development. Sensitivity is made up of judgements about the 'value' attached to the receptor, which is determined at baseline stage, and the 'susceptibility' of the receptor, which is determined at the assessment stage when the nature of the proposals, and therefore the susceptibility of the landscape and visual resource to change, is better understood.

A2.13 Susceptibility indicates *"the ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences"*[1]. Susceptibility of visual receptors is primarily a function of the expectations and occupation or activity of the receptor. A degree of professional judgement applies in arriving at the susceptibility for both landscape and visual receptors and this is clearly set out in the technical appendices to this assessment.

A2.14 A location may have different levels of sensitivity according to the types of visual receptors at that location and any one receptor type may be accorded different levels of sensitivity at different locations.

A2.15 With reference to Box 5.1 within GLVIA3 (Page 84), **Table EDP A2.1** provides an indication of the criteria by which the overall value of a landscape receptor may be judged. Within the assessment, further reference to the Landscape Institute's 'TGN 02-21: Assessing landscape value outside national designations' may be applied where appropriate.

[1] Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition Page 158

Table EDP A2.2 provides an indication of the criteria by which the overall susceptibility of the landscape in relation to the type of development proposed.

Table EDP A2.1: Assessment of Landscape Value

Landscape Character Area Value				
Very Low	**Low**	**Medium**	**High**	**Very High**
Undesignated countryside and landscape features; absence of distinctive landscape characteristics; despoiled/-degraded by the presence of many landscape detractors.	Undesignated countryside and landscape features; few distinctive landscape characteristics; presence of landscape detractors.	Undesignated countryside and landscape features; some distinctive landscape characteristics; few landscape detractors.	Locally designated/valued countryside (e.g. Areas of High Landscape Value, Regional Scenic Areas) and landscape features; many distinctive landscape characteristics; very few landscape detractors.	Nationally/internationally designated/valued countryside and landscape features; strong/distinctive landscape characteristics; absence of landscape detractors.
Consideration of Other Value Criteria				
Condition/Quality				
A landscape with no or few areas intact and/or in poor condition.	A landscape with few areas that are intact and/or in a reasonable condition.	A landscape with some areas that are intact and/or in reasonable condition.	A landscape with many areas that are intact and/or in a reasonable condition.	A landscape with most areas intact and/or in good condition.
Scenic Quality				
A landscape of little or no aesthetic appeal.	A landscape of low aesthetic appeal.	A landscape of some aesthetic appeal.	A landscape of high aesthetic appeal.	A landscape of very high aesthetic appeal.
Rarity and Representativeness				
A landscape that does not contain rare landscape types or features.	A landscape that contains few distinct landscape types or features.	A landscape that contains distinct but not rare landscape types or features.	A landscape that contains one or more rare landscape types or features.	A landscape that is abundant in rare landscape types or features.
Conservation Interests				
A landscape with no or very limited cultural, geological and/or nature conservation content.	A landscape with limited cultural, geological and/or nature conservation content.	A landscape with some cultural, geological and/or nature conservation content.	A landscape with rich cultural, geological and/or nature conservation content.	A landscape with abundant cultural, geological and/or nature conservation content.
Recreation Value				
A landscape with no or very limited contribution to recreational experience.	A landscape with no or limited contribution to recreational experience.	A landscape that provides some contribution to recreational experience.	A landscape that provides a good contribution to recreational experience.	A distinct landscape that forms a strong contribution to recreational experience.

Landscape Character Area Value				
Perceptual Aspects				
A landscape with prominent detractors, probably part of the key characteristics.	A landscape with landscape detractors, and is not particularly wild, tranquil or unspoilt.	A landscape with few detractors that also retains some perceptual values.	A landscape with very few detractors that has a relatively wild, tranquil or unspoilt landscape.	A wild, tranquil or unspoilt landscape without noticeable detractors.
Cultural Associations				
A landscape without recorded associations.	A landscape with few recorded associations.	A landscape with some and/or moderately valued associations.	A landscape with numerous and/or highly valued associations.	A landscape of rich and/or very highly valued associations.
Overall Judgement of Landscape Value				
Very Low value – receptor largely reflects very low value criteria above.	**Low value** – receptor largely reflects low value criteria above.	**Medium value** – receptor largely reflects medium value criteria above.	**High value** – receptor largely reflects high value criteria above.	**Very High value** – receptor largely reflects very high value criteria above.

Table EDP A2.2: Assessment of Landscape Susceptibility

Very Low Susceptibility to Change	**Low Susceptibility to Change**	**Medium Susceptibility to Change**	**High Susceptibility to Change**	**Very High Susceptibility to Change**
Pattern, Complexity and Physical Susceptibility to Change to the Proposed Development				
A simple, monotonous and/or degraded landscape with common/indistinct features and minimal variation in landscape pattern.	A landscape with an occasionally intact pattern and/or with a low degree of complexity and with few features in reasonable condition.	A landscape with some intact pattern and/or with a degree of complexity and with features mostly in reasonable condition.	A landscape with mostly patterned/-textured or a simple but distinctive landscape and/or with high value features and essentially intact.	A strongly patterned/-textured or a simple but distinctive landscape and/or with high value features intact.

Very Low Susceptibility to Change	Low Susceptibility to Change	Medium Susceptibility to Change	High Susceptibility to Change	Very High Susceptibility to Change
Visual Susceptibility to Change to the Proposed Development				
A very enclosed landscape that contains or strongly filters views, with an absence of visual landmarks and a lack of intervisibility with designated landscapes.	A predominantly enclosed landscape that contains or filters most views, with very few views of visual landmarks or intervisibility with designated landscapes.	A partially enclosed landscape with some visual containment and filtering, possible limited intervisibility with visual landmarks and designated landscapes.	An open landscape with intervisibility and limited visual filtering or enclosure. Prominent visual landmarks may be present, and/or intervisibility with designated landscapes may occur.	An open or exposed landscape with extensive intervisibility and no or very limited visual filtering or enclosure. Prominent visual landmarks are present, and/or intervisibility with designated landscapes occurs.
Experiential Susceptibility to Change to the proposed development				
A landscape with prominent visual and/or aural intrusion and close relationship with large scale built development/-infrastructure. A landscape that contains many light sources and essentially suffers from widespread light pollution.	A busy landscape with frequent visual and/or aural intrusion and nearby relationship with large scale built development/-infrastructure. A landscape that contains frequent light sources and suffers from light pollution.	A partially tranquil landscape with limited visual and/or aural intrusion, some relationship with built development/ infrastructure may be present. A landscape that contains some light sources.	A tranquil landscape with limited visual and/or aural intrusion, some relationship with built development/-infrastructure may be present. A landscape that contains few light sources.	A very tranquil, wild or remote landscape with little or no sense of visual or aural intrusion. A landscape that contains very few light sources and provides dark skies.
Overall Judgement of Susceptibility to Change to the proposed development				
Very Low susceptibility – receptor largely reflects very low criteria above.	**Low susceptibility** – receptor largely reflects low criteria above.	**Medium value** – receptor largely reflects medium criteria above.	**High susceptibility** – receptor largely reflects high criteria above.	**Very High susceptibility** – receptor largely reflects very high criteria above.

A2.16 **Table EDP A2.3** provides an indication of the criteria by which the overall sensitivity of the landscape resource is judged within this assessment and considers both value and susceptibility independently.

Table EDP A2.3: Assessment of Landscape Sensitivity

		Susceptibility of Landscape Receptor				
		Very High	**High**	**Medium**	**Low**	**Very Low**
Receptor Value	**Very High**	Very High	Very High/High	High	High/Medium	Medium
	High	Very High/High	High	High/Medium	Medium	Medium/Low
	Medium	High	High/Medium	Medium	Medium/Low	Low
	Low	High/Medium	Medium	Medium/Low	Low	Low/Very Low
	Very Low	Medium	Medium/Low	Low	Low/Very Low	Very Low

A2.17 For visual receptors, judgements of susceptibility and value are closely interlinked considerations. For example, the most valued views are those that people go and visit because of the available view, and it is at those viewpoints that their expectations will be highest and thus most susceptible to change.

A2.18 **Table EDP A2.4** provides an indication of the criteria by which the overall sensitivity of a visual receptor is judged within this assessment and considers both value and susceptibility independently.

Table EDP A2.4: Visual Receptor Sensitivity

Category	Visual Receptor Criteria
Very High	Designed view (which may be to or from a recognised heritage asset or other important viewpoint), or where views of the surroundings are an important contributor to the experience. Key promoted viewpoint, e.g., interpretative signs. References in literature and art and/or guidebooks tourist maps. Protected view recognised in planning policy designation. Visual receptors with a very high susceptibility to change may include those with views from residential properties, especially from rooms normally occupied in waking or daylight hours; national public rights of way, e.g., National Trails and nationally designated countryside/landscape features with public access, which people might visit purely to experience the view; and visitors to heritage assets of national importance.
High	View of clear value but may not be formally recognised, e.g. framed view of high scenic value, or destination hill summits. It may also be inferred that the view is likely to have value, e.g. to local residents. Visual receptors with a high susceptibility to change are considered to be those whose attention or interest is focussed on their surroundings and may include those with views from recreational receptors where there is some appreciation of the landscape, e.g., golf and fishing; local public rights of way, access land and National Trust land, also panoramic viewpoints marked on maps; road routes promoted in tourist guides for their scenic value.

Category	Visual Receptor Criteria
Medium	View is not promoted or recorded in any published sources and may be typical of the views experienced from a given receptor. Visual receptors with a medium susceptibility to change may include people engaged in outdoor sport other than appreciation of the landscape, e.g. football and rugby, or road users on minor routes passing through rural or scenic areas.
Low	View of clearly lesser value than similar views experienced from nearby visual receptors that may be more accessible. Visual receptors with a low susceptibility to change may include road users on main road routes (motorways/A roads) and users of rail routes or people at their place of work (where the place of work may be in a sensitive location). Also views from commercial buildings where views of the surrounding landscape may have some limited importance.
Very Low	View affected by many landscape detractors and unlikely to be valued. Visual receptors with a very low susceptibility to change may include people at their place of work, indoor recreational or leisure facilities or other locations where views of the wider landscape have little or no importance.

A2.19 The tables above offer a template for assessing overall sensitivity of any landscape or visual receptor as determined by combining judgements of their susceptibility to the type of change or development proposed and the value attached to the landscape as set out at paragraph 5.39 of GLVIA3. However, the narrative in this report may demonstrate that assessment of overall sensitivity can change on a case-by-case basis.

A2.20 For example, a high susceptibility to change and a low value may result in a medium overall sensitivity, unless it can be demonstrated that the receptor is unusually susceptible or is in some particular way more valuable. A degree of professional judgement applies in arriving at the overall sensitivity for both landscape and visual receptors.

Magnitude of Change

A2.21 The magnitude of any landscape or visual change is determined through a range of considerations particular to each receptor. As set out within GLVIA3 (Page 39), the following steps are considered in defining the magnitude of change:

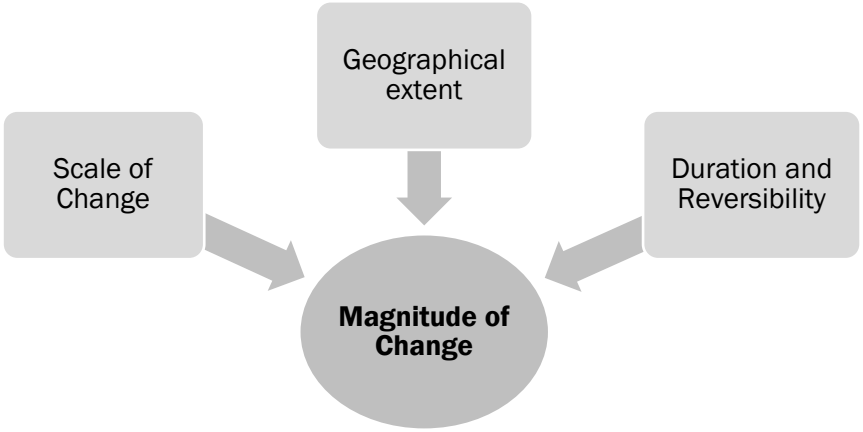


Figure EDP A2.1: Assessing the Magnitude of Change

A2.22 Receptor locations from which views of the proposed development are not likely to occur will receive no change and therefore no effect. With reference to the ZTV and site survey, the magnitude of change is defined for receptor locations from where visibility of the proposed development is predicted to occur.

A2.23 **Table EDP A2.5** provides an indication of the criteria by which the size/scale of change at a landscape or visual receptor is judged within this assessment.

Table EDP A2.5: Landscape and Visual Receptor Size/Scale of Change Criteria

Category	Landscape Receptor Criteria	Visual Receptor Criteria
Large Scale ▲	Total loss of or major alteration to key elements/features/characteristics of the baseline condition. Addition of elements which strongly conflict with the key characteristics of the existing landscape.	There would be a substantial change to the baseline, with the proposed development creating a new focus and having a defining influence on the view.
	Notable loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that are prominent and may conflict with the key characteristics of the existing landscape.	The proposed development will be clearly noticeable, and the view would be fundamentally altered by its presence.
	Partial loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that may be evident but do not necessarily conflict with the key characteristics of the existing landscape.	The proposed development will form a new and recognisable element within the view which is likely to be recognised by the receptor.
	Minor loss or alteration to one or more key elements/features/characteristics of the baseline landscape. Addition of elements that may not be uncharacteristic within the existing landscape.	The proposed development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component.
Small Scale ▼	Barely discernible loss or alteration to key elements/features/characteristics of the baseline landscape. Addition of elements not uncharacteristic within the existing landscape.	The proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation.

A2.24 **Table EDP A2.6** provides an indication of the criteria by which the geographical extent of the area affected is judged within this assessment.

Table EDP A2.6: Geographical Extent Criteria

	Landscape Receptors	Visual Receptor Criteria
Largest ↕ **Smallest**	Large scale effects influencing several landscape types or character areas.	Direct views at close range with changes over a wide horizontal and vertical extent.
	Effects at the scale of the landscape type or character areas within which the proposal lies.	Direct or oblique views at close range with changes over a notable horizontal and/or vertical extent.
	Effects within the immediate landscape setting of the site.	Direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected.
	Effects at the site level (within the development site itself).	Oblique views at medium or long range with a small horizontal/vertical extent of the view affected.
	Effects only experienced on parts of the site at a very localised level.	Long range views with a negligible part of the view affected.

A2.25 The third, and final, factor, in determining the predicted magnitude of change is duration and reversibility. Duration and reversibility are separate but linked considerations. Duration is judged according to the defined terms set out below, whereas reversibility is a judgement about the prospects and practicality of the particular effect being reversed in, for example, a generation. The categories used in this assessment are set out below.

Duration:

- Long-term (15 years+);
- Medium to long-term (10 to 15 years);
- Medium-term (5 to 10 years);
- Short-term (1 year to 5 years); or
- Temporary (less than 12 months).

Reversibility:

- Permanent with unlikely restoration to original state, e.g. major road corridor, power station, urban extension, etc.;
- Permanent with possible conversion to original state, e.g. agricultural buildings, retail units;
- Partially reversible to a different state, e.g. mineral workings;
- Reversible after decommissioning to a similar original state, e.g. wind energy development; or
- Quickly reversible, e.g. temporary structures.

A2.26 With consideration of the judgements set out above, **Table EDP A2.7** combines these judgements to provide the overall criteria by which the magnitude of change may be judged. While not all of the criteria may apply, the size/ scale, geographical extent Criteria and the duration/reversibility of effects on receptors are taken together to form a reasoned assessment of the magnitude of change. The overall magnitude of change is derived using professional judgement.

Table EDP A2.7: The Assessment of the Overall Magnitude of Change

Category	Receptor Criteria
Very High	Total loss of, or major alteration to key elements/features/characteristics of the baseline condition. Addition of elements which strongly conflict with the key characteristics of the existing landscape. The proposed development would create a new focus and have a defining influence on the view. Landscape and visual effects are typically large in scale, resulting in a permanent and irreversible change, influencing several landscape types or character areas. Visual changes would be experienced in direct, close ranging views with changes over a wide horizontal and vertical extent.
High	Notable loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that are prominent and may conflict with the key characteristics of the existing landscape. The proposed development would be clearly noticeable, and the view would be fundamentally altered by its presence. Direct or oblique views at close range with changes over a notable horizontal and/or vertical extent. Notable landscape and visual effects may be experienced in the medium to long-term, with possible conversion to original state, at the scale of the landscape type or character area/s within which the proposal lies.
Medium	Partial loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that may be evident but do not necessarily conflict with the key characteristics of the existing landscape within the immediate setting of the site. The proposed development would form a new and recognisable element within the view which is likely to be recognised by the receptor. Visual change would be experienced in direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected. Effects may be partially reversible to a different state, being experienced in the medium term.
Low	Minor loss or alteration to one or more key elements/features/characteristics of the baseline landscape. Addition of elements, largely at the site level, that may not be uncharacteristic within the existing landscape. The proposed development would form a minor constituent of an oblique view, being partially visible or at sufficient distance to be a small component at medium or long range and with a small horizontal/vertical extent of the view affected. The duration of the change may be short-term, being reversible to a similar original state.
Very Low	Barely discernible loss or alteration to key elements/features/characteristics of the baseline landscape. Addition of elements, experienced on parts of the site at a very localised level, not uncharacteristic within the existing landscape. The proposed development would form a barely noticeable component of the view, often being seen as a small component in a long-range view where, although slightly altered, the change would be similar to the baseline situation. Effects may be temporary and quickly reversible to the original state of the baseline context.

Significance of Effect

A2.27 The purpose of the EIA process is to identify the significant environmental effects (both beneficial and adverse) of development proposals. Schedule 4 to the EIA Regulations specifies the information to be included in all environmental statements, which should include a description of:

"The description of the likely significant effects …should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development".

A2.28 In order to consider the likely significance of any effect, the sensitivity of each receptor is combined with the predicted magnitude of change to determine the significance of effect, with reference also made to the geographical extent, duration and reversibility of the effect within the assessment. Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each receptor, the significance of effect can be derived by combining the sensitivity and magnitude in accordance with the matrix in **Table EDP A2.8**.

Table EDP A2.8: Level of Effects Matrix

Overall Sensitivity	Overall Magnitude of Change				
	Very High	High	Medium	Low	Very Low
Very High	**Very Substantial**	**Substantial**	**Major**	**Major/- Moderate**	**Moderate**
High	**Substantial**	**Major**	**Major/ Moderate**	**Moderate**	Moderate/- Minor
Medium	**Major**	**Major/- Moderate**	**Moderate**	Moderate/- Minor	Minor
Low	**Major/- Moderate**	**Moderate**	Moderate/ Minor	Minor	Minor/- Negligible
Very Low	**Moderate**	Moderate/ Minor	Minor	Minor/- Negligible	Negligible

A2.29 In certain cases, where additional factors may arise, a further degree of professional judgement may be applied when determining whether the overall change in the view will be significant or not. For example, in cases where a moderate effect is experienced by a high or very high sensitivity receptor, this may be considered to be significant. Similarly, where a moderate effect is experienced by a very low sensitivity receptor, this may not be considered significant. Where this occurs, further explanation is given within the assessment.

Definition of Effects

A2.30 Taking into account the levels of effect described above, and with regard to effects being either adverse or beneficial, the following table represents a description of the range of effects likely at any one receptor.

Table EDP A2.9: Definition of Effect

Category	Definition of Adverse Effects	Definition of Beneficial Effects
Very Substantial	Typically, the landscape or visual receptor is very highly sensitive with the proposals representing a very high adverse magnitude of change. The changes would be at complete variance with the landscape character and would permanently diminish the integrity of a valued landscape or view.	The removal of substantial existing incongruous landscape or visual elements and the introduction or restoration of highly valued landscape elements or built form which would reinforce local landscape character and substantially improve landscape condition and visual amenity.
Substantial	Typically, the landscape or visual receptor has a very high to high sensitivity with the proposals representing a very high to high adverse magnitude of change to the view or landscape resource. Changes would result in a fundamental change to the landscape resource or visual amenity.	The removal of existing incongruous landscape/visual elements and the introduction or restoration of some valued landscape or visual elements would complement landscape character and improve landscape condition and improve the local visual amenity.
Major	Typically, the landscape or visual receptor has a high to medium sensitivity with the proposals representing a high to medium magnitude of change. The proposals would represent a material but non-fundamental change to the landscape resource or visual amenity.	The removal of some existing incongruous landscape elements and/or the introduction or restoration of some potentially valued landscape elements which reflect landscape character and result in some improvements to landscape condition and/or visual amenity.
Moderate	Typically, the landscape or visual receptor has a medium sensitivity with the proposals representing a medium magnitude of change. The proposals would result in a slight but non-material change to the landscape resource or visual amenity.	Some potential removal of incongruous landscape features or visual amenity, although more likely the existing landscape and/or resource is complemented by new landscape features or built features compliant with the local landscape and published landscape character assessments.
Minor	Typically, the landscape or visual receptor has a low sensitivity with the proposals representing a low magnitude of change. There would be a detectable but non-material change to the landscape resource of visual amenity.	The proposals would result in minimal positive change to the landscape or visual resource, either through perceptual or physical change, and any change would not be readily apparent but would be coherent with ongoing change and process, and coherent with published landscape character assessments.

Category	Definition of Adverse Effects	Definition of Beneficial Effects
Negligible	Typically, the landscape receptor has a very low sensitivity with the proposals resulting in very limited loss or alteration to the landscape resource or change to the view. There would be a barely perceptible change to the landscape resource or visual amenity.	There would be a barely perceptible positive or negative change to the landscape resource or visual amenity.

A2.31 Effects can be adverse (negative), beneficial (positive) or neutral. The landscape effects will be considered against the landscape baseline, which includes published landscape strategies or policies if they exist. Changes involving the addition of large-scale man-made objects are typically considered to be adverse as they are not usually actively promoted as part of published landscape strategies. Accordingly, the assessment of landscape effects as a result of these aspects of the proposed development will be assumed to be adverse, unless otherwise stated within the assessment.

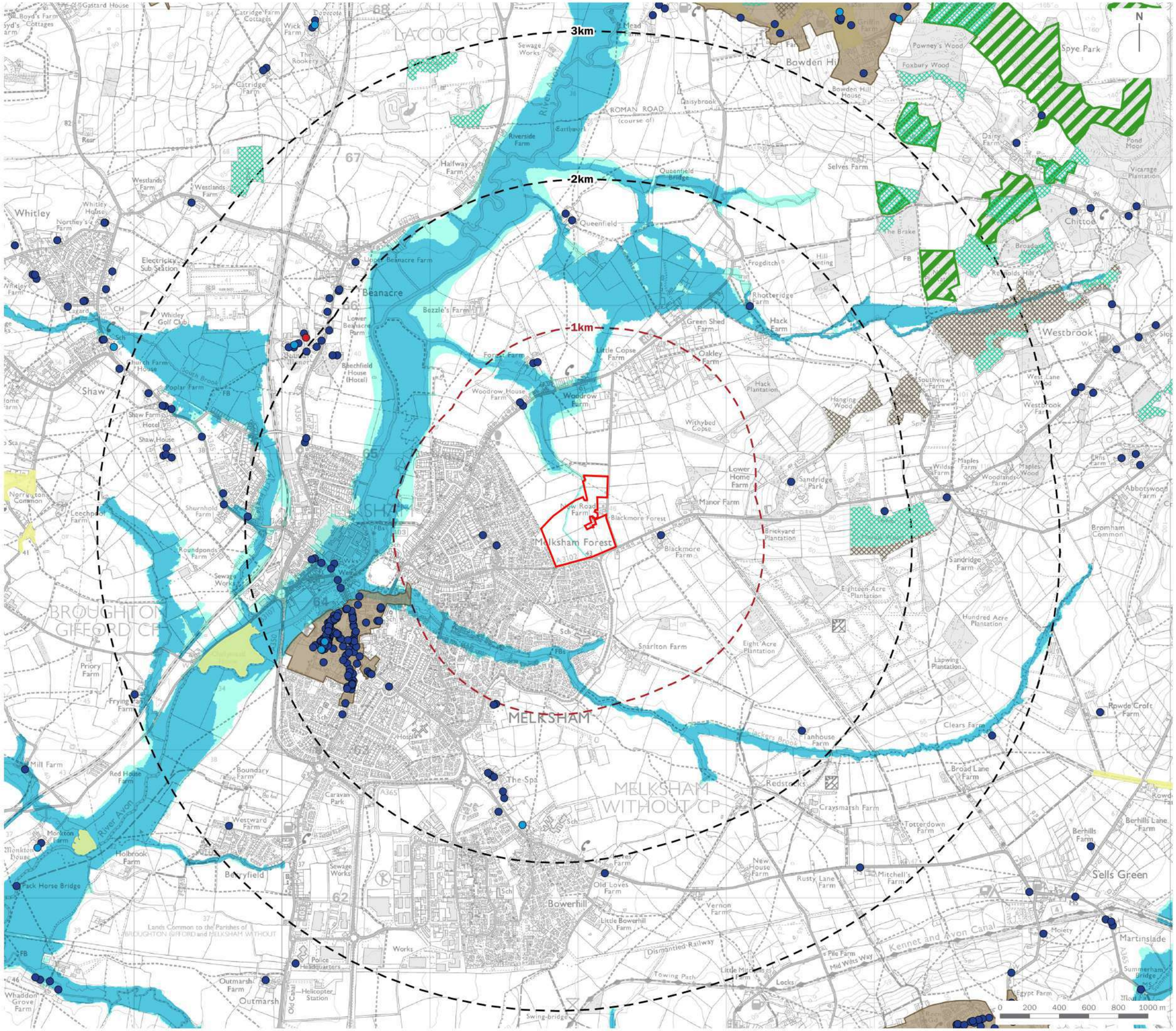
A2.32 Visual effects are more subjective as people's perception of development varies through the spectrum of negative, neutral and positive attitudes. In the assessment of visual effects, the assessor will exercise objective professional judgement in assessing the level of effects and, unless otherwise stated, will assume that all effects are adverse, thus representing the worst-case scenario.

Plans

Plan EDP 1: Environmental Planning Context
(edp9740_d003 01 December 2022 VMS/WGa)

Plan EDP 2: Published Landscape Character Assessments
(edp7940_d005 01 December 2022 VMS/WGa)

Plan EDP 3: Findings of Visual Appraisal
(edp7940_d006 01 December 2022 VMS/WGa)



Site Boundary

DRAFT

Range Rings (at 1km intervals)

1km Study Area

Ecology Considerations

- Ancient Semi-Natural Woodland (ASNW)
- Planted Ancient Woodland Sites (PAWS)
- Site of Special Scientific Interest (SSSI)

Heritage Considerations

- Melksham Conservation Area
- Grade I Listed Building
- Grade II* Listed Building
- Grade II Listed Building

Landscape Considerations

- Access Layer (CRoW Act 2000)
- Flood Zone 2
- Flood Zone 3

client

Bloor Homes South West Limited

project title

Land north of Eastern Way, Melksham

drawing title

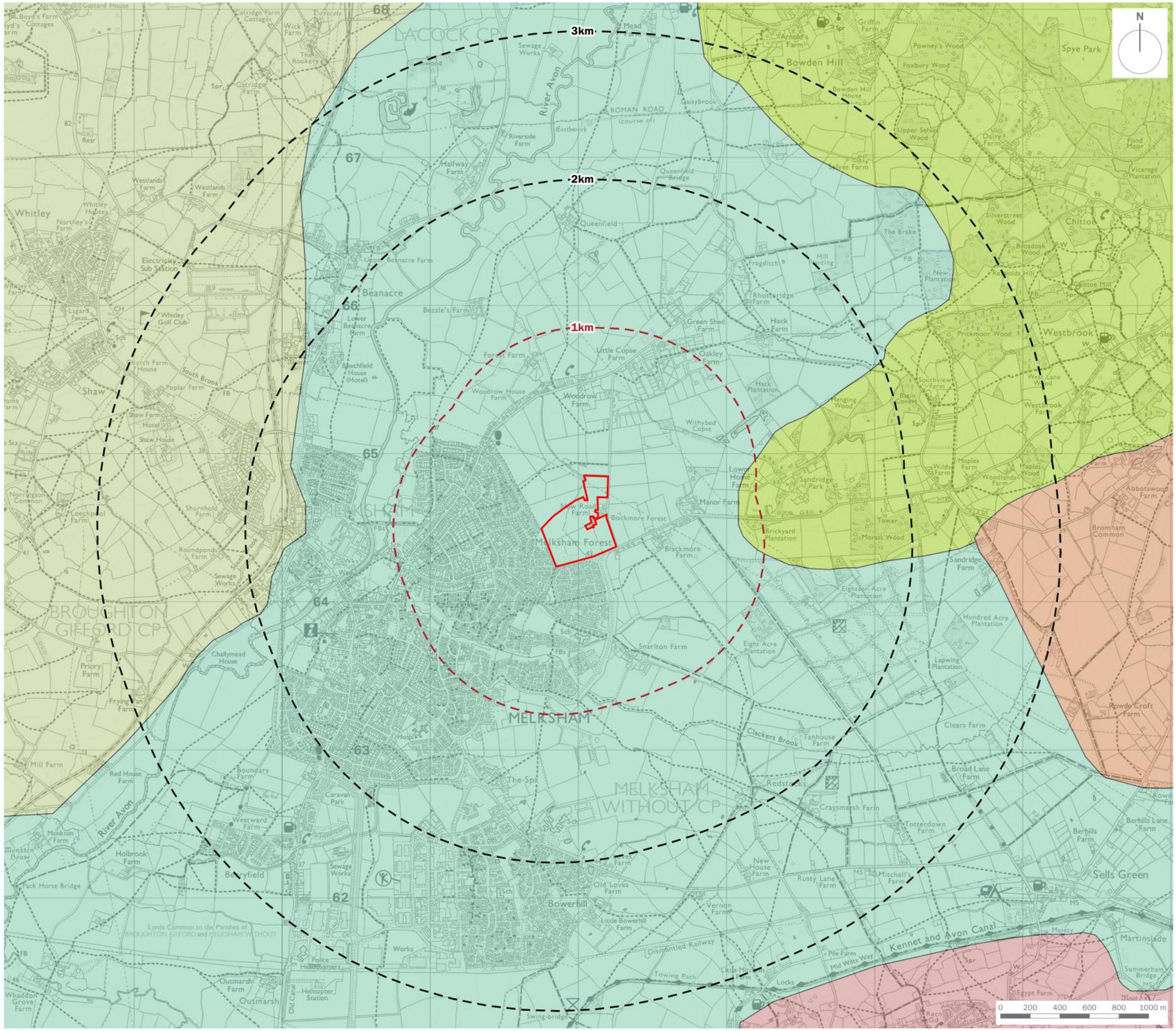
Environmental Planning Context

date	**01 DECEMBER 2022**	drawn by	**VMS**
drawing number	**edp7940_d003**	checked	**WGa**
scale	**1:25,000 @ A3**	QA	

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DRAFT

Site Boundary

Range Rings (at 1km intervals)

1km Study Area

Landscape Character Areas

7C - Bowood Greensand Hills

11A - Calne Rolling Clay Lowland

11C - Trowbridge Rolling Clay Lowland

12B - Avon Open Clay Vale

16A - Malmesbury-Corsham Limestone Lowlands

client

Bloor Homes South West Limited

project title

Land north of Eastern Way, Melksham

drawing title

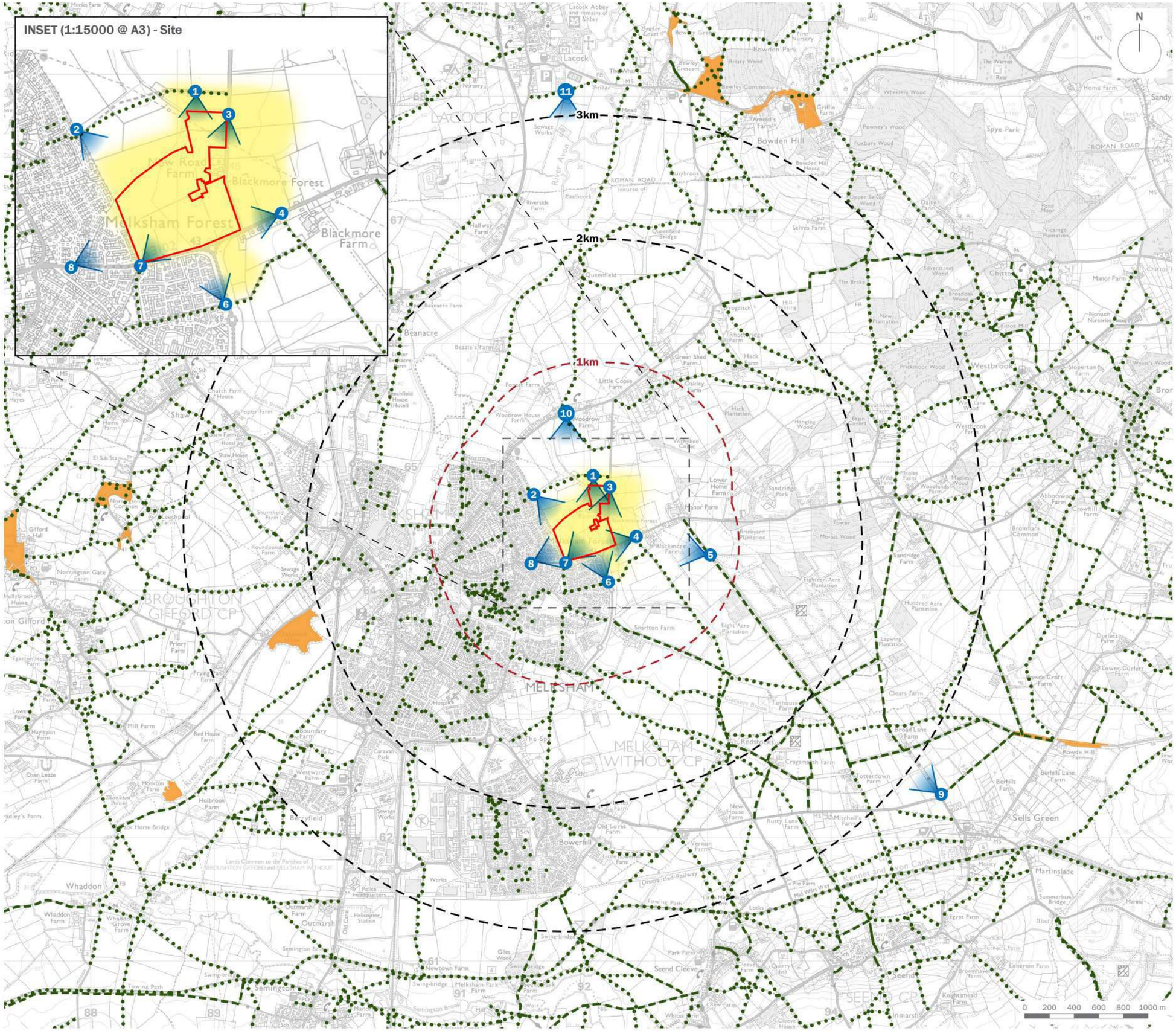
Published Landscape Character Assessments

date	**01 DECEMBER 2022**	drawn by	**VMS**
drawing number	**edp7940_d005**	checked	**WGa**
scale	**1:25,000 @ A3**	QA	

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client

Bloor Homes South West Limited

project title

Land north of Eastern Way, Melksham

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Findings of Visual Appraisal

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scale	**1:30,000 @ A3**	QA	

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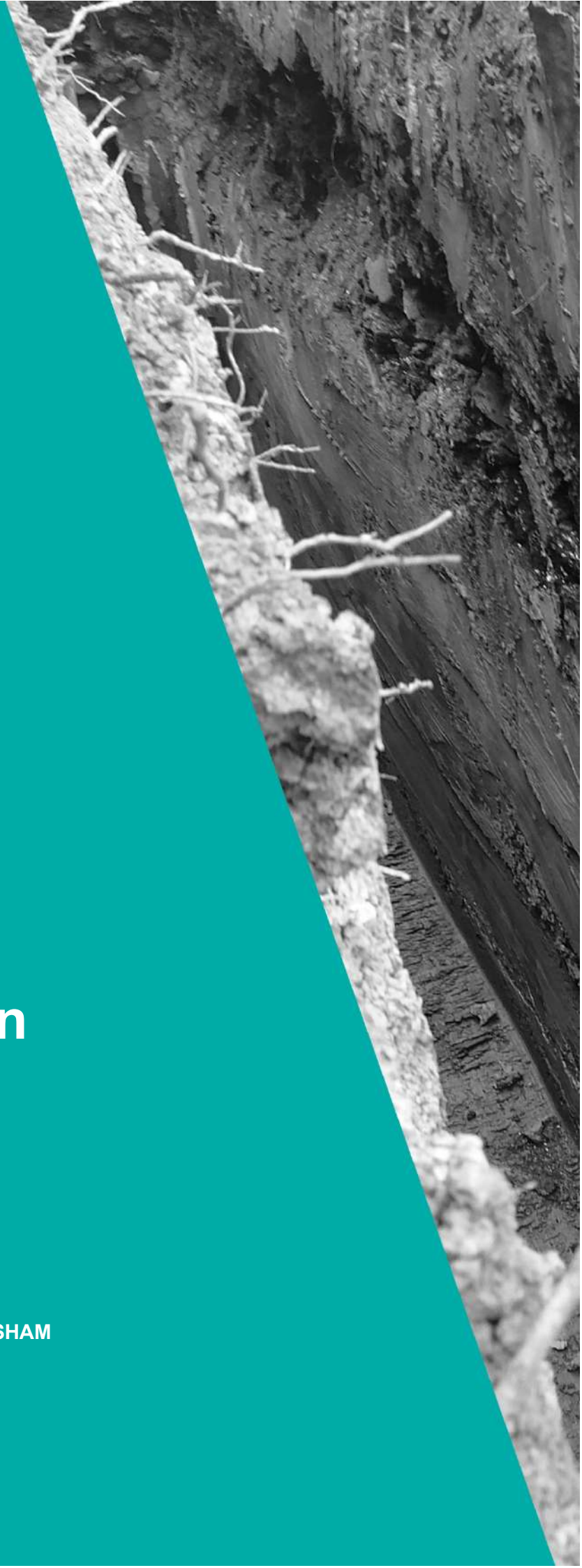
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Appendix 4: Geotechnical and Geo-Environmental Site Investigation

Please note that due to file size the appendices for this document have not been included. Should they be required please request these.

Eastwood
CONSULTING ENGINEERS



Site Investigation

NEW FARM, SANDRIDGE COMMON, MELKSHAM

BLOOR HOMES SOUTH WEST

8 SEPTEMBER 2023

GEOTECHNICAL AND GEO-ENVIRONMENTAL SITE INVESTIGATION

NEW FARM, SANDRIDGE COMMON MELKSHAM

FOR

BLOOR HOMES SOUTH WEST

ISSUE 2



48309-ECE-XX-XX-RP-C-0002 **8 September 2023**

GEOTECHNICAL AND GEO-ENVIRONMENTAL SITE INVESTIGATION

NEW FARM, SANDRIDGE COMMON MELKSHAM

FOR

BLOOR HOMES SOUTH WEST

ISSUE 2

Job No.	:	48309
Report Status	:	Final
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Ruth Noble

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1.0 EXECUTIVE SUMMARY

1. This report presents the findings of a Geotechnical and Geo-environmental Site Investigation carried out by Eastwood Consulting Engineers (ECE) for, and on the instructions of Bloor Homes South West.

2. The approximately 17 hectare site is located off the A3102, on the eastern side of Melksham in Wiltshire.

3. The geological map indicates that the solid geology at the site is the Oxford Clay Formation. No superficial deposits are indicated to be present.

4. Historically, the site comprised agricultural land and has remained undeveloped to the present day. A small pond appears to have been backfilled on the site in circa 1975.

5. The underlying bedrock is classified as unproductive strata. The site does not lie within a groundwater Source Protection Zone.

6. No radon precautions are necessary in the construction of new dwellings.

7. No landfill sites are identified within 250 m of the site, however two areas of potentially infilled land were identified on the site, one of which being the infilled pond and the other being a potential small watercourse on the western boundary of the site.

8. The ground conditions were found to comprise topsoil over firm to stiff sandy gravelly clay, inferred to be representative of superficial deposits, becoming very stiff clay of the Oxford Clay Formation generally from between 0.8 and 1.4 m depth.

9. Groundwater was not encountered during the investigation.

10. Due to the cohesive nature of the Oxford Clay Formation, site soakaway drainage solutions are unlikely to be viable. Drainage solutions within the Superficial Deposits may be more viable due to the relatively more granular nature of the deposits. Infiltration testing would need to be conducted in order to confirm this.

11. Geotechnical laboratory testing has demonstrated that the cohesive superficial deposits have a high volume change potential (VCP) and the Oxford Clay Formation has a medium VCP.

12. Strip or trenchfill foundations onto the natural firm to stiff clay are considered appropriate at a minimum depth of 1000 mm. An allowable bearing capacity of 125 kN/m^2 can be adopted for the superficial deposits, increasing to 150 kN/m^2 on the Oxford Clay Formation.

13. Foundations will need to be deepened when located within influencing distance of trees, in accordance with NHBC Standards Chapter 4.2. Where founding depths exceed 2.5 m, piling is likely to be required.

14. DS-2 AC-2 sulphate precautions will be required for concrete in contact with the superficial deposits, increasing to DS-4 AC-4 for concrete in contact with the Oxford Clay Formation.

15. No elevated concentrations of contaminants were recorded and no remedial measures are considered necessary.

16. The conclusions made in this report are subject to agreement by the approving bodies and your warranty provider.

2.0 INTRODUCTION

2.1 Terms of Reference

This report presents the findings of a Geotechnical and Geo-environmental Site Investigation carried out by Eastwood Consulting Engineers for, and on the instructions of, Bloor Homes South West. Any other parties using the information in this report do so at their own risk and any duty of care is excluded.

2.2 Context

ECE has not been made aware of any previous investigation undertaken at the site.

2.3 Aims and Objectives

The aims and objectives of this additional investigation were as follows:

- To assimilate and review information extracted from published documentation to derive an outline conceptual model identifying potential contaminants, pathways and receptors, as well as possible linkages between these;
- Detail the ground conditions and their geotechnical properties enabling outline foundation proposals to be made for the proposed development;
- Carry out tiered risk assessment to establish the likely risks to future receptors, involving the use of generic assessment criteria and where unacceptable risks are identified, site specific assessment criteria within a detailed quantitative risk assessment;
- Identify feasible remediation options if unacceptable risks are highlighted; and
- Develop an appropriate remediation strategy where remediation is required.

2.4 Scope of Investigation

This document is split into two sections. These constitute the findings of the Phase 1 and Phase 2 investigations, consecutively.

2.4.1 Phase 1

The Phase 1 investigation involved a review of information extracted from published documentation as well as that obtained from a site reconnaissance. Information regarding the current and former land uses both on and surrounding the site, as well as the environmental sensitivity of the site

location as determined by factors including geology, hydrogeology and hydrology have been examined.

Information analysed in this section of the report has been obtained from a variety of sources and included the following:

- Envirocheck Report
- Geological Maps and Associated Geological Memoirs; and
- A site walkover

2.4.2 Phase 2

This part of the investigation consisted of intrusive works and laboratory analysis. The findings were used to test the conceptual model and produce a final risk assessment. The intrusive works comprised trial pits which were undertaken to enable:

- Examination of the shallow ground conditions;
- In situ description of soils, enabling any localised lateral and vertical changes in soil conditions to be logged;
- Assessment of any contamination identified using visual and olfactory methods; and
- Collection of soil samples for chemical and geotechnical testing.

2.5 Limitations of Investigation

This report is based on the assumption that the site will be developed with new residential dwellings, outdoor play areas and a nursery. The dwellings will be of conventional construction and will be two storeys or less in height, and it is assumed that existing ground levels will not alter significantly. If this is not the case, then the advice given in this report may not be appropriate.

Where assessments of site areas affected in particular ways are given, these are approximate. All information, comments and opinions given in this report are based on the ground conditions encountered during the site work, on the results of laboratory testing carried out as part of the investigation and information gained from a geological and historical desk study. However, there may be conditions at the site that have not been taken into account, such as unpredictable soil strata and water conditions between or below investigation points. It should be noted that

groundwater levels vary due to seasonal or other effects, and may at times differ from those measured during the investigation.

This report considers the ground and groundwater and does not cover any buildings or their fabric or the constituents of any existing hardstanding materials. Generally, testing has only been carried out for contaminants identified as potentially present with no assessment made of biological contamination. Risks to ecological receptors, such as bats, have not been considered.

3.0 THE SITE

3.1 Description

The approximately 17 hectare site is located off the A1302, Sandridge Common on the eastern side of Melksham. The site is irregular in shape and centred off grid reference 392030 164540.

The site currently comprises eight agricultural fields all bordered by hedgerows with trees locally interspersed within the hedgerows. Within the centre of the site, but not included within the site boundary, there are three residential properties with gardens with hedgerows separating them from the fields and also a working farm yard with associated industrial equipment and commercial outbuildings.

A surface watercourse is present in the eastern portion of the site running through the fields roughly southeast to northwest before changing to run southwest to northeast and crosses the northern site boundary.

Two sets of overhead cables cross the site. A 400 Kv route crosses the northern portion of the site northwest-southeast and an 11Kv route crosses the southern portion of the site roughly east-west.

The A1302, Sandridge Common borders the south of the site and New Road borders the east of the site. The site is bordered to the west and south by residential properties, while to the north and beyond New Road to the east of the site, are more agricultural fields.

The site is relatively level at around 45 m AOD.

3.2 History

Historical Ordnance Survey maps obtained as part of the Envirocheck Report have been studied to assess the previous use of the site. Copies of the maps are presented in Appendix 1.

3.2.1 The Site

The earliest historical map of the area, dated 1886, shows the majority of the site to be undeveloped and comprised of agricultural fields with lines of trees delineating the boundaries, in a similar arrangement to the current day, but with an additional field boundary in the east of the site. By 1901 the surface watercourse which currently crosses the site from north to south is indicated. In addition, a pond is located at the intersection of four field boundaries in the east of the site.

No changes are then observed until the 1961 map which shows the overhead power line and associated pylons crossing the northern section of the site.

The pond in the east appears to have reduced in size between 1961 and 1973, and is no longer indicated from 1975, at which point the additional field boundary is removed and the site appears in its current day layout.

No further significant changes are observed on any of the subsequent maps.

3.2.2 The Surrounding Area

The earliest available historical maps, dated 1886, shows the immediately surrounding area to be predominantly agricultural farm land. In the location of the existing farm buildings outside the centre of the site are a number of structures assumed to comprise previous farm buildings. Two wells are also noted in this area, but these do not appear to encroach onto the site. The southern and eastern boundaries of the site are formed by roads, in the same location as the present day Sandridge Common and New Road respectively.

The wider surrounding area is also predominantly agricultural with scattered farm buildings and the village/hamlets of Melksham Forest and Blackmore Forest being present around 350 m west and immediately to the south east of the site respectively.

By 1901 small amounts of predominantly residential development have appeared around Melksham Forest and Blackmore Forest. The development around Melksham then continues throughout the 20th Century. It meets the western site boundary by 1973 at which time a transport depot is indicated around 350 m south of the site.

Small amounts of development then continue, and the development reaches the full extent of the western boundary, as well as the western half of the southern boundary between 2006 and 2023.

No further significant changes are then noted.

3.3 Geology

The online BGS Geology Viewer shows the bedrock across the site to be the Oxford Clay Formation comprising mudstone. There are no recorded Superficial deposits overlying the Oxford Clay Formation. This agrees with map sheet 265 of the Geological Survey of England and Wales 1:63,360/1:50,000 geological map series.

No faults are indicated to be present within the vicinity of the site.

There are no historical borehole records recorded within the vicinity of the site.

3.4 Hydrogeology

3.4.1 Groundwater Vulnerability

The underlying bedrock is classified as unproductive strata comprising rock layers with low permeability that have negligible significance for water supply or river base flow.

Information within the Envirocheck states that the site is not located within a groundwater Source Protection Zone.

3.4.2 Groundwater Abstractions

According to the Envirocheck there are no groundwater abstractions recorded within 500 m of the site.

3.5 Hydrology

The Envirocheck records the nearest surface water feature, to be located within the site. This is considered to refer to the surface watercourse identified on existing maps of the site. There are a number of surface watercourses identified within the surrounding area, however the nearest named watercourse is the River Avon, located around 1.2 km west of the site.

Information within the Envirocheck states that the site does not lie within a groundwater Source Protection Zone.

3.6 Extractive Industries

The site does not lie within a coal mining-affected area.

There are no BGS recorded mineral sites within 1km of the site, and no extractive industries were identified in the surrounding area on the historical maps.

Extractive industries are therefore not considered to affect the site.

3.7 Ground Gas

The site is within a lower probability radon area where <1% of homes are estimated to be at or above the action level. Therefore no radon precautions are necessary in the construction of new dwellings.

No development has occurred on the site in the past and therefore significant depths of made ground are not expected to be present. A suspected infilled pond is however noted to be present in the western part of the site, and therefore localised made ground may be associated with this.

According to the Envirocheck there are no landfill sites within 250 m of the site.

The Envirocheck lists two areas of potentially infilled land relating to water-related features, on the site or site boundary. One refers to the infilled pond mentioned above and the second is located on the western corner of the site where a possible watercourse was infilled. However, there is no definitive evidence of this shown on the historical maps. The Enviocheck also lists seven more instances of potentially infilled land within 250 m of the site, with all relating to small ponds or surface watercourses. The areas of potentially infilled land would not be considered to have the potential to generate significant volumes of ground gas, and due to the low permeability of the geology in the area, lateral migration of gases is unlikely to occur. Amber 1 ground gas precautions should be installed in the plots located directly over the infilled pond located within the site unless further investigation and risk assessment demonstrates that there is no risk.

3.8 Pollution Incidents to Controlled Waters

The Envirocheck lists one pollution incident within 250 m of the site, recorded at 115 m east of the site. This was a Category 3 (Minor) incident relating to the release of diesel fuels on 24th March 1999 into the Upper Avon Catchment. Due to the distance from site and the time elapsed since the incident it is not considered that this will pose a significant risk to the site.

3.9 Local Authority Pollution Prevention and Controls

The Envirocheck does not list any controls within 250 m of the site.

3.10 Discharge Consents

The Envirocheck does not list any active discharge consents within 250 m of the site. There is however one revoked discharge consent. This was located 42 m south east of the site and operated by Wessex Water Services Ltd. It related to sewage discharges to a ditch tributary of Clackers Brook.

This is not considered to affect the groundwater below the site.

3.11 Flooding

Information provided in the Envirocheck Report shows the watercourse crossing the site to be bordered on either site by a Zone 2 (extreme) flood area relating to rivers or the sea. This watercourse is also noted as being at high risk (30 year return) of surface water flooding. Additional low to high surface water flood risk areas area present in the north, east and south of the site.

The site does not however lie within an area at risk of groundwater flooding.

3.12 Soil Geochemistry

The Envirocheck estimates the following concentrations of arsenic, cadmium, chromium, nickel and lead to be present in the natural soil at the site. These have been compared to the appropriate assessment value protective of residential human health receptors with homegrown produce.

Contaminant	Estimated Concentration (mg/kg)	Assessment Value (mg/kg)
Arsenic	15 to 25	37
Cadmium	<1.8	11
Chromium	90 to 120	910
Lead	<100	200
Nickel	30 to 45	180

Given the above, no naturally elevated concentrations of metals/metalloids are anticipated.

3.13 Contemporary Trade Directory Entries and Fuel Station Entries

There are two contemporary trade directory entries recorded within 250 m of the site, the nearest is a door manufacturer 91 m south of the site and a plant and machinery repairer 107 m west of the site, although Envirocheck states that this is inactive.

There are no fuel stations within 250 m of site.

3.14 Ground Stability Hazards

The Envirocheck states the potential for shrinking or swelling clay ground stability hazards on the site is classed as moderate. The remaining ground stability hazards listed in the Envirocheck are classed as either ‘very low’ or ‘no hazard’.

4.0 OUTLINE CONCEPTUAL MODEL

4.1 Potential Sources of Contamination

Historically, the site was part of agricultural land and has remained undeveloped to present day. The site is to be developed with residential housing with associated private gardens, roads and areas of public open space.

4.2 Ground Gas

Radon precautions are not required.

Significant areas of made ground are not expected to be present at the site, although there is potential for deep made ground associated with an infilled pond in the west of the site.

No landfill sites have been recorded within 250 m of the site.

Amber 1 ground gas precautions should be installed in the plots located directly over the infilled pond located on site unless further investigation and risk assessment demonstrate that this is not required.

4.3 Potential Pollutant Linkages

The following table details the possible sources and associated contaminants of concern, pathways and receptors, highlighted by the Phase 1 as potentially present.

Source	Potential Contaminants	Potential Pathways	Potential Receptors
Made ground	Heavy metals/metalloids Asbestos PAHs	Ingestion Inhalation Direct contact Biological uptake Migration through ground	Site residents and visitors to the site Site construction workers Plants Water supply pipes
Topsoil	Pesticides		
Made or natural ground	Sulphates Low pH	Direct contact	Below ground concrete

5.0 GROUND INVESTIGATION

5.1 Site Works

Eastwood Consulting Engineers attended site from 24 July to 2 August 2023. Ninety-three trial pits (TP1 to TP93) were excavated to depths of between 2.4 m and 2.7 m bgl and five cable percussion boreholes (BH01 to BH05) were completed to depths of between 10.5 and 14.1 m bgl.

Copies of all trial pit and borehole logs are presented in Appendix 3, and their locations are plotted on the Exploratory Hole Location Plan, drawing number 48309/SK001, a copy of which is included in Appendix 2.

5.2 Laboratory Testing

Forty-two samples of topsoil and twenty-four samples of natural ground were despatched for chemical testing. Soil samples were taken in 1kg plastic tubs and 250ml amber glass jars and analysed at Chemtest laboratories using MCERTs accredited methodologies where available. The chemical test results are presented in Appendix 4 and discussed further in Section 8.

Fifteen disturbed samples and six undisturbed (U100) samples of natural ground were dispatched for geotechnical testing at Geolabs. The results are included in Geolabs report reference GEO/38592 a copy of which is enclosed and discussed further in Section 7.

6.0 GROUND CONDITIONS

6.1 Topsoil

Topsoil was encountered at the surface in all of the trial pit locations. This was predominately dark brown gravelly silty sand/sandy silt and reached depths of 0.3 m below ground level (bgl).

6.2 Natural Ground

Underlying the topsoil or reworked ground, the natural ground was found to comprise firm to stiff, slightly sandy slightly gravelly clay generally to depths of between 0.8 and 1.4 m bgl, although this did reach 2 m in one location. This was inferred to represent superficial deposits and was found to overlie very stiff fissured clay representative of the Oxford Clay Formation. The base of this strata was not proven in any of the trial pits. The borehole continued within this stratum which generally became weak mudstone at depths of between 12 and 13.9 m bgl.

6.3 Obstructions

No significant obstructions were encountered.

A 21 mm water pipe supplying water troughs on site was encountered in TP48 at a depth of 0.6 m bgl. This was damaged by the excavator and subsequently sealed. No evidence of the pipe was shown on any of the services records provided to ECE prior to the investigation.

6.4 Groundwater

Groundwater was not encountered within any of the trial pits excavated on the site.

6.5 Evidence of Contamination

Visual or olfactory evidence of possible contamination was not identified in any of the exploratory holes.

7.0 GEOTECHNICAL APPRAISAL

The site is proposed for residential development including private gardens and areas of public open space.

Ground conditions encountered during the site investigation comprised topsoil over firm to stiff clay, with the exception of re-worked clay being encountered in six locations. The ground conditions were found to be homogenous with little variation noted.

7.1 Geotechnical Testing

Fifteen samples of the natural cohesive ground were sent for geotechnical testing. A copy of the results (GEO/38592) is included in Appendix 4 and these are summarised in the table below.

Location	Depth (m bgl)	Strata	Water Content (%)	Liquid Limit (%)	40% Liquid Limit	Modified Plasticity Index (%)	Volume Change Potential
TP01	2.0	OCF	26.5	52	20.8	32	Medium
TP04	1.2	OCF	25.7	55	22	31	Medium
TP04	2.6	OCF	27.6	60	24	32.6	Medium
TP06	1.5	OCF	26.3	53	21.2	33	Medium
TP10	1.0	OCF	24.5	55	22	30	Medium
TP13	0.9	SD	29.4	67	26.8	45	High
TP15	1.5	OCF	23.3	51	20.4	26	Medium
TP21	1.5	OCF	24.0	52	20.8	30	Medium
TP25	1.5	OCF	25.5	48	19.2	25	Medium
TP28	2.3	OCF	29.8	56	22.4	30	Medium
TP37	0.4	SD	29.6	70	28	44	High
TP37	2.5	OCF	27.2	53	21.2	28	Medium
TP57	1.4	OCF	24.2	54	21.6	29	Medium
BH3	1.0	SD	38.4	80	32	48.5	High
BH3	2.4	OCF	29.2	64	25.6	37.6	Medium

OCF = Oxford Clay Formation
SD = Superficial Deposits

The above demonstrates that the cohesive superficial deposits have a high volume change potential, whilst the underlying Oxford Clay Formation is shown to be of medium volume change potential in accordance with NHBC Standards Chapter 4.2. Based on this, the clay soils should be considered to be of high volume change potential for design purposes.

In all samples the water content is greater than 40% of the liquid limit and therefore the samples are not indicated to be significantly desiccated.

The seven undisturbed samples underwent quick undrained triaxial testing. The results are again included in Geolabs report (GEO/38592) , and are summarised in the table below.

Location	Depth (m bgl)	Material	Shear Stress (kPa)
BH2	6.0	Oxford Clay Formation	137
BH3	3.0	Oxford Clay Formation	62
BH3	9.0	Oxford Clay Formation	384
BH4	4.0	Oxford Clay Formation	108
BH4	10.0	Oxford Clay Formation	388
BH5	6.0	Oxford Clay Formation	131

These results indicate a trend of increasing shear strength with depth within the natural Oxford Clay, as would be expected.

7.2 Foundations

Conventional strip or trench-fill footings are considered appropriate. Based on the clay soils having a high volume change potential, a minimum founding depth of 1000 mm below current or finished ground level, whichever is lower, will be required. All foundations must be taken down to bear on undisturbed, non-desiccated natural ground. Therefore if any made/re-worked ground or desiccated clay is encountered at founding depth, the foundations will need to be deepened until non-desiccated natural ground is encountered.

Our observations with regards to the strength of the clay soils indicate that at the minimum founding level of 1000 mm an allowable bearing capacity of 125 kN/m^2 will be appropriate for design. This is likely to increase to around 150 kN/m^2 on the underlying Oxford Clay Formation strata. All foundation trenches should, however, be inspected for soft spots and if any are encountered the foundation should be deepened locally until firmer ground is encountered.

Foundations within clay soils will need to be deepened in accordance with NHBC Standards, Chapter 4.2 where past, present or proposed trees are within influencing distance of the foundation. Heave precautions will be required where the footing depth due to past or present trees is in excess of 1500 mm. For trenchfill footings, allowance should be made for placing a 75 mm thickness of low density polystyrene from the top of the footing down to a depth of 500 mm above formation level

against the inside face of the perimeter footings. The trenches will need to be dug wider to accommodate this. A smooth vertical face is required for the external side of the footings.

Consideration should be given to tree influence at an early stage. Plots are likely to need to be piled wherever the depth due to trees exceeds 2.5 m, therefore, plots should be located outside these zones, where possible, in order to prevent the need for piling.

7.3 Ground Floors

Where less than 600 mm of made ground is present, ground bearing slabs will be appropriate. Elsewhere, reinforced suspended slabs or precast concrete floors with a minimum 150 mm high ventilated void should be used.

If the footings require heave precautions due to trees, a precast concrete floor with a ventilated void will be required. This void should be a minimum of 300 mm high.

7.4 Superstructure Precautions

No additional superstructure precautions will be required due to the ground conditions encountered.

7.5 Excavation Problems

All of the trial pits remained dry and stable whilst open. Nonetheless, support will be required in accordance with current Health & Safety Regulations wherever access is required to trenches deeper than 1.2 m or less where there is risk of collapse.

7.6 Obstructions

No significant obstructions were encountered.

7.7 Roads

A CBR value of at least 2% is likely to be appropriate for road design. The ground should be assumed to be frost susceptible and a minimum construction thickness of 450 mm will therefore apply. It is recommended that CBR tests are undertaken along any proposed roads prior to construction so that more accurate CBR values can be obtained.

7.8 Surface Water Drainage

Due to the cohesive nature of the Oxford Clay Formation and the overlying superficial deposits, it is unlikely that soakaways will be a viable method of surface water drainage at the site. However, the

superficial deposits were found to be more heterogenous and contained a higher granular content, and as such, may be more capable of supporting some form of SUDS. Infiltration testing would need to be undertaken in order to confirm the infiltration rate within this strata and allow potential solutions to be developed.

8.0 REFINEMENT OF OUTLINE CONCEPTUAL MODEL

8.1 Source Characterisation

An outline conceptual model, detailing the possible sources and associated contaminants of concern, potential pathways and receptors identified in the phase 1 study was detailed in Section 4.0.

This section of the report documents the works undertaken to obtain information to test and refine this model enabling a risk assessment to be produced and, where significant risks are expected, remediation recommendations.

8.2 Investigation of Potential Contamination Sources

The investigation works undertaken to cover each of the sources of potential contamination outlined in Section 4, are detailed in the table below:

Source	Potential Contaminants	Targeted Exploratory Holes
Made ground	Heavy metals/metalloids Asbestos PAHs	Made ground was not encountered in any of the exploratory holes.
Topsoil	Pesticides	Topsoil was encountered in all of the exploratory holes.
Sulphates and low pH in natural ground	Sulphates Low pH	Natural ground was encountered in all of the exploratory holes.

8.3 Gas Precautions

No radon precautions are required at the site and no landfill sites were identified within 250 m. Significant depths of made ground were not encountered therefore, other than the Amber 1 gas precautions in plots located over the position of the infilled pond, ground gas precautions are not considered to be necessary in the construction of new dwellings at the site.

8.4 Unexpected Contamination

No visual or olfactory observations of unexpected contamination were noted.

8.5 Chemical Testing

Forty-five samples of topsoil and twenty-five samples of natural ground were sent for testing. Each of the samples was analysed for the suite of contaminants listed overleaf.

Contaminant Type	Actual Contaminants
Metals/Metalloids	Arsenic, cadmium, chromium, lead, mercury, nickel, selenium, copper and zinc
pH	pH
PAHs	Speciated PAH
Sulphates*	Water soluble sulphate, acid soluble sulphate, total sulphur

*Natural ground only

In addition to the above testing, five samples of topsoil were screened for asbestos and five were also tested for organochlorine and organophosphorus pesticides. Nine samples of topsoil and four samples of natural ground were also tested for total organic carbon.

Testing was undertaken by Chemtest, a UKAS accredited laboratory, using MCERTs accredited methodologies, where available.

8.6 Assessment Criteria

The proposed development of the site is to be residential with associated gardens and car parking, there are also to be outside recreation areas and a nursery. Therefore, the assessment criteria relating to a residential end use with homegrown produce have been used.

Tables detailing the relevant assessment concentrations used are included in Appendix 5.

8.7 Chemical Test Results

A copy of the chemical test results (Chemtest report 23-25982) is included in Appendix 4. Some preliminary risk assessment is undertaken in this section of the report where determinants can be readily discounted.

8.7.1 Topsoil

No determinants were found to be elevated within the samples of topsoil.

None of the samples tested recorded asbestos to be present.

None of the samples tested recorded any detectable concentrations of pesticides.

8.7.2 Natural Ground

No determinants were found to be elevated within the samples of natural ground.

8.7.3 Phytotoxicity

There were no exceedances of phytotoxicity assessment values within any of the samples.

8.7.4 Sulphates

In accordance with BRE Special Digest 1, the site comes under the classification of 'greenfield' and groundwater is not expected to be mobile.

The natural ground samples collected from the trial pits, all of which represented what is inferred to be superficial deposits, as well as four deeper samples of Oxford Clay Formation from the cable percussion boreholes were each scheduled for analysis of sulphates in order to confirm the concrete classification. The results for the sulphate testing are included in Geolabs report reference (GEO/38592), and Chemtest report reference (23-25982-1) copies of which are enclosed in Appendix 4, and are summarised in the tables below;

Strata	Superficial Deposits	Range of Results	Characteristic Value	Design Sulphate Class	ACEC class
Superficial Deposits	Water Soluble Sulphate (mg/l)	<10 – 270	180	DS-2	AC-2
	Total Sulphur (%)	0.012 – 0.2	0.11		
	Total potential sulphate	0.069 – 0.21	0.33		
	pH	6.6 – 8.2	6.6		
Oxford Clay Formation	Water Soluble Sulphate (mg/l)	550 to 2,300	2,300	DS-4*	AC-4
	Total Sulphur (%)	0.41 to 1.0	1.0		
	Total potential sulphate	1.23 to 3.0	3.0		
	pH	7.8 to 8.3	7.8		

*A Design Sulphate Class of DS-4 has been determined as BRE Special Digest 1 confirms that '*a limitation can be applied if the sulfate class for the total potential sulfate is initially found to be Sulfate Class 5, but sulfate classes for groundwater and the water extracts tests are Sulfate Class 3 or less. In this case, the Design Sulfate Class for the site location can be limited to DS-4*'

The results have been compared with values given in 'BRE Special Digest 1 – Concrete in Aggressive Ground, and design sulphate (DS) and aggressive chemical environment for concrete (ACEC) classifications have been determined from this.

The Superficial Deposits tested indicate a concrete classification of DS-2 AC-2 and the samples of Oxford Clay Formation have resulted in a concrete classification of DS-4 AC-4. Appropriate sulphate precautions will therefore be required in below ground concrete at the site.

8.8 Significant Pollutant Linkages

The significant pollutant linkages consequently identified are thus documented in the table below

Source	Pathway	Receptor
Sulphates in the natural ground	Direct contact	Below ground concrete

9.0 RISK ASSESSMENT

9.1 Human Health: Future Site Users

No determinants were recorded at concentrations considered to pose a significant risk to human health. Therefore no remedial measures are necessary and the soils on site are considered suitable for re-use within the development.

9.2 Human Health: During Construction

Groundworkers employed during the construction phase of the development are most at risk of harm due to them having direct contact with affected soils. However, the contact is generally of short duration, and all competent ground workers will be aware of the potential risks associated with any made ground soils. Therefore, the overall risk to the health of construction workers is considered to be low.

Normal site procedures, such as the wearing of gloves when handling soils and the washing of hands prior to eating, should be implemented at all times.

9.3 Plants

No samples recorded phytotoxic concentrations of contaminants.

9.4 Ground Gas

Amber 1 ground gas precautions are recommended in any plots located directly over the infilled pond located on the site unless further investigation and risk assessment demonstrates that this is not required.

9.5 Construction Materials

Based on the results of the pH and sulphate testing discussed in Section 8.7.4, DS-2 AC-2 sulphate precautions will be required for any concrete in contact with the superficial deposits only. For concrete in contact with the underlying Oxford Clay Formation DS-4 AC-4 sulphate precautions will be required.

The results of the chemical testing will need to be forwarded to the water company so that appropriate water supply pipes can be selected.

9.6 Controlled Waters

Groundwater was not encountered as part of this investigation and no elevated concentrations of contaminants were recorded in the soil samples. No significant risk to controlled waters has therefore been identified during the course of this investigation.

Standard good site practice during the construction phase of the development must still be adhered to in terms of surface water run-off control measures, to ensure there is no risk to controlled waters.

9.7 Unexpected Contamination

Should any unusual, brightly coloured, ashy, fibrous or odorous material or material suspected of containing asbestos be encountered during construction this should be brought to the attention of the site staff and investigated.

9.8 Disposal of Material

If material needs to be removed, it should to be taken to a suitably licensed landfill or waste treatment facility. The costs of disposal and landfill tax can be substantial. The disposal of material should therefore be seen as a last resort with options such as treatment and reuse either on-site or off-site considered where possible.

The category of landfill which can accept the waste (inert, non-hazardous or hazardous) would need to be determined and will also have a significant effect on the costs. Additional testing may be required by the landfill operator and the acceptance of material is generally at their discretion.



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RTPI
Chartered Town Planner

Appendix 1.6 Scoping opinion from Local Authority

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

SCOPING OPINION

Application Reference Number: PL/2024/06514

Received Date: 10 July 2024

Decision Date: 27 March 2025

Applicant:	Bloor Homes
Particulars of Development:	EIA Scoping Request for proposed mixed use residential development (Reduction in size to previous Scoping Opinion under PL/2023/09008)
At:	Land at New Farm, Melksham, Wilts, SN12 7QY

With regard to your request for a formal opinion from the Council on the information to be supplied in the Environment Statements (ES) in respect of the above.

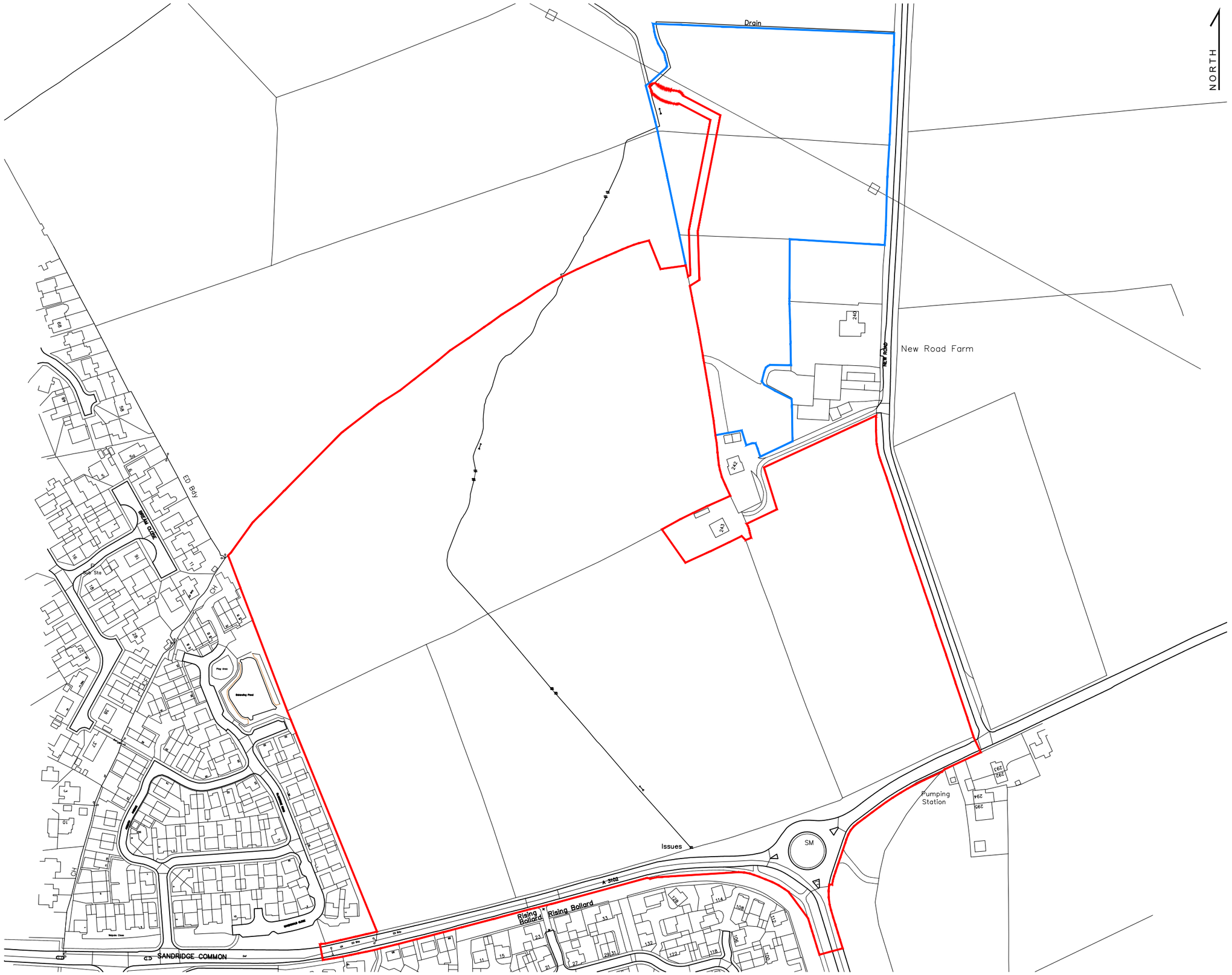
Following the submission of application PL/2024/10345;

"*The construction of 295 homes; public open space, including formal play space and allotments; sustainable drainage systems; and associated infrastructure; with 0.4ha of land safeguarded for a nursery. The principal point of access is to be provided from a new northern arm on the existing Eastern Way/A3102 roundabout junction, with a secondary access onto the A3102. Additional access points are proposed for pedestrians and cyclists*."

which has been submitted with an Environmental Statement, it is confirmed that the ES statement submitted with application PL/2024/10345 contains all necessary detail that the Council would have requested in the scoping opinion.

Parvis Khansari - **Corporate Director, Place**

Appendix 4.1 Location plan



Melksham, Land off Sandridge Common

0m 25 50 75 100 125 150 175 200m
1:2500

BLOOR HOMES LIMITED
UNIT 7, LATHAM ROAD, SWINDON, SN25 4DL
TELEPHONE: 01793 835600

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THIS DRAWING IS TO BE READ IN CONJUNCTION WITH SEPARATE GROUP / SITE SPECIFIC CONSTRUCTION NOTES AND MATERIALS SPECIFICATION.

Key

- Application Boundary
- Extent of land within applicants ownership

REVISION.

A	Land within applicants ownership added to layout.	17/10/24	MW
B	Updated in line with planning layout (1001C).	22/10/24	MW
C	Updated in line with planning layout (1001D).	25/10/24	MW

Land off Sandridge Common
Melksham

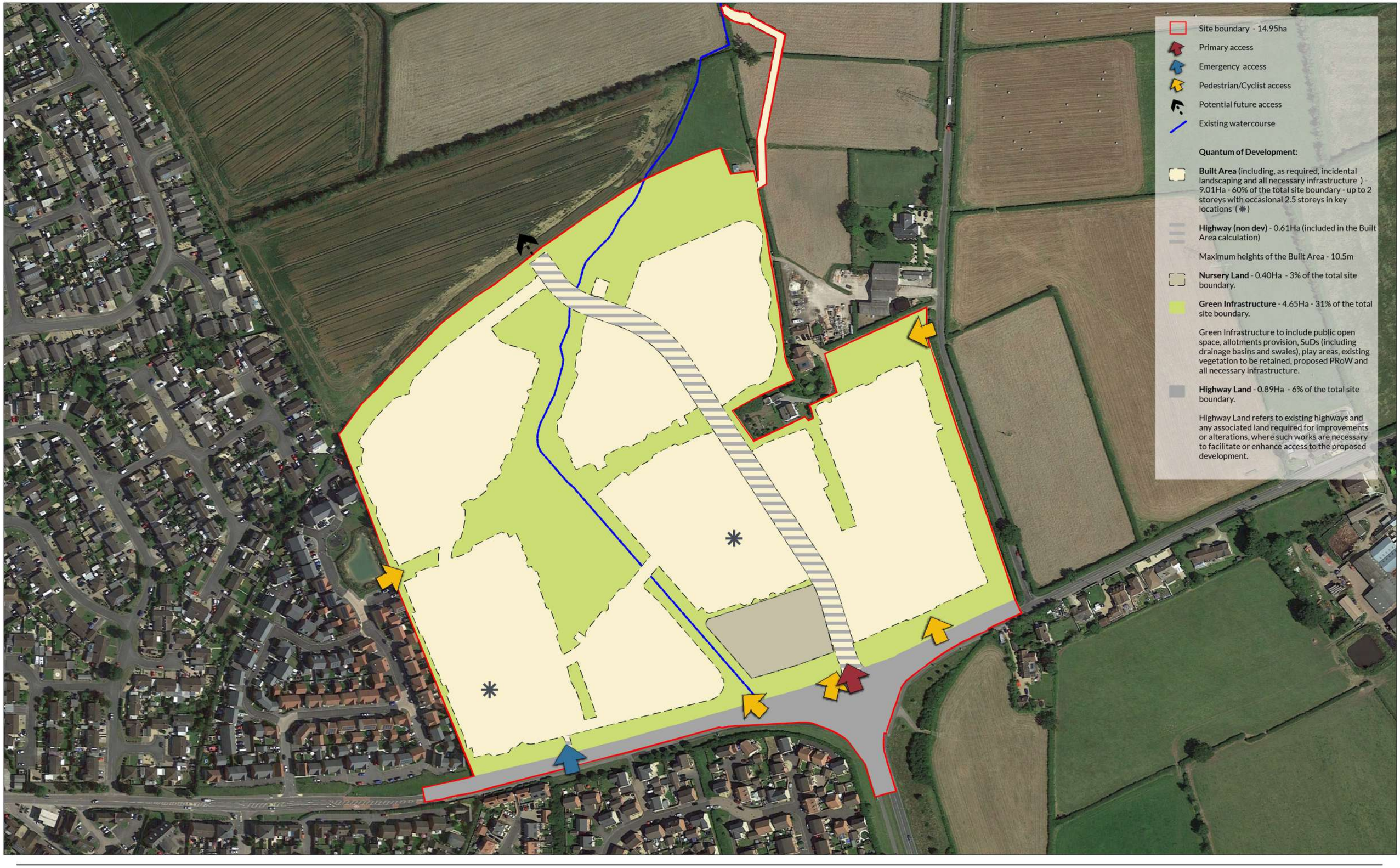
Location Plan

DATE: **11/09/24**
SCALE: **1:2500 @ A3**
DRAWN: **MW**
CHECKED:

BLOOR HOMES

DRAWING NO. SW164-PD-1000C

Appendix 4.2 Land Use Parameters



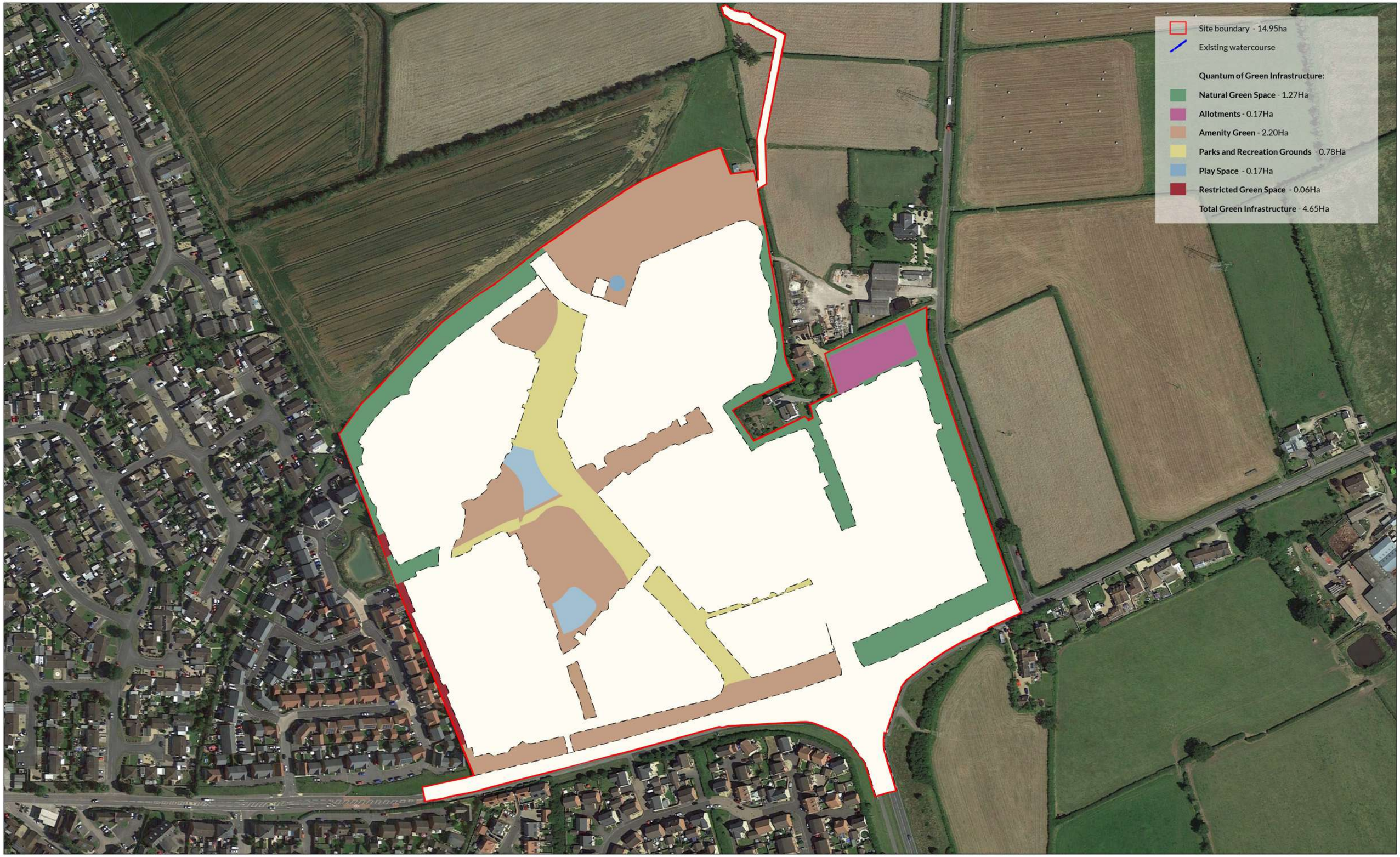
Status: FINAL

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Client:	Bloor Homes
Project title:	Land at New Road Farm Melksham
Drawing title:	Parameters Plan
Scale:	1:2500@A3
Date:	27.10.2025
Drawn by:	DR / LR
Checked by:	MV
Drawing no.:	2513292.1
Revision:	G

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Appendix 4.3 Green Infrastructure Parameters



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Client: Bloor Homes

Project title: Land at New Road Farm Melksham

Drawing title: Green Infrastructure Parameters Plan

Scale:	1:2500@A3
Date:	27.10.2025
Drawn by:	LR
Checked by:	MV
Drawing no.:	2513292.1
Revision:	A

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Rev	Description	Date	By	App'd
P02	TACTILE PAVING ADDED	16.06.25	IDR	THP
P01	FIRST ISSUE	23.05.25	THP	JR

Project Name
LAND AT NEW FARM, MELKSHAM

Project Phase

Title
COMPACT ROUNDABOUT PRELIMINARY DESIGN

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info@paulbashamassociates.com www.paulbashamassociates.com

Client
BLOOR HOMES

Date Created	Drawn By	Approved By	Suitabilty Code
23.05.25	THP		

PBA Project Number	Scale	
027.0011	1:500	(AT A3)

PBA Drawing No:	Revison
027.0011-0025	P02

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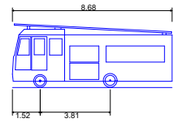
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VEHICLE PROFILE



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

NORTH

PRELIMINARY

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FIRE TENDER TRACKING LEFT IN

FIRE TENDER TRACKING LEFT OUT

Rev	Description	Date	By	App'd
P01	FIRST ISSUE	25.04.25	IDR	THP

Project Name
LAND AT NEW FARM, MELKSHAM

Project Phase
PRELIMINARY

Title
EMERGENCY ACCESS FIRE TENDER TRACKING

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Client
BLOOR HOMES

Date Created	Drawn By	Approved By	Suitabilty Code
25.04.25	IDR	THP	-

PBA Project Number	Scale
027.0011	1:250 (AT A3)

PBA Drawing No:	Revison
027.0011-0024	P01

Appendix 6.1 LSOAs definitions for study areas

Appendix 6.1 LSOAs definitions for study areas

Local socio-economic study area LSOAs 2011

E01032063 : Wiltshire 020A
E01032064 : Wiltshire 020B
E01032065 : Wiltshire 020C
E01032073 : Wiltshire 020D
E01032074 : Wiltshire 020E
E01032070 : Wiltshire 021D
E01032071 : Wiltshire 021E
E01032072 : Wiltshire 021F
E01032062 : Wiltshire 022A
E01032066 : Wiltshire 022B
E01032067 : Wiltshire 022C
E01032068 : Wiltshire 022D
E01032069 : Wiltshire 022E

Local socio-economic study area LSOAs 2021

E01032063 : Wiltshire 020A
E01032064 : Wiltshire 020B
E01032065 : Wiltshire 020C
E01032073 : Wiltshire 020D
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E01032070 : Wiltshire 021D
E01032072 : Wiltshire 021F
E01034528 : Wiltshire 021G
E01034529 : Wiltshire 021H
E01034530 : Wiltshire 021I
E01032062 : Wiltshire 022A
E01032066 : Wiltshire 022B
E01032067 : Wiltshire 022C
E01032068 : Wiltshire 022D
E01032069 : Wiltshire 022E

Chippenham HMA LSOAs 2011

E01031887 : Wiltshire 001A
E01031885 : Wiltshire 002A
E01031947 : Wiltshire 002B
E01031948 : Wiltshire 002C
E01031949 : Wiltshire 002D
E01031886 : Wiltshire 004A
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Chippenham HMA LSOAs 2021

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E01031885 : Wiltshire 002A
E01031947 : Wiltshire 002B
E01031948 : Wiltshire 002C
E01031949 : Wiltshire 002D
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E01034529 : Wiltshire 021H

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E01032067 : Wiltshire 022C

E01032068 : Wiltshire 022D

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E01032693 : Wiltshire 025H

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E01031856 : Wiltshire 026D

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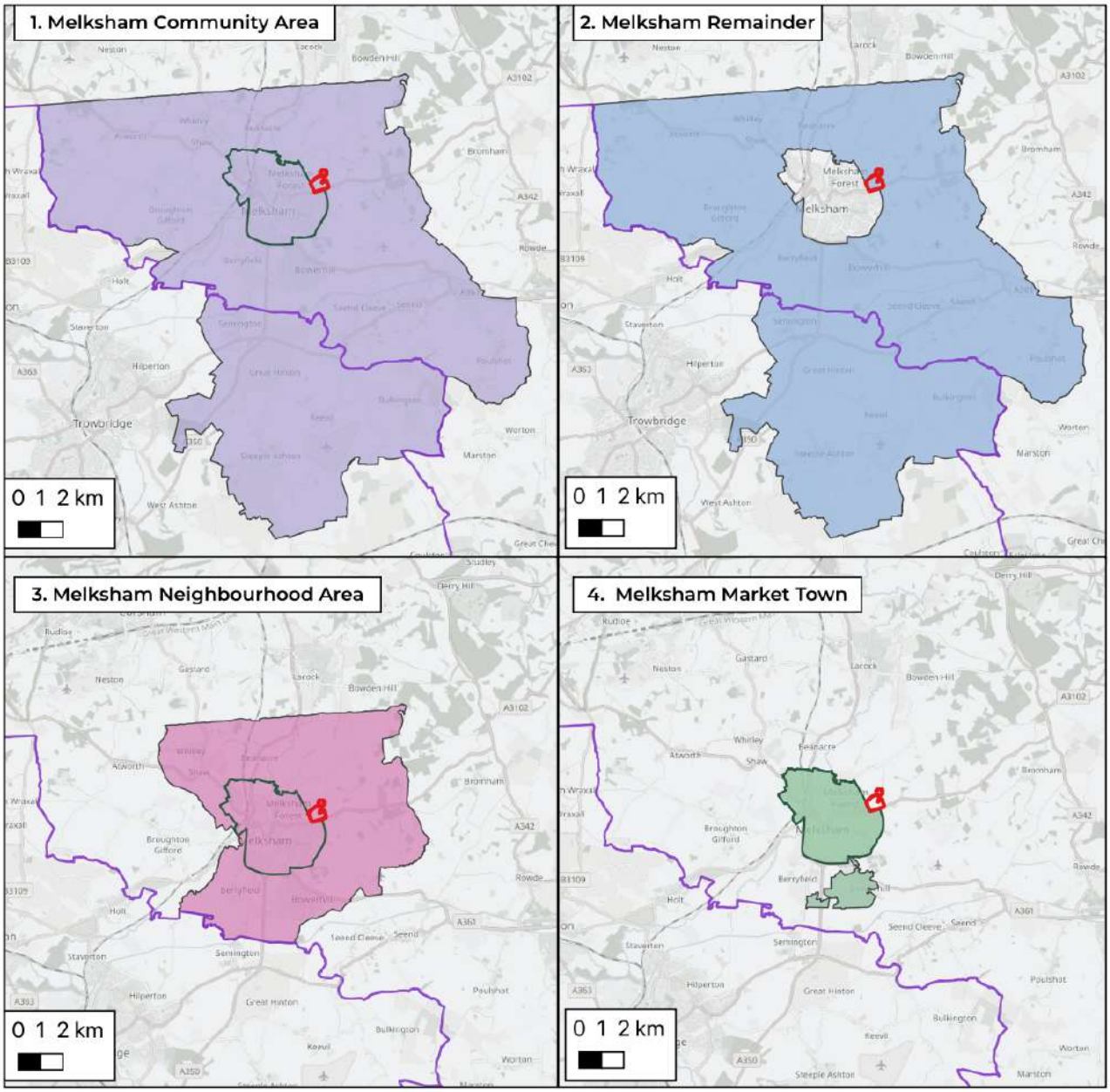
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Appendix 6.2 Legislative context and associated geographies

GEOGRAPHY	DESCRIPTION	LEGISLATION
Chippenham HMA	Local development plan	Local development plan
Melksham Community Area (Map 1)	11 parishes in total, and Melksham Town is the main settlement. Atworth, Broughton Gifford, Melksham, Melksham Without, Steeple Ashton, Bulkington, Keevil, Great Hinton, Poulshot, Semington and Seend	Core strategy
Melksham remainder (Map 2)	Parishes in the Melksham Community Area excluding Melksham Town	Core strategy
Melksham Neighbourhood Area (Map 3)	Joint of Melksham Town and Melksham Without	Joint Neighbourhood Plan
Melksham Town	(Parish Boundary)	
Melksham Market Town (Map 4)	Melksham town and Bowerhill village	Core strategy/Local development plan
Melksham Without	surrounding parish of Melksham Town (which includes Bowerhill ward, Berryfield ward, Beanacre, Shaw, Whitley and Blackmore ward.)	Joint Neighbourhood plan



Legend

- Melksham Town border
- Melksham Community Area
- Melksham Remainder
- Melksham Neighbourhood Area
- Melksham Market Town
- Chippenham HMA

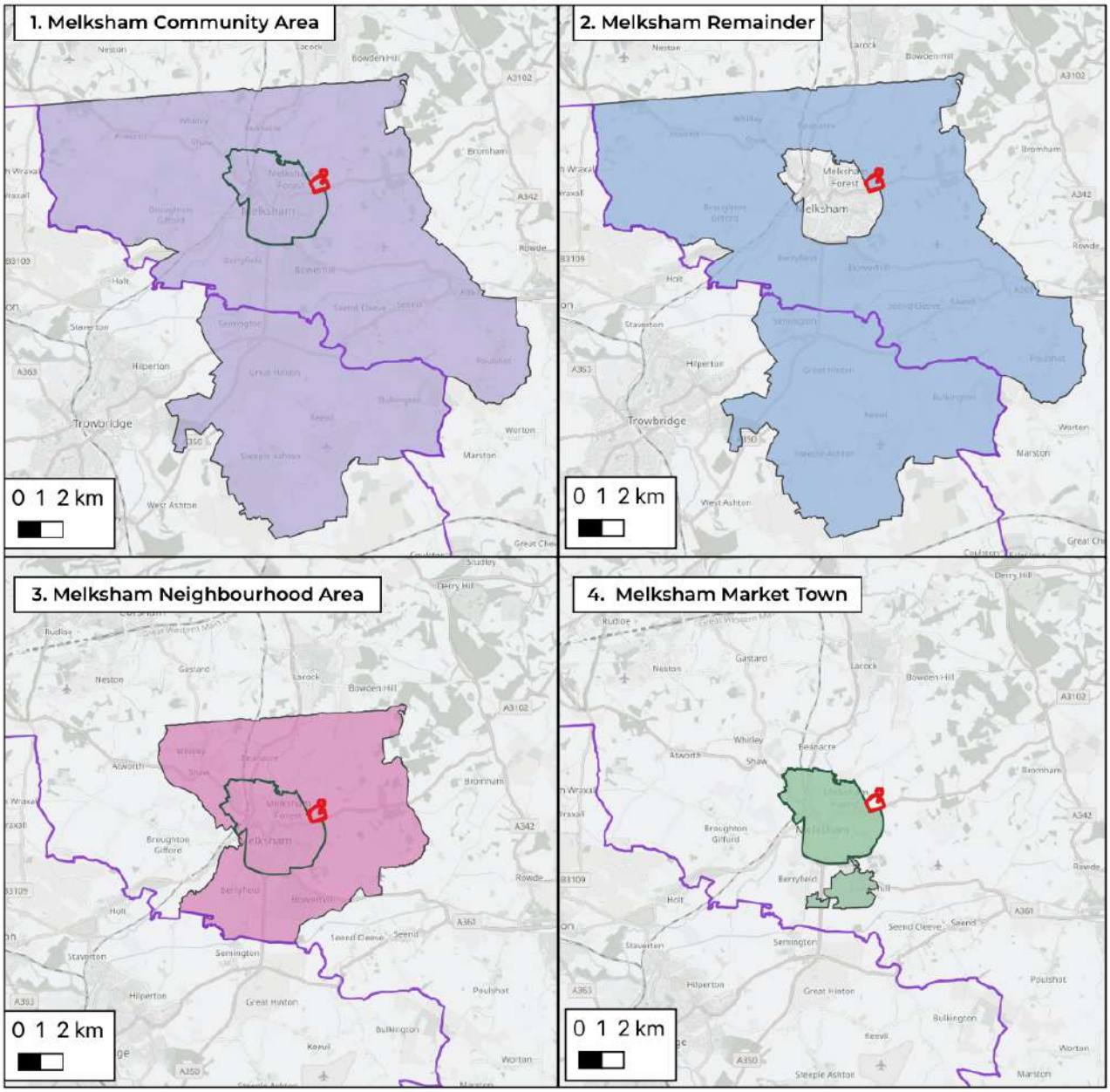
Project	Land at New Road Farm, Melksham
Title	Melksham Policy Areas
Date	March 2024
Scale	1 : 240,000

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Legend

- Melksham Town border
- Melksham Community Area
- Melksham Remainder
- Melksham Neighbourhood Area
- Melksham Market Town
- Chippenham HMA

Project	Land at New Road Farm, Melksham
Title	Melksham Policy Areas
Date	March 2024
Scale	1 : 240,000

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Appendix 7.1 Transport Assessment

LAND AT NEW FARM, MELKSHAM

Transport Assessment

November 2025

Bloor Homes South West

paulbasham associates

Transport Planning | Travel Planning | Civil & Structural Engineering

RESIDENTIAL DEVELOPMENT
LAND AT NEW FARM
MELKSHAM

TRANSPORT ASSESSMENT

CONTROLLED DOCUMENT

Document No:	027.0014/TA/1	
Status:	Final	
	Name	*Date*
Prepared by:	Izzie Drohan	November 2025
Checked by:	James Rand	November 2025
Approved by:	James Rand	November 2025

Revision Record				
Rev.	*Date*	*By*	*Summary of Changes*	*Aprvd*

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SN25 4DL

Paul Basham Associates Ltd
The Lambourn
Wyndyke Furlong
Abingdon
OX14 1UJ

RESIDENTIAL DEVELOPMENT
LAND AT NEW FARM
MELKSHAM

TRANSPORT ASSESSMENT

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4. PROPOSED DEVELOPMENT 24
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Appendix E: Roundabout Access Tracking
Appendix F: Emergency Access Vehicle Tracking
Appendix G: Pedestrian Crossing Visibility Splays
Appendix H: Stage 1 Road Safety Audit
Appendix I: TRICS Outputs
Appendix J: Traffic Flow Diagrams
Appendix K: Site Access Roundabout Modelling Outputs
Appendix L: Cranesbill Road/ Eastern Way Modelling Results
Appendix M: Eastern Way/Snowberry Lane/Rosemary Way Roundabout Modelling Outputs
Appendix N: Snowberry Lane/Spa Road/Campion Drive Roundabout Modelling Outputs
Appendix O: Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout Modelling Outputs
Appendix P: Lowbourne/Bank Street/High Street Mini Roundabout Modelling Outputs
Appendix Q: Sandridge Common/Forest Road Double Mini Roundabout Modelling Outputs
Appendix R: Church Lane/Blackmore Road Double Mini-Roundabout Modelling Outputs

1. INTRODUCTION

1.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates on behalf of Bloor Homes South West to support an outline planning application for a residential development; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; a 100 place nursery and access points for pedestrians and cyclists on Land at New Farm, Melksham. All matters are reserved except for access. Vehicle access would be provided via an improved Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.

1.2 The site is located to the immediate north of Sandridge Common Road, A3102, and approximately 1.8km east of the approximate town centre of Melksham. The site location has been identified within **Figure 1,** whilst the site layout is provided at **Appendix A**.

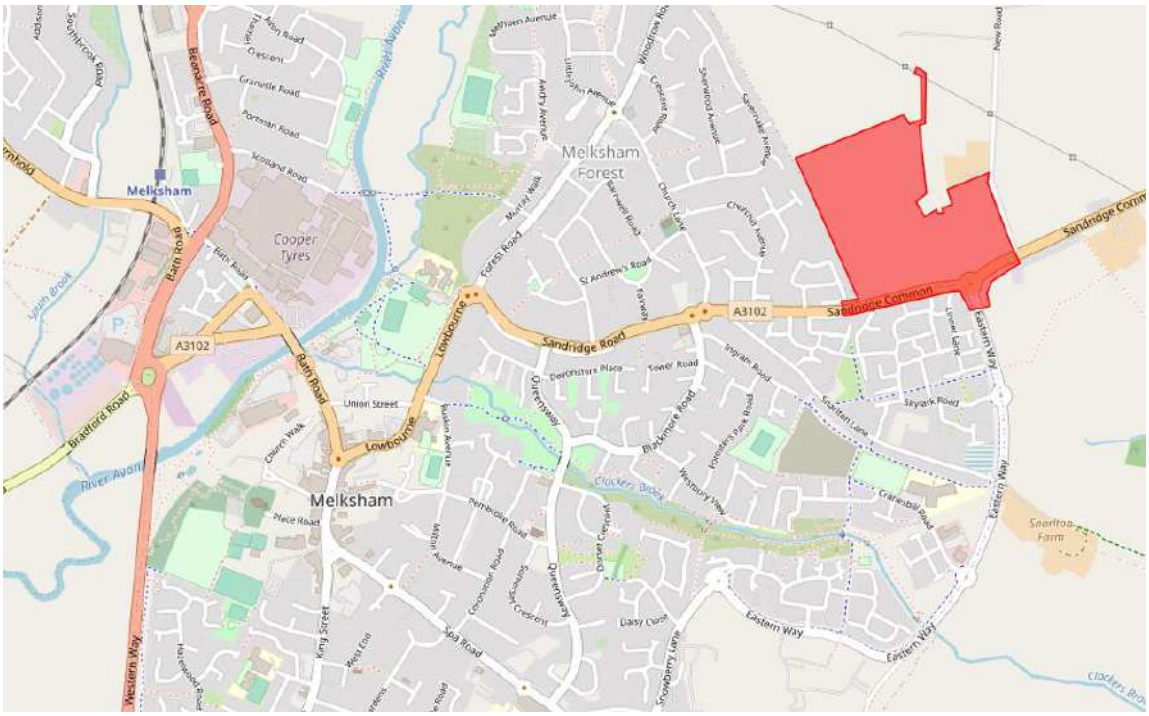


Figure 1: Site Location

1.3 The site is located in Melksham and therefore, the Highway Authority and Local Planning Authority is Wiltshire Council (WC) as it is a unitary authority.

1.4 Paul Basham Associates have prepared a Travel Plan (TP) which should be read in conjunction with this report which aims to reduce the impact of car travel by outlining various measures to promote sustainable travel options.

Site History and Relevant Planning Applications

1.5 The site has been subject to a full planning application (submitted under reference: PL/2024/13045) for 295 homes and an area safeguarded for a 100 space Children's Nursery. At the time of writing, this is a live application. WC's latest highways comments relate to internal layout matters, and therefore it is understood that the other highway principles are agreed, i.e. those that would fall to be considered as part of an outline application with detail of access – including means of access, highway impact and sustainable travel improvements.

1.6 There have been additional applications within the vicinity of the site including to the north (Land South of Woodrow Road) which was withdrawn, an application to the south (Land at Blackmore Farm) which has received consent and an application to the west (Land North of Sandridge Common) which secured planning and is now fully constructed. These applications are detailed below.

PL/2023/01949 – Land at Blackmore Farm, Sandridge Common

1.7 In 2023, an application on Blackmore Farm for 'Outline permission with some matters reserved for demolition of agricultural outbuildings and development of up to 650 dwellings; land for primary school; land for mixed-use hub (class E / class F); open space; provision of access infrastructure from Sandridge Common (A3102); and provision of all associated infrastructure necessary to facilitate development of the site (access only)' was submitted to Wiltshire Council and was refused in March 2024, albeit Wiltshire Council Highways were happy with the assessment undertaken and offered no objection to the proposals.

1.8 As part of this application, a Transport Assessment was submitted which contains information including 2022 traffic surveys of the A3102/Eastern Way junction and the scope of assessment which has been considered in preparing this TA.

1.9 In December 2023, a revised application was submitted on the site for 500 dwellings (under reference: PL/2023/11188) and therefore associated committed development traffic flows have been applied at 500 dwellings given this is the current position. This application received consent in May 2025 and is referenced throughout this report where necessary.

1.10 This Transport Assessment will therefore review national and local policy, the existing conditions, Personal Injury Accident (PIA) data, development proposals including car and cycle parking provision, trip generation and distribution outputs and the subsequent junction capacity modelling before drawing conclusions.

2. PLANNING POLICY

2.1 The proposed development and supplementary reports have been prepared in accordance with national, regional and local policy, including:

- National Planning Policy Framework (NPPF)
- Wiltshire Core Strategy (2015);
- Wiltshire Local Transport Plan (2011);
- Wiltshire Local Plan Review (2023);
- Melksham Neighbourhood Plan (2020); and
- Active Travel England Toolkit.

National Planning Policy Framework (NPPF)

2.2 The NPPF (December 2024) acts as the central guidance for development planning. Designed to make the planning system less complex and more accessible, the NPPF gives greater responsibility to Local Authorities, a 'presumption in favour of sustainable development' and encourages local planning authorities to positively seek opportunities to meet the development needs of their area. As defined in NPPF Annex 2: Glossary, a Transport Assessment is '*A comprehensive and systematic process that considers and sets out transport issues relating to a proposed development, in the context of the vision for the scheme. It identifies measures required to support alternatives to the car such as walking, cycling and public transport, and to promote accessibility and safety, together with measures that will be needed to deal with the anticipated transport impacts of the development*'. The following NPPF paragraphs are relevant to the proposed development:

Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve: a) making transport considerations an important part of early engagement with local communities; b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places; c) understanding and addressing the potential impacts of development on transport networks; d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated; e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains. ***(NPPF Para.109)***
The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making ***(NPPF Para.110)***
In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location; b) safe and suitable access to the site can be achieved for all users; c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code48; and d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach. ***(NPPF, Para. 115)***
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, following mitigation, would be severe, taking into account all reasonable future scenarios. ***(NPPF, Para. 116)***
Within this context, applications for development should: a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use; b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport; c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards; d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations. ***(NPPF, Para. 117)***
All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored. ***(NPPF, Para. 118)***

2.3 It should be noted that the NPPF had a minor update in February 2025 to resolve a cross-referencing point. This did not constitute a change to the policy and the NPPF continues to be dated December 2024.

Wiltshire Core Strategy (2015)

2.4 The Wiltshire Core Strategy sets out to create stronger, more resilient communities, and to contribute to the achievement of sustainable development. In order to do so, the document presents a vision for Wiltshire, this vision has been summarised below.

'By 2026, Wiltshire will have stronger, more resilient communities based on a sustainable pattern of development…

Employment, housing and other development will have been provided in sustainable locations in response to local needs as well as the changing climate and incorporating exceptional standards of design…

Partnership working with communities will have helped plan effectively for local areas and allow communities to receive the benefit of managed growth, where appropriate'.

2.5 In order to achieve this vision, the document produces strategies develop to address the challenges for this region. The Strategies include the following:

- Delivering a thriving economy;

Addressing climate change;

- Providing everyone with access to a decent, affordable home;

Helping to build resilient communities;

Protecting and enhancing the natural, historic and built environment; and

Ensuring that adequate infrastructure is in place to support our communities.

2.6 The site-specific and highways related strategies mentioned above have been summarised within this report:

Strategic Objective 2: Addressing Climate Change

2.7 Climate change is possibly the greatest long-term challenge facing the world today. Tackling climate change is therefore a key Government priority for the planning system. Local authorities are uniquely placed to act on climate change and the planning system can help by contributing to delivering the most sustainable development and shaping communities that are resilient to the unavoidable consequences of a changing climate:

- A sustainable pattern of development, including improvement to the self-containment levels of the main settlements and a reduction in the need to travel, will have contributed towards meeting climate change obligations.
- The supply of energy and heat from renewable sources will have contributed towards meeting national targets and helped to address fuel poverty.
- New development will have incorporated sustainable building practices and where possible will have contributed to improving the existing building stock.
- High energy efficiency will have been incorporated into new buildings and development. New developments will have incorporated appropriate adaptation and mitigation for climate change.
- New developments will be supported by sustainable waste management.

Strategic Objective 3: Providing everyone with access to a decent, affordable home

2.8 This strategy makes provision for at least 42,000 new homes in Wiltshire in the plan period from 2006-2026. It sets out a plan for an appropriate mix of types, sizes and tenures, particularly to address affordable housing needs, and will ensure a continuous supply of housing over the plan period that is aligned to job growth and the delivery of infrastructure:

- New homes will have been delivered in the most sustainable locations and will have been designed to respect the local character.

- More modest growth, proportionate to the size of the settlement, will have been delivered in smaller settlements through site allocation development plan documents, community-led planning policy documents. The benefits from the development of new homes will have been successfully captured for local communities.
- Development will have avoided encroachment on the Western Wiltshire Green Belt and the separate identity of the outlying villages to the west of Swindon protected.
- The flexible approach will have allowed the council, for example, through the preparation of the Site Allocations DPD and local communities preparing neighbourhood plans, to respond positively to opportunities without being inhibited by an overly prescriptive rigid approach which might otherwise prevent sustainable development proposals that can contribute to delivering the strategic objectives of the plan.
- The strategy will have made significant progress towards addressing the shortfall in affordable homes across Wiltshire through ensuring all new schemes of five or more houses deliver appropriate on-site affordable housing provision.
- Land will have been used efficiently and opportunities for all development to below-carbon or zero carbon will have been optimised.
- A range of housing types and sizes will have been provided in order to help meet local needs for different groups of the population in a sustainable manner, including many new homes meeting the needs of an ageing population thereby allowing people to live for longer within their own communities.
- New sites will have been provided for gypsies and travellers.
- Changes in the accommodation of military personnel will have enabled better integration with the wider community.

Strategic Objective 6: To ensure that infrastructure is in place to support communities.

2.9 The anticipated level of growth within Wiltshire will increase demand on local infrastructure services and facilities. The strategy will need to ensure that infrastructure requirements are appropriately planned, secured and implemented to ensure the timely delivery of development proposals. Social and physical infrastructure (e.g. transport improvements) can positively affect the environment, the economy and social well-being. The strategy will need to ensure that strategic and local transport needs are managed in a sustainable manner. The anticipated effects of climate change could potentially increase the frequency of flood events within Wiltshire. Development will need to appropriately address the risk of flooding and, where necessary, provide attenuation measures designed to adapt to the challenge of climate change.

Wiltshire Local Transport Plan (2011 – 2026)

2.10 The Wiltshire Local Transport Plan (LTP) sets out an accessibility vision to help ensure contribution to the national transport goals. The vision has been detailed below.

'To help reduce social exclusion and provide good sustainable access to employment, health care, education, leisure and social activities as well as other vital goods and services so that wherever possible people can satisfy their needs locally and without the need to travel by car.'

2.11 In order to meet this vision, goals and objectives have been produced. The goals of the LTP have been summarised below:

- Supporting economic growth;
- Reducing carbon emissions;
- Better safety, security and health;
- Promote equality of opportunity; and
- Improve quality of life and a healthy, natural environment.

2.12 The objectives of the LTP have been summarised below:

- To provide, support and/or promote a choice of sustainable transport alternatives including walking, cycling, buses and rail;
- To reduce the impact of traffic on people's quality of life and Wiltshire's built and natural environment;
- To minimise traffic delays and disruption and improve journey time reliability on key routes;
- To improve sustainable access to a full range of opportunities particularly for those people without access to a car;
- To reduce the level of air pollutant and climate change emissions from transport;
- To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts;
- To reduce the need to travel, particularly by private car;
- To promote travel modes that are beneficial to health;
- To improve the resilience of the transport system to impacts such as adverse weather, climate change and peak oil; and
- To enhance the journey experience of transport users.

2.13 The Wiltshire Local Transport Plan covers the period between March 2022 to March 2026 and sets out the council's objectives, implementation plans and targets for transport in Wiltshire via a long-term transport strategy, a shorter-term implementation plan and a number of supporting strategies.

- support economic growth;
- reduce carbon emissions;
- contribute to better safety, security and health;
- promote equality of opportunity; and
- improve quality of life and a healthy natural environment;

Wiltshire's Local Plan

2.14 Wiltshire's Local Plan is currently under review. The Wiltshire Council Local Plan Pre-Submission Draft 2020 – 2038 was submitted in September 2023 and provides an emerging vision for Melksham that was subject to public consultation from September to November 2023, with the Stage 2 hearings set to commence on the 11th November 2025. Within the emerging Wiltshire Local Plan, the site is referenced under Policy 20: Land north of A3102 is included. The document outlines the development being capable of delivering approximately 285 dwellings and a 100-space nursery and states that access is possible via a fourth arm off the existing roundabout on A3102.

2.15 Furthermore, within the Policy, infrastructure and mitigation requirements are set out including:

- vehicular access from the existing roundabout on the A3102 adjacent to the southern boundary;
- offsite infrastructure improvements to water supply and foul water network;
- introduce green and blue infrastructure through the development that incorporates new woodland and/or tree planting;
- provision of a suitable buffer either side of the watercourse that runs south to north through the site;
- funding contributions towards early years, primary and secondary education and on, or off-site healthcare capacity to meet the needs created by the development; and
- measures to positively support walking, cycling and public transport use between the site, Melksham town centre and Melksham railway station and linking into existing networks.

Joint Melksham Neighbourhood Plan (2020 – 2026)

2.16 The Melksham Neighbourhood Plan was adopted in July 2021 and gives the communities of Melksham Town and Melksham Without real local planning power in guiding the conservation and development of the area until 2026.

2.17 The Melksham Neighbourhood Plan is shaped by the following Vision:

'The vision of the Neighbourhood Plan is to make the town of Melksham and the parish of Melksham Without great places to live, to work, to play and to visit; attractive, healthy, convenient and environmentally sustainable, with access to employment, education, shops and services via walking, cycling and public transport'.

2.18 The aforementioned vision s underpinned by the following objectives:

- A 21st century community… meeting the challenges of sustainable development and climate change through:
  - Reducing carbon emissions to contribute to carbon neutrality in Wiltshire by 2030
  - Planning for new development that addresses the impact of climate change
  - Encouraging and promoting new development that addresses the impact of climate change
- Great places to live… where our housing and infrastructure needs are balanced with global and regional issues;
  - Enabling and promoting the importance of early community engagement in change and development
  - Supporting sustainable development of new housing and associated facilities within settlements, and exceptionally, adjacent to settlements
  - Promoting the delivery of infrastructure to address the needs of the population
- Great places for shopping, working and getting around through;
  - Protecting and enhancing the vitality of Melksham town centre
  - The retention, regeneration and intensified use of previously developed employment land
  - Supporting improved transport infrastructure for the increasing Melksham population
  - Encouraging journeys by rail and bus together with improving cycle and walking routes to reduce the need to travel by car.
- Places where community well-being and open spaces are protected and enhanced by;
  - Preserving and increasing our network of green spaces
  - Promoting opportunities for people to lead healthier lifestyles with a greater sense of well-being
  - Protecting, improving and expanding existing services and community facilities to promote health, education and social needs
- A locally distinctive and high quality built and natural environment;
  - Conserving and enhancing the quality of the natural landscape
  - Ensuring that new development is sympathetic to our built heritage and the character of the area, with high standards of design.

Active Travel England Toolkit

2.19 Active Travel England have produced a toolkit to assess merits for active travel in the development proposal for any development over 150 units in size. The guidance indicates the importance of moving away from 'predict and provide' and towards 'vision and validate'/'decide and provide' which is also supported by the DfT Circular 01/2022.

2.20 Active Travel England (ATE) states that Transport Assessments should:

- Forecast the multi-modal movements generated by a development, quantifying the additional trip generation and the distribution and assignment;
- Provide a qualitative analysis of the current infrastructure in the surrounding area (which may include using the Cycling Level of Service Tool in LTN 1/20), taking into account how additional movements across all modes of transport will impact upon the capacity of public transport, walking, wheeling and cycling networks; and
- Provide detail (and justification) of any proposed improvements to infrastructure and the proposed delivery mechanism, as well as any other supporting strategies that seek to enable an increase in walking, wheeling and cycling rates.

2.21 High quality walking infrastructure from the site to public transport should be provided, which allows people to carry out daily duties. ATE expect walking routes to:

- be 2m wide (with limited pinch points of 1.5m due to street furniture) and localised widening to accommodate peak usage;
- be step-free;
- have a smooth, even surface;
- be uncluttered;
- have street lighting; and
- include appropriate crossings in compliance with LTN 1/20 Table 10-2 and Inclusive Mobility.

2.22 The development proposals and site design will take this into consideration when tying into the surrounding pedestrian infrastructure. The existing pedestrian infrastructure along Sandridge Common Road and Eastern Way (which provides access to schools and local facilities) is all step free and of suitable width as aforementioned.

2.23 The Active Travel Toolkit (attached as **Appendix B**) has been utilised to determine the sustainability of the proposed development site. The site passes 8 out of the 10 of the criteria within the checklist and the criteria that the site does not meet can be met through condition mainly related to the provision of a bus service being implemented.

3. SITE LOCATION

3.1 The site is located in Melksham, approximately 9km northeast of Trowbridge and 9km south of Chippenham. The development site is bound to the north by undeveloped land, to the east by New Road, to the South by the Sandridge Common (A3102) and the west by residential development. The local highway network is shown in **Figure 2** below.



Figure 2: Site Context Plan

3.2 The site currently comprises agricultural land and as aforementioned has been subject to a full planning application (ref: PL/2024/10345) for 295 homes and an area safeguarded for a 100 space Nursery. The existing site conditions are outlined in **Photograph 1**.



Photograph 1: Existing Site Frontage along Sandridge Common

Local Road Network

3.3 Sandridge Common (A3102) routes along the southern boundary of the site and measures approximately 7m in width with a shared footway/cycleway measuring 3m along the southern side of the carriageway which continues into Melksham town centre. Within the vicinity of the site, a 40mph speed limit is in place along Sandridge Common with a 30mph limit introduced approximately 90m west of the site's western boundary. The conditions on Sandridge Common are demonstrated in **Photographs 2** and **3**.



Photograph 2: Conditions along Sandridge Common



Photograph 3: Existing roundabout to the east

3.4 Approximately 215m east of the proposed secondary access point, Sandridge Common (A3102), meets a 3-arm roundabout with Eastern Way and Sandridge Common. Eastern Way is a single carriageway Road that measures approximately 7.3m wide and is subject to a 40mph speed limit.

3.5 Approximately 150m east of the Sandridge Common roundabout, there is a priority junction with New Road (**Photograph 4**), a single carriageway road that measures approximately 4.2m wide and is subject to national speed limit (which would be 60mph). New Road continues for 1.2km north before reaching a further priority junction with Woodrow Road/Lower Woodrow. Lower Woodrow continues north to reach Bewley Common and Lacock.



Photograph 4: New Road

3.6 From the site, the A3102 routes west approximately 1.1km to reach a double mini roundabout with Forest Road and Lowbourne. From Lowbourne, Melksham town centre can be accessed. To the north of Lowbourne and via Bank Street (A3102) the A350 can be accessed via the Farmers Roundabout. The A350 is located west of Melksham and is a primary route that runs from Junction 17 of the M4 to Poole in Dorset.

Existing Traffic Conditions

3.7 In February 2024 as part of the full planning application on the site, 2 x 7-day ATC surveys were undertaken, with one installed on A3102 Sandridge Common Road to the west of the existing A3102/Eastern Way roundabout and one installed along New Road to the east of the site. The results of the two ATC surveys are summarised in **Table 1** and **Table 2**, with the full outputs attached as **Appendix C**.

A3102 Sandridge Common Road	Daily Flow (7-day Average)	85th percentile Speeds (mph)
Eastbound	3624	41.9
Westbound	3498	39.6

Table 1: ATC Traffic Speed Survey Results (A3102 Sandridge Common Road)

New Road	Daily Flow (7-day Average)	85th percentile Speeds (mph)
Northbound	727	36.0
Southbound	794	39.6

Table 2: ATC Traffic Speed Survey Results (New Road)

3.8 As summarised within **Table 1**, 85th percentile speeds along the A3102 Sandridge Common Road are 41.9mph eastbound and 39.6mph westbound. In terms of daily 7-day average traffic flows, the A3102 Sandridge Common typically accommodates 3624 vehicles eastbound and 3498 vehicles westbound.

3.9 As summarised within **Table 2**, 85th percentile speeds along New Road are 36.0mph northbound and 39.6mph southbound. In terms of daily 7-day average traffic flows, New Road accommodates 727 vehicles northbound and 794 vehicles southbound on a typical day, which equates to 61 vehicles per hour northbound and 66 vehicles per hour southbound across a 12 hour period.

Pedestrian and Cycle Network

3.10 Along Sandridge Common within the vicinity of the roundabout junction with Eastern Way a shared footway/cycleway, that measures 3m wide, runs along the southern side of the carriageway (**Photograph 5**) towards Melksham Town Centre. The shared arrangement ends approximately 200m west of the A3102/ Eastern Way Roundabout, at the pedestrian/cycle connection to Redwing Road. Beyond this to the west the pedestrian footway reduces to 2m in width and continues to route into Melksham. Along the northern side of the A3102 (across the site boundary), no footways or cycleways are present.



Photograph 5: Shared Footway/Cycleway along southern side of Sandridge Common Road

3.11 To the west of the site, Sandridge Common Road is equipped with 2m wide lit footways. Approximately 10m west of the speed limit change a 2m footway begins along the northern side of Sandridge Common Road.

3.12 In addition, along the pedestrian route into Melksham town centre, there are appropriately placed dropped kerbs and tactile paving to facilitate the safe movement of pedestrians. The existing pedestrian conditions are demonstrated within **Photographs 6** and **7**.



Photograph 6: Pedestrian infrastructure along Skylark Road junction



Photograph 7: Existing pedestrian crossing infrastructure along Sandridge Common Road

3.13 As detailed above, a shared footway and cycleway is provided along the footway which flanks the south of Sandridge Common. As mentioned, this shared arrangement ends approximately 240m west of the A3102/ Eastern Way Roundabout at Fieldfare Way but, continuous to flank Eastern Way along its entirety to Spa Road, southeast of Melksham.

3.14 The National Cycle Route 403 (NCR403) is located approximately 1.3km west of the proposed site at King George V Park and can be accessed via a 5-minute cycle long the A3102. From the King George V Park, NCR401 routes north towards Lacock (21-minute cycle) and towards Chippenham (21-minute cycle) and also provides a link to the National Cycle Route 4 (NCR4), located approximately 3.3km south (11-minute cycle). The NCR4 provides direct, off-road links to Trowbridge, a 11.7km southwest of the proposed site (37-minute cycle), and Devizes, 13.3km southeast of the proposed site (56-minute cycle).

3.15 Wiltshire's draft Local Cycling and Walking Infrastructure Plan (LCWIP) 2022 states that a full Melksham LCWIP will be published in 2024. It also contains a map which shows existing primary and secondary cycle routes and is shown in **Figure 3**.

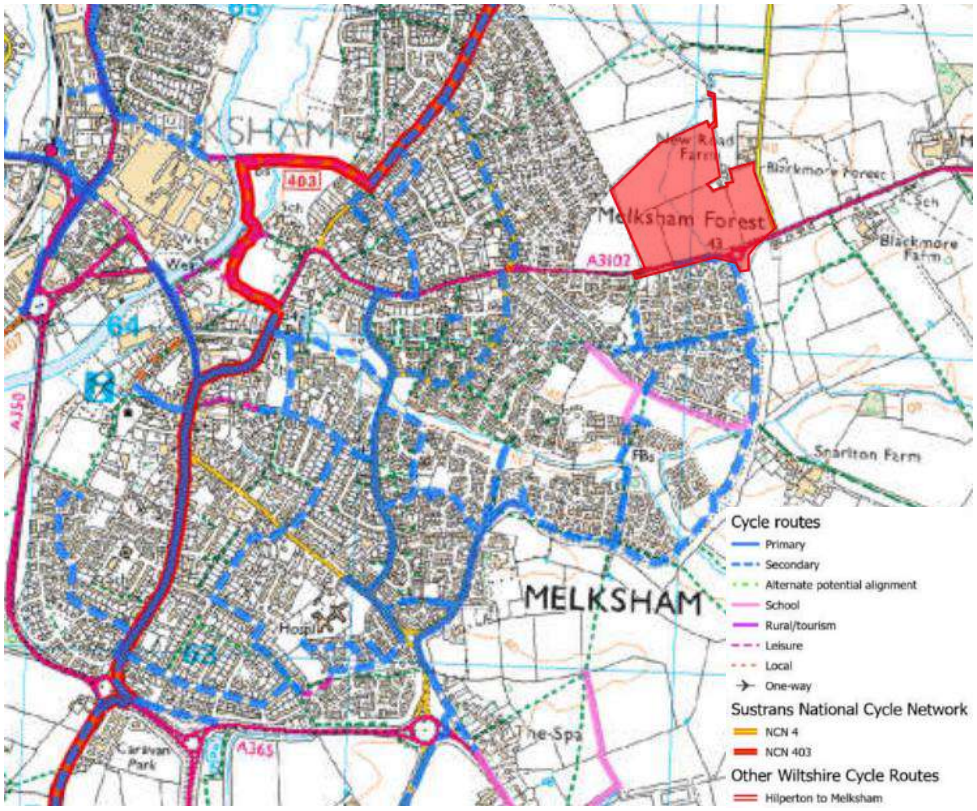


Figure 3: Wiltshire LCWIP

3.16 It can be seen in **Figure 3** that the site is north of an existing secondary route, which provides a route from the site into Melksham Town Centre and onto the National Cycle Network 403 route, which routes from Bowerhill in the south and Marlborough in the east. The southern section of the 403 route connects into the long distance NCN route 4, which connects London to Fishguard in Wales.

Public Rights of Way

3.17 There is an extensive Public Rights of Way (PRoW) network within immediate proximity of the site. The nearest ProW is located to the south of the site (route MELK103) and provides footpath access to Snarlton Lane and onward connectivity to Melksham town centre, via a series of other short footpaths on the PRoW network. There are multiple bridleways to the east of the site which would provide leisure opportunities for pedestrian and cyclists. The network, with respect to the proposed development, is shown in more detail in **Figure 4**.

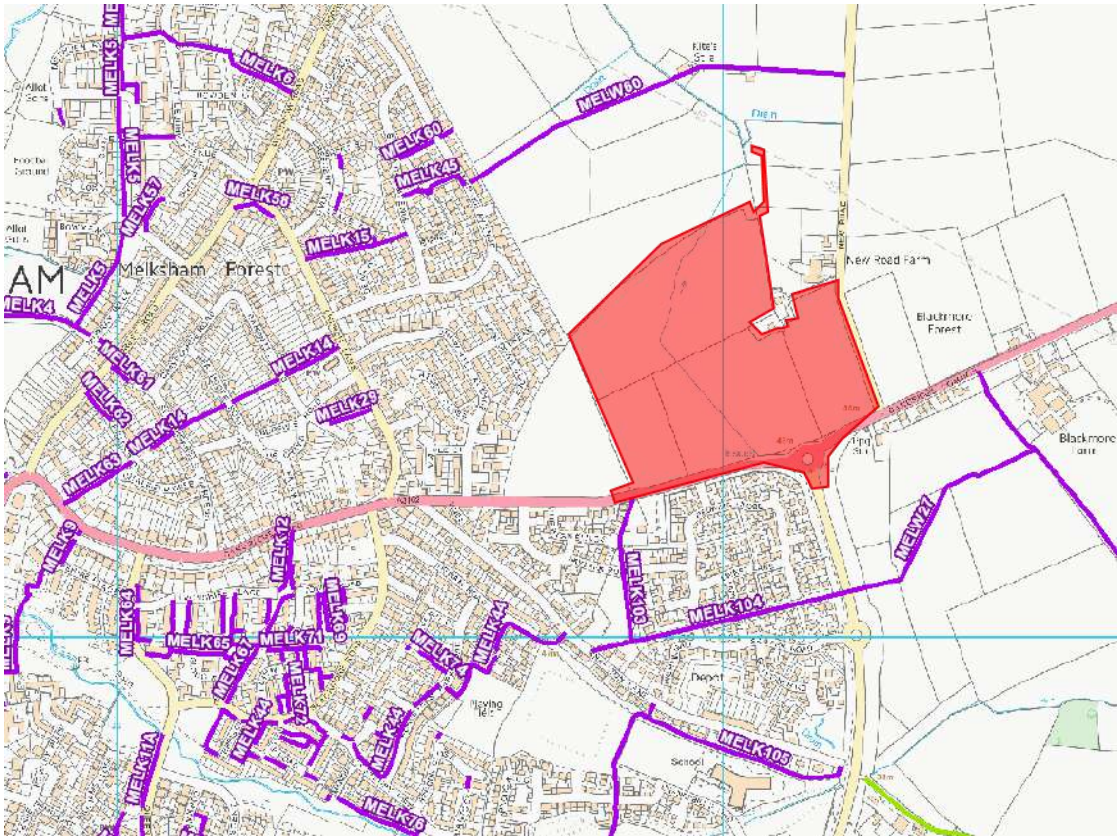


Figure 4: Public Rights of Way Map (Source: Wiltshire Council)

Accessibility to Local Amenities

3.18 It is generally accepted that walking and cycling provide important alternatives to the private car and should be encouraged to form part of longer journeys by public transport. The Chartered Institute of Highways and Transportation (CIHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:

- Most people walk to a destination that is less than one mile or 1.6km (Planning for Walking, 2015);
- The bicycle is a potential mode of transport for all journeys under 8km (Planning for Cycling, 2015); and
- Walking distances to bus stops should not exceed 400 metres, with people prepared to walk twice as far to rail stations (planning for Walking, 2015).

3.19 The location of the site in proximity to the local amenities offers a good opportunity to create a sustainable development. A short summary of the key amenities that would be of interest to the anticipated demographic of the proposed development within the locality of the site is presented in **Table 3** below, applying the average walking speed of 1.4m/s as classified in CIHT's 'Providing for journeys on foot' (2000, Table 3.2).

Amenity	Approximate Distance	Approximate Walking Journey Time	Approximate Cycling Journey Time
Proposed Nursery (within proposed development)	250m	2 minutes	1 minute
Convenience Store (Londis)	600m	7 minutes	1 minute
Convenience Store (Co-operative Food)	750m	10 minutes	2 minutes
Public House (The Foresters Arms)	750m	10 minutes	2 minutes
ATM	750m	10 minutes	2 minutes
Primary School (Forest and Sandridge Primary School)	800m	13 minutes	3 minutes
Fish and Chip Shop (Forest Fish Bar)	850m	14 minutes	3 minutes
Place of Worship (St Andrews Church)	860m	14 minutes	3 minutes
Public House (Water Meadow)	975m	15 minutes	3 minutes
Primary School (Forest and Sandridge Primary School)	975m	15 minutes	3 minutes
Melksham Town Centre	1.8km	24 minutes	5 minutes
Melksham Train Station	2.5km	30 minutes	9 minutes
Secondary School (Melksham Oak Community School)	3.2km	55 minutes	14 minutes

Table 3: Summary of Local Amenities

3.20 As summarised in **Table 3**, there are key amenities within walking distance of the site location that would be of important use to future residents. Facilities such as the nearby primary schools and range of convenience stores would be essential for everyday use.

Public Transport

Bus

3.21 The closest bus stop to the site from the proposed site access is the 'Skylark Road' bus stop, located on the southern side of Skylark Road, circa 330m (4 minute walk) south of the development. This stop provides a circular shuttle bus which runs into Melksham and back by Services 14 and 15, run by Frome Bus, however, it should be noted this is only a request stop at certain times. Additional bus services are available from the 'Ingram Road' stop located along Blackmore Road circa 750m west of the site. A summary of the regular bus services within the vicinity of the site are outlined in **Table 4**.

Bus Service	Bus Stop Location	Destination	Frequency		
			Monday-Friday	Saturday	Sunday
14/15 Frome Bus	Skylark Road	Melksham Circular	Service: Hourly First Bus: 08:16 Last Bus: 17:47	Service: Hourly First Bus: 08:42 Last Bus: 17:15	No Service
271/272/273 Traveline	Blackmore Road	Devizes – Bath City Centre	Service: Hourly First Bus: 06:54 Last Bus: 22:24	Service: Hourly First Bus: 07:11 Last Bus: 22:24	Service: 6 per Sunday (273 only) First Bus: 09:58 Last Bus: 19:55
X34	Bank Street	Chippenham - Frome	Service: Hourly First Bus: 06:54 Last Bus: 18:06	Service: Hourly First Bus: 07:05 Last Bus: 17:59	No Service
555 (School Service)	Blackmore Road/Sandridge Common	Melksham – Corsham School	2 Services daily at 07:46am (to school) and 15:05 (from school)	No Service	No Service

Table 4: Local Bus Services

3.22 In addition to the services raised above, the X76 service routes along Sandridge Common past the site. The X76 operates once a day and routes from Marlborough (via Melksham) to Bath in the morning and provides a return journey in the afternoon.

3.23 As part of the development proposals, and discussed in more detail in **Section 4**, it is proposed that two additional bus stops will be provided along Sandridge Common Road which will be located within 400m of most of the site.

Rail

3.24 Melksham Train Station is located 2.5km west of the site and is accessible either via a 7 minute drive or via the 271 bus service (37 minute journey). The station is operated by Great Western Railway and provides 8 cycle parking spaces. There are regular services, 9 in each direction per day, towards Westbury and Swindon which provide further onward connections to the west, and east towards Sailsbury and Southampton Central. This service also provides connections to local stations including Trowbridge and Chippenham. The frequency of the services and the variety of destinations make travel by rail suitable for both commuter and leisure travel.

Summary of Site Accessibility

3.25 The proposed development has been shown to be well located to support a variety of travel modes, and the sustainability of the site has been confirmed by WC Highways as part of the full planning application. The site is well connected to the local road network along with the strategic network including the A3102 and A350. The local pedestrian and cycle networks are well located to promote use by future residents and offer great opportunities for people to walk and cycle to their destinations. The site is also well located to support public transport use with regular bus services located in close

proximity as well as being able to access the local rail network. Such a summary is concurred within the Planning for Melksham July 2023 document, but more importantly the site is currently allocated under Policy 20 of the emerging Local Plan.

Personal Injury Accident (PIA) Data

3.26 Personal Injury Accident (PIA) Data has been obtained from the Department for Transport's (DfT) Mapping Application for Visualising Road Injury Casualties (MAVRIC) assessed to establish the existing safety conditions on the local highway network within the vicinity of the proposed site. This data has been collated for a five-year period from 2020-2024.

3.27 **Figure 5** demonstrates that there have been no collisions resulting in personal injury occurring along the A3102 or Eastern Way within close proximity to the site.

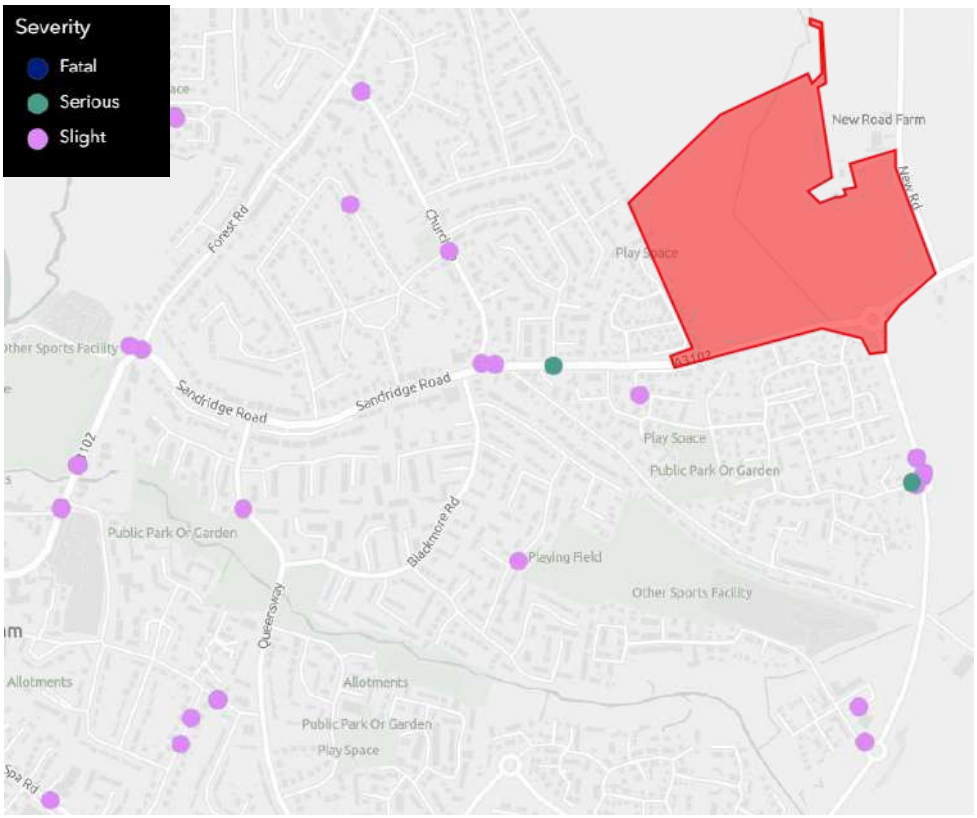


Figure 5: PIA data for the Site 2020 – 2024 (Source: DfT)

3.28 As per **Figure 5**, there are incident clusters noted at the Church Lane/ Blackmore Road /Sandridge Common Road double mini roundabout, at the Forest Road/ Lowbourne double mini-roundabout and at the Eastern Way/ Skylark Road roundabout.

3.29 Upon a closer inspection of the incidents that have occurred at the Church Lane/Sandridge Common Road mini roundabout, 3 incidents have occurred within the last 5 year period, with the 2 that occurred on the roundabout classified as 'slight' in nature and 1 incident classified as 'serious', although this did not occur on the mini roundabout. One incident involved a pedestrian and the other involved 2 cars with one casualty. However, it is noted that these incidents were classified as 'slight' in nature and these isolated incidents do not suggest that there are any patterns in the frequency or distribution of incidents and therefore the development proposals will result in a negligible impact upon the operation of the local road network.

3.30 Upon a closer inspection of the incident cluster at the Forest Road/Lowbourne double mini-roundabout, both incidents were classified as 'slight' in nature with one incident involving a pedal cyclist and the other involved 2 cars with 1 casualty.

3.31 Upon a closer inspection of the incident cluster around the Eastern Way/Skylark Road roundabout, 5 incidents have occurred in this location with 4 classified as 'slight' and 1 classified as 'serious' in nature. The serious incident involved a pedal cyclist and a vehicle occupant, with 3 of the 'slight' incidents involving 1 casualty and the last collision involved 3 vehicles and 3 casualties.

3.32 Overall, the recorded incidents do not suggest that there are any patterns in the frequency or distribution of incidents, with highways not raising any issues related to the collision record as part of the full planning application, and therefore the development proposals should be considered acceptable on this basis.

4. PROPOSED DEVELOPMENT

4.1 The proposed development comprises 295 residential units, including a mix of affordable and private dwellings and an area of land safeguarded, 0.4ha in size for a Children's Nursery. The current accommodation schedule is unknown due to the application being submitted in outline, whilst the proposed site masterplan is attached within **Appendix A**.

4.2 As part of the full planning application, Bloor Homes sought to positively engage with Wiltshire Council Officers in relation to New Road, as it is a known local concern that it is currently utilised as a 'rat run' for vehicles looking to reach south east Melksham avoiding the A350.Upon a review of New Road, it is apparent that further traffic calming would not be appropriate for a number of reasons. Firstly, given it already operates in a priority working arrangement large sections of its length any further traffic calming would do little to dissuade users of this route as it would not present a significant enough change to encourage users to change behaviour. Secondly, any traffic calming proposed would be unlikely to receive technical approval given the existing substandard nature of the carriageway. Therefore, on this basis New Road will not undergo any changes as part of the proposed development, an approach which was considered acceptable by WC Highways as part of the full application.

Access Arrangements

4.3 Access to the site will be via one main point of access via a newly constructed 4th arm on the Sandridge Common/Eastern Way Roundabout. As part of the full planning application, it was proposed that the whole roundabout be re-designed into a 'compact' style and this design is also proposed as part of this application. The proposed design of this roundabout is in accordance with DMRB CD116 guidance (also proposed as part of the full planning application), with the proposed drawing attached as **Appendix D**. The design of this roundabout has largely been agreed with WC Highways as part of the full planning application, subject to the necessary Section 278 works.

4.4 The geometries of the roundabout are shown at **Appendix D**, with the roundabout design complying with DMRB 116 and specifically, the ICD of the roundabout has been reduced from 42m to 36m to comply with requirements with a compact roundabout. Whilst all entry arms have been reduced to a consistent 4m with 1m hatch alongside, enabling a circulatory carriageway of 6m, and all exit arms measure 4.5m, which in combination create a 4 arm roundabout which is reduced in scale compared to the existing arrangement. All entry path radius' have been assessed and measure <70m, as per DMRB's requirements for compact roundabouts. The reduced scale of the roundabout has been designed alongside swept path analysis to ensure the largest vehicles (such as articulated HGVs) can still navigate the junction. Swept path analysis has been completed for this access point, with the subsequent drawing attached as **Appendix E**.

4.5 The second point of access will be located approximately 250m west of the roundabout along Sandridge Common Road that will take the form of an emergency access arrangement and will measure 3.7m wide and will be bollard controlled, which was considered acceptable by WC Highways. Fire tender tracking has been completed at the proposed access point highlighting that a fire tender can access the site should the primary access be blocked, as demonstrated within **Appendix F**.

Pedestrian Infrastructure

4.6 To allow for safe pedestrian movement, 2m footways will be provided along all internal roads. Additional pathways throughout the site will also be provided to increase pedestrian permeability and will also measure 2m in width. Where segregated footways are not provided, a 6m road width will be provided to allow for a shared surface arrangement.

4.7 As part of the roundabout upgrades, an LTN 1/20 compliant footway/cycleway measuring 3m and crossing points are also proposed along all of the roundabout arms to tie into the existing infrastructure on the southern side. Additionally, it is proposed that there will be two signalised pedestrian crossing points located along Sandridge Common, with one located adjacent to the emergency access and one located approximately 80m east of the roundabout that will facilitate access to the bus stops proposed as part of the consented Blackmore Farm application (ref: PL/2023/11188). Furthermore, two additional bus stops are proposed as part of this scheme that will be located along Sandridge Common. The subsequent location of the pedestrian crossing points with pedestrian visibility splays from the eastern pedestrian point of 1.5m x 53m in the primary direction and 1.5m x 120m I the secondary direction and visibility splays from the western point of 1.5m x 112m in both directions in accordance with the aforementioned ATCs are attached within **Appendix G**.

4.8 Furthermore, to comply with LTN 1/20, an internal shared footway/cycleway measuring 3m wide route has also been proposed on the western side of the 4th arm of the Sandridge Common roundabout to further enhance the pedestrian/cyclist facilities within the site.

4.9 As part of the latest consultation comments provided by WC highways on the full application, there were comments that related to pedestrian access specifically the inclusion of a 3m leisure connection from the site to the New Road frontage, provision of a 2m footway connecting dwellings to the proposed crossing on the eastern side of the roundabout and the removal of the proposed pedestrian connection to Gladstone Road to the east of the site if this is not deliverable. While this scheme will be outline in nature, the aforementioned points will be considered as part of any subsequent Reserved Matters Application.

Stage 1 Road Safety Audit

4.10 The roundabout access re-design has been subject to a Stage 1 Road Safety Audit that has been undertaken by an external auditor, with the Stage 1 RSA and Designers Response attached within Appendix H.

4.11 Within the roundabout access RSA, the auditors raised that the Polished Stone Value (PSV) should be provided, that the speed limit should be clearly signposted within the development, that the 30mph speed limit should be extended along Sandridge Common, details on the carriageway drainage should be provided as well as specific design elements for the roundabout arm, which will be suitably addressed through the Designers Response.

Vehicle Parking Provision

4.12 Although the application is outline, any reserved matters application will include a layout in which parking space dimensions will be provided in accordance with WC's Parking Standards.

4.13 Wiltshire Council's (WC) adopted car parking standards, which are contained within the Wiltshire Local Transport Plan (2011), have been consulted. The residential car parking standards are set out in **Table 6**, and it is worth noting that these are minimum standards.

Property Type	Minimum Spaces
1 bed	1
2-3 bed	2
4+ bed	3
Visitor Spaces	0.2 spaces per dwelling

Table 6: Residential Parking Standards (Wiltshire Council)

4.14 Vehicle parking spaces will measure 2.5m x 5m with parallel spaces measuring 2.5m x 6m, 6m aisle widths are also provided throughout the site.

Cycle Parking Provision

4.15 For the future provision of cycle parking standards, the Wiltshire LCWIP standards (2022) have been utilised, which are set out below in **Table 7**. As part of any future reserved matters application, it would be ensured that cycle parking would be sheltered, secure and accessible and where garages are used to facilitate bicycle storage, they will have internal dimensions of 6m x 3m.

Property Type	Minimum Spaces	Unit Numbers	Proposed Provision
1 bed	1	49	49
2 bed	2	56	112
3 bed	3	99	297
4+ bed	3	91	273
Visitor Spaces	1 space per 20 dwellings	-	15
TOTAL		**295**	**746**

Table 7: Proposed Cycle Parking Provision

Servicing and Emergency Access Arrangements

4.16 Refuse collection will take place on site, with the refuse vehicle able to get within 25m of each property or 25m of a bin collection point. Residents will also not have to drag their bins more than 30m, in accordance with Manual for Streets guidance.

4.17 In addition, a fire tender would be able to get within 45m of every dwelling.

5. TRIP GENERATION AND DISTRIBUTION

5.1 The proposed development will be submitted in outline and comprises 295 residential dwellings and an area safeguarded for a proposed Children's Nursery. The area safeguarded for the Nursery has not been included within the assessment, as it is expected that this will be self-serving to the development and therefore no further vehicular trip generation external to the site has been accounted for.

5.2 The proposed development trip generation was set out as part of the full planning application (PL/24/10345) Transport Assessment, with WC highways agreeing this approach. Therefore, the same trip rates, distribution and modelling results have been set out below.

5.3 The 'private houses' criteria has been utilised for the most robust assessment, as these trip rates are typically higher than affordable housing. The results of the TRICS assessment are demonstrated in **Table 8** below with the full outputs in **Appendix I**.

TRICS (V.7.10.2)	AM Peak (0800-0900)		PM Peak (1700-1800)		12 Hour Total Daily Trips
	Arrivals	Departures	Arrivals	Departures	
Trip Rate Per 1 dwelling	*0.137*	*0.390*	*0.361*	*0.166*	*4.522*
Trip Generation (295 dwellings)	40	115	106	49	1334

Table 8: Proposed Development Trip Generation (TRICS v.7.10.2)

5.4 The proposed development is likely to generate in the order of 155 trips in both the AM and PM peaks, with 1334 trips generated across a 12-hour period. It should be noted that the trip rates presented in **Table 8** are higher than those submitted (two-way movements of 0.515 AM Peak and 0.489 PM peak, compared to the above 0.527 AM Peak and 0.527 in the PM peak), and approved, as part of planning application 15/12454/OUT (Land North of Sandridge Common) and therefore are considered robust.

Trip Distribution

5.5 In order to gain an understanding of how the traffic generated by the site may impact the operation of the local highway network, the distribution figures agreed as part of the consented adjacent Land North of Sandridge Common application (approved under 15/12454/OUT) have been utilised here with the appropriate additional distributions calculated. The resultant traffic distribution and traffic flow diagrams are shown in **Appendix J** which were also included as part of the full planning application which have been accepted by WC. In summary it assumes the following distribution of trips (**Table 9**):

Link			Distribution Split		
Sandridge Common East	New Road		21%	10%	
	Sandridge Common (East)			11%	
Sandridge Common West	Church Lane		41%	5%	
	Blackmore Road			13%	
	Sandridge Common (West)	Bank Street		23%	13%
		High Street			10%
Eastern Way	Bath Road		38%	10%	
	Western Way			28%	

Table 9: Trip Distribution

Trip Assignment

5.6 Utilising the trip distribution information, applied to the vehicular trip generation set out in **Table 9** above, the trip assignment per link is summarised in **Table 10** below (an approach accepted as part of the full planning application), with the resulting development traffic assignment included within **Appendix J**.

Link			Distribution Split				
			AM Peak			PM Peak	
Sandridge Common East	New Road		33	16		33	16
	Sandridge Common (East)			17			17
Sandridge Common West	Church Lane		64	8		64	8
	Blackmore Road			20			20
	Sandridge Common (West)	Bank Street		36	20	36	20
		High Street			16		16
Eastern Way	Bath Road		59	16		59	16
	Western Way			44			44

Table 10: Trip Assignment

5.7 The development impact is distributed fairly evenly across the highway network. The impact of this additional vehicular traffic is examined in more detail in the following chapters.

6. HIGHWAYS CAPACITY ASSESSMENT

6.1 In order to quantify the impact of the development on the highway network, as part of the full planning application, independent traffic surveys were undertaken in February 2024. The surveys were as follows:

- Two Automatic Traffic Counts (ATC) on Sandridge Common Road and New Road
- Manual Classified Counts (MCC) at:
    - Eastern Way/Sandridge Common Road Roundabout
    - Cranesbill Road/Eastern Way Roundabout
    - Eastern Way/Snowberry Lane/Rosemary Way Roundabout
    - Spa Road/Campion Drive/Snowberry Lane Roundabout
    - Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout
    - Lowbourne/Bank Street/High Street Mini Roundabout
    - Lowbourne/Forest Road/Sandridge Road Double Mini Roundabout
    - Blackmore Road/Church Lane/Sandridge Common Road Double Mini Roundabout

6.2 The MCC locations are summarised below in **Figure 6**. Beyond this point, the trips disperse across the network and the impact will be negligible.

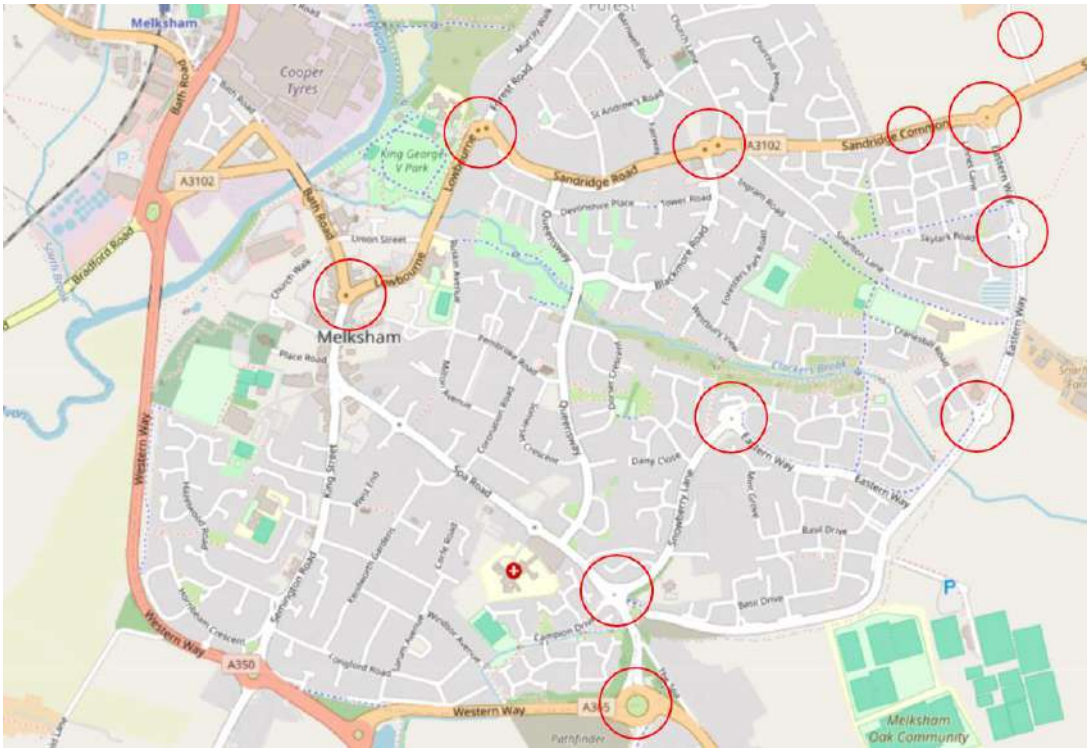


Figure 6: Scope of Turning Count surveys

Assessment Scenarios

6.3 **Table 11** describes each of the scenarios which have been assessed within the TA, for both the typical AM (0800-0900) and PM (1700-1800) weekday periods. These assessment scenarios when compared

to the full planning application have been altered to account for a revised baseline (2024 to 2025) and future year (2029 to 2030) and should therefore be considered acceptable.

Scenario	Scenario Details
1	2025 Base Year
2	2030 Forecast Year + Committed Development
3	2030 Forecast Year + Committed Development + Proposed Development

Table 11: Assessment Scenarios

Traffic Growth

6.4 To take into account background traffic growth in future year scenarios, NTEM adjusted growth factors have been obtained from TEMPro 8.1m for a 'Core' Scenario. The TEMPro program is based on the National Trip End Model and takes into account changes in car ownership and local planning forecasts regarding housing and employment. This forecast has been based on 'All Roads' for the Wiltshire 021' MSOA (for the local road network) and 'All' roads. The resulting growth factors for both the 2024 – 2025 scenario and the future growth of 2025 – 2030 are set out in **Table 12**.

Peak Hour	Growth Rate (2024 – 2025)	Growth Rate (2025 – 2030)
AM	1.0043	1.0530
PM	1.0042	1.0541

Table 12: TEMPro Growth Rates

Committed Development

6.5 As noted above, the only site considered as part of the additional committed development beyond TEMPro derived background growth is the site at Blackmore Farm. The current application at Blackmore Farm, as detailed in Section 1, comprises 500 dwellings. Therefore, committed development traffic has been derived from the accompanying TA and applied in addition to the TEMPro growth rates to identify the 2030 Forecast + Committed Development scenario.

Highway Capacity Analysis

6.6 The impact of the development on the following junctions has been modelled:

Junction 1 – Eastern Way/Sandridge Common Roundabout;

Junction 2 – Cranesbill Road/Eastern Way Roundabout

Junction 3 – Eastern Way/Snowberry Lane/Rosemary Way Roundabout

Junction 4 – Spa Road/Campion Drive/Snowberry Lane Roundabout

Junction 5 – Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout

Junction 6 – Lowbourne/Bank Street/High Street Mini Roundabout

Junction 7 – Lowbourne/Forest Road/Sandridge Road Double Mini Roundabout

Junction 8 – Blackmore Road/Church Lane/Sandridge Common Road Double Mini Roundabout

Modelling Results

1 - Site Access Roundabout

6.7 Capacity analysis of the Primary Site Access Roundabout with Sandridge Common has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from Topographical Survey and the site layout.

6.8 **Table 13** sets out the summary Junctions 9 results for the Primary Site Access roundabout in the 2030 future year with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix K**. For information the arms of the junction are as follows:

Arm A – Sandridge Common (East)

Arm B – Eastern Way (South)

Arm C – Sandridge Common (West)

Arm D – Internal Spine Road (North)

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2030 + Committed Development + Proposed Development						
Arm A	1.5	7.95	0.61	1.3	6.13	0.57
Arm B	0.5	4.63	0.35	0.8	5.48	0.46
Arm C	1.0	4.91	0.50	0.6	4.28	0.36
Arm D	0.1	4.66	0.09	0.0	4.12	0.04

Table 13: Sandridge Common/Eastern Way Roundabout Modelling Results

6.9 The Sandridge Common/Eastern Way modelling results demonstrate that the junction operates well within capacity with a maximum RFC of 0.57, queues of less than 2 vehicles and a maximum delay of 7.95 seconds.

2 - Cranesbill Road/ Eastern Way Roundabout

6.10 Capacity analysis of the Cranesbill Road/Eastern Way Roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.11 **Table 14** sets out the summary Junctions 9 results for the Cranesbill Road/ Eastern Way roundabout in the 2024 base year and 2029 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix L**. For information the arms of the junction are as follows:

- Arm 1 – Eastern Way N
- Arm 2 – Eastern Way S
- Arm 3 – Cranesbill Road

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	1.4	9.96	0.59	1.4	9.65	0.59
Arm 2	1.0	5.75	0.49	0.8	5.07	0.44
Arm 3	0.4	5.54	0.28	0.2	4.70	0.18
2030 Baseline + CD						
Arm 1	2.1	13.01	0.68	1.8	11.45	0.65
Arm 2	1.2	6.47	0.55	1.0	5.62	0.49
Arm 3	0.4	6.00	0.31	0.2	4.99	0.19
2030 + CD + Proposed Development						
Arm 1	2.7	15.74	0.74	2.0	12.26	0.67
Arm 2	1.3	6.67	0.56	1.1	6.05	0.53
Arm 3	00.4	6.10	0.31	0.2	5.18	0.20

Table 14: Cranesbill Road/Eastern Way Roundabout

6.12 The analysis shows that the junction is forecast to operate well within capacity in all scenarios, with negligible queueing and delays of less than 16 seconds and the highest RFC of 0.74. It is therefore considered that the impact on the operation of this junction is acceptable.

3 - Eastern Way/Snowberry Lane/Rosemary Way Roundabout

6.13 Capacity analysis of the Eastern Way/Snowberry Lane/Rosemary Way Roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.14 **Table 15** sets out the summary Junctions 9 results for the Eastern Way/Snowberry Lane/ Rosemary Way roundabout in the 2024 base year and 2029 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix M**. For information the arms of the junction are as follows:

- Arm 1 – Eastern Way
- Arm 2 – Snowberry Lane
- Arm 3 – Rosemary Way

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	0.9	5.49	0.46	0.7	4.93	0.42
Arm 2	0.9	6.37	0.49	1.3	7.61	0.57
Arm 3	0.1	4.42	0.10	0.0	4.29	0.03
2030 Baseline + CD						
Arm 1	1.1	6.20	0.52	0.9	5.34	0.46
Arm 2	1.2	7.17	0.54	1.7	9.02	0.64
Arm 3	0.1	4.65	0.11	0.0	4.52	0.03
2030+ CD + Proposed Development						
Arm 1	1.3	6.77	0.56	0.9	5.51	0.48
Arm 2	1.3	7.41	0.56	2.1	10.19	0.68
Arm 3	0.1	4.71	0.11	0.0	4.68	0.03

Table 15: Eastern Way/Snowberry Lane/ Rosemary Way Roundabout

6.15 Analysis shows that the junction is forecast to operate well within capacity in all scenarios, with negligible queueing and delays less than 11 seconds, with the highest RFC being 0.68. It is therefore considered that the impact on the operation of this junction is acceptable.

4 - Snowberry Lane/Spa Road/Campion Drive Roundabout

6.16 A summary of the results for this junction are shown below in **Table 16**, with the full outputs attached as **Appendix N**. For information the arms of the junctions are as follows:

- Arm 1 – Snowberry Lane
- Arm 2 – Spa Road East
- Arm 3 – Campion Drive
- Arm 4 – Spa Road West

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	0.8	4.00	0.44	0.5	3.15	0.34
Arm 2	1.1	4.16	0.53	1.6	5.13	0.62
Arm 3	0.1	3.73	0.06	0.0	3.90	0.02
Arm 4	0.7	4.16	0.40	0.6	4.29	0.38
2030 + CD						
Arm 1	1.0	4.50	0.50	0.6	3.37	0.37
Arm 2	1.3	4.58	0.58	2.1	6.06	0.68
Arm 3	0.1	3.96	0.07	0.0	4.22	0.02
Arm 4	0.7	4.49	0.43	0.7	4.73	0.42
2030 + Committed Development + Proposed Development						
Arm 1	1.5	6.28	0.60	0.6	3.37	0.38
Arm 2	1.8	6.06	0.65	2.2	6.23	0.69
Arm 3	0.1	4.86	0.08	0.0	4.28	0.02
Arm 4	1.0	5.73	0.49	0.7	4.79	0.42

Table 16: Snowberry Lane/Spa Road/Campion Drive Roundabout Modelling Results

6.17 The modelling results show that the Snowberry Lane/Spa Road/Campion Drive Roundabout demonstrates that the junction operates well within capacity with a maximum RFC of 0.69, queues of less than 3 vehicles and a maximum delay of 6.28 seconds.

5 - Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout

6.18 Capacity analysis of the Spa Road/ Bath Road/Pathfinder Way/ Western Way Roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.19 A summary of the results for this junction are shown below in **Table 17**, with the full outputs attached as **Appendix O**.

- Arm 1 – Spa Road
- Arm 2 – Bath Road
- Arm 3 – Pathfinder Way
- Arm 4 – Western Way

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	1.7	5.81	0.64	0.8	3.60	0.45
Arm 2	1.2	5.22	0.54	0.6	3.41	0.38
Arm 3	1.2	5.64	0.54	0.6	3.65	0.37
Arm 4	1.7	7.57	0.63	2.8	10.09	0.74
2030 + CD						
Arm 1	2.4	7.28	0.71	1.0	3.97	0.50
Arm 2	1.4	6.05	0.59	0.7	3.67	0.41
Arm 3	1.5	6.63	0.60	0.7	3.99	0.41
Arm 4	2.1	9.14	0.69	3.9	13.50	0.80
2030 + CD + PD						
Arm 1	2.5	7.52	0.72	1.0	3.95	0.50
Arm 2	1.4	6.01	0.59	0.7	3.66	0.41
Arm 3	1.4	6.54	0.59	0.7	3.96	0.40
Arm 4	2.1	8.90	0.68	4.3	14.55	0.82

Table 17: Spa Road/ Bath Road/ Pathfinder Way/ Western Way Roundabout Modelling Results

6.20 The modelling results show that the Spa Road/ Bath Road/ Pathfinder Way/ Western Way Roundabout demonstrates that the junction operates well within capacity with a maximum RFC of 0.82, queues of less than 15 vehicles and a maximum delay of 14.55 seconds.

6 - Lowbourne/Bank Street/High Street Mini Roundabout

6.21 A summary of the results for this junction are shown below in **Table 18**, with the full outputs attached as **Appendix P**. The arms are labelled as follows:

- Arm 1 – Bank Street
- Arm 2 – Lowbourne Road
- Arm 3 – High Street

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	0.4	4.99	0.26	2.5	13.95	0.72
Arm 2	2.0	11.93	0.67	1.0	8.77	0.49
Arm 3	0.5	6.42	0.35	1.0	7.00	0.50
2030 + CD						
Arm 1	0.4	5.39	0.30	4.4	22.97	0.82
Arm 2	3.9	19.57	0.80	1.5	11.10	0.59
Arm 3	0.7	7.48	0.41	1.3	8.45	0.58

2030 + CD + Proposed Development						
Arm 1	0.4	5.46	0.31	5.2	26.29	0.84
Arm 2	4.7	22.86	0.83	1.5	11.53	0.61
Arm 3	0.7	7.70	0.42	1.4	8.74	0.59

Table 18: Lowbourne/Bank Street/High Street Mini Roundabout Modelling Results

6.22 The modelling results show that the Lowbourne/Bank Street/High Street mini roundabout operates within capacity with the Bank Street arm operating close to the acceptable RFC value in the 2029 + CD + PD scenario experiences delays of 26.29 seconds and has an RFC of 0.84.

7 - Sandridge Common/Forest Road Double Mini Roundabout

6.23 Capacity analysis of the Sandridge Common/Forest Road double mini roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.24 **Table 19** sets out the summary Junctions 9 results for the Sandridge Common/Forest Road double mini roundabout in the 2025 base year and 2030 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix Q**. For information the arms of the junction are as follows:

Junction 1 – Arm 1 – Forest Road (North)

Junction 1 – Arm 2 – Sandridge Common (East)

Junction 1 – Arm 3 – Internal Link (West)

Junction 2 – Arm 1 – Lowbourne Road (North)

Junction 2 – Arm 2 – School/Club Access (North West)

Junction 2 – Arm 3 – Internal Link (East)

Junctions	Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		Queue	Delay	RFC	Queue	Delay	RFC
2024 Baseline							
Junction 1	Arm A	0.3	6.25	0.21	0.2	7.67	0.18
	Arm B	3.3	17.13	0.77	0.8	6.82	0.44
	Arm C	0.3	4.14	0.26	1.0	6.20	0.50
Junction 2	Arm A	0.5	5.96	0.32	3.0	18.26	0.75
	Arm B	0.1	4.39	0.09	0.0	5.43	0.02
	Arm C	2.1	9.77	0.8	0.7	5.09	0.40
2029 Baseline + Committed Development							
Junction 1	Arm A	0.3	6.60	0.22	0.2	8.62	0.20
	Arm B	2.9	15.19	0.74	0.7	6.68	0.43
	Arm C	0.4	4.47	0.31	1.4	7.55	0.59
Junction 2	Arm A	0.6	6.65	0.39	2.8	14.70	0.74
	Arm B	0.1	4.64	0.10	0.0	6.09	0.04
	Arm C	1.9	9.13	0.66	0.6	5.01	0.39
2029 + Committed Development + Proposed Development							
Junction 1	Arm A	0.3	6.68	0.22	0.3	8.95	0.21

	Arm B	3.3	17.13	0.77	0.8	6.82	0.44
	Arm C	0.8	4.52	0.32	1.6	7.97	0.61
Junction 2	Arm A	0.7	6.74	0.40	3.2	16.36	0.77
	Arm B	0.1	4.68	0.10	0.0	6.27	0.04
	Arm C	2.2	9.79	0.69	0.7	5.09	0.40

Table 19: Sandridge Common/Forest Road Double Mini Roundabout Modelling Results

6.25 The Sandridge Common/Forest Road modelling results demonstrate that the junction operates well within capacity with a maximum RFC of 0.77, queues of less than 4 vehicles and a maximum delay of 16.36 seconds.

8 - Church Lane/Blackmore Road Double Mini-Roundabout

6.26 Capacity analysis of the Church Lane/Blackmore Road double mini-roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.27 **Table 20** sets out the summary Junctions 9 results for the Church Lane/Blackmore Road double mini-roundabout in the 2025 base year and 2030 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix R**. For information the arms of the junction are as follows:

Junction 1 – Arm A – Church Lane (North)

Junction 1 – Arm B – Sandridge Common (East)

Junction 1 – Arm C – Internal Link (West)

Junction 2 – Arm A – Blackmore Road (South)

Junction 2 – Arm B – Sandridge Common (West)

Junction 2 – Arm C – Internal Link (East)

Junctions	Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		Queue	Delay	RFC	Queue	Delay	RFC
	2025 Baseline						
Junction 1	Arm A	0.6	10.17	0.37	0.5	10.50	0.32
	Arm B	1.7	12.20	0.64	1.1	9.23	0.53
	Arm C	0.7	6.45	0.40	1.5	9.89	0.60
Junction 2	Arm A	1.4	24.94	0.59	0.8	14.11	0.45
	Arm B	0.3	4.30	0.25	0.7	5.60	0.42
	Arm C	3.1	18.33	0.76	1.4	10.84	0..59
2030 Baseline + Committed Development							
Junction 1	Arm A	8.3	163.18	0.96	0.5	11.46	0.33
	Arm B	36.7	223.08	1.07	13	10.07	0.57
	Arm C	0.8	6.87	0.44	1.9	11.46	0.65
Junction 2	Arm A	1.5	27.34	0.60	0.9	16.56	0.48
	Arm B	0.4	4.49	0.28	0.9	6.10	0.47
	Arm C	3.6	20.36	0.80	1.7	12.01	0.63
2030 + Committed Development + Proposed Development							
Junction 1	Arm A	12.1	231.40	1.01	0.6	12.60	0.36
	Arm B	79.8	464.81	1.16	1.8	12.99	0.64

	Arm C	0.8	7.11	0.46	2.3	13.13	0.70
Junction 2	Arm A	1.6	27.91	0.62	1.0	16.51	0.50
	Arm B	0.4	4.57	0.29	1.0	6.49	0.49
	Arm C	3.6	20.36	0.80	1.8	12.78	0.65

Table 20: Church Lane/Blackmore Road Double Mini Roundabout Modelling Results

6.28 The Church Lane/Blackmore Road modelling results demonstrate that the junction operates mostly within capacity with the exception of Arm 1 (Church Lane N) in the 2030 + CD scenario which experiences delays of 163.18 seconds and has an RFC of 0.96 and Arm 2 (Sandridge Common East) which experiences delays of 223.08 seconds and has an RFC of 1.07. In the 2030 + CD + PD scenario Arm 1 (Church Lane N) experiences delays of 231.18 seconds and has an RFC of 1.01 and Arm 2 (Sandridge Common East) which experiences delays of 464.81 seconds and has an RFC of 1.16. It is worth noting that the junction operates over capacity without the development traffic and therefore the small increase that the development proposals will be negligible at the junction.

6.29 Whilst it is acknowledged that Arms 1 and 2 operate over capacity with the development, as part of the full planning application, it was proposed to convert the double mini roundabout into left-right staggered priority junctions, however, at the consultation stage, WC highways accepted that this would operate over capacity with their preference being an improvement in sustainable travel contributions to bring down single occupancy vehicle usage. Therefore, this approach will be taken for this outline application, under the assumption that this would still be acceptable to WC Highways.

7. SUMMARY AND CONCLUSIONS

7.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates on behalf of Bloor Homes South West to support an outline planning application for a residential development; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; a 100 place nursery and access points for pedestrians and cyclists on Land at New Farm, Melksham. All matters are reserved except for access. Vehicle access would be provided via an improved Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.

7.2 The site has been subject to a full planning application (submitted under reference: PL/2024/13045) for 295 homes and an area safeguarded for a 100 space Children's Nursery. At the time of writing, this is a live application. WC's latest highways comments relate to internal layout matters, and therefore it is understood that the other highway principles are agreed, i.e. those that would fall to be considered as part of an outline application with detail of access – including means of access, highway impact and sustainable travel improvements.

7.3 The proposed development has been shown to be well located to support a variety of travel modes. The site is well connected to the local road network along with the strategic network including the A3102 and A350. The local pedestrian and cycle networks are well located to promote use by future residents and offer great opportunities for people to walk and cycle to their destinations. The site is also well located to support public transport use with regular bus services located in close proximity as well as being able to access the local rail network. Such a summary is concurred within the emerging Wiltshire Local Plan where the site is referenced under Policy 20: Land north of A3102.

7.4 Two ATC surveys were undertaken in February 2024 (as part of the full application) along Sandridge Common and New Road with 85th percentile speeds along the A3102 Sandridge Common Road measuring 41.0mph eastbound and 39.6mph and 85th percentile speeds along New Road are 36.0mph northbound and 39.6mph southbound.

7.5 It is proposed that access to the site will be via one main access point via a newly constructed 4th arm on the Sandridge Common/Eastern Way Roundabout as part of the wider roundabout re-design works. Vehicle tracking has been completed from this access point.

7.6 There will be a further access point located approximately 250m west of the roundabout along Sandridge Common Road that will take the form of an emergency access and will measure 3.7m wide. Vehicle tracking of a fire tender has been undertaken highlighting that a fire tender is able to utilise this access should the main access point be blocked.

7.7 As detailed in the previous section, a 7-day ATC was undertaken on the A3102 Sandridge Common Road to the west of the existing A3102/Eastern Way roundabout in February 2024. The results of the ATC resulted in 85th percentile speeds of 41.9mph eastbound and 39.6mph westbound, Visibility splays at the secondary access point have been shown at 2.4m x 112.3m in the primary direction and 2.4m x 102.5m in the secondary direction.

7.8 To allow for safe pedestrian and cyclist movements, 3m shared footway/cycleways will be provided along the internal roads.

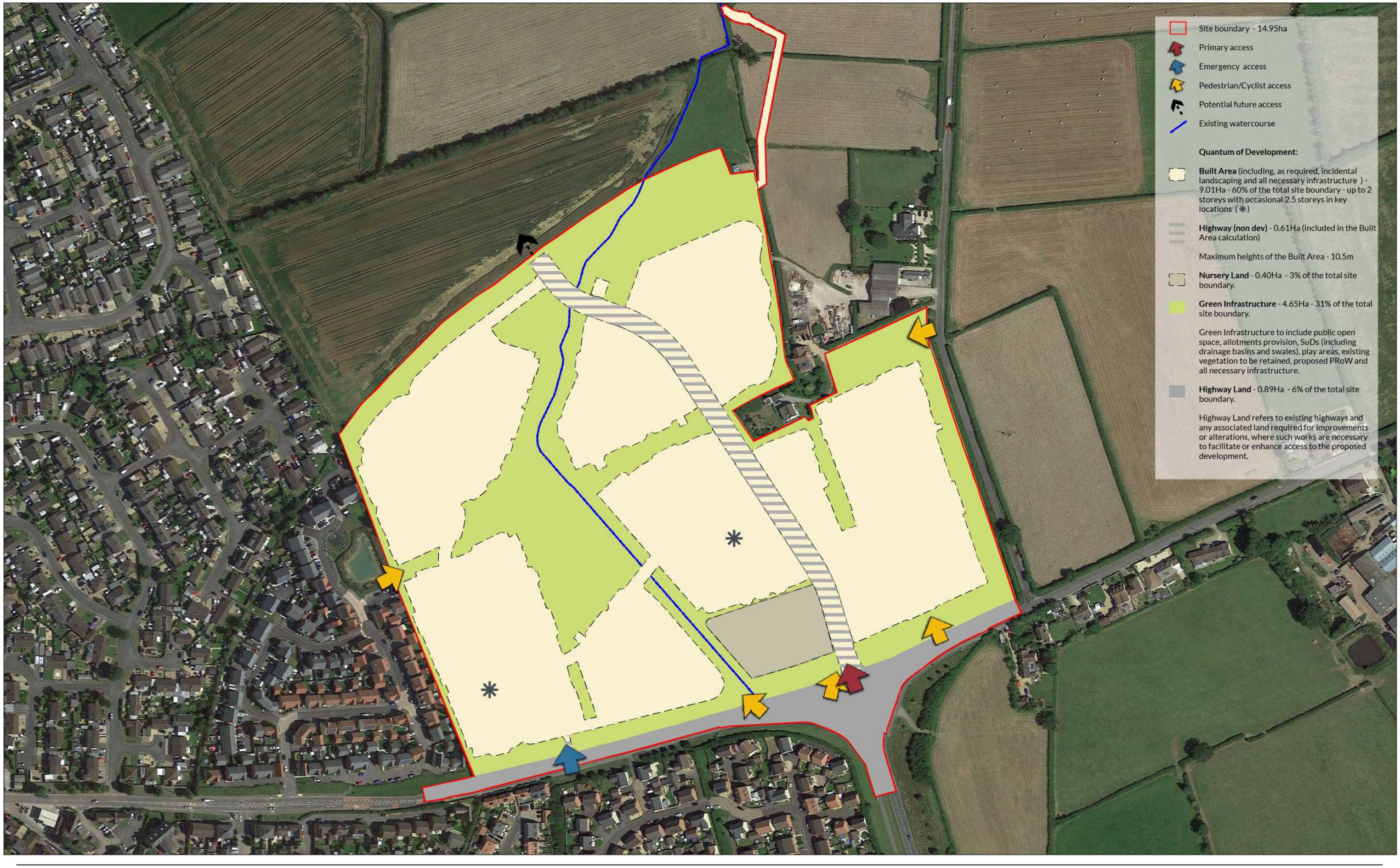
7.9 As part of the roundabout upgrades, an LTN 1/20 compliant footway/cycleway measuring 3m and crossing points are also proposed along the Sandridge Common western arm to tie into the existing infrastructure on the southern side.

7.10 The proposed development is likely to generate in the order of 155 trips in the AM and the PM peaks, with 1334 trips generated across a 12 hour period. It should be noted that the trip rates are higher (two-way movements of 0.515 AM Peak and 0.489 PM peak, compared to the above 0.527 AM Peak and 0.527 in the PM peak), and approved, as part of planning application 15/12454/OUT, and therefore are considered robust.

7.11 Junction modelling results outline that the majority of junctions operate well within capacity taking into consideration the proposed development traffic, with the exception the Church Lane/Blackmore Road double mini roundabout. Whilst it is acknowledged that Arms 1 and 2 operate over capacity with the development, as part of the full planning application, it was proposed to convert the double mini roundabout into left-right staggered priority junctions, however, at the consultation stage, WC highways accepted that this would operate over capacity with their preference being an improvement in sustainable travel contributions to bring down single occupancy vehicle usage. The same approach is therefore proposed as part of this outline application.

7.12 This TA has therefore demonstrated that the proposed development will not result in a severe impact upon the local road network and therefore is in accordance with NPPF Paragraph 116. The principles are as per the previous full application, and we would therefore ask Wiltshire Council Highways to look favourably upon this application in relation to highways.

Appendix A



Status: FINAL

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Client:	Bloor Homes
Project title:	Land at New Road Farm Melksham
Drawing title:	Parameters Plan
Scale:	1:2500@A3
Date:	27.10.2025
Drawn by:	DR / LR
Checked by:	MV
Drawing no.:	2513292.1
Revision:	G

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Appendix B

Criterion	Description	Common Shortfalls	Rating	Appraiser Comments	Local Policy & Guidance
1. Trip generation and assignment	Does the application appropriately forecast all day trips to, from and within the site by walking, wheeling and cycling?	Source data is not representative of the proposed development, is out-of-date or is confined to commuting journeys only. Forecasted trip generation is limited to motor vehicle traffic or peak hours only. Future year forecasts do not realise the potential of the development to support a greater number of walking, wheeling and cycling journeys or do not align with the national target (or any adopted local targets) that half of all journeys in towns and cities shall be walked, wheeled or cycled by 2030.	**Pass**	This information is contained within the accompanying TP	
2. Active travel route audit	Has an appropriate assessment on the design and accessibility of existing active travel routes in the locality of the site been presented?	Local pedestrian and cycling routes are only identified in application documents by their location, with no assessment provided on whether these are safe, direct, convenient and accessible for people of all abilities (paragraph 82 of the National Design Guide) or coherent, direct, safe, comfortable and attractive (core design principles in LTN 1/20). Applications that include new dwellings have not demonstrated how local schools and colleges will be accessed by active travel modes. Qualitative analysis to inform any necessary improvements to the design and accessibility of key routes does not include maps, photographs and comments nor has regard to the following guidance, tools and plans in the assessment of key routes: • Inclusive Mobility (Chapters 3, 4, 6, 7 and 15; and Sections 5.2, 5.7, 9.1, 9.3, 9.4 and 9.7 as appropriate); • PAS 6463: Design for the Mind (Sections 5.2.1, 5.2.3, 6.4, 7.6.2, 7.6.3, 7.7 and 11.12); • LTN 1/20: Cycle Infrastructure Design (including Appendix A: Cycling Level of Service Tool; and Appendix B: Junction Assessment Tool); • the government's Walking Route Audit Tool; and • any adopted or emerging Local Cycling and Walking Infrastructure Plans (LCWIPs).	**Pass**	Transport Assessment has been completed for the site detialing all walking and cycling routes available from the site.	
3. Pedestrian access to local amenities	Are most buildings within 800m from a range of amenities (such as primary schools, parks, play areas, food shops, cafes and community buildings) using well-designed routes?	Trip lengths to key amenities as presented in application documents are based on straight-line distances from site boundaries or main access points. There are few everyday amenities within the recommended distance from most buildings using safe and accessible routes for pedestrians. Footpaths/ways to local amenities do not conform to the National Design Guide standards of being safe, direct, convenient and accessible for people of all abilities, which includes but is not limited to routes that: • have a minimum width of 2m, with limited pinch points no less than 1.5m; • are step-free; • have a smooth, even surface; • have seating at regular intervals; • are uncluttered; • have good natural surveillance and clear lines of sight; • have street lighting; • have wayfinding; and • have crossing points suitable for the speed and traffic flow of the road(s).	**Pass**		
4. Cycling accessibility	Are a range of local amenities, and town centres, railway stations, employment areas and the National Cycle Network as appropriate, accessible for cyclists using well-designed routes?	Cycle routes relied on by the development are not coherent, direct, safe, comfortable or attractive in line with the five core design principles and geometric requirements in LTN 1/20 (see Sections 4.2 and 5). This may be due to physical features, steps, steep gradients or surface quality; or the absence of ramps, lighting or appropriate crossing facilities. The development relies on shared use routes in full or intermittently, which conflicts with the clear position in paragraph 1.6.1 (2) of LTN 1/20 that cycles must be treated as vehicles and not as pedestrians. There is insufficient protection from motor traffic in accordance with the suitability and segregation standards in LTN 1/20 (see Figure 4.1 and Section 6) such that some potential cyclists would be excluded.	**Pass**	Transport Assessment has been completed for the site detialing all walking and cycling routes available from the site.	
5. Access to public transport	Are all buildings within 400m of a high-frequency bus stop or 800m of a rail/light rail station or tram stop, with appropriate facilities, using well-designed routes?	There are no public transport nodes with a regular service (this will differ between urban and rural areas) within the recommended distances. Local bus stops do not have good natural surveillance or do not provide seating, lighting, shelter, real-time passenger information and raised bus boarders or specialist kerbs. Local rail stations do not provide sufficient cycle parking, including spaces for non-standard cycles. Footpaths/ways to public transport nodes do not conform to the National Design Guide standards of being safe, direct, convenient and accessible for people of all abilities, which includes but is not limited to routes that: • have a minimum width of 2m, with limited pinch points no less than 1.5m; • are step-free; • have a smooth, even surface; • have seating at regular intervals; • are uncluttered; • have good natural surveillance and clear lines of sight; • have street lighting; • have wayfinding; and • have crossing points suitable for the speed and traffic flow of the road(s).	**Condition / Obligation to make acceptable**	High quality bus stops will be provided as pert of the development proposals and therefore the provision of these will improve this access for residents.	
6. Off-site transport infrastructure	Does the application include proposals to enhance local active travel and public transport infrastructure?	The application fails to identify necessary, directly related and proportionate improvements or contributions to: • footpaths/ways in line with the design standards identified in criteria 3 and 5; • cycling routes in line with LTN 1/20 standards identified in criteria 4; or • public transport infrastructure (where this is not provided on-site) that may include: new or extended services; seating, lighting, shelter, real-time passenger information and raised bus boarders or specialist kerbs at bus stops; and secure cycle parking with pumps and repair tools at rail stations and mobility hubs. The application fails to identify the mechanism to secure identified improvements and the trigger point(s) for delivery or payment. Proposed road/junction improvements do not prioritise pedestrian and cycling movements, including appropriate crossings.	**Condition / Obligation to make acceptable**	High quality bus stops will be provided as pert of the development proposals and therefore the provision of these will improve this access for residents.	
7. Site permeability	Does the development prioritise pedestrian and cycle movements within the site?	Opportunities have been missed to maximise accessibility for active travel modes, including: • the development does not provide or safeguard pedestrian and cycling connections to neighbouring sites including future phases of development; • routes for pedestrians and cyclists are not at least as direct – and preferably more direct – than the equivalent by car; • routes are not fully accessible or do not have adjacent accessible alternatives (e.g. ramps alongside steps or bound paths next to unbound paths); • inappropriate or infrequent crossings are proposed (see Inclusive Mobility Sections 4.10-4.11, PAS 6463 Section 7.6.2, LTN 1/20 Table 10-2, Manual for Streets Section 6.3 and Manual for Steets 2 Section 9.3); • pedestrians and cyclists are not prioritised at side road crossing points (see LTN 1/20 Figure 10.13); • priority junctions have radii that interrupts the pedestrian desire line (see Manual for Streets Sections 6.3-6.4 and Manual for Streets 2 Section 9.4); • there are red/zero scores when applying the Junction Assessment Tool in LTN 1/20; • signalised junctions do not have pedestrian aspects on some arms; • where cyclists would mix with motor vehicles, lane widths are between 3.2m and 3.9m (paragraph 7.2.5 of LTN 1/20 identifies that such widths allow motor vehicles to drive alongside a cyclist without a safety margin for their comfort and protection); • there are unsafe or poorly signed transitions for cyclists when moving between cycleways on and off the carriageway; or • cycleways within commercial sites are not continuous through to cycle parking areas. Shared use routes for pedestrians and cyclists are proposed and these do not meet the limited situations listed in paragraph 6.5.6 of LTN 1/20. Where shared use routes are acceptable, their widths are below 3m (<300 cyclists per hour) or below 4.5m elsewhere, contrary to LTN 1/20 Table 6-3.	**Pass**		

8. Placemaking	Does the development establish a strong sense of place, with well-designed streets, public spaces that feel safe and key amenities provided?	The design of streets does not encourage social interaction or create attractive, safe and accessible open spaces that would support an active life for everyone, contrary to the National Design Guide (See Part 2). This may include missed opportunities to incorporate green infrastructure / street trees, shared space residential streets (such as appropriately designed home-zones, mews and culs-de-sac), equipped play facilities, seating at regular intervals, and clear lines of sight to assist with orientation (including measures to prevent inconsiderate parking). Aspects of the proposed design give rise to personal and highway safety concerns, including: • streets, public transport nodes and other public spaces do not benefit from appropriate levels of natural surveillance and lighting; • the requirements of disabled people have not been appropriately considered; • the development includes 'blind-spots', sharp turns or high-sided boundary treatments; • the development does not provide continuous and legible routes or is not supported by an effective wayfinding strategy; or • residential or local streets encourage traffic movements through the site or are not designed for a 20mph speed limit (see Manual for Streets Section 7.4 for guidance on achieving appropriate traffic speeds). There are gaps in the provision of well-located, on-site amenities to support the quantum of development proposed, in conflict with paragraph 83 of the National Design Guide. For larger residential-led developments, this may include a lack of evidence that the applicant has utilised local authority pupil yield data (or the Department for Education's Pupil Yield Dashboard in the absence of such) to inform the need for new schools and early years settings.	**Pass**		
9. Cycle parking and trip-end facilities	Does the application provide the requisite amount and quality of cycle parking and trip-end facilities?	Cycle parking is not provided in accordance with up-to-date local standards, or Section 11 of LTN 1/20 in the absence of such. Details of accessibility, parking types and dimensions, security arrangements or lighting as appropriate is not provided (highly accessible cycle parking is essential for people with sensory and/or information processing differences and disabled cyclists who may be unable to walk very far or navigate a change in levels). For workplaces, public buildings (including those used for leisure and recreation) larger retail developments and other developments with communal parking: • internal cycle stores cannot be accessed from building frontages, are not step-free or require passing through more than two sets of doors; • a proportion of cycle parking (typically 5%) is not provided for non-standard cycles to accommodate people with mobility impairments, which is contrary to paragraph 11.3.2 of LTN 1/20 (Table 11-2 also advises on bay lengths and access aisle widths for larger cycles using Sheffield stands); or • high-quality facilities including showers, lockers, changing rooms and drying areas are not provided for cyclists in non-residential settings (see Section 11.7 of LTN 1/20, BREEAM guidance and any local standards). The quantum and quality of the cycle parking and trip-end facilities proposed does not align with travel plan targets for cycling or application objectives to deliver a sustainable form of development.	**Pass**		
10. Travel planning	Does the travel plan outline ambitious mode share targets and measures to embed active travel, alongside appropriate monitoring and remedial strategies?	A 'full', 'framework' or 'interim' travel plan has not been submitted as appropriate (a framework travel plan is generally only appropriate for commercial developments where the end user is unknown, while an interim travel plan can be acceptable where the split of uses is not yet confirmed). Where the appropriate travel plan has been submitted: • targets for active travel mode share lack ambition or do not align with the national target (or any adopted local target) that half of all journeys in towns and cities shall be walked, wheeled or cycled by 2030; • mode share targets are not set for the end of each phase (where identifiable) nor extend to five years beyond the final occupation of the development; • there is an absence of travel plan targets for all uses proposed within the application site as appropriate; • the travel plan does not provide sufficient detail on the active travel and public transport infrastructure to be provided or improved (both on and off-site) or how its use will be embedded by initiatives and incentives to be secured through planning conditions and obligations; or • there are no details of effective and influential actions to be taken if targets are not met, with the intention for these to be secured and monitored (if triggered) through planning conditions and obligations.	**Pass**	All outlined within the TP	

Appendix C

Melksham ATC, New Road



Direction: Northbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	0	0	3	0	0	1	2	1	1
01:00	0	0	2	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0
03:00	0	1	0	0	0	0	1	0	0
04:00	2	0	0	2	0	0	0	1	1
05:00	3	0	1	6	7	6	7	6	4
06:00	26	3	3	36	39	34	36	34	25
07:00	73	8	8	98	125	137	130	113	83
08:00	84	39	21	119	152	179	143	135	105
09:00	59	33	40	46	68	92	68	67	58
10:00	84	48	46	44	42	55	58	57	54
11:00	84	46	42	34	50	54	41	53	50
12:00	60	44	49	43	49	63	56	54	52
13:00	36	41	29	30	46	46	39	39	38
14:00	53	36	36	54	55	61	61	57	51
15:00	67	38	19	62	58	59	75	64	54
16:00	52	25	14	63	70	58	68	62	50
17:00	29	34	17	45	49	46	51	44	39
18:00	26	32	13	21	36	30	45	32	29
19:00	10	15	14	13	17	12	28	16	16
20:00	5	9	2	4	6	10	10	7	7
21:00	6	4	3	5	7	10	13	8	7
22:00	0	3	4	1	4	2	2	2	2
23:00	1	0	2	0	1	2	0	1	1
Total									
12H(7-19)	707	424	334	659	800	880	835	776	663
16H(6-22)	754	455	356	717	869	946	922	842	717
18H(6-24)	755	458	362	718	874	950	924	844	720
24H(0-24)	760	459	368	726	881	958	934	852	727
AM Peak	08:00	10:00	10:00	08:00	08:00	08:00	08:00	08:00	08:00
	84	48	46	119	152	179	143	135	105
PM Peak	15:00	12:00	12:00	16:00	16:00	12:00	15:00	15:00	15:00
	67	44	49	63	70	63	75	64	54

Paul Castle Associates

Direction: Southbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	0	0	4	0	0	1	0	0	1
01:00	0	0	2	1	0	0	0	0	0
02:00	0	0	0	1	0	0	1	0	0
03:00	1	0	1	0	0	0	0	0	0
04:00	0	0	0	2	0	0	1	1	0
05:00	5	1	0	2	3	3	4	3	3
06:00	8	2	1	11	9	6	15	10	7
07:00	24	5	6	27	36	25	54	33	25
08:00	33	11	10	38	38	50	83	48	38
09:00	24	33	14	38	47	65	81	51	43
10:00	35	40	23	26	41	74	54	46	42
11:00	45	33	39	31	42	86	82	57	51
12:00	57	48	44	35	49	95	66	60	56
13:00	50	44	35	29	53	82	101	63	56
14:00	68	44	27	43	70	105	101	77	65
15:00	70	39	30	78	103	152	135	108	87
16:00	82	42	30	106	133	196	179	139	110
17:00	56	37	27	119	125	191	184	135	106
18:00	31	26	22	42	47	85	74	56	47
19:00	11	15	16	17	33	42	35	28	24
20:00	7	9	9	14	10	22	11	13	12
21:00	4	7	6	11	8	10	19	10	9
22:00	6	13	2	7	11	4	17	9	9
23:00	1	6	0	0	2	4	4	2	2
Total									
12H(7-19)	575	402	307	612	784	1206	1194	874	726
16H(6-22)	605	435	339	665	844	1286	1274	935	778
18H(6-24)	612	454	341	672	857	1294	1295	946	789
24H(0-24)	618	455	348	678	860	1298	1301	951	794
AM Peak	11:00	10:00	11:00	08:00	09:00	11:00	08:00	11:00	11:00
	45	40	39	38	47	86	83	57	51
PM Peak	16:00	12:00	12:00	17:00	16:00	16:00	17:00	16:00	16:00
	82	48	44	119	133	196	184	139	110

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	0	0	7	0	0	2	2	1	2
01:00	0	0	4	1	0	0	0	0	1
02:00	0	0	0	1	0	1	1	1	0
03:00	1	1	1	0	0	0	1	0	1
04:00	2	0	0	4	0	0	1	1	1
05:00	8	1	1	8	10	9	11	9	7
06:00	34	5	4	47	48	40	51	44	33
07:00	97	13	14	125	161	162	184	146	108
08:00	117	50	31	157	190	229	226	184	143
09:00	83	66	54	84	115	157	149	118	101
10:00	119	88	69	70	83	129	112	103	96
11:00	129	79	81	65	92	140	123	110	101
12:00	117	92	93	78	98	158	122	115	108
13:00	86	85	64	59	99	128	140	102	94
14:00	121	80	63	97	125	166	162	134	116
15:00	137	77	49	140	161	211	210	172	141
16:00	134	67	44	169	203	254	247	201	160
17:00	85	71	44	164	174	237	235	179	144
18:00	57	58	35	63	83	115	119	87	76
19:00	21	30	30	30	50	54	63	44	40
20:00	12	18	11	18	16	32	21	20	18
21:00	10	11	9	16	15	20	32	19	16
22:00	6	16	6	8	15	6	19	11	11
23:00	2	6	2	0	3	6	4	3	3
Total									
12H(7-19)	1282	826	641	1271	1584	2086	2029	1650	1388
16H(6-22)	1359	890	695	1382	1713	2232	2196	1776	1495
18H(6-24)	1367	912	703	1390	1731	2244	2219	1790	1509
24H(0-24)	1378	914	716	1404	1741	2256	2235	1803	1521
AM Peak	11:00	10:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	129	88	81	157	190	229	226	184	143
PM Peak	15:00	12:00	12:00	16:00	16:00	16:00	16:00	16:00	16:00
	137	92	93	169	203	254	247	201	160

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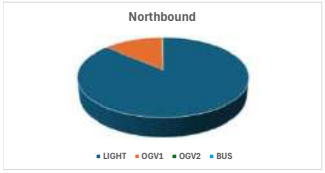
Melksham ATC, New Road

Direction: Northbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	760	640	118	0	2
Sat 24 Feb 2024	459	410	48	1	0
Sun 25 Feb 2024	368	335	32	0	1
Mon 26 Feb 2024	726	614	110	1	1
Tue 27 Feb 2024	881	762	118	0	1
Wed 28 Feb 2024	958	826	130	2	0
Thu 29 Feb 2024	934	807	122	4	1
5 Day Ave.	852	730	120	1	1
7 Day Ave.	727	628	97	1	1

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	84.2%	15.5%	0.0%	0.3%
Sat 24 Feb 2024	100.0%	89.3%	10.5%	0.2%	0.0%
Sun 25 Feb 2024	100.0%	91.0%	8.7%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	84.6%	15.2%	0.1%	0.1%
Tue 27 Feb 2024	100.0%	86.5%	13.4%	0.0%	0.1%
Wed 28 Feb 2024	100.0%	86.2%	13.6%	0.2%	0.0%
Thu 29 Feb 2024	100.0%	86.4%	13.1%	0.4%	0.1%
5 Day Ave.	100.0%	85.7%	14.0%	0.2%	0.1%
7 Day Ave.	100.0%	86.4%	13.3%	0.2%	0.1%

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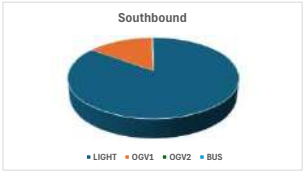


Direction: Southbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	618	492	120	3	3
Sat 24 Feb 2024	455	404	51	0	0
Sun 25 Feb 2024	348	314	33	0	1
Mon 26 Feb 2024	678	581	97	0	0
Tue 27 Feb 2024	860	733	124	1	2
Wed 28 Feb 2024	1298	1094	199	2	3
Thu 29 Feb 2024	1301	1098	198	0	5
5 Day Ave.	951	800	148	1	3
7 Day Ave.	794	674	117	1	2

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	79.6%	19.4%	0.5%	0.5%
Sat 24 Feb 2024	100.0%	88.8%	11.2%	0.0%	0.0%
Sun 25 Feb 2024	100.0%	90.2%	9.5%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	85.7%	14.3%	0.0%	0.0%
Tue 27 Feb 2024	100.0%	85.2%	14.4%	0.1%	0.2%
Wed 28 Feb 2024	100.0%	84.3%	15.3%	0.2%	0.2%
Thu 29 Feb 2024	100.0%	84.4%	15.2%	0.0%	0.4%
5 Day Ave.	100.0%	84.1%	15.5%	0.1%	0.3%
7 Day Ave.	100.0%	84.9%	14.8%	0.1%	0.3%

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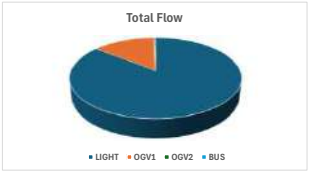


Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	1378	1132	238	3	5
Sat 24 Feb 2024	914	814	99	1	0
Sun 25 Feb 2024	716	649	65	0	2
Mon 26 Feb 2024	1404	1195	207	1	1
Tue 27 Feb 2024	1741	1495	242	1	3
Wed 28 Feb 2024	2256	1920	329	4	3
Thu 29 Feb 2024	2235	1905	320	4	6
5 Day Ave.	1803	1529	267	3	4
7 Day Ave.	1521	1301	214	2	3

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	82.1%	17.3%	0.2%	0.4%
Sat 24 Feb 2024	100.0%	89.1%	10.8%	0.1%	0.0%
Sun 25 Feb 2024	100.0%	90.6%	9.1%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	85.1%	14.7%	0.1%	0.1%
Tue 27 Feb 2024	100.0%	85.9%	13.9%	0.1%	0.2%
Wed 28 Feb 2024	100.0%	85.1%	14.6%	0.2%	0.1%
Thu 29 Feb 2024	100.0%	85.2%	14.3%	0.2%	0.3%
5 Day Ave.	100.0%	84.8%	14.8%	0.1%	0.2%
7 Day Ave.	100.0%	85.6%	14.1%	0.1%	0.2%

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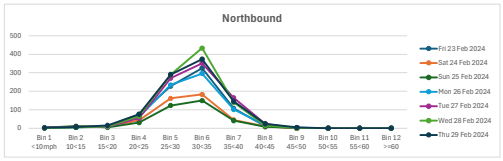


Melksham ATC, New Road

Direction: Northbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	760	35.7	30.5	5.0	0	6	11	73	227	325	106	11	1	0	0	0
Sat 24 Feb 2024	459	35.4	29.7	5.5	4	8	8	42	161	182	45	9	0	0	0	0
Sun 25 Feb 2024	368	35.8	29.9	5.7	2	11	4	30	123	149	41	7	1	0	0	0
Mon 26 Feb 2024	726	36.0	30.7	5.2	2	5	8	61	234	296	101	16	3	0	0	0
Tue 27 Feb 2024	881	36.5	31.2	5.1	2	6	8	55	271	351	164	24	0	0	0	0
Wed 28 Feb 2024	958	35.8	30.9	4.7	1	4	10	65	290	433	139	15	1	0	0	0
Thu 29 Feb 2024	934	36.3	30.8	5.3	2	6	15	76	290	373	145	23	4	0	0	0
5 Day Ave.	852	36.0	30.8	5.0	1	5	10	66	262	356	131	18	2	0	0	0
7 Day Ave.	727	35.9	30.5	5.2	2	7	9	57	228	301	106	15	1	0	0	0

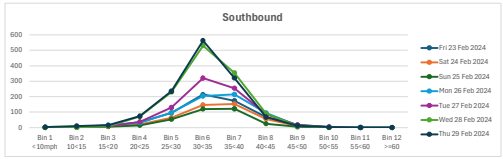
Paul Castle Associates



Direction: Southbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	618	40.3	33.7	6.3	1	2	12	35	95	214	173	67	17	2	0	0
Sat 24 Feb 2024	455	40.4	34.2	6.0	0	3	7	19	63	146	153	55	9	0	0	0
Sun 25 Feb 2024	348	39.6	33.5	5.9	1	3	6	14	53	120	121	25	5	0	0	0
Mon 26 Feb 2024	678	41.0	34.3	6.5	0	4	16	31	96	204	215	95	13	3	1	0
Tue 27 Feb 2024	860	39.9	33.9	5.8	2	2	8	37	130	320	255	87	16	3	0	0
Wed 28 Feb 2024	1298	38.6	33.1	5.2	1	1	8	71	230	531	354	91	11	0	0	0
Thu 29 Feb 2024	1301	38.3	32.6	5.5	2	9	15	74	235	564	321	67	12	2	0	0
5 Day Ave.	951	39.6	33.5	5.9	1	4	12	50	157	367	264	81	14	2	0	0
7 Day Ave.	794	39.7	33.6	5.9	1	3	10	40	129	300	227	70	12	1	0	0

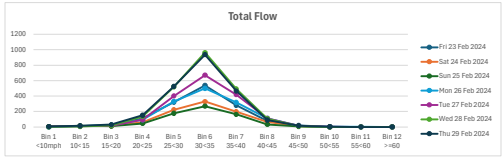
Paul Castle Associates



Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	1378	38.0	32.0	5.8	1	8	23	108	322	539	279	78	18	2	0	0
Sat 24 Feb 2024	914	38.4	31.9	6.2	4	11	15	61	224	328	198	64	9	0	0	0
Sun 25 Feb 2024	716	38.0	31.7	6.1	3	14	10	44	176	269	162	32	6	0	0	0
Mon 26 Feb 2024	1404	38.7	32.4	6.1	2	9	24	92	330	500	316	111	16	3	1	0
Tue 27 Feb 2024	1741	38.4	32.5	5.6	4	8	16	92	401	671	419	111	16	3	0	0
Wed 28 Feb 2024	2256	37.5	32.2	5.1	2	5	18	136	520	964	493	106	12	0	0	0
Thu 29 Feb 2024	2235	37.5	31.8	5.5	4	15	30	150	525	937	466	90	16	2	0	0
5 Day Ave.	1803	38.0	32.2	5.6	3	9	22	116	420	722	395	99	16	2	0	0
7 Day Ave.	1521	38.1	32.1	5.8	3	10	19	98	357	601	333	85	13	1	0	0

Paul Castle Associates



Melksham ATC, A3102 Sandridge Common



Direction: Eastbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	2	9	27	2	5	7	7	5	8
01:00	1	6	7	1	3	3	1	2	3
02:00	0	3	3	2	4	2	0	2	2
03:00	1	4	2	2	2	1	1	1	2
04:00	9	6	1	12	11	10	10	10	8
05:00	50	9	11	48	43	48	45	47	36
06:00	120	28	14	134	128	136	123	128	98
07:00	421	68	26	459	449	445	455	446	332
08:00	570	143	58	525	557	544	531	545	418
09:00	319	204	139	285	292	301	287	297	261
10:00	207	267	175	178	198	173	177	187	196
11:00	207	268	237	210	173	180	216	197	213
12:00	269	244	265	225	214	222	196	225	234
13:00	221	253	234	204	201	204	225	211	220
14:00	309	241	222	233	243	258	261	261	252
15:00	343	216	164	269	250	288	282	286	259
16:00	342	227	173	301	286	287	269	297	269
17:00	350	242	131	302	309	337	285	317	279
18:00	257	180	119	203	212	226	204	220	200
19:00	166	140	100	118	115	118	168	137	132
20:00	81	63	57	75	67	90	91	81	75
21:00	71	68	43	68	59	67	85	70	66
22:00	49	53	22	41	40	40	44	43	41
23:00	29	30	4	9	11	14	23	17	17
Total									
12H(7-19)	3815	2553	1943	3394	3384	3465	3388	3489	3135
16H(6-22)	4253	2852	2157	3789	3753	3876	3855	3905	3505
18H(6-24)	4331	2935	2183	3839	3804	3930	3922	3965	3563
24H(0-24)	4394	2972	2234	3906	3872	4001	3986	4032	3624
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	570	268	237	525	557	544	531	545	418
PM Peak	17:00	13:00	12:00	17:00	17:00	17:00	17:00	17:00	17:00
	350	253	265	302	309	337	285	317	279

Paul Castle Associates

Direction: Westbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	5	11	22	5	0	5	7	4	8
01:00	0	6	7	2	4	1	1	2	3
02:00	0	2	4	0	2	0	0	0	1
03:00	1	2	2	1	2	3	4	2	2
04:00	2	4	0	4	2	3	3	3	3
05:00	22	4	8	23	23	28	35	26	20
06:00	57	21	10	76	71	72	76	70	55
07:00	357	69	30	329	372	385	379	364	274
08:00	372	140	76	424	411	421	477	421	332
09:00	346	186	139	312	329	347	303	327	280
10:00	214	243	199	177	163	179	187	184	195
11:00	237	287	219	214	159	220	178	202	216
12:00	242	262	244	177	186	238	213	211	223
13:00	235	229	203	191	197	204	226	211	212
14:00	284	254	208	202	235	251	250	244	241
15:00	396	218	165	359	366	391	358	374	322
16:00	401	238	167	375	362	352	387	375	326
17:00	316	222	115	339	364	373	373	353	300
18:00	201	143	122	173	209	225	223	206	185
19:00	142	106	70	118	103	137	128	126	115
20:00	87	71	39	77	77	84	91	83	75
21:00	63	58	33	51	62	66	62	61	56
22:00	46	47	15	25	49	43	54	43	40
23:00	19	29	6	9	9	9	17	13	14
Total									
12H(7-19)	3601	2491	1887	3272	3353	3586	3554	3473	3106
16H(6-22)	3950	2747	2039	3594	3666	3945	3911	3813	3407
18H(6-24)	4015	2823	2060	3628	3724	3997	3982	3869	3461
24H(0-24)	4045	2852	2103	3663	3757	4037	4032	3907	3498
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	372	287	219	424	411	421	477	421	332
PM Peak	16:00	12:00	12:00	16:00	15:00	15:00	16:00	16:00	16:00
	401	262	244	375	366	391	387	375	326

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	7	20	49	7	5	12	14	9	16
01:00	1	12	14	3	7	4	2	3	6
02:00	0	5	7	2	6	2	0	2	3
03:00	2	6	4	3	4	4	5	4	4
04:00	11	10	1	16	13	13	13	13	11
05:00	72	13	19	71	66	76	80	73	57
06:00	177	49	24	210	199	208	199	199	152
07:00	778	137	56	788	821	830	834	810	606
08:00	942	283	134	949	968	965	1008	966	750
09:00	665	390	278	597	621	648	590	624	541
10:00	421	510	374	355	361	352	364	371	391
11:00	444	555	456	424	332	400	394	399	429
12:00	511	506	509	402	400	460	409	436	457
13:00	456	482	437	395	398	408	451	422	432
14:00	593	495	430	435	478	509	511	505	493
15:00	739	434	329	628	616	679	640	660	581
16:00	743	465	340	676	648	639	656	672	595
17:00	666	464	246	641	673	710	658	670	580
18:00	458	323	241	376	421	451	427	427	385
19:00	308	246	170	236	218	255	296	263	247
20:00	168	134	96	152	144	174	182	164	150
21:00	134	126	76	119	121	133	147	131	122
22:00	95	100	37	66	89	83	98	86	81
23:00	48	59	10	18	20	23	40	30	31
Total									
12H(7-19)	7416	5044	3830	6666	6737	7051	6942	6962	6241
16H(6-22)	8203	5599	4196	7383	7419	7821	7766	7718	6912
18H(6-24)	8346	5758	4243	7467	7528	7927	7904	7834	7025
24H(0-24)	8439	5824	4337	7569	7629	8038	8018	7939	7122
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	942	555	456	949	968	965	1008	966	750
PM Peak	16:00	12:00	12:00	16:00	17:00	17:00	17:00	16:00	16:00
	743	506	509	676	673	710	658	672	595

Paul Castle Associates

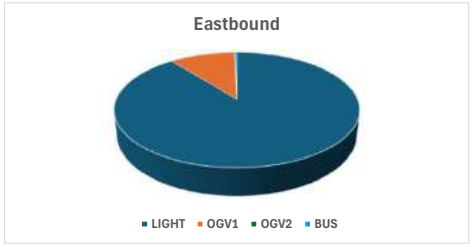
Melksham ATC, A3102 Sandridge Common

Direction: Eastbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	4394	3942	437	6	9
Sat 24 Feb 2024	2972	2760	208	1	3
Sun 25 Feb 2024	2234	2090	137	1	6
Mon 26 Feb 2024	3906	3413	472	8	13
Tue 27 Feb 2024	3872	3405	446	8	13
Wed 28 Feb 2024	4001	3552	430	6	13
Thu 29 Feb 2024	3986	3499	471	5	11
5 Day Ave.	4032	3562	451	7	12
7 Day Ave.	3624	3237	372	5	10

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	89.7%	9.9%	0.1%	0.2%
Sat 24 Feb 2024	100.0%	92.9%	7.0%	0.0%	0.1%
Sun 25 Feb 2024	100.0%	93.6%	6.1%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	87.4%	12.1%	0.2%	0.3%
Tue 27 Feb 2024	100.0%	87.9%	11.5%	0.2%	0.3%
Wed 28 Feb 2024	100.0%	88.8%	10.7%	0.1%	0.3%
Thu 29 Feb 2024	100.0%	87.8%	11.8%	0.1%	0.3%
5 Day Ave.	100.0%	88.4%	11.2%	0.2%	0.3%
7 Day Ave.	100.0%	89.3%	10.3%	0.1%	0.3%

Paul Castle Associates

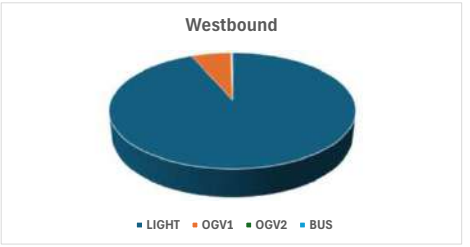


Direction: Westbound

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	4045	3789	247	2	7
Sat 24 Feb 2024	2852	2724	125	1	2
Sun 25 Feb 2024	2103	2034	68	1	0
Mon 26 Feb 2024	3663	3346	309	2	6
Tue 27 Feb 2024	3757	3463	282	6	6
Wed 28 Feb 2024	4037	3792	235	2	8
Thu 29 Feb 2024	4032	3754	266	2	10
5 Day Ave.	3907	3629	268	3	7
7 Day Ave.	3498	3272	219	2	6

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	93.7%	6.1%	0.0%	0.2%
Sat 24 Feb 2024	100.0%	95.5%	4.4%	0.0%	0.1%
Sun 25 Feb 2024	100.0%	96.7%	3.2%	0.0%	0.0%
Mon 26 Feb 2024	100.0%	91.3%	8.4%	0.1%	0.2%
Tue 27 Feb 2024	100.0%	92.2%	7.5%	0.2%	0.2%
Wed 28 Feb 2024	100.0%	93.9%	5.8%	0.0%	0.2%
Thu 29 Feb 2024	100.0%	93.1%	6.6%	0.0%	0.2%
5 Day Ave.	100.0%	92.9%	6.9%	0.1%	0.2%
7 Day Ave.	100.0%	93.5%	6.3%	0.1%	0.2%

Paul Castle Associates

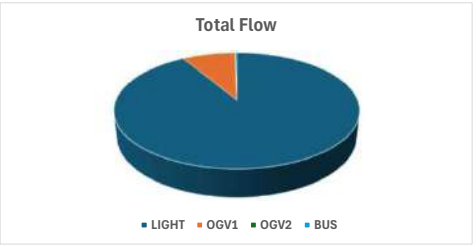


Direction: Total Flow

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	8439	7731	684	8	16
Sat 24 Feb 2024	5824	5484	333	2	5
Sun 25 Feb 2024	4337	4124	205	2	6
Mon 26 Feb 2024	7569	6759	781	10	19
Tue 27 Feb 2024	7629	6868	728	14	19
Wed 28 Feb 2024	8038	7344	665	8	21
Thu 29 Feb 2024	8018	7253	737	7	21
5 Day Ave.	7939	7191	719	9	19
7 Day Ave.	7122	6509	590	7	15

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	91.6%	8.1%	0.1%	0.2%
Sat 24 Feb 2024	100.0%	94.2%	5.7%	0.0%	0.1%
Sun 25 Feb 2024	100.0%	95.1%	4.7%	0.0%	0.1%
Mon 26 Feb 2024	100.0%	89.3%	10.3%	0.1%	0.3%
Tue 27 Feb 2024	100.0%	90.0%	9.5%	0.2%	0.2%
Wed 28 Feb 2024	100.0%	91.4%	8.3%	0.1%	0.3%
Thu 29 Feb 2024	100.0%	90.5%	9.2%	0.1%	0.3%
5 Day Ave.	100.0%	90.6%	9.1%	0.1%	0.2%
7 Day Ave.	100.0%	91.4%	8.3%	0.1%	0.2%

Paul Castle Associates

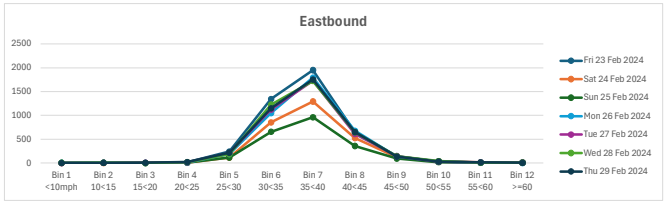


Melksham ATC, A3102 Sandridge Common

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	4394	41.7	36.6	4.9	2	4	2	15	239	1346	1952	649	143	31	4	7
Sat 24 Feb 2024	2972	42.4	37.2	5.1	0	1	1	6	117	854	1294	527	125	32	10	5
Sun 25 Feb 2024	2234	42.6	36.9	5.4	2	5	1	5	115	656	963	358	94	16	10	9
Mon 26 Feb 2024	3906	42.0	37.0	4.8	2	4	0	7	189	1050	1796	678	138	34	8	0
Tue 27 Feb 2024	3872	42.0	36.8	5.0	1	2	4	12	206	1122	1727	611	142	29	12	4
Wed 28 Feb 2024	4001	41.9	36.8	5.0	2	4	1	16	187	1226	1726	649	140	40	6	4
Thu 29 Feb 2024	3986	42.0	36.8	5.1	1	2	5	19	219	1149	1756	652	133	31	13	6
5 Day Ave.	4032	41.9	36.8	5.0	2	3	2	14	208	1179	1791	648	139	33	9	4
7 Day Ave.	3624	42.1	36.9	5.1	1	3	2	11	182	1058	1602	589	131	30	9	5

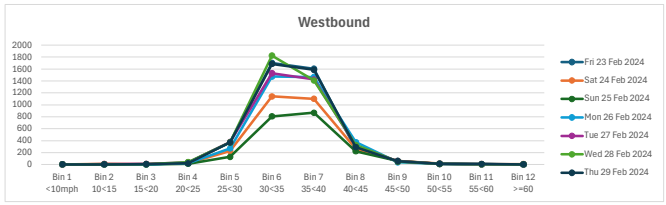
Paul Castle Associates



Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	4045	39.4	34.8	4.4	1	4	2	31	368	1703	1605	259	61	9	1	1
Sat 24 Feb 2024	2852	40.6	35.3	5.0	0	7	5	22	225	1141	1102	265	56	17	6	6
Sun 25 Feb 2024	2103	40.5	35.7	4.6	1	1	1	11	127	807	868	221	55	10	1	0
Mon 26 Feb 2024	3663	39.9	35.3	4.4	0	2	1	23	270	1473	1467	376	36	11	4	0
Tue 27 Feb 2024	3757	39.7	34.9	4.7	1	5	8	32	377	1531	1424	311	54	10	3	1
Wed 28 Feb 2024	4037	39.4	34.7	4.5	2	2	4	38	370	1826	1410	324	47	10	3	1
Thu 29 Feb 2024	4032	39.5	35.0	4.4	0	1	6	19	369	1687	1587	291	53	11	7	1
5 Day Ave.	3907	39.6	34.9	4.5	1	3	4	29	351	1644	1499	312	50	10	4	1
7 Day Ave.	3498	39.8	35.1	4.6	1	3	4	25	301	1453	1352	292	52	11	4	1

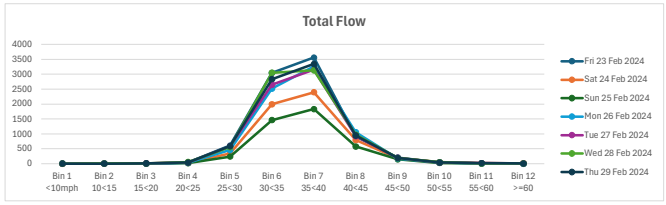
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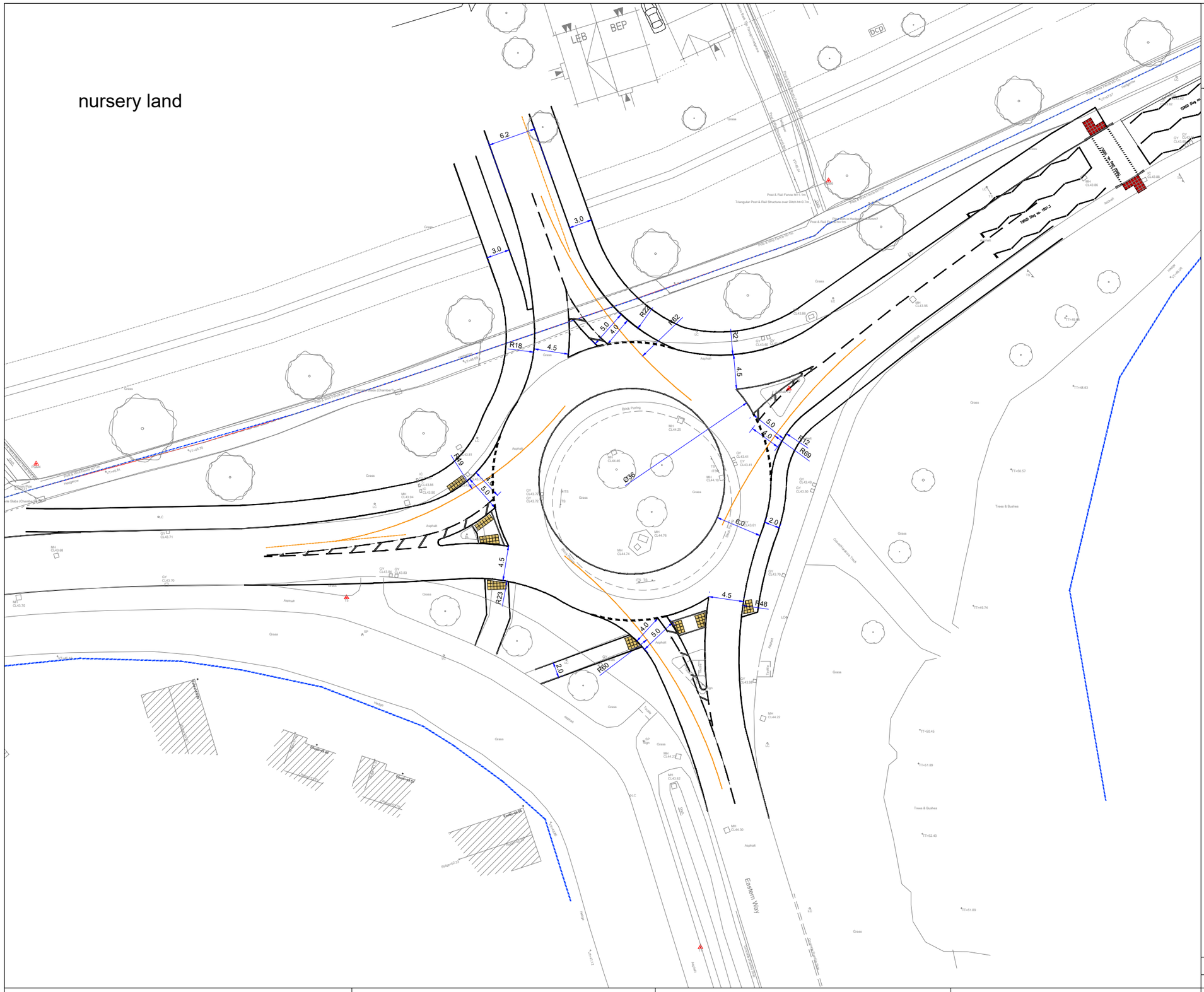
Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	8439	40.7	35.7	4.8	3	8	4	46	607	3049	3557	908	204	40	5	8
Sat 24 Feb 2024	5824	41.6	36.3	5.1	0	8	6	28	342	1995	2396	792	181	49	16	11
Sun 25 Feb 2024	4337	41.6	36.3	5.1	3	6	2	16	242	1463	1831	579	149	26	11	9
Mon 26 Feb 2024	7569	41.1	36.2	4.7	2	6	1	30	459	2523	3263	1054	174	45	12	0
Tue 27 Feb 2024	7629	41.0	35.8	4.9	2	7	12	44	583	2653	3151	922	196	39	15	5
Wed 28 Feb 2024	8038	40.8	35.7	4.9	4	6	5	54	557	3052	3136	973	187	50	9	5
Thu 29 Feb 2024	8018	40.9	35.9	4.9	1	3	11	38	588	2836	3343	943	186	42	20	7
5 Day Ave.	7939	40.9	35.9	4.8	2	6	7	42	559	2823	3290	960	189	43	12	5
7 Day Ave.	7122	41.1	36.0	4.9	2	6	6	37	483	2510	2954	882	182	42	13	6

Paul Castle Associates



Appendix D



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   - 4.2. Site Layout
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KEY

---------- INDICATIVE HIGHWAY BOUNDARY

NORTH

PRELIMINARY

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0m 25m
1:500

Rev	Description	Date	By	App'd
P01	FIRST ISSUE	03.11.2025	IDR	HLC

Date Created	Drawn By	Approved By	Suitabilty Code
03.11.25	IDR	HLC	-

PBA Project Number	Scale	
027.0014	1:500	(AT A3)

PBA Drawing No: 027.0014-0001

Revison: P01

Project Name
LAND AT NEW FARM, MELKSHAM (OUTLINE)

Project Phase
PRELIMINARY

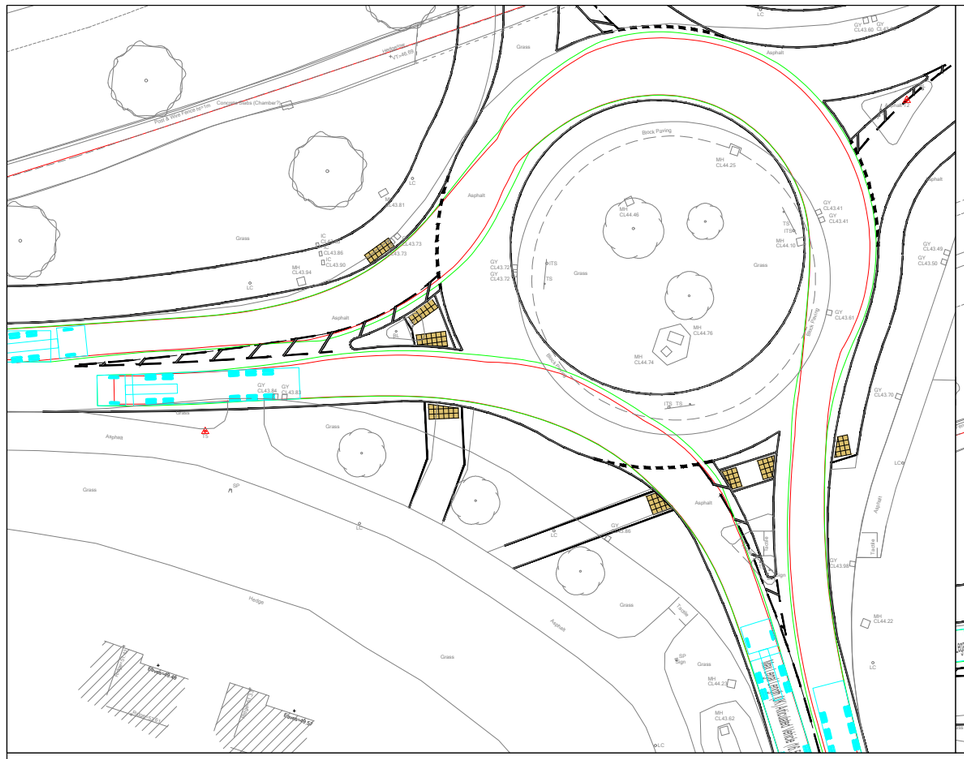
Title
COMPACT ROUNDABOUT PRELIMINARY DESIGN

paulbasham associates
Paul Basham Associates Ltd
The Lambourn, Wyndyke Furlong, Abingdon,
Oxfordshire, OX14 1UJ
01235 352150
info@paulbashamassociates.com www.paulbashamassociates.com

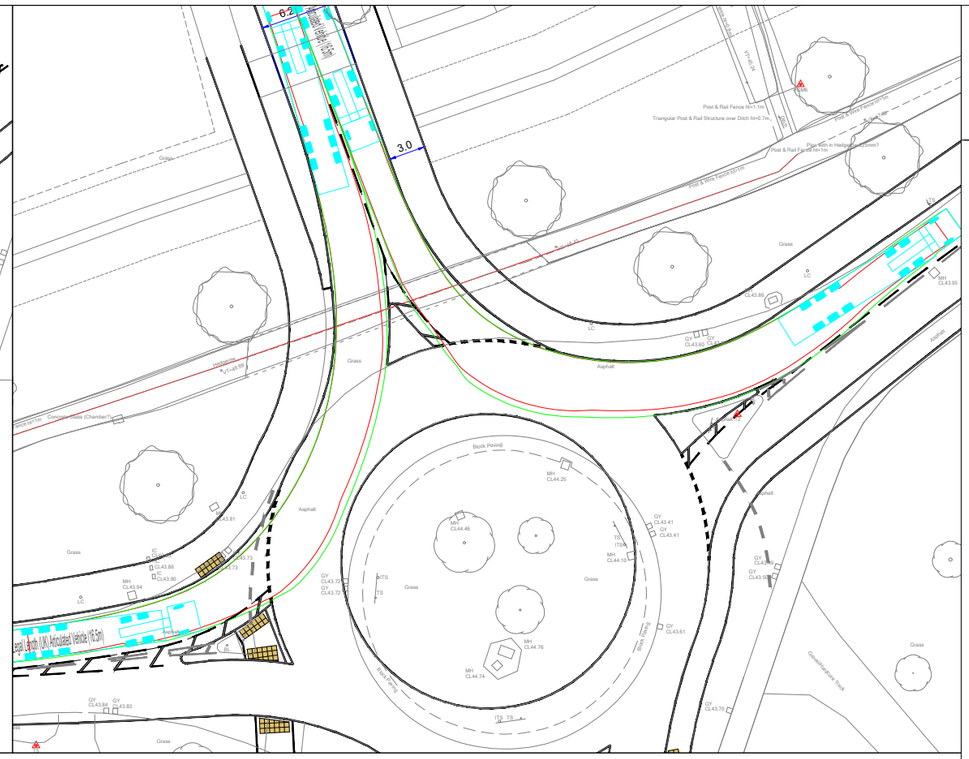
Client
BLOOR HOMES

Appendix E

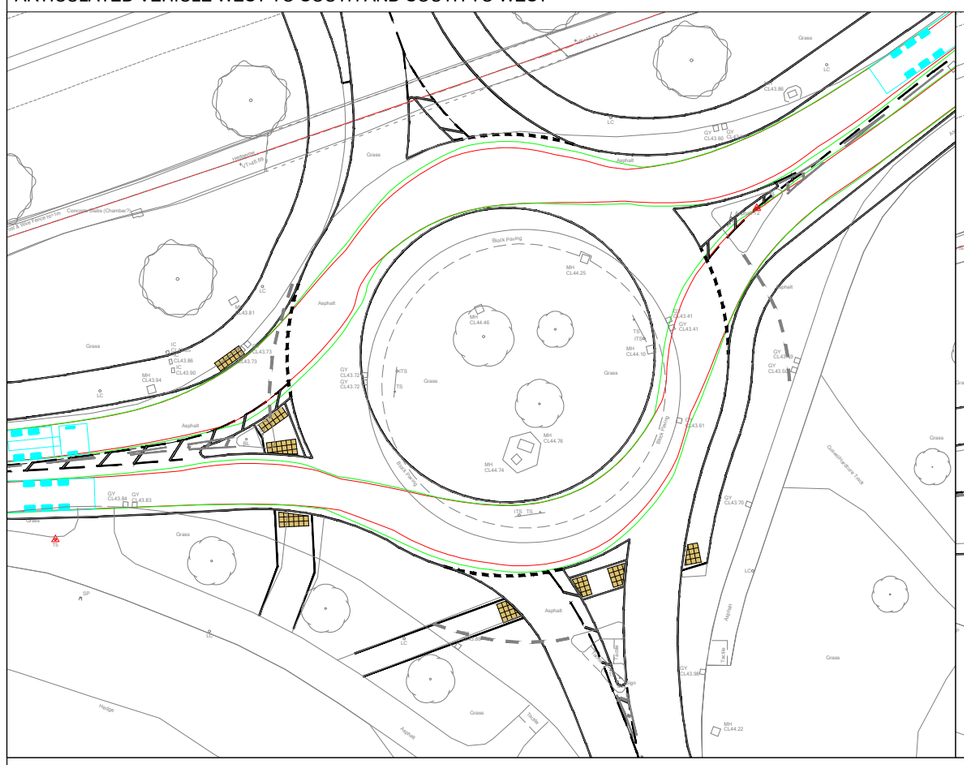
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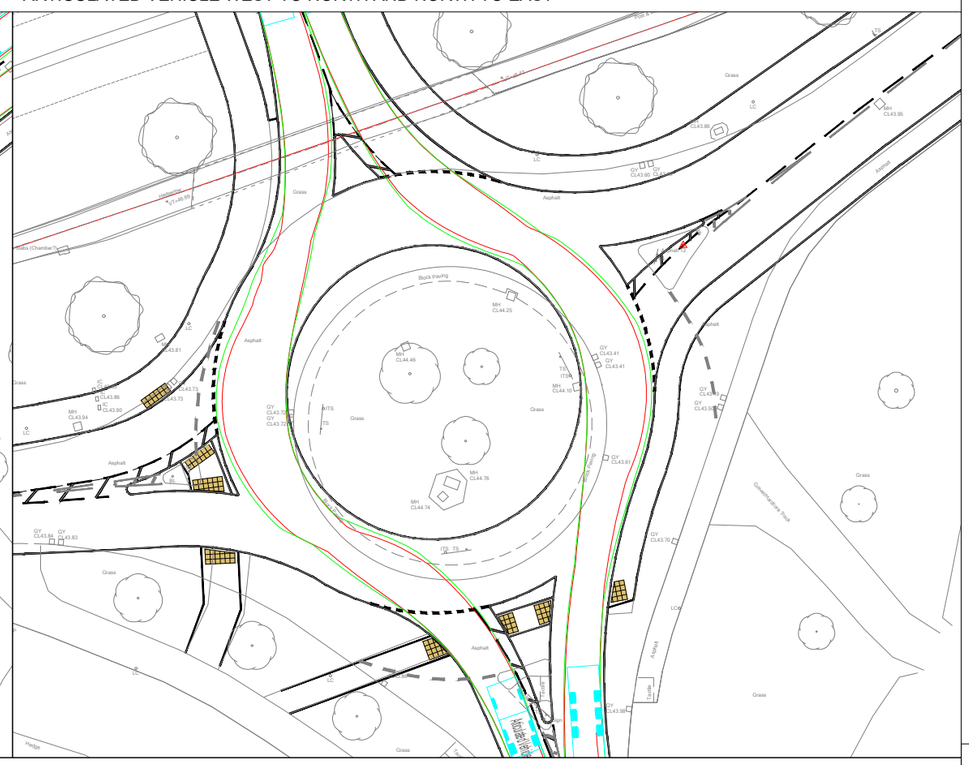
ARTICULATED VEHICLE WEST TO SOUTH AND SOUTH TO WEST



ARTICULATED VEHICLE WEST TO NORTH AND NORTH TO EAST



ARTICULATED VEHICLE WEST TO EAST AND EAST TO WEST



ARTICULATED VEHICLE NORTH TO SOUTH AND SOUTH TO NORTH

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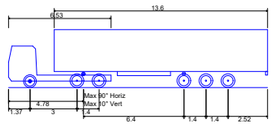
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KEY



Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	3.881m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m



PRELIMINARY

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1:500 0m 25m

Rev	Description	Date	By	App'd
P01	FIRST ISSUE	03.11.2025	IDR	HLC

Date Created	Drawn By	Approved By	Suitabilty Code
03.11.25	IDR	HLC	-

PBA Project Number	Scale
027.0014	1:500 (AT A3)

PBA Drawing No: 027.0014-0002

Revison: P01

Project Name
LAND AT NEW FARM, MELKSHAM (OUTLINE)

Project Phase
PRELIMINARY

Title
COMPACT ROUNDABOUT PRELIMINARY DESIGN SWEPT PATH ANALYSIS

paulbasham associates
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Client
BLOOR HOMES

Appendix F

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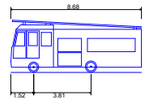
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KEY



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

NORTH

PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
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1:500 0m 25m

FIRE TENDER TURNING LEFT IN

FIRE TENDER TURNING LEFT OUT

Rev	Description	Date	By	App'd
P01	FIRST ISSUE	03.11.2025	IDR	HLC

Project Name
LAND AT NEW FARM, MELKSHAM (OUTLINE)

Project Phase
PRELIMINARY

Title
EMERGENCY ACCESS TRACKING

paul basham associates
Paul Basham Associates Ltd
The Lambourn, Wyndyke Furlong, Abingdon,
Oxfordshire, OX14 1UJ
01235 352150
info@paulbashamassociates.com www.paulbashamassociates.com

Client
BLOOR HOMES

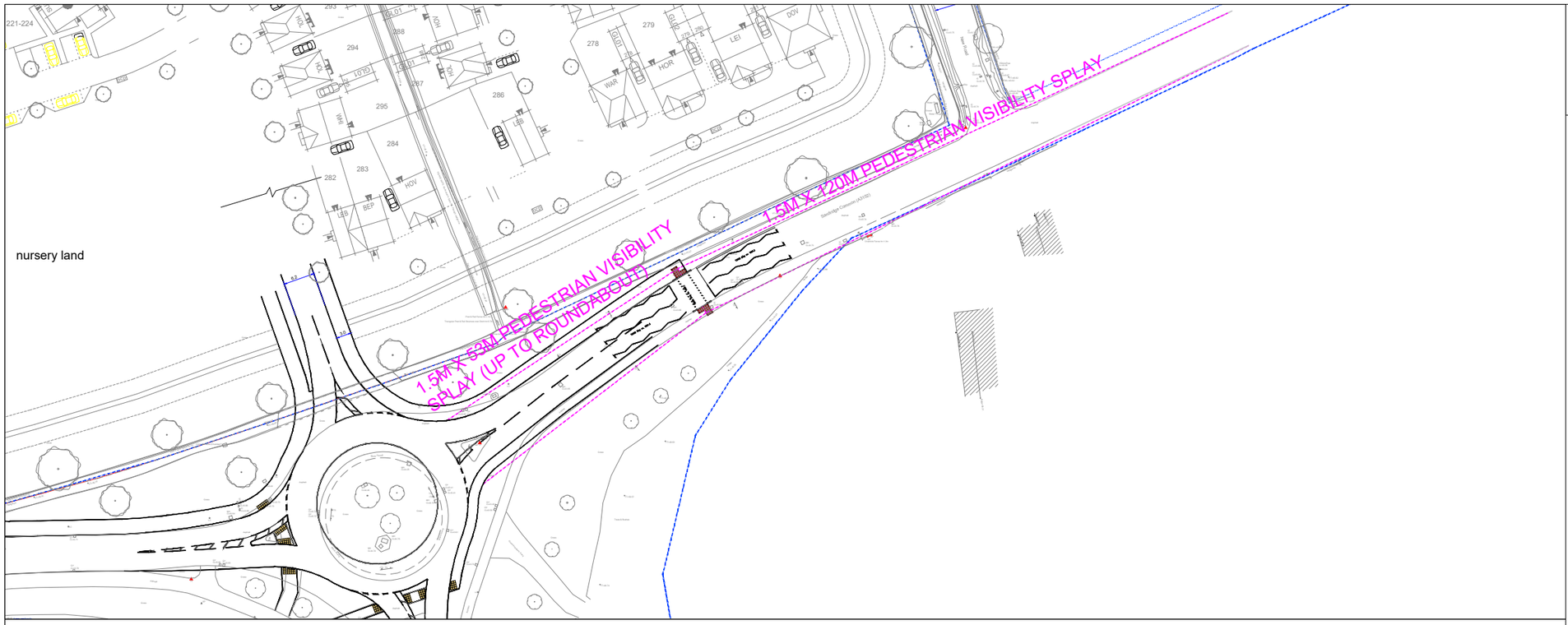
Date Created	Drawn By	Approved By	Suitabilty Code
03.11.25	IDR	HLC	-

PBA Project Number	Scale	
027.0014	1:500	(AT A3)

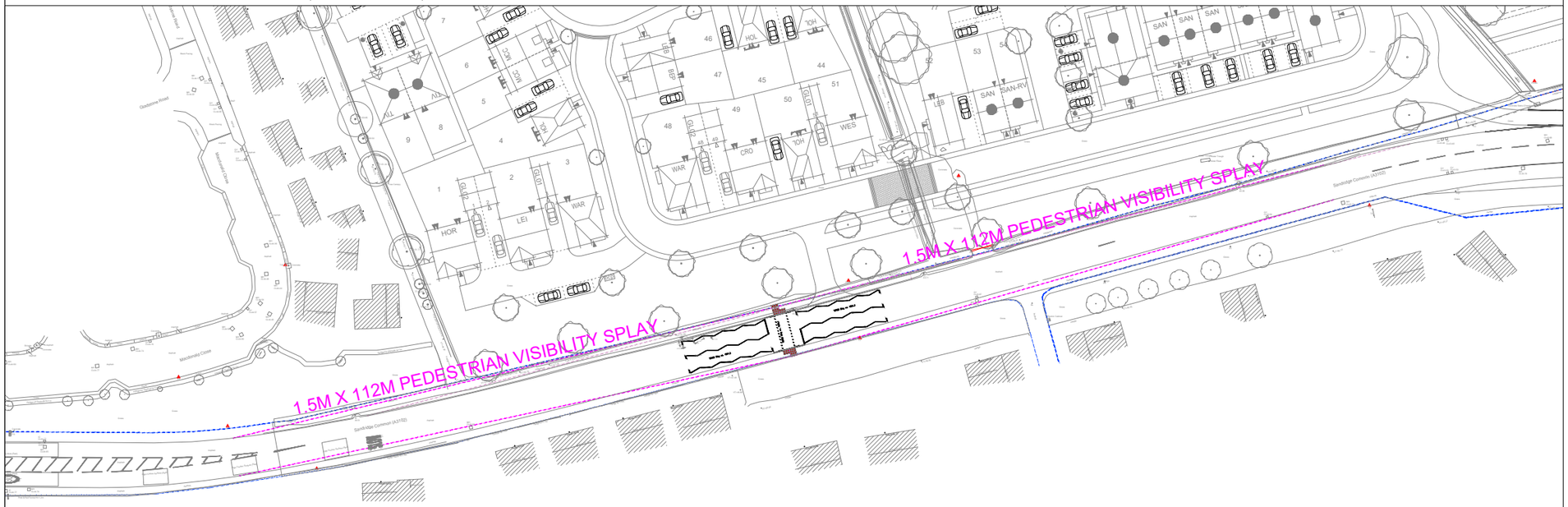
PBA Drawing No:	Revison
027.0014-0003	P01

Appendix G

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EASTERN CONTROLLED CROSSING POINT (WITH VISIBILITY)



WESTERN CONTROLLED CROSSING POINT (WITH VISIBILITY)

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   - 4.2. Site Layout

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6. VISIBILITY FOR THE WESTERN CROSSING IS BASED ON RECORDED SPEEDS ALONG SANDRIDGE COMMON. VISIBILITY FOR THE EASTERN CROSSING IS BASED ON THE 40MPH SPEED LIMIT

KEY

---------- INDICATIVE HIGHWAY BOUNDARY

NORTH

PRELIMINARY

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0m 50m
1:1000

Rev	Description	Date	By	App'd
P01	FIRST ISSUE	03.11.2025	IDR	HLC

Date Created	Drawn By	Approved By	Suitabilty Code
03.11.25	IDR	HLC	-

PBA Project Number	Scale	
027.0014	1:1000	(AT A3)

PBA Drawing No:	Revison
027.0014-0004	P01

Project Name
LAND AT NEW FARM, MELKSHAM (OUTLINE)

Project Phase
PRELIMINARY

Title
PROPOSED PEDESTRIAN CROSSING POINT VISIBILITY SPLAYS

paul basham associates
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Client
BLOOR HOMES

Appendix I

Calculation Reference: AUDIT-247601-230630-0617

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	3 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	3 days
	SC	SURREY	1 days
	SP	SOUTHAMPTON	1 days
	WB	WEST BERKSHIRE	1 days
	WS	WEST SUSSEX	2 days
03	SOUTH WEST		
	DV	DEVON	1 days
04	EAST ANGLIA		
	NF	NORFOLK	9 days
05	EAST MIDLANDS		
	DY	DERBY	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days

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

Primary 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: No of Dwellings
Actual Range: 108 to 537 (units:)
Range Selected by User: 100 to 600 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling 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: 01/01/15 to 12/10/22

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:

Monday	5 days
Tuesday	5 days
Wednesday	10 days
Thursday	4 days
Friday	3 days

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

Selected survey types:

Manual count	23 days
Directional ATC Count	4 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:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	25

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:

Residential Zone	25
Out of Town	2

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	10 days - Selected
Servicing vehicles Excluded	46 days - Selected

Secondary Filtering selection:

Use Class:

C3	27 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included
Population within 1 mile:

1,001 to 5,000	4 days
5,001 to 10,000	6 days
10,001 to 15,000	9 days
15,001 to 20,000	4 days
20,001 to 25,000	4 days

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

Population within 5 miles:

5,001 to 25,000	7 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
125,001 to 250,000	9 days
250,001 to 500,000	3 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	5 days
1.1 to 1.5	20 days
1.6 to 2.0	2 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:

Yes	19 days
No	8 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	27 days

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

LIST OF SITES relevant to selection parameters

1 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

2 DY-03-A-01 MIXED HOUSES DERBY
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

3 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

4 ES-03-A-08 MIXED HOUSES & FLATS EAST SUSSEX
WRESTWOOD ROAD
BEXHILL

Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: WEDNESDAY *12/10/22* *Survey Type: MANUAL*

5 EX-03-A-03 MIXED HOUSES ESSEX
KESTREL GROVE
RAYLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 123
Survey date: MONDAY *27/09/21* *Survey Type: MANUAL*

6 HC-03-A-24 MIXED HOUSES & FLATS HAMPSHIRE
STONEHAM LANE
EASTLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 243
Survey date: WEDNESDAY *10/11/21* *Survey Type: MANUAL*

7 HC-03-A-28 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY *08/11/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 HC-03-A-29 MIXED HOUSES & FLATS HAMPSHIRE
CROW LANE
RINGWOOD
CROW
Edge of Town
Residential Zone
Total No of Dwellings: 195
Survey date: THURSDAY *30/06/22* *Survey Type: MANUAL*

9 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

10 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

11 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

12 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

13 NF-03-A-16 MIXED HOUSES & FLATS NORFOLK
NORWICH COMMON
WYMONDHAM

Edge of Town
Residential Zone
Total No of Dwellings: 138
Survey date: TUESDAY *20/10/15* *Survey Type: DIRECTIONAL ATC COUNT*

14 NF-03-A-23 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 514
Survey date: WEDNESDAY *22/09/21* *Survey Type: MANUAL*

15 NF-03-A-31 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 321
Survey date: THURSDAY *22/09/22* *Survey Type: DIRECTIONAL ATC COUNT*

16 NF-03-A-32 MIXED HOUSES & FLATS NORFOLK
HUNSTANTON ROAD
HUNSTANTON

Edge of Town
Residential Zone
Total No of Dwellings: 164
Survey date: WEDNESDAY *21/09/22* *Survey Type: DIRECTIONAL ATC COUNT*

LIST OF SITES relevant to selection parameters (Cont.)

17 NF-03-A-33 MIXED HOUSES NORFOLK
LONDON ROAD
ATTLEBOROUGH

Edge of Town
Residential Zone
Total No of Dwellings: 143
Survey date: THURSDAY *29/09/22* *Survey Type: MANUAL*

18 NF-03-A-35 MIXED HOUSES & FLATS NORFOLK
REPTON AVENUE
NORWICH

Edge of Town
Residential Zone
Total No of Dwellings: 116
Survey date: WEDNESDAY *28/09/22* *Survey Type: MANUAL*

19 NF-03-A-38 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 537
Survey date: TUESDAY *20/09/22* *Survey Type: MANUAL*

20 NF-03-A-39 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

21 NF-03-A-47 MIXED HOUSES & FLATS NORFOLK
BURGH ROAD
AYLSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 300
Survey date: WEDNESDAY *21/09/22* *Survey Type: DIRECTIONAL ATC COUNT*

22 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

23 SP-03-A-02 MIXED HOUSES & FLATS SOUTHAMPTON
BARNFIELD WAY
NEAR SOUTHAMPTON
HEDGE END
Edge of Town
Out of Town
Total No of Dwellings: 250
Survey date: TUESDAY *12/10/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

24	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings:	DETACHED & SEMI-DETACHED	248	STAFFORDSHIRE
	Survey date: WEDNESDAY		*22/11/17*	*Survey Type: MANUAL*
25	WB-03-A-03 DORKING WAY READING CALCOT Edge of Town Residential Zone Total No of Dwellings:	MIXED HOUSES	108	WEST BERKSHIRE
	Survey date: FRIDAY		*09/09/22*	*Survey Type: MANUAL*
26	WS-03-A-08 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Total No of Dwellings:	MIXED HOUSES	180	WEST SUSSEX
	Survey date: THURSDAY		*19/04/18*	*Survey Type: MANUAL*
27	WS-03-A-14 TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone Total No of Dwellings:	MIXED HOUSES	117	WEST SUSSEX
	Survey date: WEDNESDAY		*20/10/21*	*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
HC-03-A-26	COVID
SF-03-A-09	COVID
SF-03-A-10	COVID
WS-03-A-13	COVID

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip 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	27	221	0.076	27	221	0.310	27	221	0.386
08:00 - 09:00	27	221	0.137	27	221	0.390	27	221	0.527
09:00 - 10:00	27	221	0.132	27	221	0.162	27	221	0.294
10:00 - 11:00	27	221	0.124	27	221	0.147	27	221	0.271
11:00 - 12:00	27	221	0.132	27	221	0.141	27	221	0.273
12:00 - 13:00	27	221	0.147	27	221	0.145	27	221	0.292
13:00 - 14:00	27	221	0.153	27	221	0.141	27	221	0.294
14:00 - 15:00	27	221	0.163	27	221	0.178	27	221	0.341
15:00 - 16:00	27	221	0.258	27	221	0.165	27	221	0.423
16:00 - 17:00	27	221	0.277	27	221	0.162	27	221	0.439
17:00 - 18:00	27	221	0.361	27	221	0.166	27	221	0.527
18:00 - 19:00	27	221	0.295	27	221	0.160	27	221	0.455
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.255			2.267			4.522

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

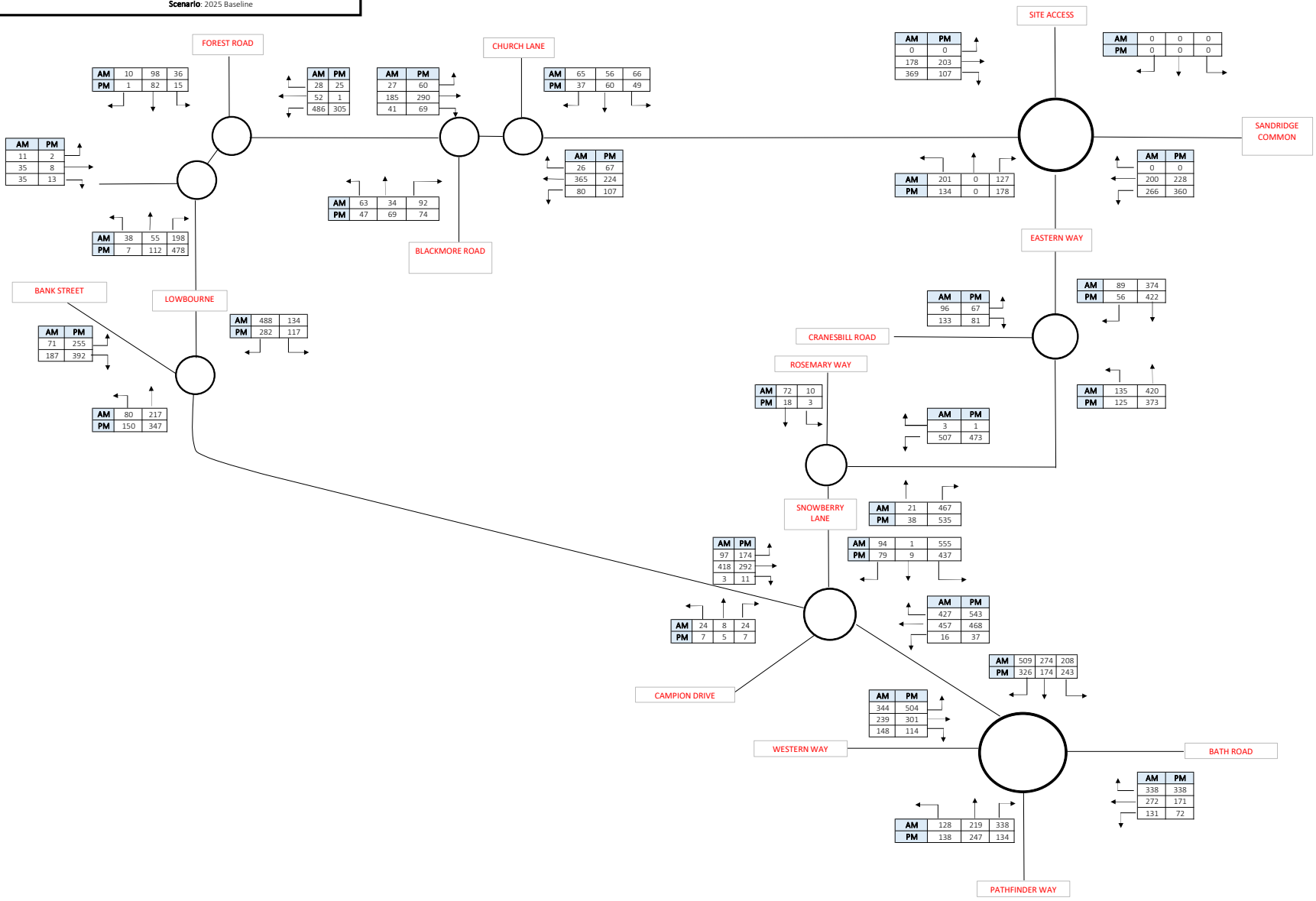
Trip rate parameter range selected:	108 - 537 (units:)
Survey date date range:	01/01/15 - 12/10/22
Number of weekdays (Monday-Friday):	27
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	25
Surveys manually removed from selection:	4

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.

Appendix J

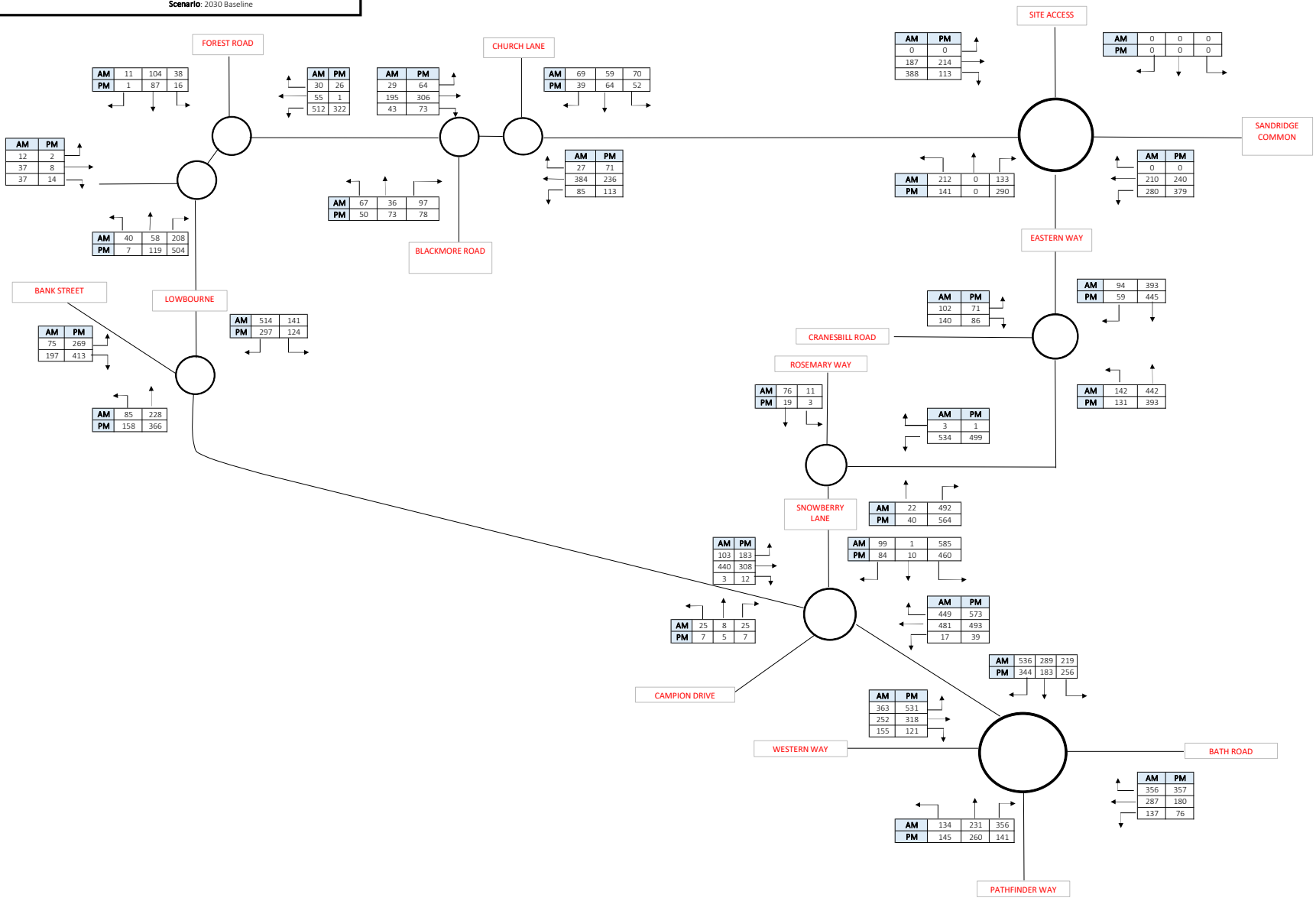
Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: 2025 Baseline



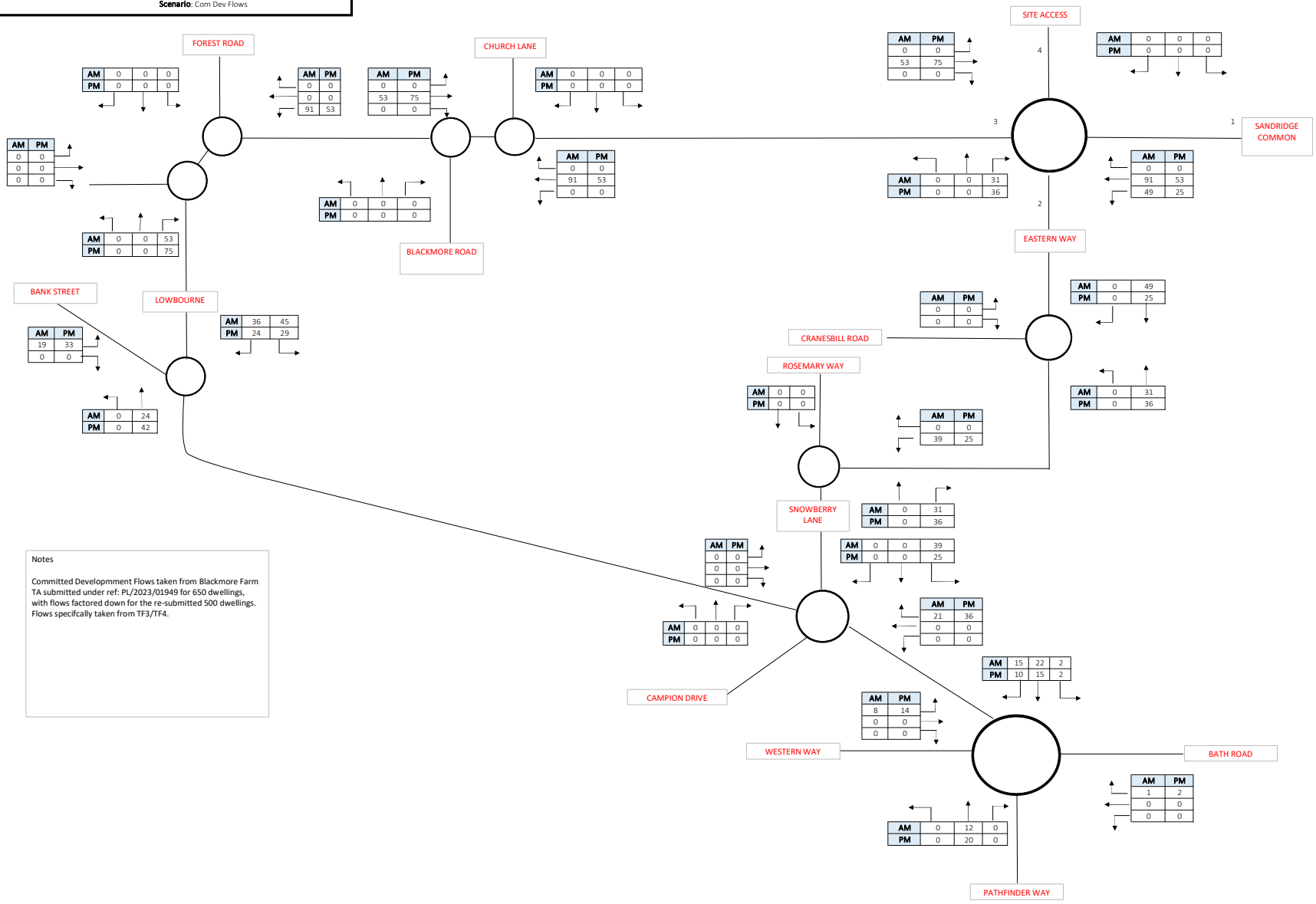
Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: 2030 Baseline



Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: Com Dev Flows

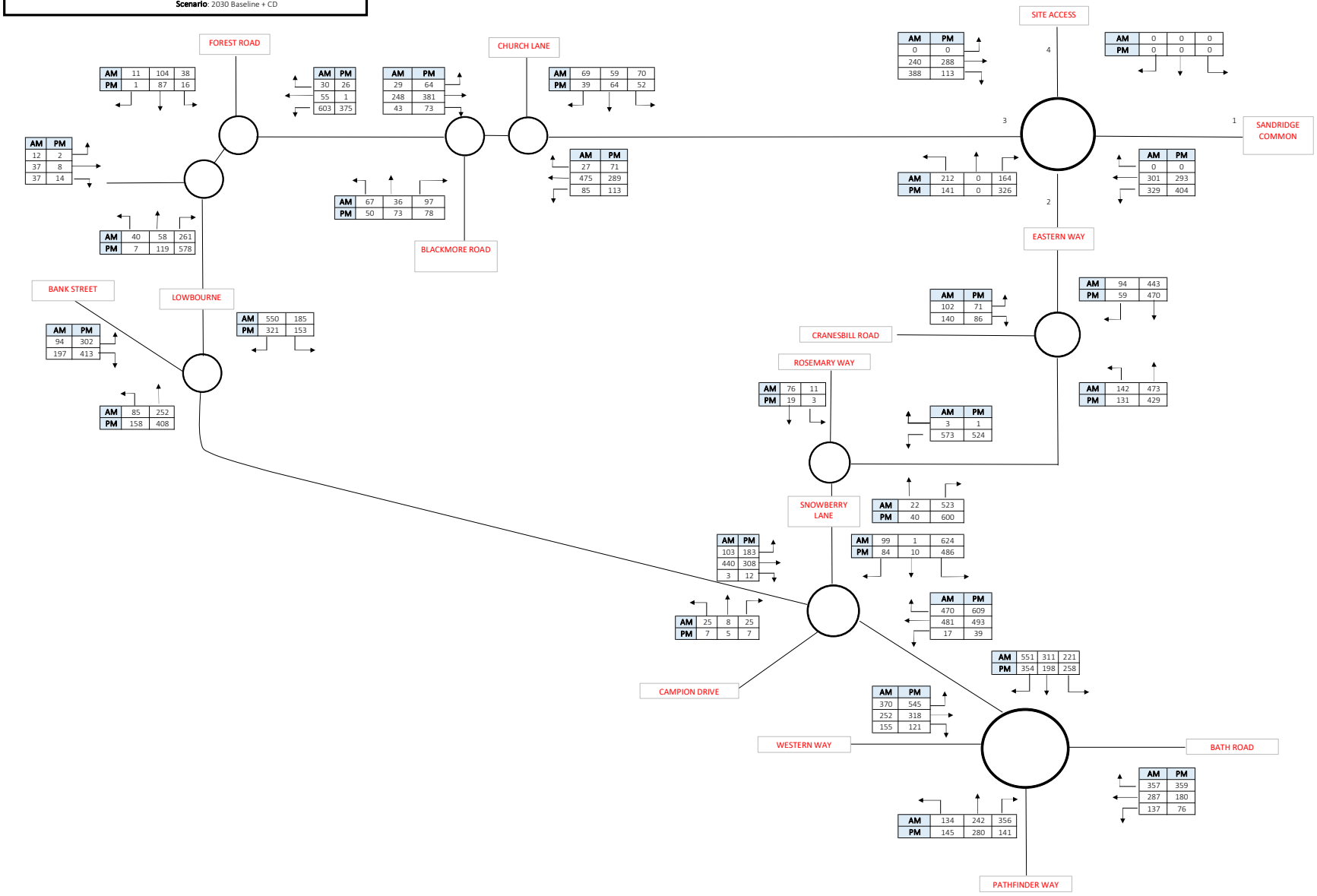


Notes

Committed Developmment Flows taken from Blackmore Farm TA submitted under ref: PL/2023/01949 for 650 dwellings, with flows factored down for the re-submitted 500 dwellings. Flows specifcally taken from TF3/TF4.

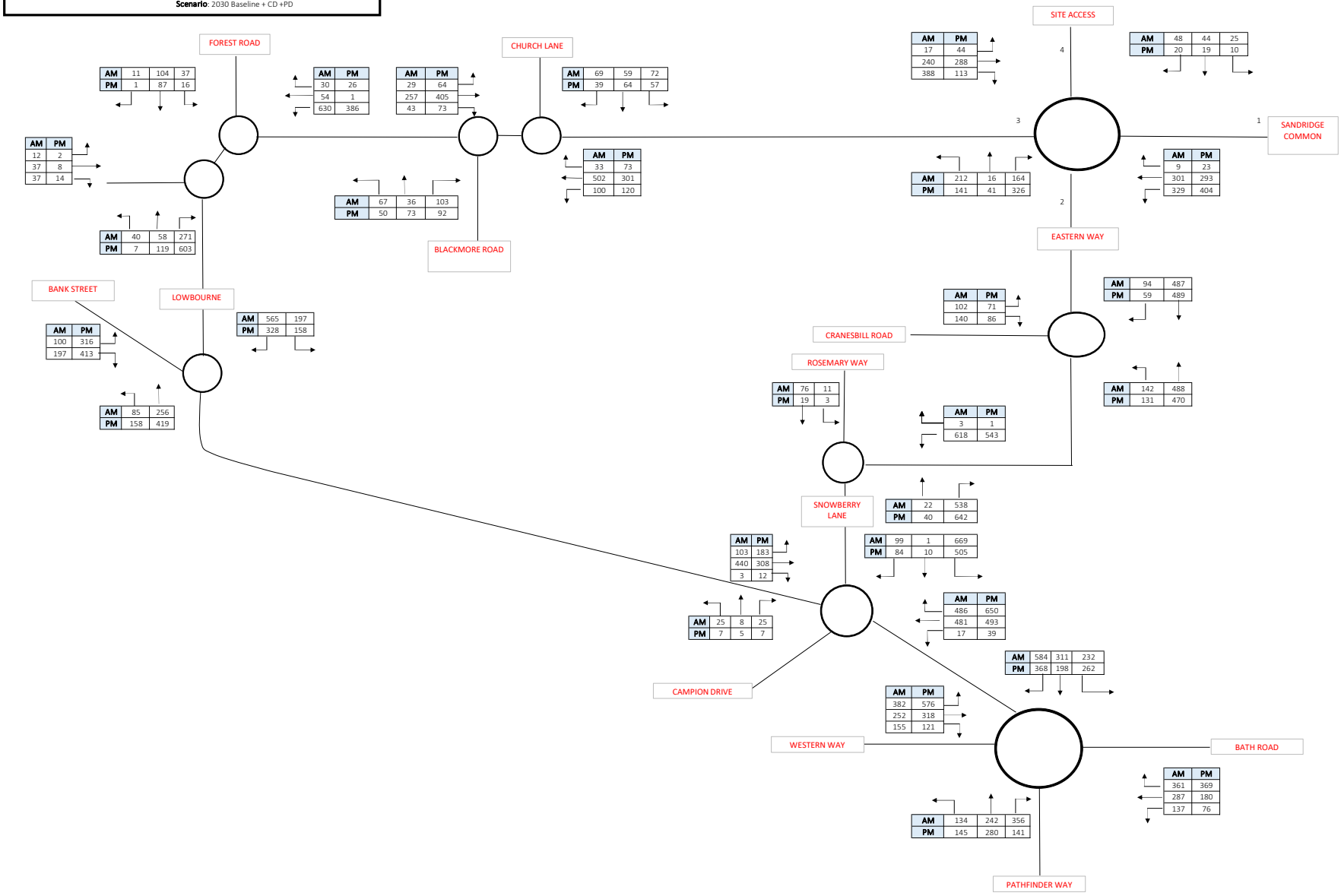
Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: 2030 Baseline + CD



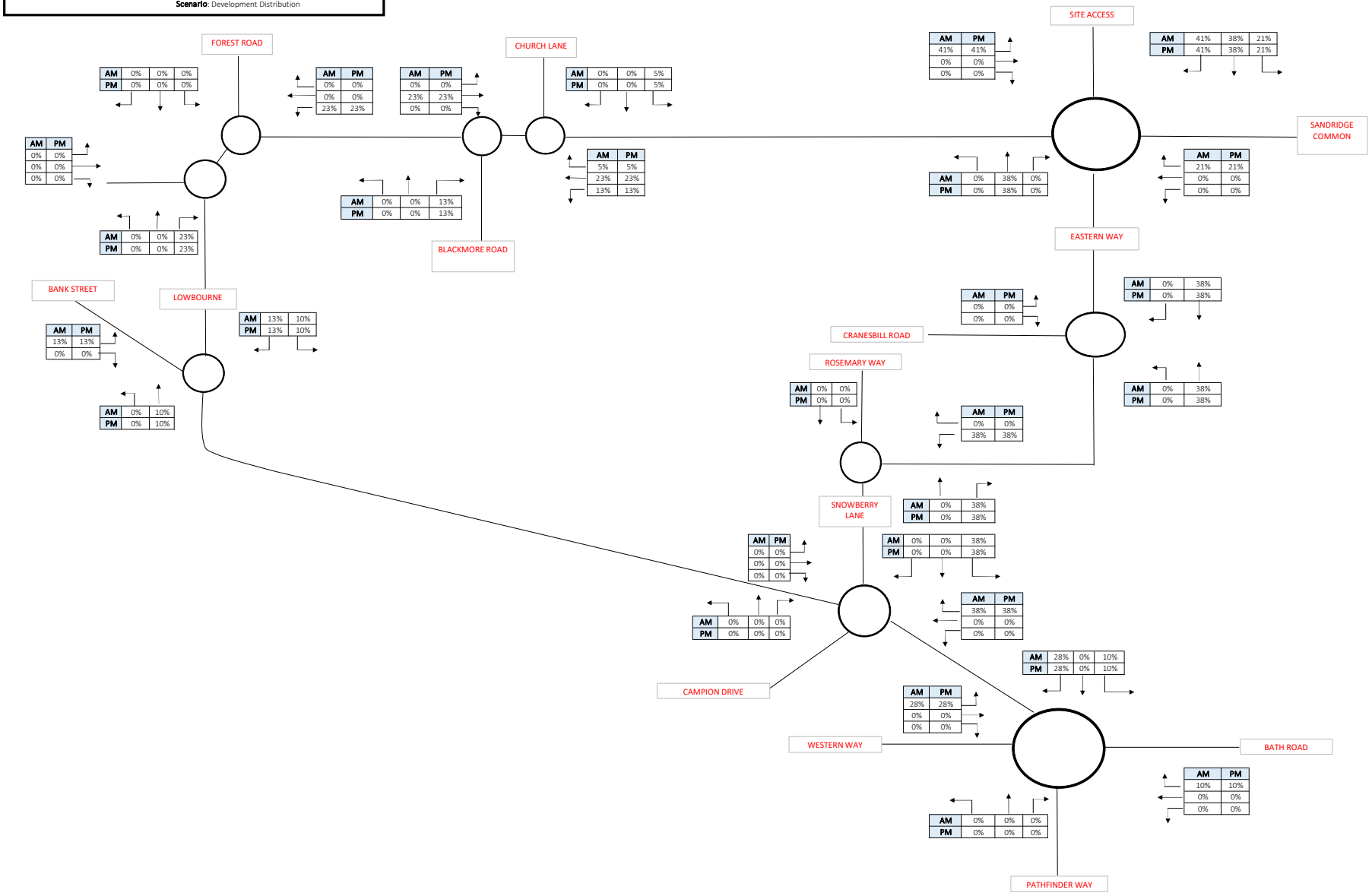
Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: 2030 Baseline + CD +PD



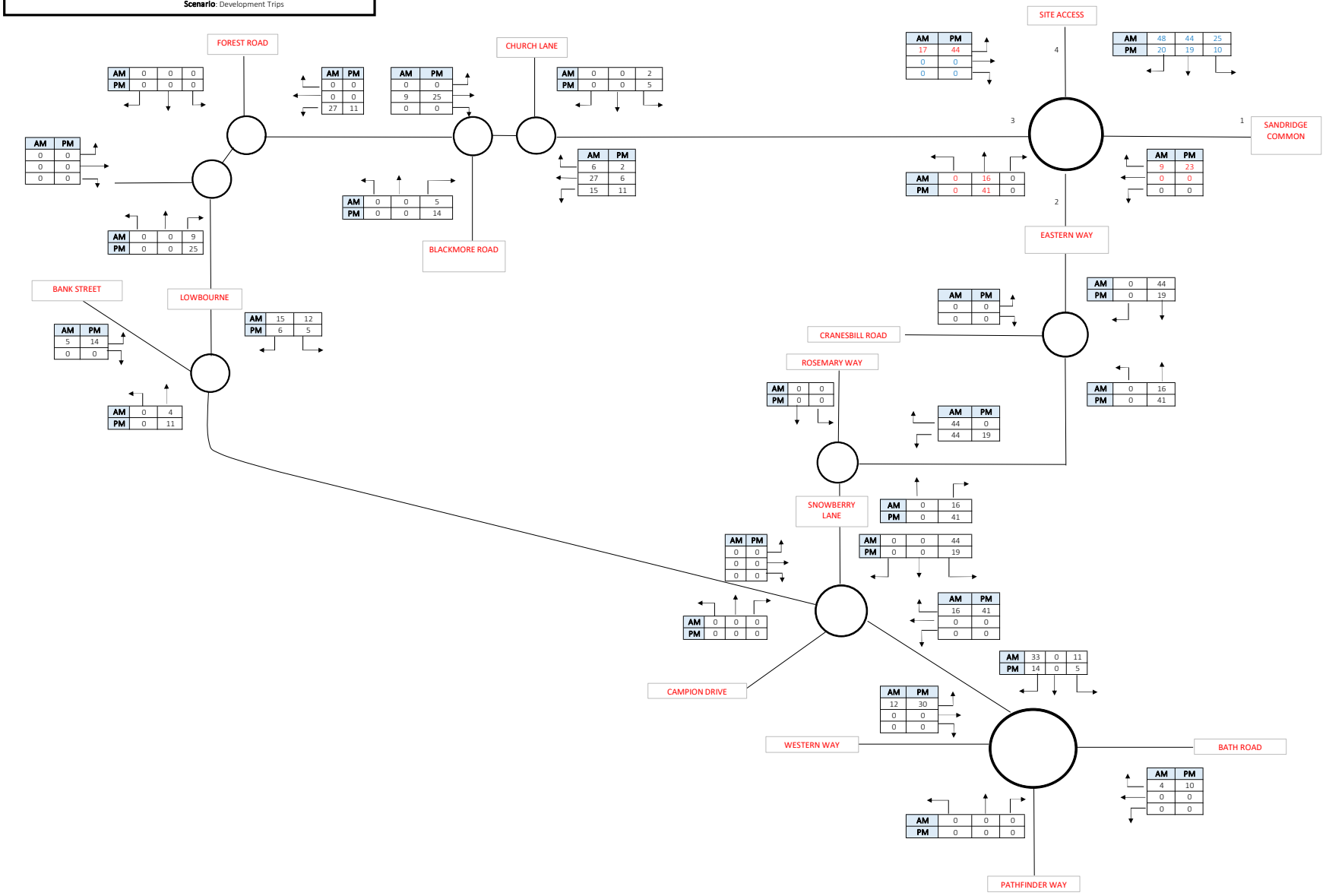
Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: Development Distribution



Project Name: New Farm, Melksham
Project Number: 027.0014
Drawn By: IDR
Approved By: JNR

Scenario: Development Trips



Appendix K

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Site Access Roundabout.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 05/11/2025 09:27:33

«Uses hatching - 2030 Baseline + CD + PD, AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	Uses hatching - 2030 Baseline + CD + PD							
Arm 1	2.1	10.69	0.68	B	1.7	7.74	0.63	A
Arm 2	0.6	5.01	0.38	A	0.9	5.94	0.48	A
Arm 3	1.3	6.51	0.56	A	0.8	5.64	0.43	A
Arm 4	0.2	5.60	0.17	A	0.1	4.74	0.07	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Uses hatching	✓	100.000	100.000

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030 Baseline + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

Uses hatching - 2030 Baseline + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Sandridge Common E	
2	Eastern Way	
3	Sandridge Common W	
4	Site Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.65	5.00	10.0	12.0	36.0	13.5	
2	3.65	5.00	15.0	15.0	36.0	18.0	
3	3.65	5.00	15.0	15.0	36.0	18.0	
4	3.10	5.00	10.0	22.0	36.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.602	1426
2	0.609	1460
3	0.609	1460
4	0.593	1353

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	639	100.000
2		ONE HOUR	✓	392	100.000
3		ONE HOUR	✓	645	100.000
4		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	329	301	9
	2	164	0	212	16
	3	240	388	0	17
	4	25	44	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	5	5	5
	2	5	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.68	10.69	2.1	B	586	880
2	0.38	5.01	0.6	A	360	540
3	0.56	6.51	1.3	A	592	888
4	0.17	5.60	0.2	A	107	161

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	481	120	360	1141	0.421	478	321	0.0	0.7	5.405	A
2	295	74	268	1227	0.241	294	570	0.0	0.3	3.854	A
3	486	121	142	1304	0.372	483	420	0.0	0.6	4.375	A
4	88	22	593	936	0.094	88	31	0.0	0.1	4.239	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	574	144	431	1099	0.523	573	385	0.7	1.1	6.829	A
2	352	88	321	1195	0.295	352	683	0.3	0.4	4.271	A
3	580	145	170	1287	0.451	579	503	0.6	0.8	5.080	A
4	105	26	711	867	0.121	105	38	0.1	0.1	4.726	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	704	176	527	1041	0.676	700	471	1.1	2.0	10.449	B
2	432	108	392	1151	0.375	431	835	0.4	0.6	4.992	A
3	710	178	208	1264	0.562	708	615	0.8	1.3	6.463	A
4	129	32	870	773	0.167	129	46	0.1	0.2	5.590	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	704	176	528	1040	0.677	703	472	2.0	2.1	10.687	B
2	432	108	394	1150	0.375	432	838	0.6	0.6	5.010	A
3	710	178	208	1263	0.562	710	618	1.3	1.3	6.506	A
4	129	32	872	771	0.167	129	46	0.2	0.2	5.602	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	574	144	433	1097	0.523	578	387	2.1	1.1	6.981	A
2	352	88	324	1193	0.295	353	687	0.6	0.4	4.290	A
3	580	145	170	1286	0.451	582	507	1.3	0.8	5.122	A
4	105	26	714	865	0.122	105	38	0.2	0.1	4.742	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	481	120	362	1140	0.422	483	324	1.1	0.7	5.487	A
2	295	74	270	1225	0.241	296	574	0.4	0.3	3.872	A
3	486	121	142	1303	0.373	487	423	0.8	0.6	4.413	A
4	88	22	597	934	0.094	88	32	0.1	0.1	4.257	A

Appendix L

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Cranesbill Road,Eastern Way Roundabout.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 04/11/2025 11:19:53

»2025, AM
»2025, PM
»2030 + CD, AM
»2030 + CD, PM
»2030 + CD + PD, AM
»2030 + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Arm 1	1.4	9.96	0.59	A	1.4	9.65	0.59	A
Arm 2	1.0	5.75	0.49	A	0.8	5.07	0.44	A
Arm 3	0.4	5.56	0.28	A	0.2	4.70	0.18	A
	2030 + CD							
Arm 1	2.1	13.01	0.68	B	1.8	11.45	0.65	B
Arm 2	1.2	6.47	0.55	A	1.0	5.62	0.49	A
Arm 3	0.4	6.00	0.31	A	0.2	4.99	0.19	A
	2030 + CD + PD							
Arm 1	2.7	15.74	0.74	C	2.0	12.26	0.67	B
Arm 2	1.3	6.67	0.56	A	1.1	6.05	0.53	A
Arm 3	0.4	6.10	0.31	A	0.2	5.18	0.20	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/09/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	08:00	09:30	15
D2	2025	PM	ONE HOUR	17:00	18:30	15
D3	2030 + CD	AM	ONE HOUR	08:00	09:30	15
D4	2030 + CD	PM	ONE HOUR	17:00	18:30	15
D5	2030 + CD + PD	AM	ONE HOUR	08:00	09:30	15
D6	2030 + CD + PD	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Eastern Way N	
2	Eastern Way S	
3	Cranesbill Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.00	5.00	3.0	20.0	40.0	47.0	
2	3.00	6.00	9.0	18.0	40.0	12.0	
3	3.00	6.00	5.0	22.0	40.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.492	1037
2	0.604	1426
3	0.573	1281

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	463	100.000
2		✓	555	100.000
3		✓	229	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	374	89
	2	420	0	135
	3	96	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.59	9.96	1.4	A
2	0.49	5.75	1.0	A
3	0.28	5.56	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	349	100	894	0.390	346	0.6	6.539	A
2	418	67	1256	0.333	416	0.5	4.276	A
3	172	315	984	0.175	172	0.2	4.426	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	416	119	884	0.471	415	0.9	7.658	A
2	499	80	1248	0.400	498	0.7	4.798	A
3	206	377	948	0.217	206	0.3	4.847	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	510	146	871	0.585	508	1.4	9.851	A
2	611	98	1237	0.494	610	1.0	5.726	A
3	252	462	900	0.280	252	0.4	5.551	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	510	146	871	0.585	510	1.4	9.958	A
2	611	98	1237	0.494	611	1.0	5.751	A
3	252	462	899	0.280	252	0.4	5.562	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	416	120	884	0.471	418	0.9	7.758	A
2	499	80	1248	0.400	500	0.7	4.825	A
3	206	378	947	0.217	206	0.3	4.860	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	349	100	894	0.390	350	0.6	6.630	A
2	418	67	1256	0.333	419	0.5	4.305	A
3	172	317	983	0.175	173	0.2	4.444	A

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	478	100.000
2		✓	498	100.000
3		✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	422	56
	2	373	0	125
	3	67	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.59	9.65	1.4	A
2	0.44	5.07	0.8	A
3	0.18	4.70	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	360	61	913	0.394	357	0.6	6.446	A
2	375	42	1271	0.295	373	0.4	4.003	A
3	111	280	1004	0.111	111	0.1	4.029	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	430	73	907	0.474	429	0.9	7.507	A
2	448	50	1266	0.354	447	0.5	4.394	A
3	133	335	972	0.137	133	0.2	4.288	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	526	89	899	0.585	524	1.4	9.549	A
2	548	61	1259	0.436	547	0.8	5.053	A
3	163	410	929	0.175	163	0.2	4.695	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	526	89	899	0.585	526	1.4	9.647	A
2	548	62	1259	0.436	548	0.8	5.065	A
3	163	411	929	0.175	163	0.2	4.699	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	430	73	907	0.474	432	0.9	7.602	A
2	448	51	1266	0.354	449	0.6	4.410	A
3	133	336	972	0.137	133	0.2	4.295	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	360	61	913	0.394	361	0.7	6.531	A
2	375	42	1271	0.295	375	0.4	4.023	A
3	111	281	1003	0.111	112	0.1	4.038	A

2030 + CD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 + CD	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	537	100.000
2		✓	615	100.000
3		✓	242	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	443	94
	2	473	0	142
	3	102	140	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.68	13.01	2.1	B
2	0.55	6.47	1.2	A
3	0.31	6.00	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	404	105	892	0.453	401	0.8	7.292	A
2	463	70	1254	0.369	461	0.6	4.527	A
3	182	354	961	0.190	181	0.2	4.609	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	483	126	881	0.548	481	1.2	8.966	A
2	553	84	1245	0.444	552	0.8	5.186	A
3	218	425	921	0.236	217	0.3	5.113	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	591	154	867	0.682	588	2.1	12.713	B
2	677	103	1234	0.549	675	1.2	6.426	A
3	266	520	867	0.307	266	0.4	5.988	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	591	154	867	0.682	591	2.1	13.007	B
2	677	103	1234	0.549	677	1.2	6.468	A
3	266	521	866	0.308	266	0.4	6.005	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	483	126	881	0.548	486	1.2	9.194	A
2	553	85	1245	0.444	554	0.8	5.227	A
3	218	426	920	0.237	218	0.3	5.134	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	404	106	891	0.454	406	0.8	7.441	A
2	463	71	1253	0.369	464	0.6	4.567	A
3	182	357	960	0.190	182	0.2	4.634	A

2030 + CD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 + CD	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	529	100.000
2		✓	560	100.000
3		✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	470	59
	2	429	0	131
	3	71	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.65	11.45	1.8	B
2	0.49	5.62	1.0	A
3	0.19	4.99	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	398	64	911	0.437	395	0.8	6.935	A
2	422	44	1270	0.332	420	0.5	4.227	A
3	118	321	980	0.121	118	0.1	4.171	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	476	77	905	0.525	474	1.1	8.330	A
2	503	53	1264	0.398	503	0.7	4.724	A
3	141	385	944	0.150	141	0.2	4.486	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	582	95	897	0.650	580	1.8	11.255	B
2	617	65	1257	0.490	615	1.0	5.600	A
3	173	471	894	0.193	173	0.2	4.988	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	582	95	897	0.650	582	1.8	11.446	B
2	617	65	1257	0.491	617	1.0	5.621	A
3	173	472	894	0.193	173	0.2	4.994	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	476	77	905	0.525	478	1.1	8.491	A
2	503	53	1264	0.398	505	0.7	4.747	A
3	141	387	943	0.150	141	0.2	4.493	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	398	65	911	0.437	400	0.8	7.058	A
2	422	45	1269	0.332	422	0.5	4.253	A
3	118	323	979	0.121	118	0.1	4.183	A

2030 + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.20	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 + CD + PD	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	581	100.000
2		✓	630	100.000
3		✓	242	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	487	94
	2	488	0	142
	3	102	140	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.74	15.74	2.7	C
2	0.56	6.67	1.3	A
3	0.31	6.10	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	437	105	892	0.491	434	0.9	7.800	A
2	474	70	1254	0.378	472	0.6	4.591	A
3	182	366	955	0.191	181	0.2	4.648	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	126	881	0.593	520	1.4	9.922	A
2	566	84	1245	0.455	565	0.8	5.289	A
3	218	438	913	0.238	217	0.3	5.169	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	640	154	867	0.737	635	2.6	15.153	C
2	694	103	1234	0.562	692	1.3	6.618	A
3	266	536	857	0.311	266	0.4	6.084	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	640	154	867	0.738	639	2.7	15.739	C
2	694	103	1234	0.562	694	1.3	6.666	A
3	266	537	856	0.311	266	0.4	6.101	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	126	881	0.593	527	1.5	10.311	B
2	566	85	1245	0.455	568	0.8	5.334	A
3	218	440	912	0.239	218	0.3	5.190	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	437	106	891	0.491	439	1.0	8.007	A
2	474	71	1253	0.378	475	0.6	4.634	A
3	182	368	953	0.191	183	0.2	4.671	A

2030 + CD + PD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 + CD + PD	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	548	100.000
2		✓	601	100.000
3		✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	489	59
	2	470	0	131
	3	71	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.67	12.26	2.0	B
2	0.53	6.05	1.1	A
3	0.20	5.18	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	413	64	911	0.453	409	0.8	7.125	A
2	452	44	1270	0.356	450	0.5	4.383	A
3	118	352	963	0.123	118	0.1	4.258	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	493	77	905	0.544	491	1.2	8.668	A
2	540	53	1264	0.427	540	0.7	4.962	A
3	141	422	922	0.153	141	0.2	4.605	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	603	95	897	0.673	600	2.0	12.008	B
2	662	65	1257	0.526	660	1.1	6.017	A
3	173	516	868	0.199	173	0.2	5.170	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	603	95	897	0.673	603	2.0	12.255	B
2	662	65	1257	0.526	662	1.1	6.047	A
3	173	517	868	0.199	173	0.2	5.180	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	493	77	905	0.544	496	1.2	8.867	A
2	540	53	1264	0.427	542	0.8	4.996	A
3	141	424	922	0.153	141	0.2	4.615	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	413	65	911	0.453	414	0.8	7.266	A
2	452	45	1269	0.357	453	0.6	4.417	A
3	118	354	961	0.123	118	0.1	4.273	A

Appendix M

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Eastern Way, Rosemary Way Roundabout.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 04/11/2025 11:27:57

»2025, AM
»2025, PM
»2030 Forecast + CD, AM
»2030 Forecast + CD, PM
»2030 Forecast + CD + PD, AM
»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Arm 1	0.9	5.49	0.46	A	0.7	4.93	0.42	A
Arm 2	0.9	6.37	0.49	A	1.3	7.61	0.57	A
Arm 3	0.1	4.42	0.10	A	0.0	4.29	0.03	A
	2030 Forecast + CD							
Arm 1	1.1	6.20	0.52	A	0.9	5.34	0.46	A
Arm 2	1.2	7.17	0.54	A	1.7	9.02	0.64	A
Arm 3	0.1	4.65	0.11	A	0.0	4.52	0.03	A
	2030 Forecast + CD + PD							
Arm 1	1.3	6.77	0.56	A	0.9	5.51	0.48	A
Arm 2	1.3	7.41	0.56	A	2.1	10.19	0.68	B
Arm 3	0.1	4.71	0.11	A	0.0	4.68	0.03	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/09/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15
D2	2025	PM	ONE HOUR	16:45	18:15	15
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	5.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Eastern Way	
2	Snowberry Lane	
3	Rosemary Way	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.65	6.00	4.0	20.0	40.0	22.0	
2	3.30	5.50	5.0	14.0	40.0	38.0	
3	3.65	5.00	3.0	20.0	40.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.589	1391
2	0.530	1215
3	0.578	1322

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	510	100.000
2		✓	488	100.000
3		✓	82	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	507	3
	2	467	0	21
	3	10	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.46	5.49	0.9	A
2	0.49	6.37	0.9	A
3	0.10	4.42	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	384	54	1233	0.312	382	0.4	4.225	A
2	367	2	1103	0.333	365	0.5	4.869	A
3	62	350	1000	0.062	61	0.1	3.836	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	458	65	1226	0.374	458	0.6	4.682	A
2	439	3	1103	0.398	438	0.7	5.412	A
3	74	419	960	0.077	74	0.1	4.063	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	562	79	1218	0.461	561	0.8	5.460	A
2	537	3	1102	0.487	536	0.9	6.345	A
3	90	513	905	0.100	90	0.1	4.416	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	562	79	1218	0.461	562	0.9	5.486	A
2	537	3	1102	0.487	537	0.9	6.370	A
3	90	514	905	0.100	90	0.1	4.419	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	458	65	1226	0.374	459	0.6	4.701	A
2	439	3	1103	0.398	440	0.7	5.441	A
3	74	421	959	0.077	74	0.1	4.070	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	384	54	1232	0.312	385	0.5	4.248	A
2	367	2	1103	0.333	368	0.5	4.902	A
3	62	352	998	0.062	62	0.1	3.843	A

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	474	100.000
2		✓	573	100.000
3		✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	473	1
	2	535	0	38
	3	3	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.42	4.93	0.7	A
2	0.57	7.61	1.3	A
3	0.03	4.29	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	357	13	1256	0.284	355	0.4	3.989	A
2	431	0.75	1104	0.391	429	0.6	5.314	A
3	16	400	971	0.016	16	0.0	3.769	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	426	16	1255	0.340	426	0.5	4.340	A
2	515	0.90	1104	0.467	514	0.9	6.097	A
3	19	480	924	0.020	19	0.0	3.974	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	20	1253	0.417	521	0.7	4.916	A
2	631	1	1104	0.572	629	1.3	7.559	A
3	23	587	862	0.027	23	0.0	4.288	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	20	1253	0.417	522	0.7	4.925	A
2	631	1	1104	0.572	631	1.3	7.612	A
3	23	589	862	0.027	23	0.0	4.293	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	426	16	1255	0.340	427	0.5	4.352	A
2	515	0.90	1104	0.467	517	0.9	6.155	A
3	19	483	923	0.020	19	0.0	3.981	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	357	14	1256	0.284	357	0.4	4.007	A
2	431	0.75	1104	0.391	432	0.6	5.371	A
3	16	404	969	0.016	16	0.0	3.777	A

2030 Forecast + CD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	576	100.000
2		✓	545	100.000
3		✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	573	3
	2	523	0	22
	3	11	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.52	6.20	1.1	A
2	0.54	7.17	1.2	A
3	0.11	4.65	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	434	57	1231	0.352	431	0.5	4.492	A
2	410	2	1103	0.372	408	0.6	5.162	A
3	65	391	976	0.067	65	0.1	3.953	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	518	68	1224	0.423	517	0.7	5.086	A
2	490	3	1103	0.444	489	0.8	5.860	A
3	78	469	931	0.084	78	0.1	4.222	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	634	84	1215	0.522	633	1.1	6.166	A
2	600	3	1102	0.544	599	1.2	7.123	A
3	96	574	870	0.110	96	0.1	4.649	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	634	84	1215	0.522	634	1.1	6.196	A
2	600	3	1102	0.544	600	1.2	7.166	A
3	96	576	869	0.110	96	0.1	4.654	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	518	68	1224	0.423	519	0.7	5.116	A
2	490	3	1103	0.444	491	0.8	5.905	A
3	78	472	929	0.084	78	0.1	4.231	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	434	57	1231	0.352	434	0.5	4.527	A
2	410	2	1103	0.372	411	0.6	5.209	A
3	65	395	974	0.067	66	0.1	3.964	A

2030 Forecast + CD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	7.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	525	100.000
2		✓	640	100.000
3		✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	524	1
	2	600	0	40
	3	3	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.46	5.34	0.9	A
2	0.64	9.02	1.7	A
3	0.03	4.52	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	395	14	1256	0.315	393	0.5	4.166	A
2	482	0.75	1104	0.437	479	0.8	5.733	A
3	17	449	943	0.018	16	0.0	3.887	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	472	17	1254	0.376	471	0.6	4.595	A
2	575	0.90	1104	0.521	574	1.1	6.781	A
3	20	538	891	0.022	20	0.0	4.132	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	578	21	1252	0.462	577	0.8	5.326	A
2	705	1	1104	0.639	702	1.7	8.908	A
3	24	658	822	0.029	24	0.0	4.514	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	578	21	1252	0.462	578	0.9	5.340	A
2	705	1	1104	0.639	705	1.7	9.017	A
3	24	661	820	0.030	24	0.0	4.522	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	472	17	1254	0.376	473	0.6	4.614	A
2	575	0.90	1104	0.521	578	1.1	6.882	A
3	20	542	889	0.022	20	0.0	4.142	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	395	14	1256	0.315	396	0.5	4.189	A
2	482	0.75	1104	0.437	483	0.8	5.814	A
3	17	453	940	0.018	17	0.0	3.897	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	621	100.000
2		✓	560	100.000
3		✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	618	3
	2	538	0	22
	3	11	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.56	6.77	1.3	A
2	0.56	7.41	1.3	A
3	0.11	4.71	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	468	57	1231	0.380	465	0.6	4.686	A
2	422	2	1103	0.382	419	0.6	5.246	A
3	65	403	969	0.068	65	0.1	3.981	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	558	68	1224	0.456	557	0.8	5.393	A
2	503	3	1103	0.457	503	0.8	5.990	A
3	78	483	923	0.085	78	0.1	4.261	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	684	84	1215	0.563	682	1.3	6.731	A
2	617	3	1102	0.559	615	1.2	7.360	A
3	96	591	861	0.111	96	0.1	4.706	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	684	84	1215	0.563	684	1.3	6.774	A
2	617	3	1102	0.559	617	1.3	7.409	A
3	96	592	860	0.111	96	0.1	4.712	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	558	68	1224	0.456	560	0.8	5.436	A
2	503	3	1103	0.457	505	0.9	6.042	A
3	78	485	922	0.085	78	0.1	4.271	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	468	57	1231	0.380	468	0.6	4.730	A
2	422	2	1103	0.382	422	0.6	5.297	A
3	65	406	967	0.068	66	0.1	3.993	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	544	100.000
2		✓	682	100.000
3		✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	543	1
	2	642	0	40
	3	3	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.48	5.51	0.9	A
2	0.68	10.19	2.1	B
3	0.03	4.68	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	410	14	1256	0.326	408	0.5	4.234	A
2	513	0.75	1104	0.465	510	0.9	6.029	A
3	17	480	925	0.018	16	0.0	3.964	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	489	17	1254	0.390	488	0.6	4.696	A
2	613	0.90	1104	0.556	612	1.2	7.294	A
3	20	576	869	0.023	20	0.0	4.237	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	599	21	1252	0.478	598	0.9	5.494	A
2	751	1	1104	0.680	748	2.1	9.985	A
3	24	704	795	0.030	24	0.0	4.668	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	599	21	1252	0.478	599	0.9	5.511	A
2	751	1	1104	0.680	751	2.1	10.194	B
3	24	707	794	0.031	24	0.0	4.679	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	489	17	1254	0.390	490	0.6	4.717	A
2	613	0.90	1104	0.556	616	1.3	7.436	A
3	20	580	867	0.023	20	0.0	4.251	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	410	14	1256	0.326	410	0.5	4.261	A
2	513	0.75	1104	0.465	515	0.9	6.130	A
3	17	485	922	0.018	17	0.0	3.978	A

Appendix N

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Campion Drive, Spa Road Roundabout.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 04/11/2025 12:00:52

»2025, AM
»2025, PM
»2030 Forecast + CD, AM
»2030 Forecast + CD, PM
»2030 Forecast + CD + PD, AM
»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Arm 1	0.8	4.00	0.44	A	0.5	3.15	0.34	A
Arm 2	1.1	4.16	0.53	A	1.6	5.13	0.62	A
Arm 3	0.1	3.73	0.06	A	0.0	3.90	0.02	A
Arm 4	0.7	4.16	0.40	A	0.6	4.29	0.38	A
	2030 Forecast + CD							
Arm 1	1.0	4.50	0.50	A	0.6	3.37	0.37	A
Arm 2	1.3	4.58	0.58	A	2.1	6.06	0.68	A
Arm 3	0.1	3.96	0.07	A	0.0	4.22	0.02	A
Arm 4	0.7	4.49	0.43	A	0.7	4.73	0.42	A
	2030 Forecast + CD + PD							
Arm 1	1.5	6.28	0.60	A	0.6	3.37	0.38	A
Arm 2	1.8	6.06	0.65	A	2.2	6.23	0.69	A
Arm 3	0.1	4.86	0.08	A	0.0	4.28	0.02	A
Arm 4	1.0	5.73	0.49	A	0.7	4.79	0.42	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15	✓
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15	✓
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Snowberry Lane	
2	Spa Road East	
3	Campion Drive	
4	Spa Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.60	8.10	18.3	22.9	41.9	15.0	
2	4.40	6.60	22.7	21.5	42.3	17.0	
3	3.50	6.80	15.6	17.3	41.9	14.5	
4	4.00	7.00	8.7	81.0	42.3	17.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.707	1962
2	0.696	1931
3	0.658	1733
4	0.676	1777

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	650	100.000
2		ONE HOUR	✓	900	100.000
3		ONE HOUR	✓	56	100.000
4		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	555	1	94
	2	427	0	16	457
	3	8	24	0	24
	4	97	418	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.44	4.00	0.8	A	596	895
2	0.53	4.16	1.1	A	826	1239
3	0.06	3.73	0.1	A	51	77
4	0.40	4.16	0.7	A	475	713

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	489	122	334	1726	0.284	488	399	0.0	0.4	2.903	A
2	678	169	74	1880	0.360	675	748	0.0	0.6	2.983	A
3	42	11	734	1251	0.034	42	15	0.0	0.0	2.978	A
4	390	97	344	1544	0.253	389	431	0.0	0.3	3.112	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	584	146	400	1679	0.348	584	478	0.4	0.5	3.283	A
2	809	202	88	1870	0.433	808	895	0.6	0.8	3.389	A
3	50	13	878	1156	0.044	50	18	0.0	0.0	3.256	A
4	466	116	412	1499	0.311	465	516	0.3	0.4	3.481	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	716	179	489	1616	0.443	715	585	0.5	0.8	3.989	A
2	991	248	108	1856	0.534	989	1096	0.8	1.1	4.146	A
3	62	15	1075	1026	0.060	62	22	0.0	0.1	3.731	A
4	570	143	505	1436	0.397	570	632	0.4	0.7	4.150	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	716	179	490	1616	0.443	716	586	0.8	0.8	3.999	A
2	991	248	108	1856	0.534	991	1098	1.1	1.1	4.159	A
3	62	15	1077	1025	0.060	62	22	0.1	0.1	3.735	A
4	570	143	505	1436	0.397	570	633	0.7	0.7	4.159	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	584	146	401	1679	0.348	585	479	0.8	0.5	3.294	A
2	809	202	88	1870	0.433	811	898	1.1	0.8	3.402	A
3	50	13	881	1154	0.044	50	18	0.1	0.0	3.263	A
4	466	116	413	1498	0.311	466	518	0.7	0.5	3.492	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	489	122	335	1725	0.284	490	401	0.5	0.4	2.918	A
2	678	169	74	1880	0.360	678	751	0.8	0.6	2.999	A
3	42	11	737	1249	0.034	42	15	0.0	0.0	2.986	A
4	390	97	346	1543	0.253	390	433	0.5	0.3	3.122	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	525	100.000
2		ONE HOUR	✓	1048	100.000
3		ONE HOUR	✓	19	100.000
4		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	437	9	79
	2	543	0	37	468
	3	5	7	0	7
	4	174	292	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.34	3.15	0.5	A	482	723
2	0.62	5.13	1.6	A	962	1442
3	0.02	3.90	0.0	A	17	26
4	0.38	4.29	0.6	A	438	657

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	395	99	233	1798	0.220	394	542	0.0	0.3	2.562	A
2	789	197	74	1880	0.420	786	552	0.0	0.7	3.284	A
3	14	4	818	1196	0.012	14	43	0.0	0.0	3.046	A
4	359	90	416	1496	0.240	358	416	0.0	0.3	3.161	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	472	118	278	1765	0.267	472	648	0.3	0.4	2.783	A
2	942	236	89	1869	0.504	941	661	0.7	1.0	3.872	A
3	17	4	979	1090	0.016	17	51	0.0	0.0	3.355	A
4	429	107	498	1441	0.298	428	497	0.3	0.4	3.554	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	578	145	341	1721	0.336	577	793	0.4	0.5	3.146	A
2	1154	288	109	1856	0.622	1151	809	1.0	1.6	5.095	A
3	21	5	1198	946	0.022	21	63	0.0	0.0	3.892	A
4	525	131	610	1365	0.385	524	609	0.4	0.6	4.278	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	578	145	341	1721	0.336	578	795	0.5	0.5	3.149	A
2	1154	288	109	1855	0.622	1154	810	1.6	1.6	5.130	A
3	21	5	1200	944	0.022	21	63	0.0	0.0	3.899	A
4	525	131	611	1364	0.385	525	610	0.6	0.6	4.289	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	472	118	279	1765	0.267	473	651	0.5	0.4	2.789	A
2	942	236	89	1869	0.504	945	663	1.6	1.0	3.902	A
3	17	4	982	1087	0.016	17	51	0.0	0.0	3.365	A
4	429	107	500	1439	0.298	430	499	0.6	0.4	3.570	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	395	99	234	1797	0.220	396	544	0.4	0.3	2.571	A
2	789	197	75	1879	0.420	790	555	1.0	0.7	3.307	A
3	14	4	822	1193	0.012	14	43	0.0	0.0	3.054	A
4	359	90	418	1494	0.240	360	418	0.4	0.3	3.172	A

2030 Forecast + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	724	100.000
2		ONE HOUR	✓	968	100.000
3		ONE HOUR	✓	58	100.000
4		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	624	1	99
	2	470	0	17	481
	3	8	25	0	25
	4	103	440	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	4.50	1.0	A	664	997
2	0.58	4.58	1.3	A	888	1332
3	0.07	3.96	0.1	A	53	80
4	0.43	4.49	0.7	A	501	752

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	545	136	351	1714	0.318	543	436	0.0	0.5	3.069	A
2	729	182	77	1878	0.388	726	817	0.0	0.6	3.120	A
3	44	11	788	1215	0.036	44	16	0.0	0.0	3.072	A
4	411	103	377	1522	0.270	410	454	0.0	0.4	3.231	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	651	163	420	1665	0.391	650	522	0.5	0.6	3.546	A
2	870	218	92	1867	0.466	869	978	0.6	0.9	3.605	A
3	52	13	943	1113	0.047	52	19	0.0	0.0	3.391	A
4	491	123	452	1472	0.333	490	543	0.4	0.5	3.665	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	797	199	514	1598	0.499	796	639	0.6	1.0	4.478	A
2	1066	266	113	1853	0.575	1064	1197	0.9	1.3	4.553	A
3	64	16	1154	974	0.066	64	23	0.0	0.1	3.953	A
4	601	150	553	1404	0.428	600	665	0.5	0.7	4.474	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	797	199	515	1598	0.499	797	640	1.0	1.0	4.495	A
2	1066	266	113	1852	0.575	1066	1199	1.3	1.3	4.576	A
3	64	16	1156	973	0.066	64	23	0.1	0.1	3.959	A
4	601	150	554	1403	0.428	601	666	0.7	0.7	4.489	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	651	163	422	1664	0.391	652	523	1.0	0.6	3.562	A
2	870	218	93	1867	0.466	872	981	1.3	0.9	3.627	A
3	52	13	946	1111	0.047	52	19	0.1	0.0	3.401	A
4	491	123	453	1471	0.334	492	545	0.7	0.5	3.679	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	545	136	353	1713	0.318	546	438	0.6	0.5	3.086	A
2	729	182	78	1877	0.388	730	821	0.9	0.6	3.138	A
3	44	11	792	1213	0.036	44	16	0.0	0.0	3.078	A
4	411	103	379	1521	0.270	412	456	0.5	0.4	3.245	A

2030 Forecast + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	580	100.000
2		ONE HOUR	✓	1141	100.000
3		ONE HOUR	✓	19	100.000
4		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	486	10	84
	2	609	0	39	493
	3	5	7	0	7
	4	183	308	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.37	3.37	0.6	A	532	798
2	0.68	6.06	2.1	A	1047	1571
3	0.02	4.22	0.0	A	17	26
4	0.42	4.73	0.7	A	462	692

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	437	109	245	1789	0.244	435	598	0.0	0.3	2.658	A
2	859	215	80	1876	0.458	856	601	0.0	0.8	3.516	A
3	14	4	889	1148	0.012	14	46	0.0	0.0	3.173	A
4	379	95	466	1463	0.259	377	438	0.0	0.3	3.312	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	521	130	294	1754	0.297	521	716	0.3	0.4	2.919	A
2	1026	256	95	1865	0.550	1024	719	0.8	1.2	4.273	A
3	17	4	1065	1033	0.017	17	55	0.0	0.0	3.542	A
4	452	113	557	1401	0.323	452	524	0.3	0.5	3.792	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	639	160	359	1708	0.374	638	875	0.4	0.6	3.363	A
2	1256	314	117	1850	0.679	1253	881	1.2	2.1	5.991	A
3	21	5	1302	877	0.024	21	67	0.0	0.0	4.205	A
4	554	138	682	1317	0.421	553	641	0.5	0.7	4.708	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	639	160	360	1707	0.374	639	877	0.6	0.6	3.367	A
2	1256	314	117	1850	0.679	1256	882	2.1	2.1	6.059	A
3	21	5	1306	875	0.024	21	67	0.0	0.0	4.216	A
4	554	138	684	1315	0.421	554	643	0.7	0.7	4.727	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	521	130	295	1754	0.297	522	719	0.6	0.4	2.926	A
2	1026	256	95	1865	0.550	1029	721	2.1	1.2	4.326	A
3	17	4	1070	1030	0.017	17	55	0.0	0.0	3.556	A
4	452	113	560	1399	0.323	453	527	0.7	0.5	3.812	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	437	109	247	1788	0.244	437	601	0.4	0.3	2.665	A
2	859	215	80	1876	0.458	861	604	1.2	0.9	3.553	A
3	14	4	894	1145	0.012	14	46	0.0	0.0	3.185	A
4	379	95	468	1461	0.259	379	440	0.5	0.4	3.331	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	6.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	769	100.000
2		ONE HOUR	✓	984	100.000
3		ONE HOUR	✓	58	100.000
4		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	669	1	99
	2	486	0	17	481
	3	8	25	0	25
	4	103	440	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.60	6.28	1.5	A	706	1058
2	0.65	6.06	1.8	A	903	1354
3	0.08	4.86	0.1	A	53	80
4	0.49	5.73	1.0	A	501	752

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	579	145	351	1536	0.377	577	448	0.0	0.6	3.744	A
2	741	185	77	1702	0.435	738	850	0.0	0.8	3.720	A
3	44	11	799	1050	0.042	43	16	0.0	0.0	3.576	A
4	411	103	389	1353	0.304	409	454	0.0	0.4	3.810	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	691	173	420	1487	0.465	690	536	0.6	0.9	4.515	A
2	885	221	92	1691	0.523	883	1018	0.8	1.1	4.447	A
3	52	13	957	946	0.055	52	19	0.0	0.1	4.025	A
4	491	123	466	1301	0.377	490	543	0.4	0.6	4.437	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	847	212	514	1420	0.596	844	656	0.9	1.5	6.224	A
2	1083	271	113	1677	0.646	1081	1245	1.1	1.8	6.006	A
3	64	16	1171	806	0.079	64	23	0.1	0.1	4.850	A
4	601	150	570	1231	0.489	600	664	0.6	0.9	5.694	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	847	212	515	1419	0.596	847	657	1.5	1.5	6.284	A
2	1083	271	113	1677	0.646	1083	1248	1.8	1.8	6.063	A
3	64	16	1174	804	0.079	64	23	0.1	0.1	4.863	A
4	601	150	571	1230	0.489	601	666	0.9	1.0	5.727	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	691	173	422	1485	0.465	694	538	1.5	0.9	4.561	A
2	885	221	93	1691	0.523	887	1023	1.8	1.1	4.496	A
3	52	13	961	944	0.055	52	19	0.1	0.1	4.041	A
4	491	123	468	1299	0.378	492	546	1.0	0.6	4.466	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	579	145	353	1534	0.377	580	450	0.9	0.6	3.776	A
2	741	185	78	1702	0.435	742	855	1.1	0.8	3.755	A
3	44	11	804	1047	0.042	44	16	0.1	0.0	3.587	A
4	411	103	391	1351	0.304	412	456	0.6	0.4	3.833	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	586	100.000
2		ONE HOUR	✓	1159	100.000
3		ONE HOUR	✓	19	100.000
4		ONE HOUR	✓	492	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	495	9	82
	2	638	0	38	483
	3	5	7	0	7
	4	179	302	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.37	0.6	A	538	807
2	0.69	6.23	2.2	A	1064	1595
3	0.02	4.28	0.0	A	17	26
4	0.42	4.79	0.7	A	451	677

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	441	110	240	1792	0.246	440	616	0.0	0.3	2.659	A
2	873	218	77	1878	0.465	869	603	0.0	0.9	3.556	A
3	14	4	902	1140	0.013	14	44	0.0	0.0	3.197	A
4	370	93	487	1448	0.256	369	429	0.0	0.3	3.332	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	527	132	287	1759	0.300	526	738	0.3	0.4	2.921	A
2	1042	260	92	1868	0.558	1040	722	0.9	1.2	4.344	A
3	17	4	1080	1023	0.017	17	52	0.0	0.0	3.577	A
4	442	111	583	1383	0.320	442	514	0.3	0.5	3.822	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	645	161	352	1713	0.377	644	903	0.4	0.6	3.366	A
2	1276	319	112	1853	0.689	1272	884	1.2	2.2	6.158	A
3	21	5	1321	865	0.024	21	64	0.0	0.0	4.266	A
4	542	135	714	1295	0.418	541	628	0.5	0.7	4.766	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	645	161	352	1713	0.377	645	905	0.6	0.6	3.370	A
2	1276	319	112	1853	0.689	1276	885	2.2	2.2	6.234	A
3	21	5	1324	862	0.024	21	64	0.0	0.0	4.278	A
4	542	135	716	1294	0.419	542	630	0.7	0.7	4.786	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	527	132	288	1758	0.300	527	741	0.6	0.4	2.926	A
2	1042	260	92	1867	0.558	1046	724	2.2	1.3	4.400	A
3	17	4	1085	1020	0.017	17	52	0.0	0.0	3.592	A
4	442	111	586	1381	0.320	443	516	0.7	0.5	3.844	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	441	110	241	1791	0.246	442	620	0.4	0.3	2.667	A
2	873	218	77	1878	0.465	874	606	1.3	0.9	3.594	A
3	14	4	907	1137	0.013	14	44	0.0	0.0	3.206	A
4	370	93	490	1446	0.256	371	431	0.5	0.3	3.352	A

Appendix O

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Spa Road, Pathfinder Way Roundabout.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 04/11/2025 12:27:51

»2025, AM
»2025, PM
»2030 Forecast + CD, AM
»2030 Forecast + CD, PM
»2030 Forecast + CD + PD, AM
»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Arm 1	1.7	5.81	0.64	A	0.8	3.60	0.45	A
Arm 2	1.2	5.22	0.54	A	0.6	3.41	0.38	A
Arm 3	1.2	5.64	0.54	A	0.6	3.65	0.37	A
Arm 4	1.7	7.57	0.63	A	2.8	10.09	0.74	B
	2030 Forecast + CD							
Arm 1	2.4	7.28	0.71	A	1.0	3.97	0.50	A
Arm 2	1.4	6.05	0.59	A	0.7	3.67	0.41	A
Arm 3	1.5	6.63	0.60	A	0.7	3.99	0.41	A
Arm 4	2.1	9.14	0.69	A	3.9	13.51	0.80	B
	2030 Forecast + CD + PD							
Arm 1	2.5	7.52	0.72	A	1.0	3.95	0.50	A
Arm 2	1.4	6.01	0.59	A	0.7	3.66	0.41	A
Arm 3	1.4	6.54	0.59	A	0.7	3.96	0.40	A
Arm 4	2.1	8.90	0.68	A	4.3	14.55	0.82	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15
D2	2025	PM	ONE HOUR	16:45	18:15	15
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	6.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Spa Road	
2	Bath Road	
3	Pathfinder Way	
4	Western Way	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.20	8.30	75.1	27.8	92.1	29.7	
2	3.70	8.20	56.8	30.2	92.1	27.5	
3	5.50	8.00	34.8	20.9	92.1	34.9	
4	3.70	7.50	103.7	36.6	92.1	69.6	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.551	2365
2	0.539	2264
3	0.529	2248
4	0.458	1904

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	991	100.000
2		✓	741	100.000
3		✓	685	100.000
4		✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	208	274	509
	2	338	0	131	272
	3	219	338	0	128
	4	344	238	148	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.64	5.81	1.7	A
2	0.54	5.22	1.2	A
3	0.54	5.64	1.2	A
4	0.63	7.57	1.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	746	543	1850	0.403	743	0.7	3.244	A
2	558	698	1682	0.332	556	0.5	3.191	A
3	516	839	1600	0.322	514	0.5	3.308	A
4	550	671	1423	0.386	547	0.6	4.099	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	891	650	1791	0.497	890	1.0	3.986	A
2	666	836	1608	0.414	665	0.7	3.816	A
3	616	1005	1513	0.407	615	0.7	4.006	A
4	656	804	1362	0.482	655	0.9	5.082	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1091	795	1711	0.638	1088	1.7	5.748	A
2	816	1022	1507	0.541	814	1.2	5.179	A
3	754	1229	1394	0.541	752	1.2	5.589	A
4	804	983	1280	0.628	801	1.7	7.465	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1091	797	1710	0.638	1091	1.7	5.812	A
2	816	1025	1506	0.542	816	1.2	5.218	A
3	754	1232	1393	0.542	754	1.2	5.636	A
4	804	985	1279	0.628	804	1.7	7.571	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	891	653	1789	0.498	894	1.0	4.034	A
2	666	840	1606	0.415	668	0.7	3.848	A
3	616	1009	1511	0.408	618	0.7	4.039	A
4	656	807	1361	0.482	659	0.9	5.154	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	746	546	1848	0.404	747	0.7	3.272	A
2	558	702	1680	0.332	559	0.5	3.212	A
3	516	844	1598	0.323	517	0.5	3.330	A
4	550	675	1421	0.387	551	0.6	4.142	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	743	100.000
2		✓	581	100.000
3		✓	519	100.000
4		✓	919	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	243	174	326
	2	338	0	72	171
	3	247	134	0	138
	4	504	301	114	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.45	3.60	0.8	A
2	0.38	3.41	0.6	A
3	0.37	3.65	0.6	A
4	0.74	10.09	2.8	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	559	411	1923	0.291	558	0.4	2.633	A
2	437	461	1810	0.242	436	0.3	2.617	A
3	391	627	1713	0.228	390	0.3	2.718	A
4	692	540	1483	0.466	688	0.9	4.508	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	668	493	1878	0.356	667	0.5	2.972	A
2	522	551	1761	0.297	522	0.4	2.905	A
3	467	750	1648	0.283	466	0.4	3.047	A
4	826	646	1435	0.576	824	1.3	5.881	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	818	602	1818	0.450	817	0.8	3.594	A
2	640	675	1695	0.377	639	0.6	3.408	A
3	571	918	1559	0.367	571	0.6	3.642	A
4	1012	791	1368	0.740	1006	2.7	9.797	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	818	604	1816	0.450	818	0.8	3.605	A
2	640	676	1694	0.378	640	0.6	3.413	A
3	571	919	1558	0.367	571	0.6	3.647	A
4	1012	792	1368	0.740	1012	2.8	10.090	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	668	496	1876	0.356	669	0.6	2.986	A
2	522	553	1760	0.297	523	0.4	2.913	A
3	467	752	1647	0.283	467	0.4	3.053	A
4	826	647	1434	0.576	832	1.4	6.032	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	559	414	1921	0.291	560	0.4	2.647	A
2	437	463	1809	0.242	438	0.3	2.627	A
3	391	629	1711	0.228	391	0.3	2.729	A
4	692	542	1482	0.467	694	0.9	4.579	A

2030 Forecast + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1083	100.000
2		✓	781	100.000
3		✓	732	100.000
4		✓	777	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	221	311	551
	2	357	0	137	287
	3	242	356	0	134
	4	370	252	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.71	7.28	2.4	A
2	0.59	6.05	1.4	A
3	0.60	6.63	1.5	A
4	0.69	9.14	2.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	815	572	1834	0.445	812	0.8	3.512	A
2	588	763	1647	0.357	586	0.6	3.384	A
3	551	896	1570	0.351	549	0.5	3.517	A
4	585	716	1402	0.417	582	0.7	4.374	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	974	685	1772	0.549	972	1.2	4.490	A
2	702	913	1566	0.448	701	0.8	4.155	A
3	658	1073	1477	0.446	657	0.8	4.385	A
4	699	857	1338	0.522	697	1.1	5.607	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1192	837	1688	0.706	1188	2.3	7.128	A
2	860	1115	1457	0.590	857	1.4	5.981	A
3	806	1311	1351	0.597	803	1.5	6.544	A
4	855	1048	1250	0.684	851	2.1	8.936	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1192	840	1686	0.707	1192	2.4	7.279	A
2	860	1120	1455	0.591	860	1.4	6.052	A
3	806	1316	1349	0.598	806	1.5	6.630	A
4	855	1051	1249	0.685	855	2.1	9.142	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	974	689	1770	0.550	978	1.2	4.574	A
2	702	919	1563	0.449	705	0.8	4.206	A
3	658	1079	1474	0.446	661	0.8	4.442	A
4	699	862	1336	0.523	703	1.1	5.725	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	815	576	1832	0.445	817	0.8	3.554	A
2	588	767	1645	0.358	589	0.6	3.415	A
3	551	901	1568	0.352	552	0.5	3.551	A
4	585	720	1400	0.418	587	0.7	4.432	A

2030 Forecast + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	810	100.000
2		✓	615	100.000
3		✓	566	100.000
4		✓	974	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	258	198	354
	2	359	0	76	180
	3	280	141	0	145
	4	535	318	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.50	3.97	1.0	A
2	0.41	3.67	0.7	A
3	0.41	3.99	0.7	A
4	0.80	13.51	3.9	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	610	435	1910	0.319	608	0.5	2.761	A
2	463	505	1786	0.259	462	0.3	2.715	A
3	426	670	1690	0.252	425	0.3	2.843	A
4	733	585	1462	0.501	729	1.0	4.885	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	728	520	1863	0.391	727	0.6	3.169	A
2	553	604	1733	0.319	552	0.5	3.048	A
3	509	802	1620	0.314	508	0.5	3.236	A
4	876	701	1410	0.621	873	1.6	6.681	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	892	634	1800	0.496	890	1.0	3.953	A
2	677	739	1660	0.408	676	0.7	3.656	A
3	623	982	1525	0.409	622	0.7	3.983	A
4	1072	858	1338	0.802	1064	3.8	12.757	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	892	638	1798	0.496	892	1.0	3.974	A
2	677	741	1659	0.408	677	0.7	3.665	A
3	623	983	1524	0.409	623	0.7	3.994	A
4	1072	859	1337	0.802	1072	3.9	13.509	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	728	526	1860	0.392	730	0.6	3.188	A
2	553	607	1731	0.319	554	0.5	3.059	A
3	509	804	1619	0.314	510	0.5	3.247	A
4	876	702	1409	0.622	885	1.7	6.983	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	610	438	1908	0.320	611	0.5	2.775	A
2	463	507	1785	0.259	463	0.4	2.726	A
3	426	673	1688	0.252	427	0.3	2.856	A
4	733	588	1461	0.502	736	1.0	4.981	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1106	100.000
2		✓	770	100.000
3		✓	718	100.000
4		✓	774	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	228	305	573
	2	354	0	135	281
	3	237	349	0	132
	4	375	247	152	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.72	7.52	2.5	A
2	0.59	6.01	1.4	A
3	0.59	6.54	1.4	A
4	0.68	8.90	2.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	833	561	1840	0.452	829	0.8	3.548	A
2	580	772	1642	0.353	578	0.5	3.374	A
3	541	906	1565	0.345	538	0.5	3.499	A
4	583	705	1407	0.414	580	0.7	4.335	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	994	671	1780	0.559	993	1.3	4.564	A
2	692	924	1560	0.444	691	0.8	4.140	A
3	645	1084	1471	0.439	644	0.8	4.350	A
4	696	844	1344	0.518	694	1.1	5.530	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1218	820	1697	0.717	1213	2.5	7.359	A
2	848	1129	1449	0.585	845	1.4	5.936	A
3	791	1326	1343	0.588	788	1.4	6.452	A
4	852	1032	1258	0.678	848	2.0	8.709	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1218	823	1696	0.718	1218	2.5	7.524	A
2	848	1134	1447	0.586	848	1.4	6.007	A
3	791	1330	1341	0.589	790	1.4	6.536	A
4	852	1035	1256	0.678	852	2.1	8.898	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	994	676	1777	0.560	999	1.3	4.656	A
2	692	931	1557	0.445	695	0.8	4.187	A
3	645	1090	1468	0.440	648	0.8	4.407	A
4	696	848	1342	0.519	700	1.1	5.639	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	833	564	1838	0.453	834	0.8	3.594	A
2	580	777	1639	0.354	581	0.6	3.403	A
3	541	911	1562	0.346	542	0.5	3.532	A
4	583	709	1406	0.415	584	0.7	4.390	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	812	100.000
2		✓	613	100.000
3		✓	555	100.000
4		✓	994	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1	2	3	4
From	1	0	257	194	361
	2	362	0	75	176
	3	275	138	0	142
	4	565	311	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.50	3.95	1.0	A
2	0.41	3.66	0.7	A
3	0.40	3.96	0.7	A
4	0.82	14.55	4.3	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	611	425	1915	0.319	609	0.5	2.753	A
2	461	505	1786	0.258	460	0.3	2.712	A
3	418	675	1687	0.248	417	0.3	2.830	A
4	748	582	1464	0.511	744	1.0	4.974	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	730	508	1869	0.391	729	0.6	3.156	A
2	551	604	1733	0.318	551	0.5	3.043	A
3	499	807	1617	0.309	498	0.4	3.216	A
4	894	696	1412	0.633	891	1.7	6.881	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	894	620	1808	0.495	893	1.0	3.928	A
2	675	739	1660	0.407	674	0.7	3.647	A
3	611	988	1522	0.402	610	0.7	3.946	A
4	1094	852	1340	0.817	1085	4.1	13.605	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	894	624	1806	0.495	894	1.0	3.949	A
2	675	741	1659	0.407	675	0.7	3.657	A
3	611	990	1521	0.402	611	0.7	3.956	A
4	1094	853	1340	0.817	1094	4.3	14.549	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	730	514	1866	0.391	731	0.6	3.177	A
2	551	607	1731	0.318	552	0.5	3.054	A
3	499	810	1616	0.309	500	0.4	3.229	A
4	894	698	1411	0.633	904	1.8	7.236	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	611	428	1913	0.319	612	0.5	2.769	A
2	461	507	1785	0.259	462	0.4	2.721	A
3	418	678	1686	0.248	418	0.3	2.840	A
4	748	584	1463	0.512	751	1.1	5.079	A

Appendix P

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Bank Street Mini.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling\Lowbourne Road, High Street, Bank Street Mini_Junctions 9 Report
Report generation date: 04/11/2025 12:38:38

»2025, AM
»2025, PM
»2030 Forecast + CD, AM
»2030 Forecast + CD, PM
»2030 Forecast + CD + PD, AM
»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Arm 1	0.4	4.99	0.26	A	2.5	13.95	0.72	B
Arm 2	2.0	11.93	0.67	B	1.0	8.77	0.49	A
Arm 3	0.5	6.42	0.35	A	1.0	7.00	0.50	A
	2030 Forecast + CD							
Arm 1	0.4	5.39	0.30	A	4.4	22.97	0.82	C
Arm 2	3.9	19.57	0.80	C	1.5	11.10	0.59	B
Arm 3	0.7	7.48	0.41	A	1.3	8.45	0.58	A
	2030 Forecast + CD + PD							
Arm 1	0.4	5.46	0.31	A	5.2	26.29	0.84	D
Arm 2	4.7	22.86	0.83	C	1.5	11.53	0.61	B
Arm 3	0.7	7.70	0.42	A	1.4	8.74	0.59	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2025	AM	FLAT	08:00	09:00	60	15	✓
D2	2025	PM	FLAT	17:00	18:00	60	15	✓
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓
D6	2030 Forecast + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	9.03	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Bank Street	
2	Lowbourne Road	
3	High Street	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	4.60	4.60	5.10	0.9	10.00	6.90	0.0	✓
2	4.80	4.80	5.40	11.2	10.00	5.50	0.0	✓
3	3.00	3.00	5.50	7.5	16.50	18.00	0.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
3	4.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.547	1116
2	0.567	1058
3	0.748	1295

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2025	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	258	100.000
2		FLAT	✓	622	100.000
3		FLAT	✓	297	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	71	187
	2	488	0	134
	3	80	217	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.26	4.99	0.4	A	258	258
2	0.67	11.93	2.0	B	622	622
3	0.35	6.42	0.5	A	297	297

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	215		980	0.263	257	561	0.0	0.4	4.969	A
2	622	156	186		924	0.673	614	286	0.0	2.0	11.339	B
3	297	74	482	30.00	854	0.348	295	318	0.0	0.5	6.410	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	217		979	0.264	258	568	0.4	0.4	4.993	A
2	622	156	187		924	0.673	622	288	2.0	2.0	11.911	B
3	297	74	488	30.00	857	0.346	297	321	0.5	0.5	6.423	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	217		979	0.264	258	568	0.4	0.4	4.993	A
2	622	156	187		924	0.673	622	288	2.0	2.0	11.922	B
3	297	74	488	30.00	857	0.346	297	321	0.5	0.5	6.424	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	217		979	0.264	258	568	0.4	0.4	4.993	A
2	622	156	187		924	0.673	622	288	2.0	2.0	11.927	B
3	297	74	488	30.00	857	0.346	297	321	0.5	0.5	6.424	A

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	10.36	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2025	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	647	100.000
2		FLAT	✓	399	100.000
3		FLAT	✓	497	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	255	392
	2	282	0	117
	3	150	347	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.72	13.95	2.5	B	647	647
2	0.49	8.77	1.0	A	399	399
3	0.50	7.00	1.0	A	497	497

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	344		906	0.714	638	428	0.0	2.4	12.984	B
2	399	100	386		813	0.491	395	596	0.0	0.9	8.545	A
3	497	124	279	30.00	1003	0.495	493	502	0.0	1.0	7.004	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	347		905	0.715	647	432	2.4	2.4	13.919	B
2	399	100	392		810	0.493	399	602	0.9	1.0	8.761	A
3	497	124	282	30.00	1015	0.490	497	509	1.0	1.0	6.954	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	347		905	0.715	647	432	2.4	2.5	13.946	B
2	399	100	392		810	0.493	399	602	1.0	1.0	8.764	A
3	497	124	282	30.00	1015	0.490	497	509	1.0	1.0	6.952	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	347		905	0.715	647	432	2.5	2.5	13.954	B
2	399	100	392		810	0.493	399	602	1.0	1.0	8.766	A
3	497	124	282	30.00	1015	0.490	497	509	1.0	1.0	6.955	A

2030 Forecast + CD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	13.58	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	291	100.000
2		FLAT	✓	735	100.000
3		FLAT	✓	337	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	94	197
	2	550	0	185
	3	85	252	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	5.39	0.4	A	291	291
2	0.80	19.57	3.9	C	735	735
3	0.41	7.48	0.7	A	337	337

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	250		960	0.303	289	623	0.0	0.4	5.355	A
2	735	184	196		919	0.800	720	343	0.0	3.6	17.093	C
3	337	84	539	30.00	816	0.413	334	377	0.0	0.7	7.429	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	252		959	0.304	291	634	0.4	0.4	5.391	A
2	735	184	197		918	0.801	734	346	3.6	3.8	19.399	C
3	337	84	549	30.00	818	0.412	337	382	0.7	0.7	7.476	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	252		959	0.304	291	635	0.4	0.4	5.391	A
2	735	184	197		918	0.801	735	346	3.8	3.9	19.522	C
3	337	84	550	30.00	818	0.412	337	382	0.7	0.7	7.479	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	252		959	0.304	291	635	0.4	0.4	5.391	A
2	735	184	197		918	0.801	735	346	3.9	3.9	19.568	C
3	337	84	550	30.00	818	0.412	337	382	0.7	0.7	7.479	A

2030 Forecast + CD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	15.05	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	715	100.000
2		FLAT	✓	474	100.000
3		FLAT	✓	566	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	302	413
	2	321	0	153
	3	158	408	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.82	22.97	4.4	C	715	715
2	0.59	11.10	1.5	B	474	474
3	0.58	8.45	1.3	A	566	566

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	404		873	0.819	699	474	0.0	4.0	19.263	C
2	474	119	404		803	0.590	468	699	0.0	1.4	10.587	B
3	566	142	317	30.00	982	0.577	561	555	0.0	1.3	8.448	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	408		870	0.821	714	479	4.0	4.3	22.643	C
2	474	119	412		798	0.594	474	710	1.4	1.4	11.085	B
3	566	142	321	30.00	997	0.568	566	565	1.3	1.3	8.348	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	408		870	0.821	715	479	4.3	4.4	22.884	C
2	474	119	413		798	0.594	474	710	1.4	1.4	11.101	B
3	566	142	321	30.00	997	0.568	566	566	1.3	1.3	8.353	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	408		870	0.821	715	479	4.4	4.4	22.972	C
2	474	119	413		798	0.594	474	710	1.4	1.5	11.104	B
3	566	142	321	30.00	997	0.568	566	566	1.3	1.3	8.354	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	15.50	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	297	100.000
2		FLAT	✓	762	100.000
3		FLAT	✓	341	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	100	197
	2	565	0	197
	3	85	256	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.31	5.46	0.4	A	297	297
2	0.83	22.86	4.7	C	762	762
3	0.42	7.70	0.7	A	341	341

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	254		957	0.310	295	637	0.0	0.4	5.423	A
2	762	191	196		919	0.829	745	353	0.0	4.3	19.165	C
3	341	85	552	30.00	807	0.422	338	388	0.0	0.7	7.628	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	256		956	0.311	297	649	0.4	0.4	5.461	A
2	762	191	197		918	0.830	761	356	4.3	4.6	22.534	C
3	341	85	564	30.00	809	0.422	341	394	0.7	0.7	7.695	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	256		956	0.311	297	650	0.4	0.4	5.461	A
2	762	191	197		918	0.830	762	356	4.6	4.7	22.771	C
3	341	85	565	30.00	809	0.422	341	394	0.7	0.7	7.699	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	256		956	0.311	297	650	0.4	0.4	5.461	A
2	762	191	197		918	0.830	762	356	4.7	4.7	22.861	C
3	341	85	565	30.00	808	0.422	341	394	0.7	0.7	7.700	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	16.59	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030 Forecast + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	729	100.000
2		FLAT	✓	486	100.000
3		FLAT	✓	577	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	316	413
	2	328	0	158
	3	158	419	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.84	26.29	5.2	D	729	729
2	0.61	11.53	1.5	B	486	486
3	0.59	8.74	1.4	A	577	577

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	415		866	0.841	711	480	0.0	4.6	21.161	C
2	486	122	403		804	0.605	480	723	0.0	1.5	10.934	B
3	577	144	324	30.00	978	0.590	571	559	0.0	1.4	8.740	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	419		864	0.844	728	486	4.6	4.9	25.719	D
2	486	122	412		798	0.609	486	734	1.5	1.5	11.504	B
3	577	144	328	30.00	994	0.580	577	570	1.4	1.4	8.627	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	419		864	0.844	728	486	4.9	5.1	26.128	D
2	486	122	413		798	0.609	486	735	1.5	1.5	11.526	B
3	577	144	328	30.00	994	0.580	577	571	1.4	1.4	8.632	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	419		864	0.844	729	486	5.1	5.2	26.286	D
2	486	122	413		798	0.609	486	735	1.5	1.5	11.531	B
3	577	144	328	30.00	994	0.580	577	571	1.4	1.4	8.632	A

Appendix Q

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Sandridge Common, Forest Road Double Mini.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 04/11/2025 12:56:40

»2025, AM
»2025, PM
»2030 Forecast + CD, AM
»2030 Forecast + CD, PM
»2030 Forecast + CD + PD, AM
»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Junction 1 - Arm 1	0.3	6.25	0.21	A	0.2	7.67	0.18	A
Junction 1 - Arm 2	3.3	17.13	0.77	C	0.8	6.82	0.44	A
Junction 1 - Arm 3	0.3	4.14	0.26	A	1.0	6.20	0.50	A
Junction 2 - Arm 1	0.5	5.96	0.32	A	3.0	18.26	0.75	C
Junction 2 - Arm 2	0.1	4.39	0.09	A	0.0	5.43	0.02	A
Junction 2 - Arm 3	2.1	9.77	0.68	A	0.7	5.09	0.40	A
	2030 Forecast + CD							
Junction 1 - Arm 1	0.3	6.60	0.22	A	0.2	8.62	0.20	A
Junction 1 - Arm 2	2.9	15.19	0.74	C	0.7	6.68	0.43	A
Junction 1 - Arm 3	0.4	4.47	0.31	A	1.4	7.55	0.59	A
Junction 2 - Arm 1	0.7	6.65	0.39	A	2.8	14.70	0.74	B
Junction 2 - Arm 2	0.1	4.64	0.10	A	0.0	6.09	0.04	A
Junction 2 - Arm 3	1.9	9.13	0.66	A	0.6	5.01	0.39	A
	2030 Forecast + CD + PD							
Junction 1 - Arm 1	0.3	6.68	0.22	A	0.3	8.95	0.21	A
Junction 1 - Arm 2	3.3	17.13	0.77	C	0.8	6.82	0.44	A
Junction 1 - Arm 3	0.5	4.52	0.32	A	1.6	7.97	0.61	A
Junction 2 - Arm 1	0.7	6.74	0.40	A	3.2	16.36	0.77	C
Junction 2 - Arm 2	0.1	4.68	0.10	A	0.0	6.27	0.04	A
Junction 2 - Arm 3	2.2	9.79	0.69	A	0.7	5.09	0.40	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2025	AM	FLAT	08:00	09:00	60	15	✓
D2	2025	PM	FLAT	17:00	18:00	60	15	✓
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓
D6	2030 Forecast + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	12.39	B
2	Club/School	Mini-roundabout	1, 2, 3	8.45	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Junction	Arm	Name	Description
1	1	Forest Rd (N)	
	2	A3012 Sandridge Common (E)	
	3	Internal Link W	
2	1	A3102 Lowbourne Road (SW)	
	2	School/Club Access	
	3	Internal Link E	

Mini Roundabout Geometry

Junction	Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	1	3.50	3.50	5.60	1.2	11.50	6.50	0.0	
	2	3.00	3.00	4.50	6.8	14.10	12.30	0.0	
	3	5.90	5.90	6.40	0.1	11.10	8.00	0.0	
2	1	2.90	2.90	4.60	2.9	12.90	9.10	0.0	
	2	3.50	3.50	5.60	15.5	10.40	7.50	0.0	
	3	6.00	6.00	6.60	0.1	15.20	13.80	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.621	905
	2	0.630	1026
	3	0.702	1224
2	1	0.610	965
	2	0.665	1101
	3	0.719	1228

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2025	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	152	100.000
	2		FLAT	✓	715	100.000
	3	✓				
2	1		FLAT	✓	290	100.000
	2		FLAT	✓	81	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	38	114
	2	30	0	685
	3	70	308	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	38	252
	2	35	0	46
	3	536	52	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.21	6.25	0.3	A	152	152
	2	0.77	17.13	3.3	C	715	715
	3	0.26	4.14	0.3	A	298	298
2	1	0.32	5.96	0.5	A	290	290
	2	0.09	4.39	0.1	A	81	81
	3	0.68	9.77	2.1	A	796	796

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	240	730	0.208	151	84	0.0	0.3	6.207	A
	2	715	179	113	925	0.773	702	278	0.0	3.2	15.405	C
	3	296	74	29	1168	0.254	295	786	0.0	0.3	4.117	A
2	1	290	73	69	895	0.324	288	744	0.0	0.5	5.917	A
	2	81	20	250	902	0.090	81	107	0.0	0.1	4.378	A
	3	786	197	35	1167	0.674	778	296	0.0	2.0	9.080	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	243	728	0.209	152	85	0.3	0.3	6.246	A
	2	715	179	114	925	0.773	715	281	3.2	3.3	17.038	C
	3	298	74	30	1168	0.255	298	799	0.3	0.3	4.139	A
2	1	290	73	71	894	0.325	290	762	0.5	0.5	5.962	A
	2	81	20	252	901	0.090	81	109	0.1	0.1	4.387	A
	3	799	200	35	1167	0.684	798	298	2.0	2.1	9.737	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	243	728	0.209	152	85	0.3	0.3	6.246	A
	2	715	179	114	925	0.773	715	281	3.3	3.3	17.105	C
	3	298	74	30	1168	0.255	298	799	0.3	0.3	4.139	A
2	1	290	73	71	894	0.325	290	763	0.5	0.5	5.963	A
	2	81	20	252	901	0.090	81	109	0.1	0.1	4.387	A
	3	799	200	35	1167	0.685	799	298	2.1	2.1	9.768	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	243	728	0.209	152	85	0.3	0.3	6.246	A
	2	715	179	114	925	0.773	715	281	3.3	3.3	17.130	C
	3	298	74	30	1168	0.255	298	799	0.3	0.3	4.139	A
2	1	290	73	71	894	0.325	290	763	0.5	0.5	5.963	A
	2	81	20	252	901	0.090	81	109	0.1	0.1	4.387	A
	3	799	200	35	1167	0.685	799	298	2.1	2.1	9.774	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 98% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	6.57	A
2	Club/School	Mini-roundabout	1, 2, 3	12.32	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2025	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	104	100.000
	2		FLAT	✓	413	100.000
	3	✓				
2	1		FLAT	✓	595	100.000
	2		FLAT	✓	15	100.000
	3	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	16	88
	2	26	0	387
	3	121	612	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	7	588
	2	13	0	2
	3	304	305	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.18	7.67	0.2	A	104	104
	2	0.44	6.82	0.8	A	413	413
	3	0.50	6.20	1.0	A	587	587
2	1	0.75	18.26	3.0	C	595	595
	2	0.02	5.43	0.0	A	15	15
	3	0.40	5.09	0.7	A	474	474

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	480	581	0.179	103	121	0.0	0.2	7.524	A
	2	413	103	87	941	0.439	410	496	0.0	0.8	6.735	A
	3	579	145	26	1171	0.495	575	471	0.0	1.0	6.008	A
2	1	595	149	235	794	0.750	584	247	0.0	2.8	16.403	C
	2	15	4	577	685	0.022	15	242	0.0	0.0	5.371	A
	3	471	118	13	1183	0.399	469	579	0.0	0.7	5.023	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	492	573	0.181	104	123	0.2	0.2	7.670	A
	2	413	103	88	941	0.439	413	508	0.8	0.8	6.818	A
	3	590	147	26	1170	0.504	589	475	1.0	1.0	6.193	A
2	1	595	149	238	792	0.752	595	250	2.8	2.9	18.153	C
	2	15	4	588	678	0.022	15	245	0.0	0.0	5.428	A
	3	475	119	13	1183	0.402	475	590	0.7	0.7	5.085	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	492	573	0.181	104	123	0.2	0.2	7.673	A
	2	413	103	88	941	0.439	413	508	0.8	0.8	6.818	A
	3	590	147	26	1170	0.504	590	475	1.0	1.0	6.199	A
2	1	595	149	238	792	0.752	595	250	2.9	2.9	18.230	C
	2	15	4	588	678	0.022	15	245	0.0	0.0	5.429	A
	3	475	119	13	1183	0.402	475	590	0.7	0.7	5.085	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	493	573	0.181	104	123	0.2	0.2	7.674	A
	2	413	103	88	941	0.439	413	509	0.8	0.8	6.818	A
	3	590	147	26	1170	0.504	590	475	1.0	1.0	6.200	A
2	1	595	149	238	792	0.752	595	250	2.9	3.0	18.255	C
	2	15	4	588	678	0.022	15	245	0.0	0.0	5.430	A
	3	475	119	13	1183	0.402	475	590	0.7	0.7	5.085	A

2030 Forecast + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 92% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	10.88	B
2	Club/School	Mini-roundabout	1, 2, 3	8.09	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	152	100.000
	2		FLAT	✓	688	100.000
	3	✓				
2	1		FLAT	✓	353	100.000
	2		FLAT	✓	84	100.000
	3	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	38	114
	2	30	0	658
	3	70	298	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	39	314
	2	36	0	48
	3	646	64	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.22	6.60	0.3	A	152	152
	2	0.74	15.19	2.9	C	688	688
	3	0.31	4.47	0.4	A	361	361
2	1	0.39	6.65	0.7	A	353	353
	2	0.10	4.64	0.1	A	84	84
	3	0.66	9.13	1.9	A	769	769

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	290	699	0.217	151	98	0.0	0.3	6.553	A
	2	688	172	113	925	0.744	677	327	0.0	2.7	13.966	B
	3	359	90	30	1168	0.308	358	761	0.0	0.4	4.433	A
2	1	353	88	68	895	0.394	350	721	0.0	0.6	6.577	A
	2	84	21	312	862	0.097	84	107	0.0	0.1	4.625	A
	3	761	190	36	1166	0.652	753	359	0.0	1.8	8.574	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	293	697	0.218	152	99	0.3	0.3	6.605	A
	2	688	172	114	925	0.744	688	331	2.7	2.8	15.138	C
	3	362	90	30	1168	0.310	362	772	0.4	0.4	4.467	A
2	1	353	88	70	894	0.395	353	738	0.6	0.6	6.649	A
	2	84	21	314	860	0.098	84	109	0.1	0.1	4.638	A
	3	772	193	36	1166	0.662	771	362	1.8	1.9	9.101	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	293	697	0.218	152	99	0.3	0.3	6.605	A
	2	688	172	114	925	0.744	688	331	2.8	2.8	15.177	C
	3	362	90	30	1168	0.310	362	772	0.4	0.4	4.468	A
2	1	353	88	70	894	0.395	353	738	0.6	0.6	6.649	A
	2	84	21	314	860	0.098	84	109	0.1	0.1	4.638	A
	3	772	193	36	1166	0.662	772	362	1.9	1.9	9.120	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	293	697	0.218	152	99	0.3	0.3	6.605	A
	2	688	172	114	925	0.744	688	331	2.8	2.9	15.192	C
	3	362	90	30	1168	0.310	362	772	0.4	0.4	4.468	A
2	1	353	88	70	894	0.395	353	738	0.6	0.7	6.649	A
	2	84	21	314	860	0.098	84	109	0.1	0.1	4.638	A
	3	772	193	36	1166	0.662	772	362	1.9	1.9	9.125	A

2030 Forecast + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 98% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	7.35	A
2	Club/School	Mini-roundabout	1, 2, 3	10.72	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	104	100.000
	2		FLAT	✓	402	100.000
	3	✓				
2	1		FLAT	✓	691	100.000
	2		FLAT	✓	23	100.000
	3	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	16	88
	2	26	0	376
	3	121	587	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	7	684
	2	13	0	10
	3	453	2	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.20	8.62	0.2	A	104	104
	2	0.43	6.68	0.7	A	402	402
	3	0.59	7.55	1.4	A	691	691
2	1	0.74	14.70	2.8	B	691	691
	2	0.04	6.09	0.0	A	23	23
	3	0.39	5.01	0.6	A	463	463

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	562	530	0.196	103	142	0.0	0.2	8.417	A
	2	402	101	87	941	0.427	399	578	0.0	0.7	6.602	A
	3	683	171	26	1171	0.584	678	460	0.0	1.4	7.229	A
2	1	691	173	2	936	0.739	680	469	0.0	2.7	13.597	B
	2	23	6	673	621	0.037	23	9	0.0	0.0	6.017	A
	3	460	115	13	1183	0.389	458	683	0.0	0.6	4.949	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	575	522	0.199	104	145	0.2	0.2	8.616	A
	2	402	101	88	941	0.427	402	591	0.7	0.7	6.679	A
	3	694	173	26	1170	0.593	693	464	1.4	1.4	7.541	A
2	1	691	173	2	935	0.739	691	475	2.7	2.7	14.657	B
	2	23	6	684	614	0.037	23	9	0.0	0.0	6.088	A
	3	464	116	13	1183	0.392	464	694	0.6	0.6	5.007	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	575	522	0.199	104	145	0.2	0.2	8.620	A
	2	402	101	88	941	0.427	402	591	0.7	0.7	6.679	A
	3	694	173	26	1170	0.593	694	464	1.4	1.4	7.553	A
2	1	691	173	2	935	0.739	691	475	2.7	2.8	14.688	B
	2	23	6	684	614	0.037	23	9	0.0	0.0	6.090	A
	3	464	116	13	1183	0.392	464	694	0.6	0.6	5.007	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	575	522	0.199	104	145	0.2	0.2	8.621	A
	2	402	101	88	941	0.427	402	591	0.7	0.7	6.679	A
	3	694	173	26	1170	0.593	694	464	1.4	1.4	7.553	A
2	1	691	173	2	935	0.739	691	475	2.8	2.8	14.700	B
	2	23	6	684	614	0.037	23	9	0.0	0.0	6.090	A
	3	464	116	13	1183	0.392	464	694	0.6	0.6	5.007	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 93% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	12.07	B
2	Club/School	Mini-roundabout	1, 2, 3	8.56	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	152	100.000
	2		FLAT	✓	715	100.000
	3	✓				
2	1		FLAT	✓	363	100.000
	2		FLAT	✓	84	100.000
	3	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	38	114
	2	30	0	685
	3	70	308	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	39	324
	2	36	0	48
	3	721	64	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.22	6.68	0.3	A	152	152
	2	0.77	17.13	3.3	C	715	715
	3	0.32	4.52	0.5	A	371	371
2	1	0.40	6.74	0.7	A	363	363
	2	0.10	4.68	0.1	A	84	84
	3	0.69	9.79	2.2	A	796	796

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	299	693	0.219	151	98	0.0	0.3	6.627	A
	2	715	179	113	925	0.773	702	337	0.0	3.2	15.404	C
	3	369	92	29	1168	0.316	368	786	0.0	0.5	4.487	A
2	1	363	91	63	898	0.404	360	750	0.0	0.7	6.661	A
	2	84	21	322	855	0.098	84	102	0.0	0.1	4.664	A
	3	786	197	36	1166	0.674	778	369	0.0	2.0	9.093	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	303	691	0.220	152	99	0.3	0.3	6.681	A
	2	715	179	114	925	0.773	715	341	3.2	3.3	17.038	C
	3	372	93	30	1168	0.319	372	799	0.5	0.5	4.524	A
2	1	363	91	65	897	0.405	363	769	0.7	0.7	6.740	A
	2	84	21	324	853	0.098	84	104	0.1	0.1	4.678	A
	3	799	200	36	1166	0.685	798	372	2.0	2.1	9.756	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	303	691	0.220	152	99	0.3	0.3	6.681	A
	2	715	179	114	925	0.773	715	341	3.3	3.3	17.105	C
	3	372	93	30	1168	0.319	372	799	0.5	0.5	4.524	A
2	1	363	91	65	897	0.405	363	770	0.7	0.7	6.740	A
	2	84	21	324	853	0.098	84	104	0.1	0.1	4.678	A
	3	799	200	36	1166	0.685	799	372	2.1	2.1	9.787	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	303	691	0.220	152	99	0.3	0.3	6.681	A
	2	715	179	114	925	0.773	715	341	3.3	3.3	17.130	C
	3	372	93	30	1168	0.319	372	799	0.5	0.5	4.524	A
2	1	363	91	65	897	0.405	363	770	0.7	0.7	6.740	A
	2	84	21	324	853	0.098	84	104	0.1	0.1	4.678	A
	3	799	200	36	1166	0.685	799	372	2.1	2.2	9.793	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 98% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	7.67	A
2	Club/School	Mini-roundabout	1, 2, 3	11.76	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030 Forecast + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	104	100.000
	2		FLAT	✓	413	100.000
	3	✓				
2	1		FLAT	✓	716	100.000
	2		FLAT	✓	23	100.000
	3	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	16	88
	2	26	0	387
	3	121	612	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	7	709
	2	13	0	10
	3	465	2	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.21	8.95	0.3	A	104	104
	2	0.44	6.82	0.8	A	413	413
	3	0.61	7.97	1.6	A	716	716
2	1	0.77	16.36	3.2	C	716	716
	2	0.04	6.27	0.0	A	23	23
	3	0.40	5.09	0.7	A	474	474

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	585	515	0.202	103	142	0.0	0.2	8.708	A
	2	413	103	87	941	0.439	410	601	0.0	0.8	6.734	A
	3	707	177	26	1171	0.604	701	471	0.0	1.5	7.574	A
2	1	716	179	2	936	0.765	704	480	0.0	3.0	14.852	B
	2	23	6	697	605	0.038	23	9	0.0	0.0	6.178	A
	3	471	118	13	1183	0.398	469	707	0.0	0.7	5.023	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	600	506	0.205	104	145	0.2	0.3	8.945	A
	2	413	103	88	941	0.439	413	616	0.8	0.8	6.818	A
	3	719	180	26	1170	0.614	718	475	1.5	1.6	7.954	A
2	1	716	179	2	935	0.765	716	486	3.0	3.1	16.287	C
	2	23	6	709	598	0.038	23	9	0.0	0.0	6.264	A
	3	475	119	13	1183	0.402	475	719	0.7	0.7	5.085	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	600	506	0.205	104	145	0.3	0.3	8.951	A
	2	413	103	88	941	0.439	413	616	0.8	0.8	6.818	A
	3	719	180	26	1170	0.614	719	475	1.6	1.6	7.968	A
2	1	716	179	2	935	0.765	716	486	3.1	3.2	16.339	C
	2	23	6	709	597	0.039	23	9	0.0	0.0	6.266	A
	3	475	119	13	1183	0.402	475	719	0.7	0.7	5.085	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	600	506	0.206	104	145	0.3	0.3	8.952	A
	2	413	103	88	941	0.439	413	616	0.8	0.8	6.818	A
	3	719	180	26	1170	0.614	719	475	1.6	1.6	7.970	A
2	1	716	179	2	935	0.765	716	486	3.2	3.2	16.359	C
	2	23	6	709	597	0.039	23	9	0.0	0.0	6.266	A
	3	475	119	13	1183	0.402	475	719	0.7	0.7	5.085	A

Appendix R

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Church Lane,Blackmore Road Mins.j9
Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling
Report generation date: 05/11/2025 17:20:38

»2025, AM
»2025, PM
»2030 + CD, AM
»2030 + CD, PM
»2030 + CD + PD, AM
»2030 + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2025							
Junction 1 - Arm 1	0.6	10.17	0.37	B	0.5	10.50	0.32	B
Junction 1 - Arm 2	1.7	12.20	0.64	B	1.1	9.23	0.53	A
Junction 1 - Arm 3	0.7	6.45	0.40	A	1.5	9.89	0.60	A
Junction 2 - Arm 1	1.4	24.94	0.59	C	0.8	14.11	0.45	B
Junction 2 - Arm 2	0.3	4.30	0.25	A	0.7	5.62	0.42	A
Junction 2 - Arm 3	3.1	18.33	0.76	C	1.4	10.84	0.59	B
	2030 + CD							
Junction 1 - Arm 1	8.3	163.18	0.96	F	0.5	11.46	0.33	B
Junction 1 - Arm 2	36.7	223.08	1.07	F	1.3	10.07	0.57	B
Junction 1 - Arm 3	0.8	6.87	0.44	A	1.9	11.46	0.65	B
Junction 2 - Arm 1	1.5	27.34	0.60	D	0.9	16.56	0.48	C
Junction 2 - Arm 2	0.4	4.49	0.28	A	0.9	6.10	0.47	A
Junction 2 - Arm 3	3.6	20.36	0.80	C	1.7	12.01	0.63	B
	2030 + CD + PD							
Junction 1 - Arm 1	12.1	231.40	1.01	F	0.6	12.60	0.36	B
Junction 1 - Arm 2	79.8	464.81	1.16	F	1.8	12.99	0.64	B
Junction 1 - Arm 3	0.8	7.11	0.46	A	2.3	13.13	0.70	B
Junction 2 - Arm 1	1.6	27.91	0.62	D	1.0	16.51	0.50	C
Junction 2 - Arm 2	0.4	4.57	0.29	A	1.0	6.49	0.49	A
Junction 2 - Arm 3	3.6	20.36	0.80	C	1.8	12.78	0.65	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	08:00	09:30		15	✓
D2	2025	PM	ONE HOUR	17:00	18:30		15	✓
D3	2030 + CD	AM	FLAT	08:00	09:00	60	15	✓
D4	2030 + CD	PM	FLAT	17:00	18:00	60	15	✓
D5	2030 + CD + PD	AM	FLAT	08:00	09:00	60	15	✓
D6	2030 + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	9.87	A
2	Blackmore Road	Mini-roundabout	1, 2, 3	16.06	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Junction	Arm	Name	Description
1	1	Church Lane (N)	
	2	A3102 Sandridge Common (E)	
	3	Internal Link W	
2	1	Blackmore Road (S)	
	2	A3102 Sandridge Common (W)	
	3	Internal Link E	

Mini Roundabout Geometry

Junction	Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	1	2.50	2.50	3.70	9.0	8.60	4.90	0.0	
	2	3.20	3.20	3.30	0.2	16.50	16.70	0.0	✓
	3	4.00	4.00	4.10	0.1	11.30	8.30	0.0	✓
2	1	3.20	3.20	3.40	1.7	11.80	8.30	0.0	
	2	3.40	3.40	3.40	0.0	19.90	19.90	0.0	✓
	3	3.70	3.70	3.70	0.0	13.10	10.00	0.0	✓

Zebra Crossings

Junction	Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1	3	1.00	1.00	✓	Distance	4.00	2.86	4.00	2.86

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.603	820
	2	0.546	975
	3	0.519	1040
2	1	0.604	702
	2	0.783	1348
	3	0.508	926

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	08:00	09:30	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	188	100.000
	2		ONE HOUR	✓	471	100.000
	3	✓				
2	1		ONE HOUR	✓	190	100.000
	2		ONE HOUR	✓	253	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[ONEHOUR]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	66	122
	2	26	0	445
	3	61	277	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	63	127
	2	41	0	212
	3	137	430	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.37	10.17	0.6	B	173	259
	2	0.64	12.20	1.7	B	432	648
	3	0.40	6.45	0.7	A	311	466
2	1	0.59	24.94	1.4	C	174	262
	2	0.25	4.30	0.3	A	232	348
	3	0.76	18.33	3.1	C	520	780

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	142	35	206		621	0.228	140	65	0.0	0.3	7.473	A
	2	355	89	91		837	0.424	352	256	0.0	0.7	7.375	A
	3	253	63	19	0.00	936	0.271	252	423	0.0	0.4	5.255	A
2	1	143	36	318		446	0.321	141	132	0.0	0.5	11.730	B
	2	190	48	94		1152	0.165	190	365	0.0	0.2	3.739	A
	3	423	106	31		826	0.513	419	253	0.0	1.0	8.767	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	169	42	249		595	0.284	169	78	0.3	0.4	8.427	A
	2	423	106	109		827	0.512	422	308	0.7	1.0	8.869	A
	3	304	76	23	0.00	934	0.326	303	508	0.4	0.5	5.710	A
2	1	171	43	384		406	0.420	170	159	0.5	0.7	15.148	C
	2	227	57	114		1137	0.200	227	440	0.2	0.2	3.958	A
	3	508	127	37		823	0.618	506	304	1.0	1.6	11.287	B

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	207	52	304		562	0.368	206	95	0.4	0.6	10.090	B
	2	519	130	134		813	0.638	516	376	1.0	1.7	11.988	B
	3	371	93	28	0.00	931	0.399	371	621	0.5	0.7	6.416	A
2	1	209	52	467		356	0.587	207	194	0.7	1.3	23.661	C
	2	279	70	138		1117	0.249	278	536	0.2	0.3	4.287	A
	3	621	155	45		819	0.759	616	371	1.6	2.9	17.283	C

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	207	52	306		561	0.369	207	96	0.6	0.6	10.165	B
	2	519	130	134		813	0.638	518	378	1.7	1.7	12.201	B
	3	373	93	29	0.00	931	0.401	373	624	0.7	0.7	6.453	A
2	1	209	52	473		353	0.593	209	196	1.3	1.4	24.940	C
	2	279	70	140		1116	0.250	279	542	0.3	0.3	4.298	A
	3	624	156	45		819	0.762	624	373	2.9	3.1	18.328	C

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	169	42	252		593	0.285	170	79	0.6	0.4	8.510	A
	2	423	106	110		826	0.512	426	312	1.7	1.1	9.051	A
	3	307	77	24	0.00	933	0.329	307	513	0.7	0.5	5.755	A
2	1	171	43	393		401	0.426	173	162	1.4	0.8	15.983	C
	2	227	57	116		1135	0.200	228	450	0.3	0.3	3.972	A
	3	513	128	37		823	0.623	518	307	3.1	1.7	12.016	B

09:15 - 09:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	142	35	210		619	0.229	142	66	0.4	0.3	7.561	A
	2	355	89	92		836	0.424	356	260	1.1	0.7	7.516	A
	3	256	64	20	0.00	935	0.274	257	428	0.5	0.4	5.305	A
2	1	143	36	327		441	0.324	144	135	0.8	0.5	12.169	B
	2	190	48	96		1150	0.166	191	374	0.3	0.2	3.755	A
	3	428	107	31		826	0.519	431	256	1.7	1.1	9.167	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 85% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	9.72	A
2	Blackmore Road	Mini-roundabout	1, 2, 3	9.33	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	PM	ONE HOUR	17:00	18:30	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	146	100.000
	2		ONE HOUR	✓	398	100.000
	3	✓				
2	1		ONE HOUR	✓	191	100.000
	2		ONE HOUR	✓	419	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[ONEHOUR]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	49	97
	2	67	0	331
	3	130	365	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	47	144
	2	69	0	350
	3	168	261	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.32	10.50	0.5	B	134	201
	2	0.53	9.23	1.1	A	365	548
	3	0.60	9.89	1.5	A	453	679
2	1	0.45	14.11	0.8	B	175	263
	2	0.42	5.62	0.7	A	384	577
	3	0.59	10.84	1.4	B	392	588

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	110	27	271		582	0.189	109	146	0.0	0.2	7.593	A
	2	300	75	72		847	0.354	297	307	0.0	0.5	6.527	A
	3	370	92	50	0.00	920	0.402	367	320	0.0	0.7	6.481	A
2	1	144	36	193		522	0.276	142	176	0.0	0.4	9.451	A
	2	315	79	107		1141	0.276	314	228	0.0	0.4	4.342	A
	3	320	80	52		815	0.392	317	370	0.0	0.6	7.193	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	131	33	326		549	0.239	131	176	0.2	0.3	8.602	A
	2	358	89	87		839	0.426	357	370	0.5	0.7	7.455	A
	3	443	111	60	0.00	915	0.485	442	384	0.7	0.9	7.605	A
2	1	172	43	233		498	0.345	171	212	0.4	0.5	11.005	B
	2	377	94	129		1124	0.335	376	275	0.4	0.5	4.808	A
	3	384	96	62		810	0.474	383	443	0.6	0.9	8.406	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	161	40	398		505	0.318	160	215	0.3	0.5	10.417	B
	2	438	110	106		828	0.529	437	452	0.7	1.1	9.155	A
	3	542	136	74	0.00	908	0.598	540	470	0.9	1.4	9.745	A
2	1	210	53	285		466	0.451	209	259	0.5	0.8	13.927	B
	2	461	115	158		1102	0.419	460	336	0.5	0.7	5.605	A
	3	470	117	76		803	0.585	468	542	0.9	1.4	10.666	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	161	40	401		504	0.319	161	217	0.5	0.5	10.497	B
	2	438	110	107		828	0.529	438	455	1.1	1.1	9.225	A
	3	544	136	74	0.00	907	0.599	544	471	1.4	1.5	9.891	A
2	1	210	53	287		465	0.452	210	260	0.8	0.8	14.111	B
	2	461	115	159		1101	0.419	461	338	0.7	0.7	5.624	A
	3	471	118	76		803	0.587	471	544	1.4	1.4	10.838	B

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	131	33	330		546	0.240	132	178	0.5	0.3	8.698	A
	2	358	89	88		839	0.427	359	374	1.1	0.8	7.531	A
	3	446	111	60	0.00	914	0.487	448	386	1.5	1.0	7.749	A
2	1	172	43	236		496	0.346	173	214	0.8	0.5	11.186	B
	2	377	94	130		1123	0.335	378	279	0.7	0.5	4.831	A
	3	386	97	62		810	0.477	388	446	1.4	0.9	8.574	A

18:15 - 18:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	110	27	276		579	0.190	110	149	0.3	0.2	7.684	A
	2	300	75	73		847	0.354	300	313	0.8	0.6	6.600	A
	3	373	93	51	0.00	919	0.405	374	323	1.0	0.7	6.614	A
2	1	144	36	197		519	0.277	144	179	0.5	0.4	9.619	A
	2	315	79	109		1140	0.277	316	233	0.5	0.4	4.369	A
	3	323	81	52		815	0.396	324	373	0.9	0.7	7.347	A

2030 + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	139.16	F
2	Blackmore Road	Mini-roundabout	1, 2, 3	17.21	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030 + CD	AM	FLAT	08:00	09:00	60	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	198	100.000
	2		FLAT	✓	586	100.000
	3	✓				
2	1		FLAT	✓	200	100.000
	2		FLAT	✓	319	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	70	128
	2	27	0	559
	3	65	345	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	67	133
	2	43	0	276
	3	144	543	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.96	163.18	8.3	F	198	198
	2	1.07	223.08	36.7	F	586	586
	3	0.44	6.87	0.8	A	408	408
2	1	0.60	27.34	1.5	D	200	200
	2	0.28	4.49	0.4	A	319	319
	3	0.80	20.36	3.6	C	647	647

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	337		294	0.674	191	89	0.0	1.8	32.888	D
	2	586	147	123		647	0.906	560	405	0.0	6.5	34.980	D
	3	404	101	26	0.00	932	0.433	401	658	0.0	0.8	6.737	A
2	1	200	50	508		331	0.604	194	178	0.0	1.4	25.345	D
	2	319	80	129		1124	0.284	317	573	0.0	0.4	4.454	A
	3	658	164	43		820	0.802	643	404	0.0	3.6	19.050	C

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	344		224	0.883	188	90	1.8	4.4	81.476	F
	2	586	147	121		568	1.032	547	410	6.5	16.3	92.876	F
	3	409	102	25	0.00	933	0.438	409	643	0.8	0.8	6.869	A
2	1	200	50	508		331	0.603	200	178	1.4	1.5	27.245	D
	2	319	80	133		1121	0.284	319	575	0.4	0.4	4.486	A
	3	643	161	43		820	0.784	643	409	3.6	3.6	20.360	C

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	344		210	0.941	190	90	4.4	6.5	126.805	F
	2	586	147	123		554	1.058	546	411	16.3	26.4	157.414	F
	3	409	102	25	0.00	933	0.438	409	643	0.8	0.8	6.873	A
2	1	200	50	508		331	0.603	200	178	1.5	1.5	27.314	D
	2	319	80	133		1121	0.284	319	575	0.4	0.4	4.486	A
	3	643	161	43		820	0.784	643	409	3.6	3.6	20.362	C

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	344		206	0.963	191	90	6.5	8.3	163.177	F
	2	586	147	123		549	1.067	545	412	26.4	36.7	223.083	F
	3	409	102	25	0.00	933	0.439	409	643	0.8	0.8	6.873	A
2	1	200	50	508		331	0.603	200	178	1.5	1.5	27.338	D
	2	319	80	133		1121	0.284	319	575	0.4	0.4	4.486	A
	3	643	161	43		820	0.784	643	409	3.6	3.6	20.361	C

2030 + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 85% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	10.92	B
2	Blackmore Road	Mini-roundabout	1, 2, 3	10.26	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030 + CD	PM	FLAT	17:00	18:00	60	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	155	100.000
	2		FLAT	✓	473	100.000
	3	✓				
2	1		FLAT	✓	201	100.000
	2		FLAT	✓	517	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	52	103
	2	71	0	402
	3	137	459	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	50	151
	2	73	0	444
	3	177	459	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.33	11.46	0.5	B	155	155
	2	0.57	10.07	1.3	B	473	473
	3	0.65	11.46	1.9	B	594	594
2	1	0.48	16.56	0.9	C	201	201
	2	0.47	6.10	0.9	A	517	517
	3	0.63	12.01	1.7	B	504	504

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	448		475	0.326	153	204	0.0	0.5	11.121	B
	2	473	118	102		831	0.569	468	500	0.0	1.3	9.785	A
	3	589	147	70	0.00	909	0.648	582	499	0.0	1.8	10.791	B
2	1	201	50	356		423	0.475	198	210	0.0	0.9	15.706	C
	2	517	129	148		1109	0.466	514	405	0.0	0.9	6.009	A
	3	499	125	73		805	0.621	493	589	0.0	1.6	11.333	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	458		469	0.330	155	208	0.5	0.5	11.450	B
	2	473	118	103		830	0.570	473	510	1.3	1.3	10.068	B
	3	595	149	71	0.00	909	0.655	595	505	1.8	1.9	11.436	B
2	1	201	50	364		418	0.480	201	213	0.9	0.9	16.533	C
	2	517	129	151		1107	0.467	517	414	0.9	0.9	6.098	A
	3	505	126	73		805	0.628	505	595	1.6	1.6	11.985	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	458		469	0.330	155	208	0.5	0.5	11.460	B
	2	473	118	103		830	0.570	473	510	1.3	1.3	10.072	B
	3	595	149	71	0.00	909	0.655	595	505	1.9	1.9	11.457	B
2	1	201	50	364		418	0.481	201	214	0.9	0.9	16.558	C
	2	517	129	151		1107	0.467	517	414	0.9	0.9	6.099	A
	3	505	126	73		805	0.628	505	595	1.6	1.7	12.008	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	458		469	0.330	155	208	0.5	0.5	11.461	B
	2	473	118	103		830	0.570	473	510	1.3	1.3	10.072	B
	3	595	149	71	0.00	909	0.655	595	505	1.9	1.9	11.462	B
2	1	201	50	364		418	0.481	201	214	0.9	0.9	16.565	C
	2	517	129	151		1107	0.467	517	414	0.9	0.9	6.099	A
	3	505	126	73		804	0.628	505	595	1.7	1.7	12.011	B

2030 + CD + PD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 84% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	273.68	F
2	Blackmore Road	Mini-roundabout	1, 2, 3	17.28	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030 + CD + PD	AM	FLAT	08:00	09:00	60	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	200	100.000
	2		FLAT	✓	635	100.000
	3	✓				
2	1		FLAT	✓	206	100.000
	2		FLAT	✓	329	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	72	128
	2	33	0	602
	3	65	360	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	67	139
	2	43	0	286
	3	159	570	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	1.01	231.40	12.1	F	200	200
	2	1.16	464.81	79.8	F	635	635
	3	0.46	7.11	0.8	A	424	424
2	1	0.62	27.91	1.6	D	206	206
	2	0.29	4.57	0.4	A	329	329
	3	0.80	20.36	3.6	C	647	647

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	353		230	0.869	184	93	0.0	4.0	64.983	F
	2	635	159	118		604	1.051	569	419	0.0	16.4	68.723	F
	3	420	105	30	0.00	930	0.451	416	658	0.0	0.8	6.961	A
2	1	206	52	503		335	0.616	200	183	0.0	1.5	25.746	D
	2	329	82	135		1120	0.294	327	568	0.0	0.4	4.534	A
	3	658	164	43		820	0.802	643	420	0.0	3.6	19.050	C

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	360		202	0.991	185	94	4.0	7.6	141.931	F
	2	635	159	119		557	1.139	553	427	16.4	36.9	190.730	F
	3	425	106	29	0.00	931	0.456	425	643	0.8	0.8	7.111	A
2	1	206	52	503		335	0.615	206	183	1.5	1.5	27.797	D
	2	329	82	139		1117	0.295	329	570	0.4	0.4	4.569	A
	3	643	161	43		820	0.784	643	425	3.6	3.6	20.360	C

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	360		199	1.005	189	94	7.6	10.4	198.853	F
	2	635	159	121		552	1.150	551	428	36.9	58.0	324.232	F
	3	425	106	29	0.00	931	0.457	425	643	0.8	0.8	7.115	A
2	1	206	52	503		335	0.615	206	183	1.5	1.6	27.876	D
	2	329	82	139		1117	0.295	329	570	0.4	0.4	4.570	A
	3	643	161	43		820	0.784	643	425	3.6	3.6	20.362	C

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	360		203	0.986	193	93	10.4	12.1	231.402	F
	2	635	159	124		548	1.158	548	430	58.0	79.8	464.809	F
	3	425	106	28	0.00	931	0.457	425	643	0.8	0.8	7.114	A
2	1	206	52	503		335	0.615	206	183	1.6	1.6	27.906	D
	2	329	82	139		1117	0.295	329	570	0.4	0.4	4.570	A
	3	643	161	43		820	0.784	643	425	3.6	3.6	20.361	C

2030 + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	13.01	B
2	Blackmore Road	Mini-roundabout	1, 2, 3	10.74	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030 + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

Default vehicle mix	Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	✓	HV Percentages	2.00

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	160	100.000
	2		FLAT	✓	493	100.000
	3	✓				
2	1		FLAT	✓	215	100.000
	2		FLAT	✓	542	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	5.00
2	1		
	2		
	3		

Origin-Destination Data

Junction 1

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	57	103
	2	73	0	420
	3	137	498	0

Junction 2

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	50	165
	2	73	0	469
	3	183	340	0

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Junction 2

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.36	12.60	0.6	B	160	160
	2	0.64	12.99	1.8	B	493	493
	3	0.70	13.13	2.3	B	632	632
2	1	0.50	16.51	1.0	C	215	215
	2	0.49	6.49	1.0	A	542	542
	3	0.65	12.78	1.8	B	521	521

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	486		453	0.354	158	206	0.0	0.5	12.133	B
	2	493	123	102		772	0.638	486	542	0.0	1.7	12.306	B
	3	628	157	72	5.00	908	0.691	619	516	0.0	2.1	12.129	B
2	1	215	54	331		439	0.490	211	251	0.0	0.9	15.604	C
	2	542	136	162		1098	0.493	538	380	0.0	1.0	6.382	A
	3	516	129	72		805	0.641	509	628	0.0	1.7	11.911	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	497		446	0.359	160	210	0.5	0.6	12.587	B
	2	493	123	103		770	0.640	493	554	1.7	1.7	12.966	B
	3	634	158	73	5.00	908	0.698	633	523	2.1	2.2	13.082	B
2	1	215	54	340		433	0.496	215	256	0.9	1.0	16.467	C
	2	542	136	165		1096	0.494	542	390	1.0	1.0	6.494	A
	3	523	131	73		805	0.650	522	634	1.7	1.8	12.734	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	497		446	0.359	160	210	0.6	0.6	12.601	B
	2	493	123	103		770	0.640	493	554	1.7	1.8	12.984	B
	3	634	158	73	5.00	908	0.698	634	523	2.2	2.3	13.124	B
2	1	215	54	340		433	0.496	215	256	1.0	1.0	16.498	C
	2	542	136	165		1096	0.494	542	390	1.0	1.0	6.494	A
	3	523	131	73		805	0.650	523	634	1.8	1.8	12.770	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	497		446	0.359	160	210	0.6	0.6	12.605	B
	2	493	123	103		770	0.640	493	554	1.8	1.8	12.989	B
	3	634	158	73	5.00	908	0.698	634	523	2.3	2.3	13.135	B
2	1	215	54	340		433	0.497	215	256	1.0	1.0	16.505	C
	2	542	136	165		1096	0.494	542	390	1.0	1.0	6.494	A
	3	523	131	73		804	0.650	523	634	1.8	1.8	12.776	B

Appendix 7.2 Travel Plan

LAND AT NEW FARM, MELKSHAM

Travel Plan

November 2025

Bloor Homes South West

paulbasham associates

Transport Planning | Travel Planning | Civil & Structural Engineering

RESIDENTIAL DEVELOPMENT
LAND AT NEW FARM
MELKSHAM

Travel Plan

CONTROLLED DOCUMENT

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RESIDENTIAL DEVELOPMENT
LAND AT NEW FARM
MELKSHAM

Travel Plan

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1. INTRODUCTION

1.1 This Travel Plan (TP) has been prepared by Paul Basham Associates on behalf of Bloor Homes South West to support an outline planning application for residential development; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; a 100 place nursery and access points for pedestrians and cyclists on Land at New Farm, Melksham. All matters are reserved except for access. Vehicle access would be provided via an improved Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.

1.2 The site is located to the immediate north of Sandridge Common Road, A3102 and approximately 1.8km east of the approximate town centre of Melksham. The site location has been identified within Figure 1.

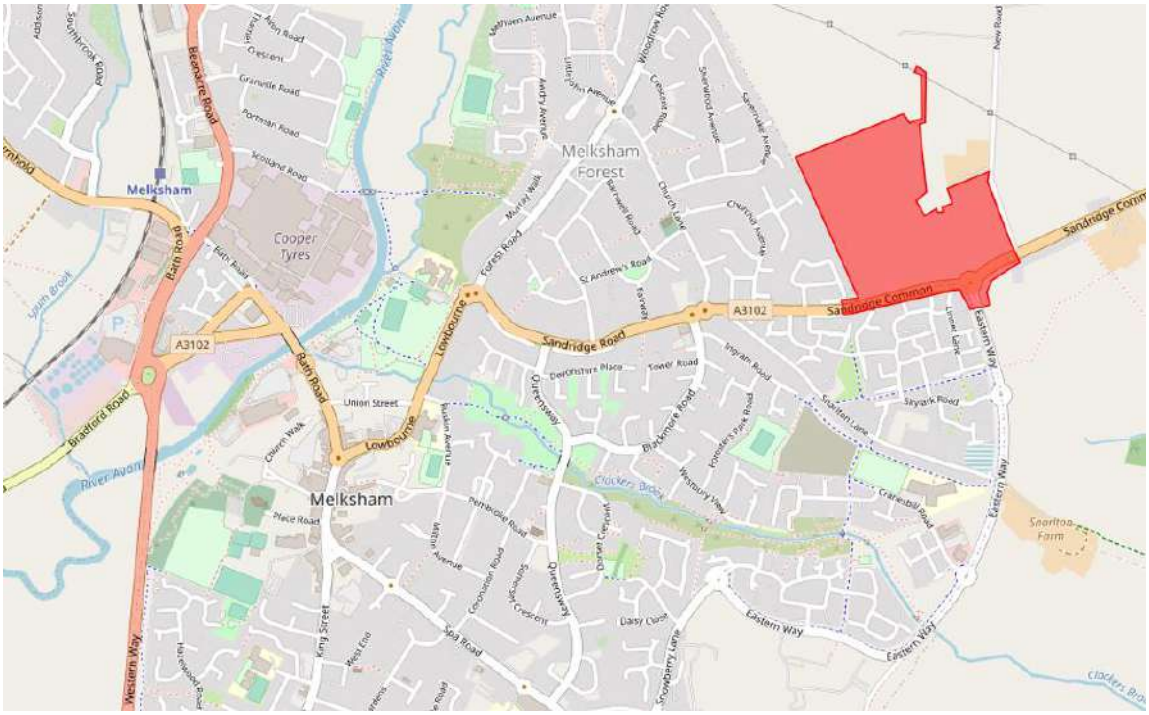


Figure 1: Site Location

1.3 In addition to this Travel Plan, a Transport Assessment (TA) and has been prepared, outlining the anticipated impacts of the development in relation to transportation and highways. Therefore, this Travel Plan should be read in conjunction with that document.

Site History

1.4 The site has been subject to a full planning application (submitted under reference: PL/2024/13045) for 295 homes and an area safeguarded for a 100 space Children's Nursery. At the time of writing, this is a live application. WC's latest highways comments relate to internal layout matters, and therefore it is understood that the other highway principles are agreed, i.e. those that would fall to be considered

as part of an outline application with detail of access – including means of access, highway impact and sustainable travel improvements. WC Highways did provide comments on the TP submitted as part of this application relating to the value of the green travel voucher, requesting that a £300 voucher per property is offered, which has been included within this TP.

Purpose of the Travel Plan

1.5 A TP is a strategy for managing travel demand to a development site by addressing the travel needs of its future users, reducing the impact of car travel by promoting and facilitating the use of sustainable modes of transport, encouraging a reduced need to travel and increasing sustainable travel practices where appropriate. This TP supports access to a full range of local facilities and activities for future site users, whilst encouraging good design principles and working with the local community.

1.6 A TP is an evolving process initiated by a front-loading exercise through site visits, the completion of a TP, and frequent meetings and conversations between its authors (Paul Basham Associates), the client (Bloor Homes) and the Local Authority (Wiltshire Council). As such the TP will develop over time following feedback received from monitoring exercises, local developments in sustainable transport and other external factors.

Travel Plan Principles

1.7 A successful TP must follow a set of principles to be determined acceptable and create a sustainable development. This TP therefore aims to demonstrate that there are sustainable local travel options available, and measures proposed, along with an implementation and monitoring strategy.

Travel Plan Structure and Approach

1.8 This TP will follow the following structure:

- Chapter 2 – Travel Plan Policy
- Chapter 3 – Existing Conditions and Local Accessibility
- Chapter 4 – Proposed Development
- Chapter 5 – Indicative Baseline and Targets
- Chapter 6 – Travel Plan Strategy
- Chapter 7 – Implementation and Monitoring

2. TRAVEL PLAN POLICY

2.1 This TP has been produced in accordance with relevant national, regional and local policy. For reference this includes:

- National Planning Policy Framework (NPPF);
- Wiltshire Core Strategy (2015);
- Wiltshire Local Transport Plan (2011 – 2026);
- Wiltshire Local Plan Review (2023); and
- Wiltshire Council's revised Development Related Travel Plan Guidance (2021).

National Planning Policy Framework (NPPF)

2.2 The NPPF (December 2024) acts as the central guidance for development planning. As defined in NPPF Annex 2: Glossary, a Travel Plan is '*a long-term management strategy for an organisation or site that details how agreed sustainable transport objectives are to be delivered, and which is monitored and regularly reviewed*' and is a requirement for developments which generate a significant amount of movement. The following NPPF paragraphs are relevant to the Travel Plan:

Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve: *a) making transport considerations an important part of early engagement with local communities;* *b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;* *c) understanding and addressing the potential impacts of development on transport networks;* *d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;* *e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and* *f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.* ***(NPPF Para.109)***
The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making. ***(NPPF Para.110)***
All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored. ***(NPPF Para. 118)***

2.3 It should be noted that the NPPF had a minor update in February 2025 to resolve a cross-referencing point. This did not constitute a change to the policy and therefore the NPPF continues to be dated December 2024.

Wiltshire Core Strategy (2015)

2.4 The Wiltshire Core Strategy sets out to create stronger, more resilient communities, and to contribute to the achievement of sustainable development. In order to do so, the document presents a vision for Wilshire, this vision has been summarised below.

'By 2026, Wiltshire will have stronger, more resilient communities based on a sustainable pattern of development…

Employment, housing and other development will have been provided in sustainable locations in response to local needs as well as the changing climate and incorporating exceptional standards of design…

Partnership working with communities will have helped plan effectively for local areas and allow communities to receive the benefit of managed growth, where appropriate'.

2.5 In order to achieve this vision, the document produces strategies develop to address the challenges for this region. The Strategies include the following:

- Delivering a thriving economy;
- Addressing climate change;
- Providing everyone with access to a decent, affordable home;
- Helping to build resilient communities;
- Protecting and enhancing the natural, historic and built environment; and
- Ensuring that adequate infrastructure is in place to support our communities.

2.6 The site-specific and highways related strategies mentioned above have been summarised within this report.

Strategic Objective 2: Addressing Climate Change.

Climate change is possibly the greatest long-term challenge facing the world today. Tackling climate change is therefore a key Government priority for the planning system. Local authorities are uniquely placed to act on climate change and the planning system can help by contributing to delivering the most sustainable development and shaping communities that are resilient to the unavoidable consequences of a changing climate.

- *A sustainable pattern of development, including improvement to the self-containment levels of the main settlements and a reduction in the need to travel, will have contributed towards meeting climate change obligations.*
- *The supply of energy and heat from renewable sources will have contributed towards meeting national targets and helped to address fuel poverty.*
- *New development will have incorporated sustainable building practices and where possible will have contributed to improving the existing building stock.*
- *High energy efficiency will have been incorporated into new buildings and development. New developments will have incorporated appropriate adaptation and mitigation for climate change.*
- *New developments will be supported by sustainable waste management.*

Strategic Objective 3: Providing everyone with access to a decent, affordable home.

This strategy makes provision for at least 42,000 new homes in Wiltshire in the plan period from 2006-2026. It sets out a plan for an appropriate mix of types, sizes and tenures, particularly to address affordable housing needs, and will ensure a continuous supply of housing over the plan period that is aligned to job growth and the delivery of infrastructure.

- *New homes will have been delivered in the most sustainable locations and will have been designed to respect the local character.*
- *More modest growth, proportionate to the size the settlement, will have been delivered in smaller settlements through site allocation development plan documents, community-led planning policy documents. The benefits from the development of new homes will have been successfully captured for local communities.*
- *Development will have avoided encroachment on the Western Wiltshire Green Belt and the separate identity of the outlying villages to the west of Swindon protected.*
- *The flexible approach will have allowed the council, for example, through the preparation of the Site Allocations DPD and local communities preparing neighbourhood plans, to respond positively to opportunities without being inhibited by an overly prescriptive rigid approach which might otherwise prevent sustainable development proposals that can contribute to delivering the strategic objectives of the plan.*
- *The strategy will have made significant progress towards addressing the shortfall in affordable homes across Wiltshire through ensuring all new schemes of five or more houses deliver appropriate on-site affordable housing provision.*
- *Land will have been used efficiently and opportunities for all development to below-carbon or zero carbon will have been optimised.*
- *A range of housing types and sizes will have been provided in order to help meet local needs for different groups of the population in a sustainable manner, including many new homes meeting the needs of an ageing population thereby allowing people to live for longer within their own communities.*
- *New sites will have been provided for gypsies and travellers.*
- *Changes in the accommodation of military personnel will have enabled better integration with the wider community.*

Strategic Objective 6: To ensure that infrastructure is in place to support communities.

The anticipated level of growth within Wiltshire will increase demand on local infrastructure services and facilities. The strategy will need to ensure that infrastructure requirements are appropriately planned, secured and implemented to ensure the timely delivery of development proposals. Social and physical infrastructure (e.g. transport improvements) can positively affect the environment, the economy and social well-being. The strategy will need to ensure that strategic and local transport needs are managed in a sustainable manner. The anticipated effects of climate change could potentially increase the frequency of flood events within Wiltshire. Development will need to appropriately address the risk of flooding and, where necessary, provide attenuation measures designed to adapt to the challenge of climate change.

- *Provision of essential infrastructure, including transport, water, energy, flood alleviation, sustainable urban drainage (SUDs), telecommunications, affordable housing, education, health care, emergency services and waste and recycling, will have been coordinated and provided in a timely manner within all new development.*
- *Appropriate place-shaping infrastructure, such as leisure and open space, green infrastructure, libraries, meeting places, places of worship, public art and cultural facilities, will have been secured on a priority basis.*
- *There will have been effective partnership working between the council, other infrastructure providers and developers to facilitate infrastructure delivery; opportunities for the co-location and multi-functional use of existing and new infrastructure services and facilities will have been realised and appropriate contributions will have been secured from developers towards the cost of new and improved infrastructure.*
- *Existing infrastructure services and facilities will have been protected, unless they are no longer needed, or there is alternative provision elsewhere.*
- *The provision of new or improved infrastructure will have been positively supported provided there is no detrimental environmental impact.*
- *Progress will have been made to ensure policies are helping to reduce greenhouse gas emissions associated with transport.*
- *A range of viable, efficient sustainable transport alternatives will have been provided to reduce reliance on the private motor vehicle, including effective choices for those people without access to a car and for the distribution of freight.*
- *A safer and more integrated transport system will have been provided that achieves a major shift to sustainable transport, including walking, cycling, and the use of bus and rail networks especially in the larger settlements of*

Trowbridge, Chippenham and Salisbury, and along the main commuting corridors.

- *Sustainable transport alternatives will have been implemented in a manner which has reduced the impact of traffic on people's quality of life and Wiltshire's built and natural environment including enhancement of the public realm and street scene.*
- *Measures will have been implemented which reduce traffic delays and disruption, and improve journey time reliability on key routes.*
- *The use of existing transport infrastructure will have been optimised through effective design, management and maintenance.*
- *Safety for all road users will have been improved, the number of casualties on Wiltshire's roads reduced and the impact of traffic speeds in towns and villages mitigated.*
- *Barriers to transport and to access for people with disabilities and mobility impairment will have been effectively removed.*
- *Access to local jobs and services will have been improved.*
- *Strategic transport corridors within Wiltshire will have been safeguarded and, where appropriate, improved in a sustainable way.*
- *The natural function of floodplains will have been maintained and enhanced and a sequential approach to flood risk will have been followed, with development being located first in areas of lowest risk.*
- *The use of appropriate surface water management will have become a prerequisite for development to ensure that flood risk is not increased elsewhere. Sustainable urban drainage systems (SUDs) will have been used in most cases.*
- *Proposals for new development will have reduced the overall risk of flooding through the appropriate implementation of climate change adaptation measures.*

Wiltshire Local Transport Plan (2011 – 2026)

2.7 The Wiltshire Local Transport Plan (LTP) sets out an accessibility vision to help ensure contribution to the national transport goals. The vision has been detailed below.

'To help reduce social exclusion and provide good sustainable access to employment, health care, education, leisure and social activities as well as other vital goods and services so that wherever possible people can satisfy their needs locally and without the need to travel by car.'

2.8 In order to meet this vision, goals and objectives have been produced. The goals of the LTP have been summarised below:

- Supporting economic growth;
- Reducing carbon emissions;
- Better safety, security and health;
- Promote equality of opportunity; and
- Improve quality of life and a healthy, natural environment.

2.9 The objectives of the LTP have been summarised below:

- To provide, support and/or promote a choice of sustainable transport alternatives including walking, cycling, buses and rail;

- To reduce the impact of traffic on people's quality of life and Wiltshire's built and natural environment;
- To minimise traffic delays and disruption and improve journey time reliability on key routes;
- To improve sustainable access to a full range of opportunities particularly for those people without access to a car;
- To reduce the level of air pollutant and climate change emissions from transport;
- To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts;
- To reduce the need to travel, particularly by private car;
- To promote travel modes that are beneficial to health;
- To improve the resilience of the transport system to impacts such as adverse weather, climate change and peak oil; and
- To enhance the journey experience of transport users.

Wiltshire's Local Plan

2.10 Wiltshire's Local Plan is currently under review. The Wiltshire Council Local Plan Pre-Submission Draft 2020 – 2038 was submitted in September 2023 and provides an emerging vision for Melksham that was subject to public consultation from September to November 2023. Within the emerging Wiltshire Local Plan, the site is referenced under Policy 20: Land north of A3102 is included. The document outlines the development being capable of delivering approximately 285 dwellings and a 100-space nursery and states that access is possible via a fourth arm off the existing roundabout on A3102.

2.11 Furthermore, within the Policy, infrastructure and mitigation requirements are set out including:

- vehicular access from the existing roundabout on the A3102 adjacent to the southern boundary;
- offsite infrastructure improvements to water supply and foul water network;
- introduce green and blue infrastructure through the development that incorporates new woodland and/or tree planting;
- provision of a suitable buffer either side of the watercourse that runs south to north through the site;
- funding contributions towards early years, primary and secondary education and on, or off-site healthcare capacity to meet the needs created by the development; and
- measures to positively support walking, cycling and public transport use between the site, Melksham town centre and Melksham railway station and linking into existing networks.

Wiltshire Council's Development Related Travel Plan Guidance (2021)

2.12 Wiltshire Council (WC) provides 'Development Related Travel Plan Guidance' (2019), revised in 2021. The guidance has been produced to support developers during Travel Plan preparation. The document states that *'a Travel Plan is a package of measures designed to encourage safe, healthy and sustainable travel options. By reducing car travel, travel plans can improve health and wellbeing, free up car parking space, and make a positive contribution to the community and the environment'.* The document incorporates the following elements:

- The policy context;
- What a Travel Plan is and what benefits it can deliver;
- When an applicant or developer will be required to submit a Travel Plan in conjunction with a planning application;
- What type of Travel Plan is appropriate;
- How a Travel Plan is best prepared;
- What the Travel Plan should include and where suggested resources can be found;
- How Travel Plans can be delivered and secured; and
- How Travel Plans will be monitored and enforced.

2.13 The document suggests that the threshold for a Full Travel Plan for a C3 Residential Use-Class is when the proposed development is for more than 40 units, stating that *'the use of Travel Plans for large housing developments will contribute to the wider promotion of the use of sustainable modes of travel'.* This Travel Plan has been informed by and seeks to meet the guidelines set out within the document.

2.14 This TP has been written in accordance with the above policies to increase the modal share of alternative transport options for the benefit of the proposed development and wider community.

3. EXISTING SITE CONDITIONS AND LOCAL ACCESSIBILITY

3.1 The site is located in Melksham, approximately 9km northeast of Trowbridge and 9km south of Chippenham. The development site is bound to the north by undeveloped land, to the east by New Road, to the South by the Sandridge Common (A3102) and the west by residential development. The local highway network is shown in **Figure 2** below.



Figure 2: Site Context Plan

3.2 The site currently comprises agricultural land and is currently subject to a live full planning application for 295 dwellings under reference: PL/2024/10345. The existing site conditions are outlined in **Photograph 1**.



Photograph 1: Existing Site Frontage along Sandridge Common

Local Road Network

3.3 Sandridge Common (A3102) routes along the southern boundary of the site and measures approximately 7m in width with a shared footway/cycleway measuring 3m along the southern side of the carriageway which continues into Melksham town centre. Within the vicinity of the site, a 40mph speed limit is in place along Sandridge Common with a 30mph limit introduced approximately 90m west of the site's western boundary. The conditions on Sandridge Common are demonstrated in **Photographs 2** and **3.**



Photograph 2: Conditions along Sandridge Common



Photograph 3: Existing roundabout to the east

3.4 Approximately 215m east of the proposed secondary access point, Sandridge Common (A3102), meets a 3-arm roundabout with Eastern Way and Sandridge Common. Eastern Way is a single carriageway Road that measures approximately 7.3m wide and is subject to a 40mph speed limit.

3.5 Approximately 150m east of the Sandridge Common Roundabout, there is a priority junction with New Road (**Photograph 4**), a single carriageway road that measures approximately 4.2m wide and is subject to national speed limit (which would be 60mph). New Road continues for 1.2km north before reaching a further priority junction with Woodrow Road/Lower Woodrow. Lower Woodrow continues north to reach Bewley Common and Lacock.



Photograph 4: New Road

3.6 From the site, the A3102 routes west approximately 1.1km to reach a double mini roundabout with Forest Road and Lowbourne. From Lowbourne, Melksham town centre can be accessed. To the north of Lowbourne and via Bank Street (A3102) the A350 can be accessed via the Farmers Roundabout. The A350 is located west of Melksham and is a primary route that runs from Junction 17 of the M4 to Poole in Dorset.

Existing Traffic Conditions

3.7 In February 2024 as part of the full planning application on the site, 2 x 7-day ATC surveys were undertaken, with one installed on A3102 Sandridge Common Road to the west of the existing A3102/Eastern Way roundabout and one installed along New Road to the east of the site. The results of the two ATC surveys are summarised in **Table 1** and **Table 2**.

A3102 Sandridge Common Road	Daily Flow (7-day Average)	85th percentile Speeds (mph)
Eastbound	3624	41.9
Westbound	3498	39.6

Table 1: ATC Traffic Speed Survey Results (A3102 Sandridge Common Road)

A3102 Sandridge Common Road	Daily Flow (7-day Average)	85th percentile Speeds (mph)
Northbound	727	36.0
Southbound	794	39.6

Table 2: ATC Traffic Speed Survey Results (New Road)

3.8 As summarised within **Table 1**, 85th percentile speeds along the A3102 Sandridge Common Road are 41.9mph eastbound and 39.6mph westbound. In terms of daily 7-day average traffic flows, the A3102 Sandridge Common typically accommodates 3624 vehicles eastbound and 3498 vehicles westbound.

3.9 As summarised within **Table 2**, 85th percentile speeds along New Road are 36.0mph northbound and 39.6mph southbound. In terms of daily 7-day average traffic flows, New Road typically accommodates 727 vehicles northbound and 794 vehicles southbound.

Pedestrian and Cycle Network

3.10 Along Sandridge Common within the vicinity of the roundabout junction with Eastern Way a shared footway/cycleway, that measures 3m wide, runs along the southern side of the carriageway (**Photograph 5**) towards Melksham Town Centre. The shared arrangement ends approximately 200m west of the A3102/ Eastern Way Roundabout, at the pedestrian/cycle connection to Redwing Road. Beyond this to the west the pedestrian footway reduces to 2m in width and continues to route into Melksham. Along the northern side of the A3102 (across the site boundary), no footways or cycleways are present.



Photograph 5: Shared Footway/Cycleway along southern side of Sandridge Common Road

3.11 To the west of the site, Sandridge Common Road is equipped with 2m wide lit footways. Approximately 10m west of the speed limit change a 2m footway begins along the northern side of Sandridge Common Road.

3.12 In addition, along the pedestrian route into Melksham town centre, there are appropriately placed dropped kerbs and tactile paving to facilitate the safe movement of pedestrians. The existing pedestrian conditions are demonstrated within **Photographs 6** and **7**.



Photograph 6: Pedestrian infrastructure along Skylark Road junction



Photograph 7: Existing pedestrian crossing infrastructure along Sandridge Common Road

3.13 As detailed above, a shared footway and cycleway is provided along the footway which flanks the south of Sandridge Common. As mentioned, this shared arrangement ends approximately 240m west of the A3102/ Eastern Way Roundabout at Fieldfare Way but, continuous to flank Eastern Way along its entirety to Spa Road, southeast of Melksham.

3.14 The National Cycle Route 403 (NCR403) is located approximately 1.3km west of the proposed site at King George V Park and can be accessed via a 5-minute cycle long the A3102. From the King George V Park, NCR401 routes north towards Lacock (21-minute cycle) and towards Chippenham (21-minute cycle) and also provides a link to the National Cycle Route 4 (NCR4), located approximately 3.3km south (11-minute cycle). The NCR4 provides direct, off-road links to Trowbridge, a 11.7km southwest of the proposed site (37-minute cycle), and Devizes, 13.3km southeast of the proposed site (56-minute cycle).

3.15 Wiltshire's draft Local Cycling and Walking Infrastructure Plan (LCWIP) 2022 states that a full Melksham LCWIP will be published in 2024. It also contains a map which shows existing primary and secondary cycle routes and is shown in **Figure 3**.

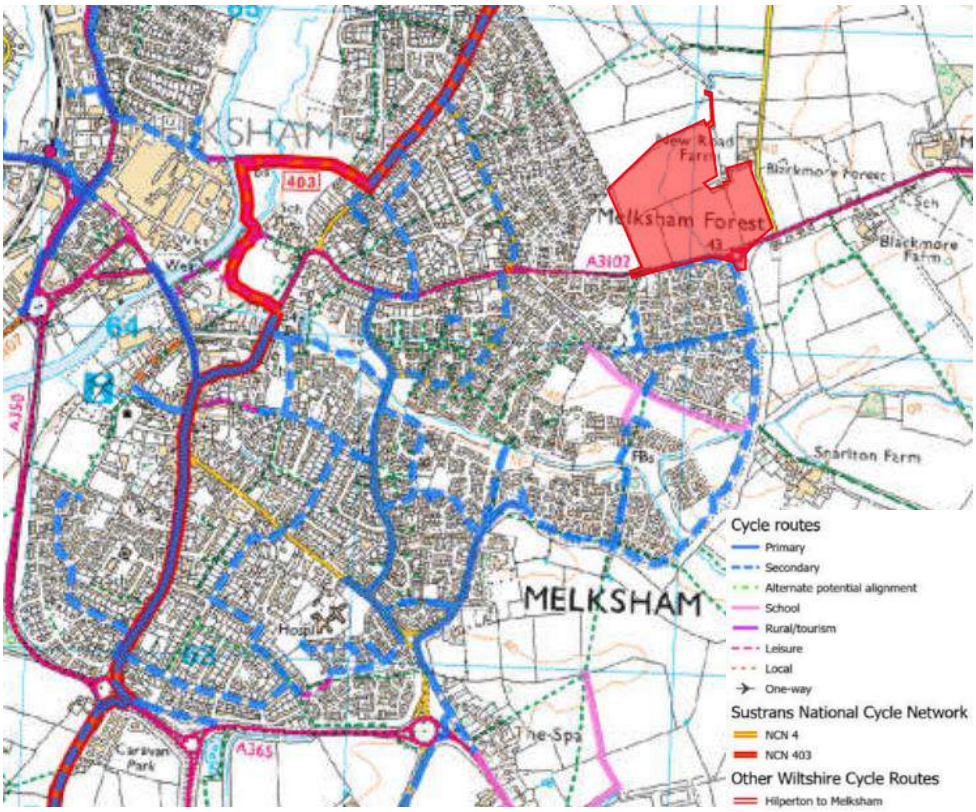


Figure 3: Wiltshire LCWIP

3.16 It can be seen in **Figure 3** that the site is north of an existing secondary route, which provides a route from the site into Melksham Town Centre and onto the National Cycle Network 403 route, which routes from Bowerhill in the south and Marlborough in the east. The southern section of the 403 route connects into the long distance NCN route 4, which connects London to Fishguard in Wales.

Public Rights of Way

3.17 There is an extensive Public Rights of Way (PRoW) network within immediate proximity of the site. The nearest ProW is located to the south of the site (route MELK103) and provides footpath access to Snarlton Lane and onward connectivity to Melksham town centre, via a series of other short footpaths on the PRoW network. There are multiple bridleways to the east of the site which would provide leisure opportunities for pedestrian and cyclists. The network, with respect to the proposed development, is shown in more detail in **Figure 4**.

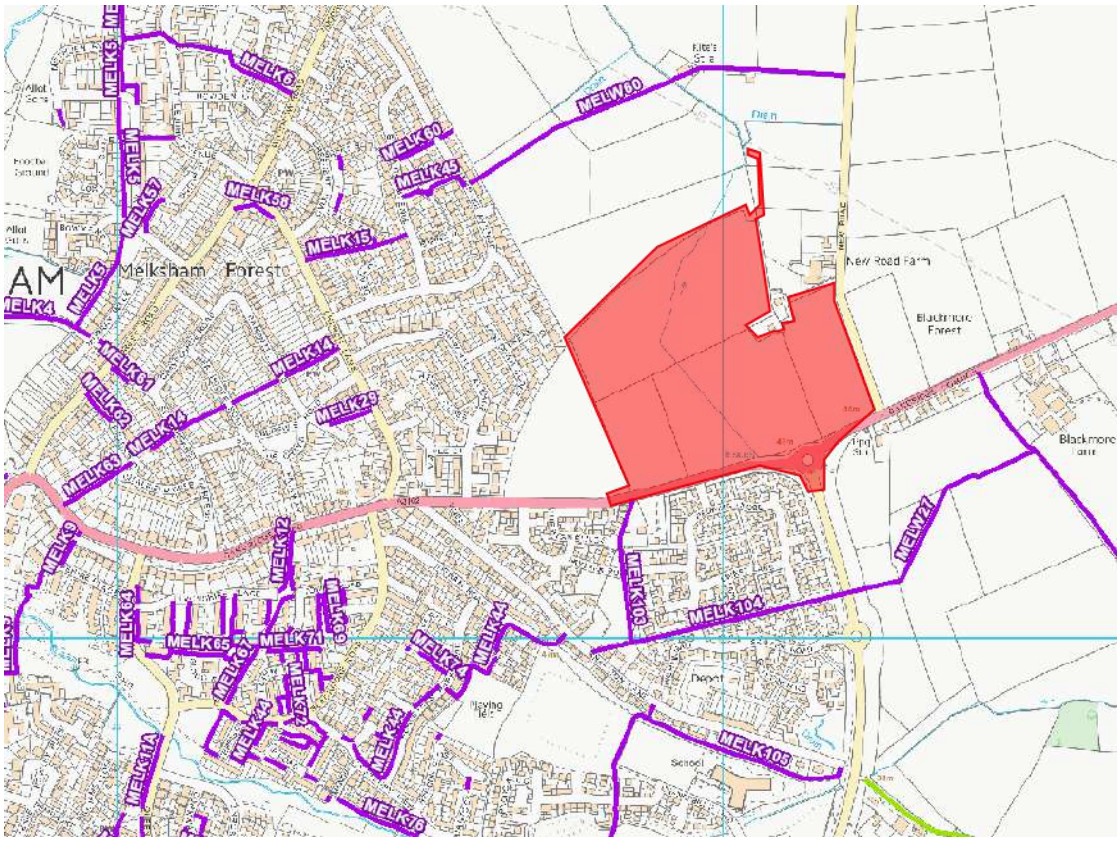


Figure 4: Public Rights of Way Map (Source: Wiltshire Council)

Accessibility to Local Amenities

3.18 It is generally accepted that walking and cycling provide important alternatives to the private car and should be encouraged to form part of longer journeys by public transport. The Chartered Institute of Highways and Transportation (CIHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:

- Most people walk to a destination that is less than one mile or 1.6km (Planning for Walking, 2015);
- The bicycle is a potential mode of transport for all journeys under 8 km (Planning for Cycling, 2015); and
- Walking distances to bus stops should not exceed 400 metres, with people prepared to walk twice a far to rail stations (planning for Walking, 2015).

3.19 The location of the site in proximity to the local amenities offers a good opportunity to create a sustainable development. A short summary of the key amenities that would be of interest to the anticipated demographic of the proposed development within the locality of the site is presented in

Table 3 below, applying the average walking speed of 1.4m/s as classified in CIHT's 'Providing for journeys on foot' (2000, Table 3.2).

Amenity	Approximate Distance	Approximate Walking Journey Time	Approximate Cycling Journey Time
Proposed Nursery (within proposed development)	250m	2 minutes	1 minute
Convenience Store (Londis)	475m	7 minutes	1 minute
Convenience Store (Co-operative Food)	600m	10 minutes	2 minutes
Public House (The Foresters Arms)	600m	10 minutes	2 minutes
ATM	600m	10 minutes	2 minutes
Primary School (Forest and Sandridge Primary School)	800m	13 minutes	3 minutes
Fish and Chip Shop (Forest Fish Bar)	850m	14 minutes	3 minutes
Place of Worship (St Andrews Church)	860m	14 minutes	3 minutes
Public House (Water Meadow)	975m	15 minutes	3 minutes
Primary School (Forest and Sandridge Primary School)	975m	15 minutes	3 minutes
Melksham Town Centre	1.8km	24 minutes	5 minutes
Melksham Train Station	2.5km	30 minutes	9 minutes
Secondary School (Melksham Oak Community School)	3.2km	55 minutes	14 minutes

Table 3: Summary of Local Amenities

3.20 As summarised in **Table 3**, there are key amenities within walking distance of the site location that would be of important use to future residents. Facilities such as the nearby primary schools and range of convenience stores would be essential for everyday use.

Public Transport

Bus

3.21 The closest bus stop to the site from the proposed site access is the 'Skylark Road' bus stop, located on the southern side of Skylark Road, circa 330m (4 minute walk) south of the development. This stop provides a circular shuttle bus which runs into Melksham and back by Services 14 and 15, run by Frome Bus, however, it should be noted this is only a request stop at certain times. Additional bus services are available from the 'Ingram Road' stop located along Blackmore Road circa 750m west of the site. A summary of the bus services within the vicinity of the site are outlined in **Table 4**.

Bus Service	Bus Stop Location	Destination	Frequency		
			Monday-Friday	Saturday	Sunday
14/15 Frome Bus	Skylark Road	Melksham Circular	Service: Hourly First Bus: 08:16 Last Bus: 17:47	Service: Hourly First Bus: 08:42 Last Bus: 17:15	No Service
271/272/273 Traveline	Blackmore Road	Devizes – Bath City Centre	Service: Hourly First Bus: 06:54 Last Bus: 22:24	Service: Hourly First Bus: 07:11 Last Bus: 22:24	Service: 6 per Sunday (273 only) First Bus: 09:58 Last Bus: 19:55
X34	Bank Street	Chippenham - Frome	Service: Hourly First Bus: 06:54 Last Bus: 18:06	Service: Hourly First Bus: 07:05 Last Bus: 17:59	No Service
555 (School Service)	Blackmore Road/Sandridge Common	Melksham – Corsham School	2 Services daily at 07:46am (to school) and 15:05 (from school)	No Service	No Service

Table 4: Local Bus Services

3.22 In addition to the services raised above, the X76 service routes along Sandridge Common past the site. The X76 operates once a day and routes from Marlborough (via Melksham) to Bath in the morning and provides a return journey in the afternoon.

3.23 As part of the development proposals, and discussed in more detail in **Section 4**, it is proposed that two additional bus stops will be provided along Sandridge Common Road which will be located within 400m of most of the site.

Rail

3.24 Melksham Train Station is located 2.5km west of the site and is accessible either via a 7 minute drive or via the 271 bus service (37 minute journey). The station is operated by Great Western Railway and provides 8 cycle parking spaces. There are regular services, 9 in each direction per day, towards Westbury and Swindon which provide further onward connections to the west, and east towards Sailsbury and Southampton Central. This service also provides connections to local stations including Trowbridge and Chippenham. The frequency of the services and the variety of destinations make travel by rail suitable for both commuter and leisure travel.

Summary of Site Accessibility

3.25 The proposed development has been shown to be well located to support a variety of travel modes and the sustainability of the site has been confirmed by WC Highways as part of the full planning application. The site is well connected to the local road network along with the strategic network including the A3102 and A350. The local pedestrian and cycle networks are well located to promote use by future residents and offer great opportunities for people to walk and cycle to their destinations. The site is also well located to support public transport use with regular bus services

located in close proximity as well as being able to access the local rail network. Such a summary is concurred within the Planning for Melksham July 2023 document, but more importantly the site is currently allocated under Policy 20 of the emerging Local Plan.

4. PROPOSED DEVELOPMENT

4.1 The proposed development comprises 295 residential units, which will include a mix of affordable and private dwellings and an area of land 0.4ha in size for a Children's Nursery. The proposed masterplan is attached within **Appendix A**.

Access Arrangements

4.2 Access to the site will be via one main point of access via a newly constructed 4th arm on the Sandridge Common/Eastern Way Roundabout.

4.3 The second point of access will be located approximately 250m west of the roundabout along Sandridge Common Road that will take the form of an emergency access point and will measure 3.7m wide and will be bollard controlled.

4.4 As part of the roundabout upgrades, an LTN 1/20 compliant footway/cycleway measuring 3m and crossing points are also proposed along all of the roundabout arms to tie into the existing infrastructure on the southern side. Additionally, it is proposed that there will be two signalised pedestrian crossing points located along Sandridge Common, with one located adjacent to the emergency access and one located approximately 80m east of the roundabout that will facilitate access to the bus stops proposed as part of the consented Blackmore Farm application (ref: PL/2023/11188). Furthermore, two additional bus stops are proposed as part of this scheme that will be located along Sandridge Common.

4.5 Furthermore, to comply with LTN 1/20, an internal shared footway/cycleway measuring 3m wide route has also been proposed on the western side of the 4th arm of the Sandridge Common roundabout to further enhance the pedestrian/cyclist facilities within the site.

5. INDICATIVE BASELINE AND TARGETS

Travel Plan Aim

5.1 The overall aim of the TP is:

to support a sustainable development by reducing the need for single occupancy vehicle trips through highlighting and promoting the use of more sustainable travel methods.

Travel Plan Objectives

5.2 Specific to this TP, the objectives are:

- Reduce single occupancy vehicle trips and their subsequent impact on the local road network;
- Maximise the opportunities for travel by alternative means;
- Promote pedestrian and cycle routes both on and off-site;
- Promote local public transport; and
- Ensure safe and easy access for all site users

5.3 Meeting these objectives will help achieve a development that has a high standard of sustainable travel practices and a decreased reliance on the private car, thus reducing the impact of car travel on the local road network. The baseline travel patterns, aims and indicative targets are designed to be utilised for the Residential elements of the site. While the occupier for the Nursery is still unknown and the fact that it will be self- serving for the residents of the development, indicative baseline modal splits have not obtained.

Baseline Travel Patterns

5.4 Before setting specific targets understanding how residents/employees currently travel to work is essential. Using 2011 'Method of Travel to Work' Census data, a target to reduce single occupancy car trips by 10% is identified. The baseline modal splits are presented in **Table 5** and are sourced from 2011 Census 'WU03EW - Location of usual residence and place of work by method of travel to work'.

Mode of Travel	Indicative Baseline
Car Alone	79%
Car Share	5%
Train	1%
Bus, Minibus, Coach	2%
Taxi	0%
Motorbike, Scooter, Moped	1%
Cycle	3%
Walk	7%
Work from Home	0%
Total	**100%**

Table 5: Indicative Baseline Splits Based on 2011 Census Data

5.5 The 2011 Census suggests that 79% of existing residents travel to work by driving a car or van, 5% car share while 3% use public transport and 10% walk or cycle. These baseline modal splits are the same as was obtained for the full planning application and should therefore be considered acceptable.

5.6 It is proposed that to determine the 'actual' travel patterns, surveys would be completed at 50% occupation of the development. This would enable a sufficient sample size whilst also providing the opportunity to embed the residential TP before too many units are occupied.

5.7 Once the actual baseline modal splits have been established, the travel Plan Coordinator (TPC) and Wiltshire Council Travel Plan Officer (TPO) should discuss the acceptability of the indicative modal share target presented in **Table 6**.

Travel Plan Targets

5.8 To enable the progression and assessment of the success of the TP, it is key that SMART targets (Specific, Measurable, Achievable, Realistic and Time-bound) are implemented.

5.9 As aforementioned, this Travel Plan proposes to reduce single occupancy vehicle trips by 10% by increasing the modal share of more sustainable modes of travel, as shown in **Table 6**.

Aim	Timescale
Decrease the proportion of journeys made by single occupancy car by 10%	End of Year 5
Increase the proportion of trips made by sustainable and active modes (including public transport/walking/cycling) by 10%	End of Year 5

Table 6: Travel Plan Aims

5.10 Indicative modal split targets have been produced using the overarching target set out within **Table 6**, and the baseline modal split within **Table 5**. The indicative Modal Split Travel Plan Targets are set out in **Table 7**.

Targets	Objective	Baseline Modal Share	Interim Target (End of Year 1)	Interim Target (End of Year 3)	Interim Target (End of Year 5)
TP1	% Of single occupancy car trips	79%	76.5 % (-2.5%)	74% (-5%)	69% (-10%)
TP2	Number of residents using Public Transport Regularly	3%	3.5% (+0.5%)	4.5% (+1.5%)	6% (+3%)
TP3	Number of residents Walking Regularly	7%	8% (+1%)	8.5% (+1.5%)	10% (+3%)
TP4	Number of residents Cycling Regularly	3%	3.5% (+0.5%)	4% (+1.0%)	5.5% (+2.5%)
TP5	Number of residents Car Sharing Regularly	5%	5.5% (+0.5%)	6% (+1%)	6.5% (+1.5%)

Table 7: Indicative Travel Plan Targets

5.11 Overall, a 10% reduction in single occupancy vehicle trips is targeted over the 5-year TP period for all elements, which is the main aim in reducing pollution and congestion on the local road network. In terms of an increase in sustainable travel over the 5-years, a steadier increase in each mode is expected.

5.12 The use of public transport and walking is targeted to increase by 3%, with the number of residents cycling targeted to increase by 2.5%. Car sharing is to increase by 1.5%. The proposed modal splits are based on the current baseline modal split and location of the site which supports walking and public transport opportunities.

6. TRAVEL PLAN STRATEGY

6.1 A Travel Plan is a useful tool produced to encourage residents to use alternative modes of transport to single occupancy vehicle journeys. The following provides a summary of the measures available to target users of the development site.

Measures Package

6.2 In addition to the hard measures and onsite infrastructure (secure cycle parking and vehicle parking management) the following section proposes a package of soft measures to be implemented and refined by the TPC over the lifetime of the TP. The measures proposed are strongly influenced by the site location, the TP aim, objectives and targets and the local and national policy.

6.3 The measures set out in this section will be determined based on the final levels of occupancy and the potential for achieving a 10% modal shift. These measures have been identified through the master planning process, the Transport Assessment and Travel Plan submitted as part of this outline application and by drawing upon community transport solutions.

Key Stages: Preliminary

6.4 In order to meet the objectives of the TP it is essential that a number of tasks are completed prior to the first occupation, as outlined within the site's Action Plan (**Appendix B**). These include:

- Appoint a Travel Plan Coordinator (developer)
- Provide training to the sales staff regarding local travel options and the benefits of the TP;
- Identify a point of contact for all queries;
- Produce a Travel Plan webpage;
- Provision of Resident/Visitor noticeboard to include:
    - Public Transport Information
    - Local walking/cycling routes; and
    - Upcoming sustainable travel events.
- Produce Resident Welcome Pack (TPC) including:
    - Walking and cycling routes;
    - Bus stop locations, prices and times;
    - Rail Station information;
    - Electric charging information;
    - Car sharing information and benefits; and
    - Details of the TPC.

Key Stages: Five Years Following 50% Occupation of the Development (Following Preliminary Stage)

6.5 It is proposed that the TP period would become fully active upon occupation of the 50% of the development and would remain active for 5 years following that date. Upon reaching this trigger point, baseline surveys would be issued out to residents following agreement with WC's TPO.

6.6 After the 5 years of official monitoring has ended and WC have signed off the TP, ownership would pass to the local community.

6.7 During these five years, the Action Plan set at the preliminary stage would evolve to reflect the needs of the residents. Such measures would be determined by the TPC in dialogue with occupants of the site, local authority and other key players as necessary. These measures are discussed in further detail in the remainder of this section and are included in the Action Plan which is included in **Appendix B**.

Modal Measures: Walking and Cycling

6.8 This TP has summarised the local walking and cycle networks and the facilities which this TP would promote to residents. These will be detailed to residents in their welcome pack and through the biannual newsletters (as discussed later in the report).

6.9 The accessibility review and baseline modal splits indicate that walking is a key travel mode for existing residents in the area due to well-lit, wide footways and a number of facilities and amenities within reasonable proximity to the proposed development.

6.10 Whilst the baseline modal splits do not indicate that cycling is a key travel mode for existing residents, it is hoped that the proposed improvements to the infrastructure will help this become a more favourable travel mode.

6.11 The TPC would work with walking and cycling campaigns and support local and national campaigns and events (i.e. Cycle to Work Day and local bike doctor events). To incentivise walking and cycling the TPC will investigate the option of discounts at local stores to maximise potential for residents to habituate walking and cycling as part of healthy lifestyle practices, whether for daily commuting or occasional leisure.

Modal Measures: Public Transport

6.12 The baseline modal splits indicate that 2% of existing residents currently travel to work by bus and therefore it is considered that the development provides an opportunity to promote bus travel as an alternative mode.

6.13 The attractiveness of the bus services, particularly those from Blackmore Road, Sandridge Common Road and Skylark Road would be supported and promoted through tailored promotions. The proposed bus stops that will be provided as part of the consented Blackmore Farm application as well as the additional bus stops funded as part of this application will also be promoted as part of the TPC works.

6.14 Maximising resident use of public transport would also be supported through highlighting costs and benefits in comparison to single occupancy vehicle use through the use of the Welcome Pack and regular newsletters.

6.15 The TPC will promote rail services from Melksham station as well as the potential link-trip afforded by the 273 bus service which operates between the station and Blackmore Road.

Modal Measures: Car Sharing

6.16 Car sharing is a simple yet effective way of quickly reducing the number of single occupancy car trips, whilst bringing reductions in transport costs, congestion and pollution as well as social benefits including increasing resident interaction and creating a sense of community.

6.17 Liftshare is a well-established scheme and would be promoted to residents through newsletters/welcome pack/website, to help them find potential lift sharing partners in the local area. The TPC will also look to promote the savings brought about through car sharing.

Modal Measures: Sustainable Private Vehicle Use

6.18 On occasions when single occupancy vehicle use is unavoidable or where alternative travel options are significantly limited in comparison, opportunities to promote sustainable driving practices would be promoted.

6.19 A wider network of electric charging points is being explored across the County, encouraging the greater uptake of electric and hybrid vehicles. Altering the perceptions on hybrid vehicles, and in particular electric vehicles, is fundamental for creating a more sustainable development.

6.20 Electric vehicles now have significant ranges, with some vehicles achieving at least 300 miles before needing to be recharged. In addition, manufacturers are confident in the batteries that they are now offering 8 year warranties on some models.

6.21 Hybrid vehicles combine both electric motors with a standard combustion engine providing a normal driving scenario with the addition of an electric provision. Promotion of both electric and hybrid

vehicles is becoming a key aspect of sustainable travel, and with Government grants available, this would be promoted as part of the TPC.

Modal Measures: Home/ Remote Working and Other Modes

6.22 Following the COVID-19 pandemic working from home and utilising technology to enable remote working in public locations such as cafes, and teleconferencing, have become a feature for many people's routines.

6.23 The TPC would continue to remind residents of the benefits of this type of work, particularly now that many individuals are spending at least one day a week at home, rather than in the office.

6.24 Should monitoring exercises and communication with residents identify a strong interest in other travel modes (such as motorcycle/taxi), measures (and associated targets) will be explored by the TPC through dialogue with the relevant groups/individuals such as operators and the Wiltshire Council Travel Plan Officer.

Personalised Travel Planning

6.25 Upon moving into their new home/flat residents will be offered free personalised Travel Planning advice as part of their Welcome Pack. This will be provided by the TPC and will inform residents on how they can travel to destinations more sustainably in support of achieving the longer-term targets for the site. The literature provided will contain up to date information regarding public transport facilities, walking and cycling routes within the local area.

Marketing and Communication - Travel Plan Website/Newsletters/Posters

6.26 To ensure the ongoing promotion of the Travel Plan to residents, over its life a number of marketing and communication elements would be implemented.

6.27 Firstly, a dedicated Travel Plan website (e.g. https://tpc-paulbashamassociates.com) will be established prior to occupation, which provides residents with up to date information and latest changes to travel services, news and events. This would be reviewed biannually and updated as required, to ensure the latest travel information is suitably reflected.

6.28 The TPC would also produce biannual newsletters for the five years of the Travel Plan, providing residents with updated sustainable travel information, details of any national events and offer personalised travel planning information, to their door.

Local Area and Other Site Users

6.29 The TP will promote the local area's facilities whilst actively engaging with local resident and community groups, the schools' TPC, as well as local events and businesses. Engagement with any other local active residential Travel Plans would provide an opportunity for a 'joined up working' approach to maximise resources and share best practice.

Visitors and Deliveries

6.30 As well as co-ordinating the promotion and practice of sustainable travel with the wider local community, the TP should be encouraging and extending sustainable travel opportunities to any visitors travelling to and from the site. Residents' positive sustainable travel experiences should have a knock-on effect to visitors.

Financial Incentives: Travel Voucher

6.31 The developer would look to offer a £300 travel voucher, available for each residence, from first occupation (one gift per property). Details of what the voucher could be utilised for would be agreed by the TPC, prior to occupation but would be expected to include:

- Contribution towards a bus ticket;
- Contribution towards a rail ticket; or
- Cycle voucher

6.32 The voucher would be valid for a set period of time which would be clearly defined on the voucher. Terms and conditions would also be clearly displayed.

7. IMPLEMENTATION AND MONITORING

Implementation

7.1 The Travel Plan would be secured through a planning condition/Section 106 agreement, which would confirm the proposed measures as well as any monitoring costs, required by WC.

Travel Plan Coordinator

7.2 This section covers the implementation and monitoring of the development. The TPC position would be part-time over the life of the TP which at this stage is anticipated to be the Preliminary period followed by five years of full implementation, beginning on 50% occupation of the development.

7.3 The TPC role and contact details will be finalised with WC prior to occupation and following their appointment by the developer. The TPC would be responsible for the day-to-day implementation and monitoring of the TP to ensure targets are met. The early stages of the TP are relatively time intensive, and the budget should be 'front-loaded' to consider the work that is required to establish the TP.

7.4 More specifically, the role of the TPC requires:

- Overseeing the development and implementation of the TP and maintaining support:
- Liaising with public transport operators, local interest groups, Wiltshire Council:
- Designing and implementing an effective marketing strategy and raising awareness:
- Attending relevant networking events:
- Organising travel-based events:
- Acting as the point of call for all TP enquiries: and
- Co-ordinating the monitoring and evaluation programme for the TP including organisation of surveys.

Action Plan and Targets

7.5 An indicative Action Plan for the application of the Travel Plan has been prepared. As measures are reviewed this Action Plan will be updated through the development of the Travel Plan.

7.6 The Action Plan for the application does not yet include dates as these would be dependent on construction schedules and occupation dates. Further indicative costings for the Travel Plan Action Plan have been completed and are attached within **Appendix B**.

Surveys and Feedback

7.7 It is important that a consistent approach to data collection and feedback is implemented in order to ensure that the following outcomes are delivered:

- Collect a representative and informative data account in accordance with the development timescales:
- Develop an accurate understanding of local travel modal shares, perceptions and influencing factors:
- Adoption of the TP by local residents beyond the TP's active period: and
- The successful delivery of the TP in co-ordination with other local developments and communities.

Monitoring

7.8 This TP's approach to monitoring acknowledges the above requirements and the strategy set out within the TP.

7.9 The resultant monitoring structure for the TP is therefore set out within **Table 8** and summarised in the subsequent paragraphs. It should be noted that WC considered this monitoring approach acceptable as part of the full planning application and should therefore be considered acceptable for this application.

Preliminary Period	End of Year 1	End of Year 2	End of Year 3	End of Year 4	End of Year 5
Resident Questionnaire (occupation of 50% of dwelling)	Resident Questionnaire & Monitoring Report	Resident Questionnaire & Monitoring Report	Resident Questionnaire & Monitoring Report	Resident Questionnaire & Monitoring Report	Resident Questionnaire & Monitoring Report

Table 8: Monitoring Strategy

7.10 A resident questionnaire would be completed at 50% occupation of the development with additional travel surveys to be conducted at the end of each subsequent year. It is proposed that the survey will be completed electronically, although postal surveys may also be used. An example resident survey is included in **Appendix C**.

7.11 To assist with this the Travel Gift would be promoted, and those wishing to obtain the gift would be required to complete the questionnaire. In later years of the development, or if response rates prove to be low, further incentives may be considered.

7.12 The results of the survey will be available for residents to view on the development's dedicated Travel Plan website and also included within newsletters, when appropriate.

7.13 An annual monitoring/progress report will be produced and submitted to WC within 3 months of surveys taking place. This report will outline how the TP has been implemented for the year, along with a presentation of any survey results, analysis of the responses and information of measures implemented. The report will then conclude with an outline of the future monitoring strategy and a confirmation of targets and revisions where necessary/applicable.

Overcoming Barriers to Success

7.14 Mismanagement can become a potential barrier to the successful implementation of TP's. Whilst the TPC is responsible for the overarching management of the TP, ongoing co-ordination with WC TPO will ensure that mismanagement does not occur.

7.15 Whilst specific remedial measures have not been identified within the Travel Plan, such remedial measures would be identified through discussions with WC Travel Plan Officers. The 5-year budget for implementing the Travel Plan would be sufficient to ensure that remedial measures could be implemented. Such as if one measure is not working in year 1, there would be budget in year 2 to rectify this and change to new measures if needed.

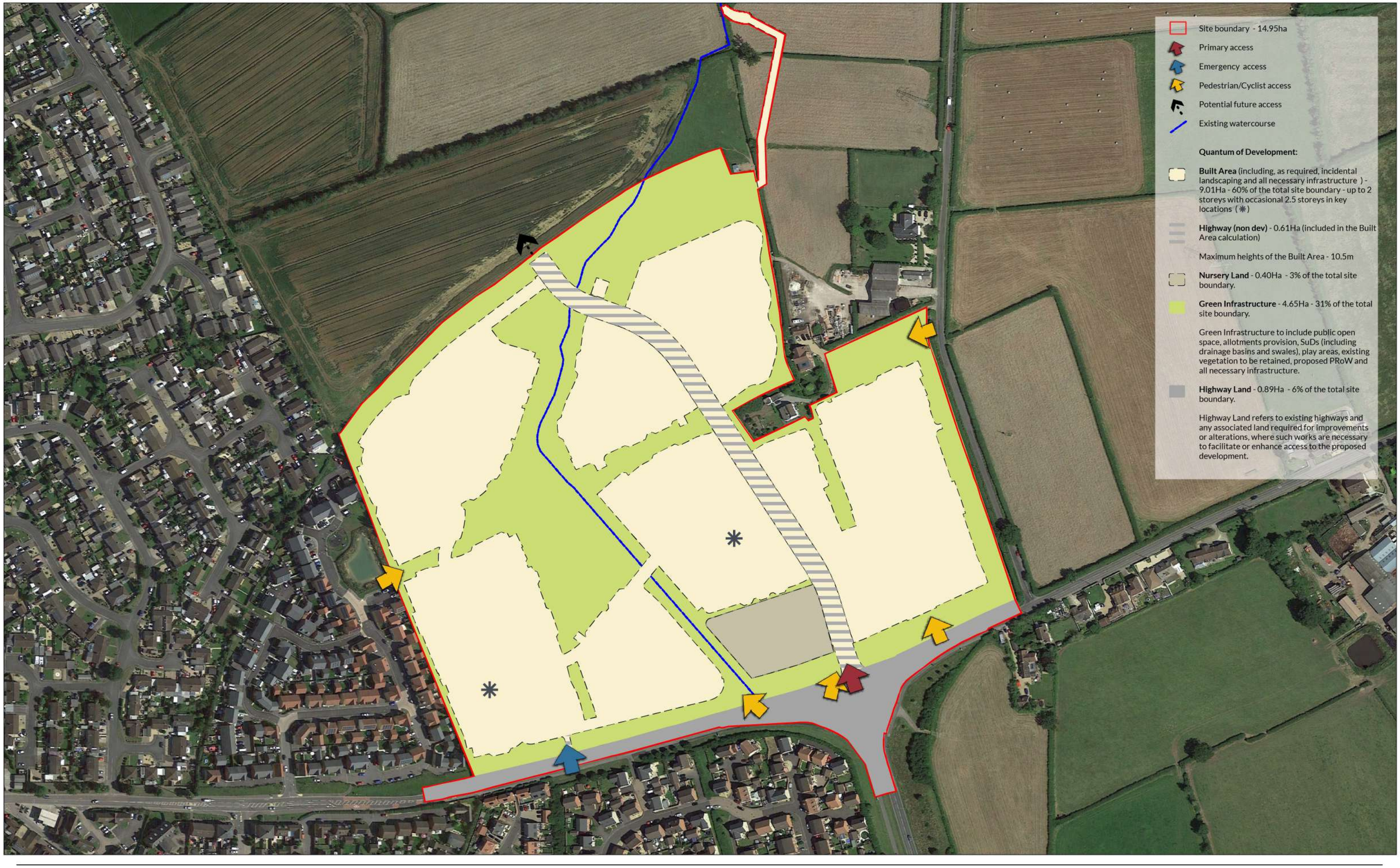
7.16 If the five-year target is not achieved, the requirement for remedial measures would be explored with WC and would reflect the level of work already undertaken on the site.

Community Embedding and Handover

7.17 Following the successful completion of the TP's 5-year strategy, the site should be operating more sustainably than if a TP were not implemented. Through liaison with residents over the course of the TP it is hoped that champions would stand out and be able to continue promoting the ideals of the TP/ maintain the website etc.

7.18 Local engagement and a gradual handover is embedded within the proposed TP strategy and should form a key subject in annual liaison with WC TPO as the TP draws to an end.

Appendix A



Status: FINAL

Notes:
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Drawing title:	Parameters Plan
Scale:	1:2500@A3
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Appendix B

Land at New Farm, Melksham (Outline)

Actions	Responsibility	Timescale	Notes
TPC to contact WC and agree targets, monitoring and confirm Action Plan	Developer/TPC	Prior to first occupation	
Site Visit	TPC	Prior to first occupation	
Establish contact with local service providers including cycle stores and local bus services to provide a development discount	TPC	Prior to first occupation	
Develop webpage	TPC	Prior to first occupation	
Prepare and distribute a Travel Welcome Pack	TPC	Prior to first occupation	
Determine communication strategy inc. resident meetings, newsletters	TPC	Prior to first occupation	
Travel Plan 'logo' and branding to be established	TPC	Prior to first occupation	
Prepare TP action database for logging/recording: Action Plans, Household details, Household Personal Travel Planning, Assistance/Communication, Local Key Players Contact Details, Survey Responses	TPC	Prior to first occupation	
Liaison with Sales Representatives to introduce TP and incentives available	TPC	Prior to first occupation	
End of Preliminary Phase Report and revise targets where necessary	TPC/WC	End of Preliminary Phase	
Resident Travel Survey	TPC	3 months following 1st occupation	Excluding expenses
	Preliminary Costs	**£3,000**	

Actions	Responsibility	Timescale	Year 1	Year 2	Year 3	Year 4	Year 5	Total	Note
Personal Travel Planning (General TPC Activities)									
Attend Resident Association Event / Group meetings	TPC	Ongoing							
Work within local community groups, attend meetings, share communciations	TPC	Ongoing							
Maintain dialogue with local public transport service operators for service changes and promotions including bus and train services	TPC	Ongoing							
Maintenance of local area walking / cycling route map and public transport information via online methods and bi-annual newsletters	TPC	Ongoing							
Provide information on safe walking and cycle routes to the school	TPC	Ongoing							
Keep up to date on local walking, cycling, public transport and car-sharing initiatives	TPC	Ongoing							
Promote local area key facilities, including walking and cycling	TPC	Ongoing							
Promote Walk to Work Week	TPC	Ongoing							
Promote Sustrans Big Cycle and Walk Challenge	TPC	Ongoing	£ 3,475.00	£ 1,725.00	£ 4,150.00	£ 1,725.00	£ 3,250.00	**£ 14,325.00**	
Promote local cycle events and local cycle shops	TPC	Ongoing							
Promote Bike Week	TPC	Ongoing							
Provision of information on local road network routes, fuel efficiency practices and fuel efficient vehicles and local electric vehicle charger provision	TPC	Ongoing							
Prepare cost comparison table for public transport against single car travel	TPC	Ongoing							
Promote and explore opportunities to co-ordinate deliveries	TPC	Ongoing							
Promotion of car sharing website such as Liftshare and electric charging locations	TPC	Ongoing							
Cooperate with local businesses to promote home/remote working and establish opportunities for long term investment in TP	TPC	Ongoing							
Promotion of home and remote working using case studies as possible evidence	TPC	Ongoing							
Encourage residents promotion of sustianble travel options to visitors	TPC	Ongoing							
Marketing and Communications									
Newsletters	TPC	Bi-annual Event	£ 500	£ 500	£ 500	£ 500	£ 500	**£ 2,500**	Does not include printing
Website/ Social Media Marketing	TPC	Annual Update	£ 250	£ 250	£ 250	£ 250	£ 250	**£ 1,250**	
Monitoring Stages - Surveys and Feedback									
Annual Progress Review	TPC	End of Each Year	£ 1,000	£ 1,000	£ 1,000	£ 1,000	£ 1,500	**£ 5,500**	
Liaison with WC	TPC	End of Each Year	£ 350	£ 350	£ 350	£ 350	£ 500	**£ 1,900**	
Resident Travel Survey	TPC	End of Years 1, 2 and 4	£ 675	£ 675		£ 675		**£ 2,025**	Does not include printing
Handover	TPC	End of Year 5					£ 1,000	**£ 1,000**	
		Year Estimates	**£ 6,250**	**£ 4,500**	**£ 6,250**	**£ 4,500**	**£ 7,000**	**£ 28,500**	
						Preliminary Stage + Year Estimates		**£ 28,500**	

Disbursements			Cost	Estimated Quantity Required	Total	Note
Subscription to Online Survey Tool	TPC		£300 per annum	5	£1,500	
Travel voucher	TPC		£300	295	£88,500	
Mileage/ Printing Costs	TPC		Costs to be agreed with developer on an Ad-hoc basis			
				Disbursement 5 year total	£90,000.00	

Project Details	
Scheme	Land at New Farm, Melksham
No. of Units	295
Personal Travel Planning Budget per unit	£ 300
Total Personal Travel Planning Budget	£ 88,500
1st Unit Occupation Target	TBC
Full Occupation Target	TBC
Applicant	Bloor Homes South West
Local Authority	Wiltshire Council
LA Travel Plan Officer	
Travel Plan Author	Izzie Drohan
Travel Plan Co-ordinator	TBC

Total Costs

TPC Total Costs	£28,500
Disbusements Total Costs	£90,000
TOTAL	£118,500

Version		PBA Author	Comment

Appendix C

– Resident Travel Survey

Thank you for taking the time to complete our residents travel survey. This will help us (your Travel Plan Coordinator) understand your travel needs and should only take a few minutes.
If you have any questions regarding our work, the survey or relating to the travel voucher, please do not hesitate to get in touch! And, don't forget to fill out your details at the end to receive your travel voucher!
You can send your completed survey to us via:

- ❑ **Post using the pre-paid envelope:** Paul Basham Associates, ###
- ❑ **Survey Monkey** at #####
- ❑ **QR code**

QR Code

Travel Plan

1. How do you currently travel?

	Daily	Couple of times a week	Weekly	Fortnightly	Monthly	Occasionally	Never
Car (alone as driver)							
Car (with passengers)							
Walking							
Cycling							
Scooter							
Bus							
Coach							
Overground Rail							
Underground Rail							
Ferry							
Motorbike							
Other: _____							

2. For your most frequent journey how far do you travel?
- ☐ 0-2 miles
- ☐ 3-5 miles
- ☐ 6-10 miles
- ☐ 11-20 miles
- ☐ 21-30 miles
- ☐ 31+ miles

3. To which location do you travel to most frequently? (tick one)
- ☐##
- ☐##
- ☐##
- ☐##
- ☐Other (Please specify)

4. What is your most frequent journey for? (please choose one)
- ☐ Work/Education
- ☐ Leisure/Retail
- ☐ Health (doctors/hospital)
- ☐ Visiting friends/family
- ☐ Other (please specify)

5. If you were to change your main mode of travel what mode would you most likely change to:

6. If you travel by car, why do you travel by car? (Please tick all that are relevant)
- ☐ 1. I don't own a car
- ☐ 2. Car essential to perform job
- ☐ 3. Reliability/ quicker than alternatives
- ☐ 4. Health reasons
- ☐ 5. Lack of alternatives
- ☐ 6. Cost
- ☐ 7. Comfort
- ☐ 8. Personal safety
- ☐ 9. Things to do on way home
- ☐ 10. Other (please specify)

7. Which of the above is the most important when travelling by car? (state the number)

8 If you usually travel by car, how do you travel when your car is unavailable (i.e. is being serviced)

Please Turn Over

9. Which of the following would most encourage you to use the listed travel modes (or use them more frequently if you do so already?)

	Discounts	More Information	Improved Reliability & Frequency	Increased Safety Measures	Cycle Storage/ Training	Better Facilities	Improved Routes	Knowledge of Local Clubs/ Events	Nothing	Other (please specify)
Walking										
Cycling										
Bus										
Rail										

10. How many cars do you own?

- ☐ 1
- ☐ 2
- ☐ 3+
- ☐ N/A (do not own a car)

11. What type of cars do you own?

- ☐ Petrol
- ☐ Diesel
- ☐ Hybrid
- ☐ Electric
- ☐ N/A (do not own a car)

12. How many bicycles do you own?

- ☐ 1
- ☐ 2
- ☐ 3+
- ☐ N/A (do not own one)

13. Is there any information you would like to see in future newsletters?

14. Is there anything else you would like to tell us about travel in your local area?

15. I would like to request: (Select One)

- ☐ £## Halfords Voucher *
- ☐ £## Bus Pass **
- ☐ I have already claimed

Please note all voucher requests will be reviewed before we can confirm a claim. One voucher available for each address. If a claim has already been made for your address you will not be eligible to receive a voucher. See Terms and Conditions for further details.

What have/will you use your voucher for:

In order for us to process your voucher request, we require the following information. Please write in capitals.

Name:_____

House/Flat number: _____

Street Name:_____

Postcode:_____

Email Address:_____

Please note that this information is kept in accordance with Data Protection policy found at: https://paulbashamassociates.com/privacy-cookie-policy/. Email travelplan@paulbashamassociates.com for further details.

Terms & Conditions

One voucher available per address within ##. If a previous resident has claimed you will not be eligible. To confirm eligibility please provide us with your address information. Sustainable Travel Vouchers are a gift from the developer and the offer(s) may be amended or removed at any time. ###

.

The full list of Terms and Conditions can be found at: ***###***

Thank You

Appendix 8.1 Ecological Baseline Report

Ecological Impact Assessment

Land north of the A3102, Melksham

06 November 2025

Ecology
Arboriculture
Land Management

Report Details

Report Title	Ecological Impact Assessment
Report Reference	1795-EcIA-LT

Quality Assurance & Revision Record

Revision	Date	Author	Checked By	Approver	Summary of Changes
V1	06 November 2025	Luke Owen BSc	Lindsay Taylor BSc MSC ACIEEM	Lindsay Taylor BSc MSc ACIEEM	

Disclosure

The content of this report that has been provided by GE Consulting is true, and has been prepared and submitted in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. Its contents are compliant with British Standard BS42020: 2013 Biodiversity Code of Practice for Planning and Development.

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Site Details

Site Name and Location	Land north of the A3102, Melksham
Central OS Grid Reference	ST 91966 64476
Client	Bloor Homes

Boundary



Executive Summary

Site Location	The Site is located directly north of Sandridge Common, situated around central National Grid Reference ST 91922 64485. The town of Melksham is directly to the west and south of the Site, while agricultural land forms the wider environment to the east and north.
Proposals	Proposals consist of the construction of 295 homes; public open space, including formal play space and allotments; sustainable drainage systems; and associated infrastructure; with 0.4ha of land safeguarded for a nursery. The principal point of access is to be provided from a new northern arm on the existing Eastern Way/A3102 roundabout junction, with a secondary/emergency access onto the A3102. Additional access points are proposed for pedestrians and cyclists.
Survey Work	• Desk Study; • UK Habitat Classification Survey; • Badger; • Bat Activity Survey; • Bat Ground Level Tree Assessment (GLTA); • Breeding Bird Survey; • Dormouse; and • Riparian Mammal Survey.
Designated Sites with Potential Impacts	Bath and Bradford-on-Avon Bats SAC (impacts are predicted to be **Negligible** and **Not Significant**). Bristol Avon River LWS (impacts are predicted to be **Negligible** and **Not Significant**.
Baseline Habitats	The Site largely comprises modified grassland fields with little to no margins, rotationally grazed by livestock. Fields are bound primarily by native hedgerows, some of which are associated with ditches and mature trees. A watercourse, a tributary of the River Avon, runs from south to north through the grassland fields in the centre of the Site. New Road runs the length of the eastern boundary with a collection of farm buildings and residential property adjacent, and Sandridge Road runs the length of the southern boundary.
Protected/ notable Species	The Site is suitable for badger, bats (including Annex II species), breeding birds, dormouse, riparian mammals and hedgehog.
Mitigation and Compensation	• Habitat retention through provision of landscape buffers along hedgerows and along the riparian corridor; • Protection of retained hedgerow trees (taking RPAs into account) and the watercourse also through provision of landscape buffers; • Habitat creation within new areas of POS; • Protection of the potential badger sett via 20m buffer of 'no development' designed into the POS; • Surface water management through provision of SuDs and structural planting; • Retention of suitable dormouse habitat (hedgerows) as part of the proposals and creation of new habitat as part of the landscaping proposals; • Retention of bat commuting and foraging habitat through hedgerow retention and provision of landscape buffers.
Biodiversity Net Gain	A separate BNG Statement and Assessment Report is provided (GE Consulting, 2025).
Enhancements	• Integrated bird boxes to be installed (one per dwelling). • Integrated bat boxes to be installed (one per dwelling). • Hedgehog highways; • Four hedgehog domes within suitable habitat; • Five reptile hibernacula/habitat piles; and • Dormouse tubes within existing hedgerows.

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1 Introduction

This report presents the results of an Ecological Impact Assessment (EcIA) at Land north of the A3102, Melksham in relation to a full planning application. The surveys were commissioned by Bloor Homes.

The area within the application boundary is hereafter referred to as the 'Site'.

1.1 Site Context

The Site lies to the north-east of Melksham and largely comprises modified grassland fields with little to no margins, rotationally grazed by livestock. Fields are bound primarily by native hedgerows, some of which are associated with ditches and mature trees. A watercourse, a tributary of the River Avon, runs from south to north through the grassland fields in the centre of the Site. New Road runs the length of the eastern boundary with a collection of farm buildings and residential property adjacent, and Sandridge Road runs the length of the southern boundary.

1.2 Description of Proposed Development

Proposals consist of the construction of 295 homes; public open space, including formal play space and allotments; sustainable drainage systems; and associated infrastructure; with 0.4ha of land safeguarded for a nursery. The principal point of access is to be provided from a new northern arm on the existing Eastern Way/A3102 roundabout junction, with a secondary/emergency access onto the A3102. Additional access points are proposed for pedestrians and cyclists.

1.3 Aims

The aims of this report are to:

- Identify and describe the habitats and species likely to be affected by the proposed development and assess the ecological value of these features;
- Identify key ecological constraints to the proposed development and evaluate the significance of any potential effects; and,
- Provide recommendations for mitigation and enhancement opportunities in accordance with relevant planning policy, legislation and other published guidance (see **Appendix 2**).

2 Methods

2.1 Ecological Scoping and Baseline Data Collection

2.1.1 Desk Study

A desk-based study was undertaken in December 2022 whereby:

- Wiltshire & Swindon Biological Records Centre (WSBRC) was contacted for records of protected/ notable species and sites designated for nature conservation value within a 2km radius of the Site boundaries;
- MAGIC (www.magic.gov.uk) was searched for international designated sites (SAC, SPA and Ramsar) within 10km, Habitats of Principal Importance (HPI) and EPS Mitigation Licences within or adjacent to the Site;
- Previous reports were reviewed with any relevant results provided in the appropriate sub-sections; and
- Aerial photography of the wider area was reviewed to identify possible important habitat features.

2.2 Field Surveys

Table 1 summarises the surveys undertaken to provide ecological baseline information for the Site. Full details are provided in the appendices. Surveys for great crested newt were scoped out due to the very limited impacts on suitable habitat on Site. Reptile surveys were scoped out due to the intense grazing presence from livestock within the Site, resulting in a minimal amount of suitable foraging or refuge habitat for reptiles in field margins and at the base of hedgerows.

Table 1: Summary of Baseline Data Collection Surveys

Survey Type	Date (s)	Relevant Appendix
UK Habitat Classification Survey	January 2023	Appendix 3
Badger Surveys	January 2023 and June 2024	Appendix 4
Bat Activity Surveys	April – October 2023	Appendix 5
Bat Ground Level Tree Assessment	January 2023	Appendix 5
Breeding Bird Survey	April – June 2023	Appendix 6
Dormouse Survey	April – October 2023	Appendix 7
Riparian Mammal Survey	April and September 2023	Appendix 8

2.3 Biodiversity Net Gain Assessment

A BNG assessment was undertaken using the statutory biodiversity metric (released in July 2024 v1.0.3) to assess the pre-development and indicative post-development value of the habitats on Site following relevant associated guidance (Defra 2024). Further details are provided in a separate BNG Statement and Assessment (1795-BNG-LO - Biodiversity Net Gain Statement and Assessment).

2.4 Baseline Evaluation and Impact Assessment

Determining the importance of ecological features was undertaken in accordance with the Chartered Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2018). The guidelines recommend a scale of significance from International to Local ecological importance as a frame of reference, however, also notes that it can be adapted to suit local circumstances. As such, where ecological receptors are assessed to be of less than Local value, an additional valuation of 'Site value' has been included.

An assessment was then made of possible ecological impacts of the proposed development on each feature within the development's likely 'Zone of Influence' (ZoI). Where uncertainty exists, a precautionary approach has been adopted.

Measures are described to ensure that any impacts can be avoided, minimised or compensated for by applying the mitigation hierarchy in accordance with NPPF (2024) paragraph 193(a) which states:

"If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused."

2.5 Limitations

Care has been taken to ensure that balanced advice is provided on the information available and collected during the study period (s), and within the resources available for the project. However, the possibility of important ecological features being missed due to survey timings, absence during surveys or the year of survey cannot be ruled out. In addition, the lack of evidence or records of protected species on Site does not preclude their presence from Site.

The original UKHAB survey was undertaken at a sub-optimal time of year. However, numerous update site visits were undertaken throughout the appropriate survey season, with updates to habitat and condition assessments made accordingly.

3 Baseline Conditions & Evaluation

3.1 Designated Sites

A summary of designated sites within the search area is provided in **Table 2**.

Table 2: Designated sites records within 2km of Site boundary, 10km for European sites

Site Name	Proximity to Site	Description
National Site Network		
Bath and Bradford-on-Avon Bats SAC	Nearest component Box Mine SSSI, c. 9.0km NW	**Annex II species** that are a primary reason for selection of this site: • 1304 Greater horseshoe bat *Rhinolophus ferrumequinum* • 1323 Bechstein's bat *Myotis bechsteinii* **Annex II species** present as a qualifying feature, but not a primary reason for site selection: • 1303 Lesser horseshoe bat *Rhinolophus hipposideros*
Local Wildlife Sites		
Bristol Avon River LWS	Approximately 1.15km west	One of the main river systems draining north-west Wiltshire.

3.2 Habitats and Flora

The distribution of habitats is shown on **Figure 1** and full details with photographs are provided in **Appendix 3**.

The Site largely comprises modified grassland fields with little to no margins, rotationally grazed by livestock. Fields are bound primarily by native hedgerows (HPI), some of which are species rich (WBAP) and some associated with ditches and mature trees. A watercourse, a tributary of the River Avon, runs from south to north through the grassland fields in the centre of the Site. New Road runs the length of the eastern boundary with a collection of farm buildings and residential property adjacent, and Sandridge Road runs the length of the southern boundary. The modified grassland fields are of **Site** value.

Despite the relatively heavy management of the hedgerows and the limited number of individual trees on Site, they do form part of a wider network of similar habitats within the vicinity. As such, the hedgerows and trees on Site are considered to be of **Local** importance.

3.3 Fauna

Full survey results are included in the relevant appendix.

3.3.1 Amphibians

There were two records for great crested newt (GCN) within 2km of the Site over the past ten years, the closest record was 1.15km from the Site. Part of the Site lies within the Amber Risk Zone for GCN of the Natural England District Level Licensing (DLL) Scheme. There are no ponds present within the Site boundary and the ditch network within the boundary is considered to be sub-optimal due to its seasonality. As such, it is considered that no suitable breeding habitat is present within the Site boundary. The hedgerow and ditch network may provide suitable terrestrial habitat for amphibians,

including GCN, however the availability of this habitat is limited. The grassland is not considered suitable as it is heavily grazed to a very short sward, with none of the structure or 'thatch' that would provide suitable resting/sheltering habitat present.

The Site is considered to be of **Local** importance for common and widespread amphibian species.

3.3.2 Badger

Badger is not listed as a species of principal importance for the conservation of biodiversity in England and has therefore not been assigned a scale of importance in this case, but will be considered further in this assessment in relation to their legal protection only.

3.3.3 Bats

There were >700 bat records within 4km of the Site, from at least 13 species. 77 records of roosts were also recorded, from at least 8 species. The surveys recorded a range of bats using the hedgerows, consisting predominantly of common pipistrelle (EPS) (**Figure 2**). Surveys found at least nine species of bats using the hedgerows, trees and grassland habitats across the Site for commuting and foraging.

Given the relatively limited assemblage of bat species, low levels of activity on the Site in the context of its geographic location and the sporadic use of the Site by Annex II species, the Site is considered to be of **Local** value to commuting and foraging bats.

3.3.4 Birds

WSBRC returned 131 records for birds within 2km of the Site over the past ten years. This included species that could present on Site such as red kite (WCA), swift (Red BoCC), house sparrow (SPI, Red BoCC), fieldfare (Red BoCC, WCA) and starling (Red BoCC). Some records were also returned for wetland birds, such as kingfisher and little egret, which are likely to be associated with the nearby Avon River. Whilst these species are regularly found near watercourses, the watercourse on Site has very little suitable vegetation and is unlikely to contain fish in any significant numbers and as such these species would be unlikely to use the Site itself.

A total of 27 species were recorded during the breeding bird survey of the Site. Of these, 12 were notable species (at least 5 Amber-listed BoCC, SPI, Local BAP or Schedule 1 WCA). The majority of notable species recorded as possible and probable (no species were confirmed breeders) were recorded in association the with hedgerows and grassland fields. There were no ground nesting species recorded within the Site due to the lack of suitable habitats given the short sward and regular disturbance throughout the Site.

Despite supporting SPI and BoCC species, the species assemblage and numbers of birds recorded was low and the Site is considered to be of **Local** importance to breeding birds.

3.3.5 Dormouse

WSBRC returned four records for dormice within 2km of the Site over the past ten years. The closest record was c. 0.5km southeast of the Site boundary. No records older than 2021 were returned.

Two dormouse nests were found inside the dormouse tubes deployed on Site, with one nest found on the northwest boundary hedgerow (H7) and one in an internal hedgerow in the southeastern section of the Site (H3). This suggests that dormice are present on Site and are utilising the native hedgerow network for foraging, breeding and commuting purposes.

The species is declining in the UK but relatively widespread in the southwest. Whilst Wiltshire, and the Melksham area in particular, are not considered to be a stronghold for the species, they have been found within 10km of the Site with relative frequency. Therefore, the Site is considered to be of **District** importance for this species.

3.3.6 Invertebrates

WSBRC returned 17 records of notable invertebrates within 2km of the Site over the past ten years. None of these were associated with the Site, however, riparian species such as the scarce chaser (RLGB near threatened) that make use of the nearby River Avon would have the potential to utilise the watercourse habitat found running through the arable fields on Site.

Overall, the Site's habitats with invertebrate interest detailed above were considered to be of **Site** importance to invertebrates.

3.3.7 Reptiles

The data search returned a single record for slow worm from within 2km of the Site and none from the Site itself. The fields are largely unsuitable for reptiles, however it is possible that a small population of common reptiles could be present within the hedgerows on the Site, and there is low potential for grass snake along the watercourse if such a population exists within the area.

The Site is considered to be of **Site** importance for reptiles, if present.

3.3.8 Riparian Mammals

The data search returned five records of otter within the past ten years, the nearest being approximately 0.67km east of the Site. The majority of the records are associated with the River Avon proper, however the nearest record was a deceased specimen found on the A3102 (Sandridge Common). The onsite watercourse and surface water drainage ditches provides very little suitable habitat for otter and would likely only be utilised by the species on an opportunistic basis during times of heavy spate. In addition, no evidence of otter was found during surveys. The species is therefore considered to be **absent from the Site and have been scoped out of further assessment.**

Twenty-one records were returned for water vole in total, with the closest being 0.5km south of the Site. All were associated either with the River Avon proper or two large tributaries 1.1km to the north and 0.5km to the south of the Site. The onsite watercourse provides limited suitable habitat for water vole, with the vegetated banks providing thin cover and foraging vegetation. However, no evidence was found during surveys. The species is therefore considered to be **absent from the Site and have been scoped out of further assessment.**

3.3.9 Hedgehog

The data search returned over 300 records of hedgehog from within 2km of the Site, with several records being adjacent to the Site boundary. In addition, the Site offers suitable foraging habitat within the grassland, as well as commuting and sheltering habitats within the hedgerows. Given its national decline over previous years, the Site is considered to be of up to **Local** importance for this species.

4 Further Survey Work

No further ecological survey work is considered necessary for this application; however any changes to the proposed masterplan or if any significant amount of time has passed since the date of this report, a re-appraisal may be required.

5 Impact Assessment And Mitigation

5.1 Designated Sites

5.1.1 National Site Network: Bath and Bradford-on-Avon Bats SAC

5.1.1.1 Construction and Operational Phase Effects

The Bath and Bradford on Avon SAC lies approximately 9km to the north-west of the Site and is designated for its populations of greater horseshoe and Bechstein's bats as the primary reason for designation, with lesser horseshoe listed as a qualifying species but not a primary reason for designation. This SAC is primarily an underground site which provides stable hibernation conditions and swarming conditions for a significant number of the qualifying species.

The SAC includes the hibernation sites associated with 15% of the UK greater horseshoe bat population and is selected on the basis of the importance of this exceptionally large overwintering population. The SAC also supports small numbers of Bechstein's bats hibernating in abandoned mines, though maternity sites remain unknown.

Within Wiltshire, the key guidance document is the "Bath and Bradford on Avon Bat SAC Planning Guidance for Wiltshire". The guidance states "In order to maintain the integrity of the SACs, it is important to protect the network of 'sensitive features' used by the designated bat. These species can be highly mobile and although individual bats are known to occasionally migrate tens of kilometres between roost sites, there are a number of roosts where large numbers of these bats are known to regularly hibernate and breed. These have been identified as 'Core Roosts' for the purposes of this guidance." Additionally, the landscapes surrounding these Core Roosts which are used regularly for foraging and commuting are also of particular importance and have been identified as 'Core Areas'. The size of these Core Areas is dependent upon the typical ranging behaviour of the species involved. The guidance document defines these as:

- 4km surrounding greater horseshoe Core Roosts;
- 2km surrounding lesser horseshoe Core Roosts;
- 1.5km surrounding Bechstein's Core Roosts; and
- 6km surrounding barbastelle Core Roosts (except at Mottisfont, where local evidence justifies a requirement for a 7.5km radius).

The Site does not lie within any bat consultation zones in relation to the SAC.

In addition, typical Bechstein habitat, namely established woodlands, are not present within the Site or surrounding area, such that the Site is not considered to be of particular interest or value for this species. Greater horseshoe bats and lesser horseshoe bats associated with the designation are unlikely to utilise the Site as these species typically fly to foraging areas within four and two kilometres of their roosts respectively. Greater horseshoe bats are known to fly up to 12km from a roost when suitable foraging habitat is in short supply, however, surveys have shown that the Site is only very occasionally used by these species. Accordingly, the proposed development is unlikely to adversely affect the qualifying interest features of the designated site, namely the Bechstein's, greater horseshoe or lesser horseshoe bat populations during either the construction or operational phase. As such impacts to designated sites are predicted to be **Negligible** and **Not Significant**.

5.1.2 Bristol Avon River LWS

Given the presence of the watercourse on Site and the hydrological link to the Bristol Avon River LWS, it is considered that construction risks could include run-off of land-based sediments, pollution incidents

(e.g. chemical or fuel spills), increased water run-off rates and contaminated water run-off. Providing the CEMP is implemented, and standard pollution control best practice is adhered to, it is considered that impacts to the Bristol Avon River LWS are **Negligible** and **Not significant**.

For reasons of spatial separation and a lack of identified impact pathways, no significant adverse impacts are predicted to occur on the other non-statutory designated sites located within 2km of the Site as a result of construction activities.

5.2 Habitats and Flora

5.2.1 Hedgerows and Trees

5.2.1.1 Construction Phase Effects

Construction will require the loss of significant sections of hedgerow in the southern half of the Site to allow for visibility splays, roads to pass through the proposed development and the construction of two development parcels. Smaller hedgerow breaches are required in the northern section to make way for access roads. Based upon the Illustrative Landscape Strategy[1], the total loss is anticipated to be approximately 0.27km.

Habitat creation inherent to the scheme, however, includes the planting of 1.02km of new native species-rich hedgerows within the proposed development. In addition, existing hedgerows will be bolstered by planting of new whips to increase diversity and fill in any gaps.

All retained hedgerows and trees will be protected during construction in accordance with an Arboricultural Method Statement following BS 5837:2012 protection measures through the provisions of the CEMP.

Providing significant planting of new hedgerows within the POS is implemented, impacts to hedgerows are considered to be **Negligible** and **Not Significant**.

No individual trees are anticipated to be lost as a result of the proposed development, with hedgerow breaches designed to avoid impacts to the hedgerow trees throughout the Site. As such, impacts to individual trees during construction are **Negligible** and **Not Significant**.

5.2.1.2 Operational Phase Effects

Development parcels and road infrastructure will be suitably buffered from retained hedgerows and trees, and therefore the risk of adverse impacts during operation from inappropriate management/ removal of hedgerows and trees by occupants is considered to be low. However, without any management, hedgerows are likely to become degraded and gappy, or over-managed resulting in low-quality and structurally poor hedgerows.

Therefore, the operational phase has the potential to result in **Temporary Minor Adverse** impacts, which would be **Significant** at the **Local** level.

370 no. new trees will be planted within the POS as part of the inherent design of the scheme, both as street trees and also as specimen trees within areas of more natural landscaping. In addition, significant areas of mixed scrub will be created in the northeast of the Site, providing structural diversity in the proposed development's treescape.

[1] Illustrative Landscape Strategy (edp7940_d013), (2024), EDP.

As such, impacts to individual trees are anticipated to be **Permanent Major Beneficial** and **Significant** at the **Local** scale.

5.2.2 Watercourse

5.2.2.1 Construction Phase Effects

The southern crossing will utilise the same space as the existing culverted crossing, extending the existing from 3m to 19.5m reducing the potential impacts that could occur by creating a new crossing.

There is potential for increased siltation due to construction run-off and/or pollution event impacts, however a 20m buffer (10m either side of the watercourse) has been designed into the scheme. The riparian vegetation within this buffer will be retained and protected during construction by fencing (through the provisions of the CEMP) to minimise sediment in surface water run-off reaching the watercourse. Cessation of agricultural practices on the Site during construction will also reduce and remove adverse effects of nutrient enrichment which will benefit the watercourse.

Standard pollution control measures will be outlined in the CEMP, ensuring any spills/ pollution events do not enter the watercourse.

Providing the measures described above are implemented and the pollution control measures detailed within the CEMP are adhered to, impacts to the watercourse are anticipated to be **Permanent Moderate Beneficial** and **Significant** at a **District** level.

5.2.2.2 Operational Phase Effects

The watercourse will be retained during the operational phase with a large buffer created by the 20m wide riparian zone, which has been designed into the scheme as a linear green space running through the proposed development, ensuring the watercourse does not suffer permanent adverse impacts as a result of urbanisation. However, whilst there will be a reduction in agricultural run-off and improvement by livestock, the operational phase could result in adverse impacts such as increased surface-water run-off rates and decreased water quality. This could result in mortality to aquatic life and nutrient enrichment. In addition, increased recreational use of the area could result in damage or poaching to the banks.

The drainage strategy has been designed to mitigate for potential increased surface run-off, with several large basins provided throughout the scheme. This will also serve to prevent pollutants entering the watercourse system and decreasing the water quality within. In addition, planting within the riparian zone will also aid the prevention of adverse effects through surface water run-off by preventing nutrients and soil sedimentation reaching the watercourse.

Further mitigation for surface water flooding on the development is provided by a new swale, parallel with the southern boundary conveying flows to the watercourse. This swale will have a small length culverted to allow the main access road to enter the Site.

Whilst the 20m buffer zone will be accessible to the public during the operational phase, paths will guide pedestrians and cyclists through the green space and over the two designated crossings, reducing impacts to the riparian corridor and the channel. In addition, habitat creation using structural planting will also serve to protect the watercourse, preventing access to the channel itself for the majority of its length.

It is however important for community engagement and place-making around the watercourse and the riparian corridor to ensure positive long-term interactions by future residents. Planting will therefore be minimised in certain areas, allowing residents to fully engage with the watercourse in a more controlled

way than open access would allow. Whilst this kind of engagement could potentially open up opportunities for adverse impacts to the watercourse, it is considered that the controlled access approach will minimise these opportunities and the benefits would outweigh any adverse effects.

Taking the above into consideration, overall, the operational phase is predicted to have **Permanent Minor Beneficial** impacts which are **Significant** at the **District** level.

5.2.3 Ditches

5.2.3.1 Construction Phase Effects

The seasonally wet surface water drainage ditches on Site are to be largely retained and integrated into the Site-wide drainage strategy. There will however be losses of the southern half of the ditches associated with both H3 and H4 (c. 0.19km in total) to allow for two development parcels, which in the absence of mitigation, will result in the permanent loss of habitat. However, significant lengths of new swales/ ditches (c. 0.31km in total) will be created as part of the drainage strategy inherent to the design of the proposed development, resulting in impacts that are **Permanent Minor Beneficial**, **Significant** at a **Local** level.

Where road crossings to the northern section of the Site are proposed, the ditch associated with H6 will require culverting. This will be in two locations, one in the east and one in the west to allow a continuous road through the proposed development, a total of 0.03km. This will result in the permanent alteration of small sections of this ditch and could result in increased siltation during construction. Without standard mitigation, construction could result in adverse effects such as pollution incidents and changes to water levels and flow. However, providing the CEMP and pollution best practice guidelines are adhered to, impacts are likely to be **Short-term Minor Adverse** and **Not Significant** at a **Local** level.

5.2.3.2 Operational Phase Effects

Whilst the loss of significant sections of the ditches associated with H3 and H4 will result in permanent habitat loss, in terms of functionality during operation, it is considered that the hydrology (i.e. composition, capacity and permanence) of the retained ditches will be altered following implementation of the drainage strategy. It is therefore considered that the change in functionality as a result of the losses will be mitigated during operation.

In addition, the change in management from pasture will reduce poaching, soil erosion and compaction, and nutrient inputs through manure deposition. This will result in a positive benefit by allowing the ground to vegetate naturally, the soil to improve and in turn improving the water quality entering the ditches as well as reducing silt run off.

Considering the above, there are no predicted negative impacts on the ditches during the operational phase. Therefore, it is considered that impacts will be **Permanent Minor Beneficial** and therefore **Significant** at the **Local** level.

5.3 Fauna

5.3.1 Amphibians

5.3.1.1 Construction Phase Effects

Construction activities involving the removal of suitable terrestrial vegetation and implementation of the drainage strategy could adversely impact local amphibian populations, either through direct mortality/ injury, or the loss of habitat.

While GCN have been known to travel distances of 1000m or more, the majority of adults stay within 250m of breeding ponds. The GCN Mitigation Guidelines seeks to classify these zones as follows:

- Immediate terrestrial habitat (approx. <50m from breeding pond);
- Intermediate terrestrial habitat (approx. 50– 250m from breeding pond); and
- Distant terrestrial habitat (approx. >250m from breeding pond).

Migration is likely associated with high risks due to predation, desiccation and other factors, so this tends to limit migration distances. A study in Western France (Jehle et al. 2011) found that 50% of radio-tracked GCN remained within 15m of the breeding pond, with 95% of individuals remaining within 63m of the pond. This suggests that where habitat is suitable, GCN remain in close proximity to their breeding ponds.

For this case, as a precaution, it is assumed that P1 is a breeding pond.

Using the zones described above, the proposals include the following impacts:

- 0 - 100m of P1 (immediate) – removal of c. 10m hedgerow H6 and culverting of the associated ditch.
- 100 - 250m of P1 (intermediate) – removal of 80m of hedgerow H4 and its associated seasonal ditch.
- More than 250m from P1 (distant) – removal of 130m of hedgerow and associated ditch.

All other suitable habitat will be retained and protected via the provisions outlined in the CEMP, namely tree protection fencing, during construction.

Given the limited extent of suitable habitat to be removed, it is not considered that entry into the Natural England District Licensing Scheme is necessary. However, as a precaution, where removal of suitable habitat is required to facilitate the proposed development, precautionary methods of working, including hand searching and supervision by a licenced ECoW, will be implemented (through the provisions of the CEMP) to ensure no individuals are harmed during construction.

Providing the measures outlined above and in the CEMP are adhered to, impacts to amphibians (including GCN) are likely to be **Permanent Minor Adverse** but **Not Significant** at the **Site** level.

5.3.1.2 Operational Phase Effects

The Site-wide drainage strategy includes the creation of extensive new potential breeding habitat through significant numbers of attenuation basins, as well as enhancements to connected networks of ditches and swales. Overall, the operational phase is considered to result in **Permanent Moderate Beneficial** impacts on amphibians, **Significant** at the **Local** level.

5.3.2 Badger

5.3.2.1 Construction Phase Effects

A potential active badger outlier sett has been recorded on the northern boundary of the Site. Given the setts' position in a hedgerow that is to be retained and with inherent buffers included in the design, it is considered that the setts can be retained in-situ. However, it is possible that it could be disturbed during construction activities in proximity. There is also potential for foraging or commuting badgers to fall into any open trenches during construction and for new setts to be excavated in areas that could be impacted by detailed proposals.

Measures to protect and buffer the sett are to be outlined within the CEMP, therefore providing these measures are implemented effectively, the potential effects on badger during construction are considered to be **Negligible** and **Not Significant**.

5.3.2.2 Operational Phase Effects

With the change in land use from agricultural there will be some reduction of available foraging resources to local badgers however, given the large areas of open space inherent to the design and similar available habitats in the surrounding landscape this is not considered to be significant. There would be no severance of habitats or reduction in the accessibility of suitable foraging and sett building opportunities for badger in the local landscape and operational effects on badger are considered to be **Negligible** and **Not Significant**.

5.3.3 Bats – Roosting

5.3.3.1 Construction Phase Effects

T1, the single tree on Site with potential for roosting bats, is to be retained within the proposed development, therefore there will be no direct loss of roosting habitat. Provisions laid out in the CEMP will ensure the tree is protected during construction in line with best arboricultural practices.

Construction activities could result in disturbance through noise and lighting, however the protection of the 15m wide buffer along the eastern boundary with tree protection fencing will ensure no noise or light pollution occurs directly adjacent to T1. Further provisions within the CEMP will serve to minimise lighting impacts through the use of timers and directional luminaires.

Impacts to roosting bats during construction are therefore likely to be **Negligible** and **Not Significant**.

5.3.3.2 Operational Phase Effects

Trees with potential to support roosting bats could be impacted by light-spill, which can lead to abandonment of traditional roosting sites. New Road does not have existing streetlights and is therefore likely to provide a dark space along this boundary. The landscape buffers, c. 15m wide, inherent to the design of the scheme will allow the maintenance of these dark corridors, ensuring the viability of any roost site that may be present can be maintained. As such, impacts during operation are **Negligible** and **Not Significant**.

5.3.4 Bats – Foraging and Commuting

5.3.4.1 Construction Phase Effects

Bats, including horseshoe bats (low numbers recorded), have been shown to avoid gaps as small as 10m[2]. Commuting routes for bats are not specifically protected, however, it is recognised that fragmentation effects caused by habitat loss can impact upon roosts, potentially causing roost abandonment, reduced access to important foraging areas and adversely impacting the favourable conservation status of bat populations.

In addition, construction lighting may result in similar fragmentation effects to sensitive bat species, such as horseshoe bats, long-eared bats and Myotis species[3][4], if light-spill occurs on hedgerows or the watercourse corridor.

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[2] Habitat Management for Bats: A Guide for Land Managers, Land Owners and Their Advisors. (2001), Entwhistle, A, Joint Nature Conservation Committee. Peterborough.

[3] Street Lighting Disturbs Commuting Bats. Current Biology, 19 (13) pp. 1123-1127, (2009), E.L. Stone, G. Jones and S. Harris.

The majority of hedgerows (both peripheral and internal) are to be retained within the scheme however there will be losses of sections of internal hedgerow towards the south of the Site, necessary to facilitate the proposed development. These losses will be compensated through the planting of significant lengths of new hedgerows.

Provisions outlined in the CEMP will ensure retained habitats are protected throughout construction, allowing commuting and foraging opportunities to be maintained throughout this period.

Further provisions within the CEMP will provide details for construction lighting, ensuring that any lighting considered necessary is in line with BCT/ILP guidance. Lighting will be directed away from retained hedgerows and the watercourse and used only when strictly necessary. Lights will be fitted with timers/ motion sensors to ensure non-essential lighting is minimised.

Due to the loss of significant sections of hedgerow and subsequent compensation once the new hedgerows have established, impacts to commuting bats during construction are likely to be **temporary but medium-term, being Moderate Adverse** to begin with. However, as the new hedgerows grow and become established commuting features, these impacts are expected to diminish, resulting in **Negligible** impacts which are **Not Significant** in the long-term.

5.3.4.2 Operational Phase Effects

The proposals include the loss of a range of habitats, however for the most part these are considered to be of relatively low suitability for bats (with the possible exception of the low numbers of greater horseshoe bats recorded due to their propensity for cattle grazed pasture). The operational phase will result in permanent fragmentation as a result of infrastructure bisecting commuting corridors and unmitigated light-spill on features of value to light-averse species such as horseshoe bats and Myotis species. Lighting can also affect the assemblage or population of bats by increasing predation, changing the composition of the invertebrate community and attracting invertebrates away from dark areas, therefore putting light-averse species at a competition disadvantage (ILP, 2023).

To mitigate for the fragmentation effects, strong green linkages are inherent to the design of the proposed development with the aim of maintaining site permeability. Landscape buffers of at least 10m (15m in some cases) are inherent to the scheme, having been 'designed in' along the majority of peripheral boundaries, maintaining foraging habitat and protecting retained hedgerows.

Significant areas of high-quality suitable foraging and commuting habitat (e.g. hedgerows, species rich grasslands, ditches, ponds and scrub) will be created within POS, maintaining strong east-west and south-north connectivity through enhancement of H6 and its associated corridor and the creation of the wide linear greenspace within the riparian zone respectively. Structurally diverse planting within these areas will provide a variety of habitats, including 'edge' habitats, which will encourage a variety of species.

New attenuation features created as part of the drainage strategy will provide enhanced foraging opportunities by encouraging a range of invertebrates into the Site.

In addition, the creation of significant lengths of new hedgerow throughout the proposed development, in combination with other linear habitats such as new swales and drainage ditches will provide suitable compensation for the losses of sections of H3 and H4, ensuring linear features are inherent to the design of the scheme.

In terms of habitat retention/ creation, it is considered that the inherent landscaping will provide enhanced and better connected commuting and foraging habitat, resulting in **Permanent Moderate Beneficial** impacts, **Significant** at a **Local** level.

It is however acknowledged that in the absence of further mitigation, light spill within these corridors may result in fragmentation, with impacts that are likely to be **Permanent Moderate Adverse** and therefore **Significant** at a **Local** level.

In addition, over-management of hedgerows could also reduce the value of the Site to commuting and foraging bats by reducing the function of hedgerows as navigation tools/ protection against prevailing weather conditions and reducing their value to invertebrate prey. This would result in a **long-term but reversible Adverse** impact.

5.3.5 Birds

5.3.5.1 Construction Phase Effects

Vegetation clearance may result in an offence under the WCA 1981 if undertaken during the breeding season, as well as reduce available breeding habitat. Noise is also likely to result in temporary displacement effects, with birds abandoning parts of the Site during construction activities.

The majority of suitable nesting habitat will, however, be retained within the inherent landscape buffers and protected under the provisions of the CEMP. The CEMP also stipulates that removal of woody vegetation is to be undertaken outside the breeding bird season (taking into consideration dormouse mitigation – see below), or with a pre-works check by an ecologist for breeding birds. Any active nest will require protection and buffering until all chicks have fledged.

Provided the measures outlined in the CEMP are implemented effectively, impacts to breeding birds during construction are **Negligible** and **Not Significant**.

5.3.6 Operational Phase Effects

A change in land use, increase in domestic pets and increased levels of disturbance in areas of open space are likely to influence the location and assemblage of birds using the Site. However, the farmland and urban-fringe bird species recorded using the Site currently are generally likely to habituate to the change and the proposed development is likely to result in an increase in certain species, such as small passerines, as a result of gardens and increased foraging opportunities. Impacts are therefore predicted to be **Negligible** and **Not Significant** during operation.

5.3.7 Dormouse

5.3.7.1 Construction Phase Effects

Dormice have been recorded utilising the hedgerow network on-Site, and presence is assumed in all hedgerows on the Site. The loss of hedgerow would result in habitat loss, fragmentation and potentially injury / mortality of dormice during construction. This would constitute an offence under the Conservation Regulations / WCA 1981 (as amended) and could have long-term / permanent effects on the dormouse population in the area. This would constitute a **Permanent Major Adverse impact, Significant** impact at the **District** level.

5.3.7.2 Operational Phase Effects

Potential adverse impacts on dormice could occur during the operational phase as a result of inappropriate hedgerow management (resulting in degradation or loss of habitat). In addition, inappropriately timed management could result in injury / mortality and an offence under legislation.

A residential development of this size is also likely to lead to an increase in predation of dormice by domestic cats.

The operation phase is predicted to result in **Permanent Major Adverse** effects on dormice, which could be **Significant** at the **District** level.

5.3.8 Invertebrates

5.3.8.1 Construction Phase Effects

No significant effects have been identified during the construction with hedgerow retention and suitable buffers to features of greatest value to invertebrates namely the watercourse and the majority of hedgerows. Some habitat loss associated with hedgerow removal will occur but the overall effect on the invertebrate assemblage is considered to be **Negligible** and **Not Significant**.

5.3.8.2 Operational Phase Effects

Inappropriate habitat management could have impacts on invertebrates using the Site, for example intensive mowing, hedgerow trimming or removal of deadwood features could remove plants/ features on which a range of widespread and notable invertebrates rely.

This could lead to **Permanent Minor Adverse** effects at the **Site** level, which are considered **Not Significant**.

5.3.9 Reptiles

5.3.9.1 Construction Phase Effects

Construction activities will result in the loss of very small amounts of suitable habitat (hedgerow bases) for common species of reptile and has a low potential to result in an offence under the WCA 1981 (as amended) from accidental killing and injury. Provision for amphibians laid out in the CEMP will also ensure no reptiles are harmed during habitat removal.

The landscape buffers inherent to the design will ensure remaining suitable habitat is protected during construction, ensuring reptiles will still be able to commute via the majority of the hedgerows on Site. Impacts are therefore **Negligible** and **Not Significant** during the construction phase.

5.3.9.2 Operational Phase Effects

Post-construction, the proposed development delivers significant areas of new open space including habitats that would be suitable for reptiles such as attenuation ponds, mixed scrub areas and the habitats associated with the riparian corridor. These are likely to provide enhanced habitat to the population of reptiles currently assumed to be present. Therefore, impacts are considered to be **Permanent Moderate Beneficial** and **Significant** and the **Site level**.

5.3.10 Hedgehog

5.3.10.1 Construction Phase Effects

There is a risk of individual hedgehog mortality during site clearance works which impact upon potentially suitable habitat e.g. hedgerows. There is also risk of entrapment and injury resulting from exposed excavations. The risks to hedgehogs are considered relatively low and **Not Significant**.

5.3.10.2 Operational Phase Effects

The creation of new barriers across the Site in the form of garden fences could cause fragmentation to hedgehog habitat, preventing them from moving across Site and accessing foraging grounds. The new

road network and traffic movements may increase the potential for hedgehog mortality. The risks to hedgehogs during operation are considered **Permanent Moderate Adverse** and **Significant** at the **Local** level.

5.4 Mitigation

This section outlines the further measures required in order to mitigate for those impacts that could not be mitigated either through inherent or standard mitigation measures. These are measures that have not been designed into the proposals and will be secure through a controlling mechanism such as planning condition or legal agreement.

They include:

- Habitat Maintenance and Monitoring Plan (HMMP) – to guide the future delivery of Biodiversity Net Gain on Site and will include management of all retained, enhanced and newly created habitats for the benefit of biodiversity;
- Lighting Strategy; and
- Dormouse mitigation licence to be obtained from Natural England.

5.5 Residual Impact Assessment

The following sections bring forward those important ecological features where adverse impacts cannot be mitigated through the implementation of inherent and standard mitigation measures and describe how Actionable Mitigation will be applied to provide further compensation to eliminate impacts where possible. Where impacts were described as Negligible or Beneficial in the Assessment of Effects, no further consideration is necessary.

5.5.1 Hedgerows and Trees

5.5.1.1 Operational Phase Effects

The effective implementation of the provisions described within the HMMP will ensure long-term management of both retained and created hedgerows for the life-time of the proposed development.

Providing the HMMP is adhered to, residual impacts are likely to be **Negligible** and **Not Significant**.

5.5.2 Bats – Roosting

5.5.2.1 Operational Phase Effects

While no evidence of roosting bats has been confirmed within T1, roosts in trees are often used intermittently and, therefore, bats could potentially be present in future years. T1 will therefore be protected from un-mitigated light spill by the implementation of a sensitive lighting strategy which will include a buffer of at least 15m around the tree to prevent operational light-spill causing abandonment of a potential roost. Further specifications that will be included in the lighting strategy are detailed in the Commuting/ Foraging section below.

Bat roosting opportunities within the proposed development will be enhanced through the provision of bat boxes installed on the new dwellings. Installation will be at a rate of 1 box per dwelling, in line with the Wiltshire Design Guide (2023). A variety of boxes will be utilised to cater for a variety of species and different times of year. Examples are:

- Vivara Pro Build-in Woodstone Bat Tube – suitable for pipistrelle species;

- Beaumaris Woodstone Box – suitable for common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, Brandt's bat and whiskered bat;
- Schwegler 1Q Summer and Winter Bat Box – suitable maternity and hibernation roost box for pipistrelles, noctule, Bechstein's bat and serotine.

Providing the lighting strategy is implemented and new roosting opportunities are installed within the new dwellings, impacts to roosting bats are likely to be **Permanent Major Beneficial** and **Significant** at a **Local** level.

5.5.3 Bats – Foraging and Commuting

5.5.3.1 Operational Phase Effects

In order to mitigate the residual effects of un-restricted light spill which may result in permanent fragmentation of commuting routes and foraging habitat, a sensitive lighting strategy, produced in accordance with BCT/ ILP (2023) Bats and Artificial Lighting, will be implemented. The lighting strategy will include a lighting assessment detailing collection of baseline lux levels from various sampling points (including those identified as being of potential ecological sensitivity) across the Site. Baseline lux levels will then be used to assess the impacts of increased light spill and include modelling of internal light spill resulting from the proposals.

The landscape buffers, riparian green space and scrub planting to the north-east of the proposed development will all be subject to the provisions within the lighting strategy and will remain unlit where possible. Where lighting is required, e.g. at crossing points or adjacent to footpaths, luminaires will have motion detectors specific to the human form preventing them from lighting up in reaction to wildlife passing by. These specifications will ensure light-averse species such as horseshoes and Myotis bats can continue to move through the Site once operational.

New habitats will be managed in the long-term through the provisions of the HMMP to:

- ensure thick, bushy hedgerows, maintained at 2.5m in height where possible to provide strong linear commuting features;
- ensure grasslands and attenuation features establish and provide new habitats for a variety of forage invertebrates for bats; and
- provide structural diversity of planting throughout the scheme to provide habitats suitable for a variety of bat species.

Provided the lighting strategy and HMMP are implemented effectively, the residual impacts to commuting/ foraging bats are likely to be **Negligible** and **Not Significant**.

5.5.4 Breeding birds

5.5.4.1 Operational Phase Effects

Bird nesting opportunities within the proposed development will be enhanced through the provision of bird boxes installed on the new dwellings. The Wiltshire Design Guide, which is based on British Standard 42021:22, states that 'Universal' bird bricks should be used. Studies have shown that swift bricks will be used not only by swifts but also by starlings, house martins, blue tits, great tits and house sparrows.

Installation will be at a rate of 1 box per dwelling, in line with the Wiltshire Design Guide (2024). However, as swifts are a gregarious species meaning they live in colonies, groups of three or five boxes will be installed per dwelling, totalling the 1 box per dwelling ratio. For example, the proposals are for 295 dwellings therefore 98 dwellings should have 3 swift bricks installed with a total of 294 throughout the proposed development.

Examples include:

- Schwegler Lightweight Swift Box No. 1a;
- Woodstone Build-in Swift Box Visible; or
- Schwegler No. 17a Swift Nest Box Triple Cavity (provides three nesting cavities in one box therefore only one box required per installation dwelling).

Providing new nesting opportunities are installed within the new dwellings as described, impacts to roosting bats are likely to be **Permanent Major Beneficial** and **Significant** at a **Local** level.

5.5.5 Dormouse

5.5.5.1 Construction Phase Effects

Due to the confirmed presence of dormouse on Site, a mitigation licence must be obtained from Natural England prior to any significant works impacting hedgerows and trees, or other suitable habitat.

Removal of suitable vegetation will be undertaken in strict accordance with a Method Statement (approved under the mitigation licence), which may involve removal across multiple years to allow dormice to disperse.

Removal should be undertaken during the active but non-breeding season of May or September – October, or a winter cut above 300mm, with ground level vegetation removed after hibernation season.

Connectivity through the landscape will be maintained by planting new native hedgerows and mixed scrub, linking up existing suitable areas and including appropriate species. Planting should be commenced as soon as possible in suitable season, preferably prior to impact to ensure sufficient suitable habitat is available at the time of clearance. Approximately 0.19km of new hedgerow and 0.14ha mixed scrub planting are included to compensate for hedgerow losses on Site and to ensure landscape connectivity for the species.

As there are no existing suitable trees to install dormouse boxes on for population monitoring purposes, use of the Site by the existing population of dormice will be monitored for a number of years post-development (details to be agreed by Natural England at licencing stage) via the installation of nest tubes (number to be agreed by Natural England) within the existing hedgerows throughout the Site.

Details of timing, ECoW/supervision requirements etc will be detailed within the Method Statement of the licence but also within the CEMP. Providing these are adhered to, residual impacts to dormice during construction are considered to be **Negligible** and **Not Significant**.

5.5.5.2 Operational Phase Effects

Habitats will be managed for the benefit of dormice. Adherence to the HMMP for the lifetime of the proposed development will ensure thick bushy hedgerows and good scrub structure are maintained.

Providing the mitigatory planting and HMMP are implemented effectively, residual impacts to dormice are considered to be **Permanent Moderate Beneficial**, and **Significant** at a **District** level.

5.5.6 Invertebrates

5.5.6.1 Operational Phase Effects

Habitat provisions for reptiles (see below) will also provide enhanced opportunities for a wider variety of invertebrates, encouraging colonisation where they are not currently present.

Providing new habitat can be incorporated into the proposed development, residual impacts to invertebrates during operation are likely to be **Permanent Moderate Beneficial** and **Significant** at a **Local** level.

5.5.7 Reptiles

5.5.7.1 Operational Phase Effects

Newly created habitats within the POS, including riparian green space, attenuation features and new hedgerow/ scrub planting will provide new opportunities for common species of reptile such as slow worm, grass snake and common lizard.

Habitats will be further enhanced through the provision of hibernacula/ habitat piles within the riparian greenspace. These will be constructed of dead wood, ideally using arisings from hedgerow removal on Site, topped with loose soil and turf. Dimensions should be a minimum of 2m length x1m width x 1m height.

Providing the above can be incorporated into the proposed development, residual impacts to common species of reptile during operation are likely to be Permanent Moderate Beneficial and Significant at a Local level.

5.5.8 Hedgehogs

5.5.8.1 Operational Phase Effects

Newly created habitats within the POS, including riparian green space, attenuation features and new hedgerow/ scrub planting as well as residential gardens will provide new opportunities for hedgehog.

'Hedgehog highways' will be created in all solid fencing across the Site and "*under any infrastructure which severs green infrastructure corridors*" (Wiltshire Design Guide) to allow free traversal throughout the proposed development.

Habitats will be further enhanced through the provision of hibernacula within the riparian greenspace. Four hedgehog domes will be provided within suitable habitat.

Providing the above can be incorporated into the proposed development, residual impacts to hedgehogs during operation are likely to be **Permanent Moderate Beneficial** and **Significant** at a **Local** level.

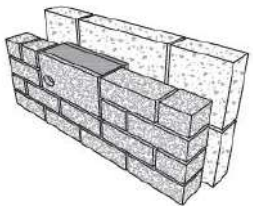
6 Biodiversity Net Gain

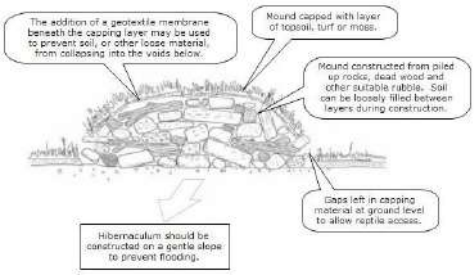
The baseline units for the Site comprise 28.74 habitat units, 18.17 hedgerow units and 5.00 watercourse units. An indicative BNG assessment suggests that the Site is likely to be capable of delivering 10% onsite. Further details are provided in the BNG Statement and Assessment Report (GE Consulting, 2025), which provides the BNG information required to support the planning application under Article 7 of The Town and Country Planning (Development Management Procedure) (England) Order 2015 as well as local information required by Wiltshire LPA, and in the submitted statutory biodiversity metric (GE Consulting, 2025).

7 Protected/Notable Species Features

The following enhancements detailed in **Table 3** are recommended in line with national guidance and local planning policy. Locations are shown in **Figure 1.**

Table 3: Enhancement Features

Quantity & Type	Illustrations	Description & Installation
Integrated bird nest box (one per dwelling)	 WoodStone Build-in Swift Nest Box Deep (nhbs.com)  Installation – integral nestbox installed in outer leaf of brickwork in a traditional cavity wall construction	• Density: ratio of one box per dwelling. • Fully integrated boxes to be built into the fabric of the building. These are more secure and eliminate future maintenance requirements. • Suitable models include the PRO UK Rendered Build-in Swift Box or the WoodStone Build-in Swift Nest Box Deep which can be chosen to suit the finishing of the building. Suppliers include www.nhbs.com and www.wildcare.co.uk. • Swift boxes are recommended as they are considered a universal box suitable not only for swifts but also for house sparrows and other small birds (CIEEM, 2021). • Install at the highest point of the building, ideally at least 5m above ground level. • To be sited under the shelter of eaves or overhanging roofs where possible, avoiding locating above doors and windows. • Entrance out of direct sun and the prevailing weather and away from perches/ledges where birds are at risk from predators. • Ensure a clear flyway of ideally at least 5m, avoiding obstructions such as trees. • See swift-conservation.org for additional advice.
Integrated bat boxes (one per dwelling)	 Vivaro Pro Build-in Woodstone Bat Box and Habibat Bat Box	• Density: one box per dwelling. • Fully integrated boxes to be built into the fabric of the building. Install within the cavity of house walls. The entrance hole can sit flush to a course of bricks. • Suitable models include the Vivaro Pro Build-in Woodstone Bat Tube, Habibat Bat Box or similar approved which can be chosen to suit the finishing of the building. Suppliers include www.nhbs.com and www.wildcare.co.uk. • Position a minimum of 3m above the ground.

Quantity & Type	Illustrations	Description & Installation
	 Installation	• Locate where there is a clear, unlit flight path for bats to linear vegetation (e.g. hedgerows) and away from windows. Install away from any lighting.
TBD[5] no. dormouse nest boxes		• Dormouse nest tube with removable insert to enable monitoring. • Attach within suitable hedges. • Tubes should be attached at minimum height of 1.5m. • Tubes to be positioned where disturbance by humans is likely to be minimal. • Providing dormouse nest tubes will increase potential for dormice to colonise further habitats within the site and surrounding areas. Installation of boxes will be a condition of a Natural England licence.
Four hibernaculum/ habitat/ log piles	 Example hibernacula design	• Provide hibernacula/ resting places for fauna such as reptiles, mammals and invertebrates. • Constructed from dead wood and rubble, topped with loose soil and turf. Dimensions to be a minimum of 2m length x 1m width x 1m height. • Located in suitable locations such as within the northern, eastern and southwest boundaries in relatively undisturbed marginal areas of the Site.
Four hedgehog domes	Schwegler Hedgehog Dome 	• Dome should be placed in sheltered areas outside in areas of dense vegetation and outside of direct sunlight.

[5] To be decided within the details of the dormouse mitigation licence from Natural England.

Quantity & Type	Illustrations	Description & Installation
Hedgehog holes		• Include 13cm x 13cm cut out through close-boarded fences (or equivalent gaps under fences) to allow hedgehog movement throughout site. • These can be holes created during fence construction, or purpose made products such as the Durapost Hedgehog Hole and Hedgehog Gravel Boards (or similar) available from suppliers including www.jacksons-fencing.co.uk or www.wickes.co.uk. • To reduce the risk of these being blocked by future residents, a small 'Hedgehog Highway Sign' should be attached. Available from www.nhbs.com. • Further information is available at: https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/

8 Monitoring

It is considered that use of the Site by the existing population of dormice will be monitored for a number of years post-development (details to be agreed by Natural England at licencing stage) via the installation of nest tubes (number to be agreed by Natural England) within the existing hedgerows throughout the Site. This detail will be outlined within any future LEMP or HMMP plan produced.

9 Conclusions

In the absence of mitigation there will be a likely significant effect on the following ecological receptors: amphibians, bats, badger, breeding birds, dormouse, reptiles, hedgehogs and invertebrates. However, with a comprehensive suite of avoidance, mitigation and compensation measures there will be no likely significant residual adverse effects.

Mitigation proposals for impacts to important ecological features during construction, which should be implemented via a CEMP, include sensitive timing and phasing of works, avoidance of impacts on important habitats and implementing protective measures to those being retained, buffers, ecological clerk of works and licensing (where relevant) during sensitive tasks.

Mitigation proposals for impacts during the operational phase include (but are not limited to) delivery of an overarching and integrated HMMP. Measures contained therein including creation of new habitat and enhancements to existing retained habitats through sensitive management. It is considered that the proposal can also deliver a biodiversity net gain on the Site, through habitat retention, enhancement and creation.

It is anticipated that the proposed development will result in no significant adverse effects to nature conservation alone or cumulatively, assuming the mitigation proposed above is implemented. The proposed enhancement measures will have a beneficial effect on nature conservation in relation to HPI, other habitats and fauna species.

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Site Boundary
g4 - Modified grassland
r - Rivers and lakes
Native hedgerow
Native hedgerow - Associated with bank or ditch
Native hedgerow with trees
Native species rich hedgerow - Associated with bank or ditch
Individual tree
Dormouse nest
Badger Sett
Tree with Moderate Bat Roost Potential
Veteran Tree (offsite)

Scale: 1:3,000

0 40 80 120 160 m

Map data ©2023 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.

Figure 1:
UK Habitat Survey and Protected Species Findings

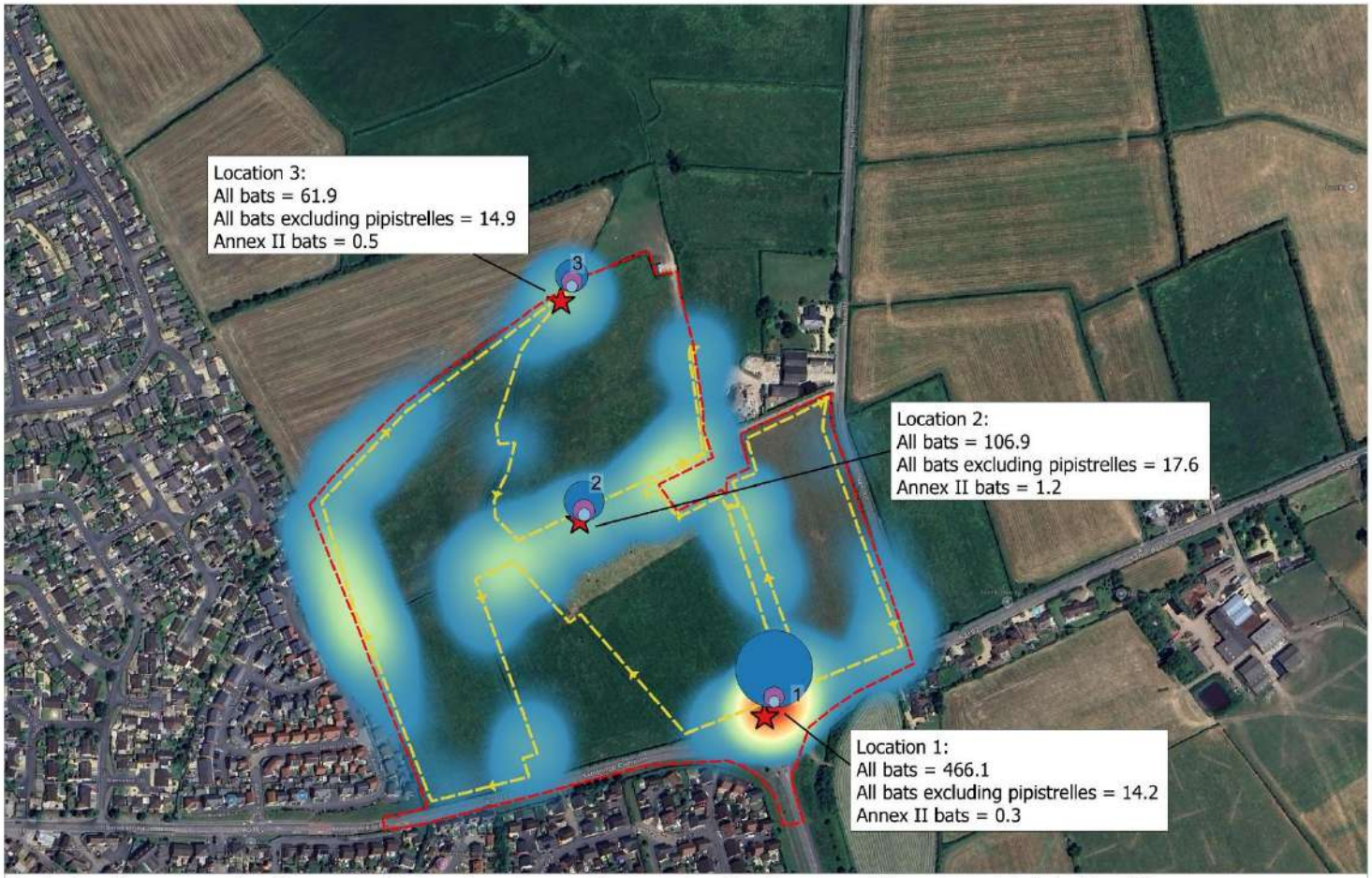
Project:
New Road Farm, Melksham

Client:
Bloor Homes South West

Date: 1/11/2024
Drawn: AG/CM
Ref: 1795B-EBR-F1
Revision: 1

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Key:
- Site Boundary
- Static Locations
- Bat Transect

Bat Static Results
- All bats
- Annex II
- Excl pips

All species passes across all transect surveys

30

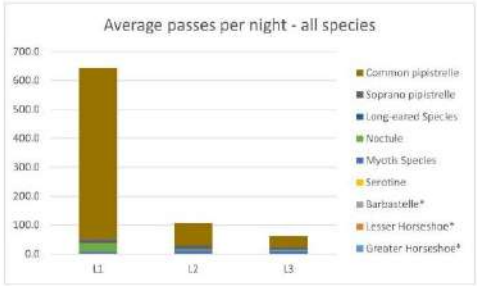
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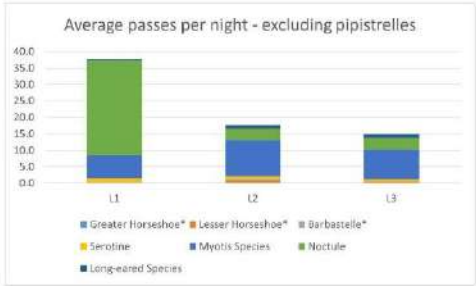
Circles are indicative of the average number of bat passes per night for spring, summer and autumn / for monthly surveys conducted April to October.

0 60 120 180 240 m

Map data ©2024 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.

Graphs show the average number of passes per night for each species across the season at each location. Annex II bat species are indicated with an "*".





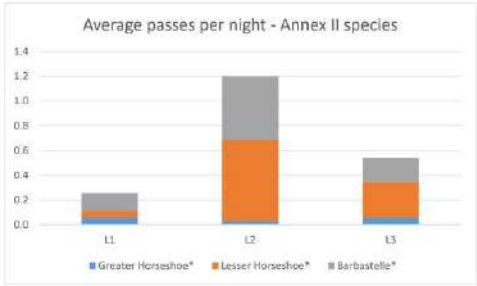


Figure 2:
Bat Activity Survey Results

Project:
New Road Farm, Melksham

Client:
Bloor Homes South West

Date: 8/10/2024
Drawn: AG/CM
Ref: 1795B-EBR-F2
Revision: -

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Key:

- D Dunnock
- GR Greenfinch
- HS House Sparrow
- LB Lesser Black-backed Gull
- KT Red Kite
- SD Stock Dove
- WP Woodpigeon
- WR Wren
- Site Boundary
- Bird Flight Line

0 40 80 120 160 m

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Figure 3:
Breeding Bird Survey Results

Project:
New Road Farm, Melksham

Client:
Bloor Homes South West

Date: 8/10/2024
Drawn: AG

Ref: 1795-EBR-F3
Revision: -

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In line with Homes for Nature, swift nest boxes will be integrated into the dwellings on a 1:1 ratio, e.g 295 dwellings = 295 swift boxes. Swifts are, however, a gregarious species and nest in colonies therefore boxes should be installed in groups of 3 or 5. Therefore at least 98 dwellings should have swift boxes installed (if groups of 3).
Boxes should be installed at a minimum height of 4m on the eastern or northern aspects of the dwellings to avoid overheating in the sun.
In line with the Wiltshire Design Guide, bat boxes will be integrated into every new dwelling. A variety of boxes will be used to cater for a variety of species and different times of year, e.g summer, maternity and hibernation boxes.
Boxes should be installed on the eastern or southern aspects, at a minimum height of 2m.
Four hedgehog domes will be installed within suitable habitat. They will be located away from roads and higher-volume pedestrian footpaths.
Dormouse tubes will be installed within the existing hedgerows until further mitigation can be provided within the north-eastern corner of the Site. Specific details will be provided during the licencing process.
Four habitat piles, or hibernacula, will be created within the riparian zone to create opportunities for common species of reptile and invertebrate. These will be constructed of dead wood, ideally using arisings from hedgerow management on site, topped with loose soil and turf.
'Hedgehog Highways' will be installed on all solid fencing throughout the development, with the exception of those which would lead hedgehogs onto the major roads. Holes will measure 13cm x 13cm allowing free traversal throughout the proposed development.
Key:
Hedgehog Domes
Habitat Piles/ Hibernacula
Integral Bat Box
Integral Swift Box (Cluster of Three)
Dormouse Tube
Not to Scale
Map data ©2025 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.
Figure Title:
Ecological Enhancement Plan
Project:
Land off Sandridge Common, Melksham
Client:
Bloor Homes South West
Date:
30/10/2025
Drawn:
LT
Ref:
1795B-EEP-F1
Revision:
1
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ARBORICULTURE
LAND MANAGEMENT
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Appendix 1 – General Glossary of Terms

Annex I	Threatened bird listed on Annex I of the EC Birds Directive/ Habitats listed on Annex I of the EC Habitats Directive
Annex II	Species of community interest whose conservation requires the designation of SACs
BAP	Biodiversity Action Plan
BMCL	Bat Mitigation Class Licence
BNG	Biodiversity Net Gain
BoCC	Bird of Conservation Concern
CEMP	Construction Environmental Management Plan
CWS	County Wildlife Site
DBW	Daytime Bat Walkover
EPS	European Protected Species
GLTA	Ground Level Tree Assessment
HPI	Habitat of Principal Importance required under Section 41 of the NERC Act 2006
HSI	Habitat Suitability Index
HMMP	Habitat Management and Monitoring Plan
IRZ	Impact Risk Zone
GCN	Great crested newt
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LEMP	Landscape and Ecology Management Plan
LPA	Local Planning Authority
LWS	Local Wildlife Site
MMU	Minimum Mapping Unit
NBW	Night-time Bat Walkover
NE	Natural England
NERC Act	Natural Environment and Rural Communities Act 2006
NPPF	National Planning Policy Framework
NVA	Night Vision Aid
NVC	National Vegetation Classification Survey

OSWI	Other Site of Wildlife Interest
pCWS	Potential County Wildlife Site
POS	Public Open Space
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature
Ramsar	A wetland site designated to be of international importance under the Ramsar Convention
RPA	Root Protection Area
SAC	Special Area of Conservation
SPA	Special Protection Area
SPI	Species of Principal Importance required under Section 41 of the NERC Act 2006
SSSI	Site of Special Scientific Interest
UKHab	UK Habitat Classification System
UWS	Unconfirmed Wildlife Site
WCA	Wildlife and Countryside Act 1981(as amended)
ZOI	Zone of Influence

Appendix 2 – Planning Policy and Legislation

Habitat and Species Legislation

Species and habitats receive legal protection in the UK under various legislation, including:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation of Habitat and Species Regulations 2017 (as amended);
- The Countryside Rights of Way (CRoW) Act 2000;
- The Hedgerows Regulations 1997;
- The Protection of Badgers Act 1992; and
- The Natural Environment and Rural Communities (NERC) Act 2006.

Where relevant, this report takes into account the legislative protection afforded to specific habitats and species.

Environment Act (2021)

The Environment Act 2021 operates as the UK's legal framework for environmental protection and provides legislation on environmental governance, principles, targets and improvement plans, waste and resource efficiency, nature protection, and water and air quality.

Part 6 of the Environment Act 2021 requires a minimum 10% biodiversity net gain for all new developments (with specified exemptions), and amends Schedule 7a (Biodiversity Gain in England) of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021) to mandate this in England. This will apply to most major developments from 12th February 2024 and to small sites from 2 April 2024.

The biodiversity net gain regulations most directly relevant to planning are:

- The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations (2024);
- The Biodiversity Gain Requirements (Exemptions) Regulations (2024);
- The Biodiversity Gain (Town and Country Planning) (Modifications and Amendments) (England) Regulations (2024); and
- The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2024).

In addition, there are regulations for the Biodiversity Gain Site register established under section 100 of the Environment Act 2021 for registered off-site biodiversity gains.

National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the Governments planning policies for England and how local planning authorities should incorporate them into their own policies and plans. Section 15 of the NPPF contains several policies targeted at enhancing the natural environment and requires local authorities to consider how impacts on biodiversity can be minimised and provide net gains in biodiversity. Paragraph 180 (a-f) states that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and

f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."

In addition, paragraph 185 (b) ensures that to protect and enhance biodiversity and geodiversity, plans should:

"b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity."

Additional Planning Practice Guidance (PPGs) supports the NPPF and includes guidance on:

- Agricultural land, soil and brownfield land of environmental value;
- Green infrastructure;
- Biodiversity, geodiversity and ecosystems; and
- Landscape.

Local Planning Policy

Wiltshire Planning Policy

The Wiltshire Core Strategy Development Plan Document ('the plan') was formally adopted in January 2015. The plan provides a positive and flexible overarching planning policy framework for Wiltshire for the period up to 2026. It contains the relevant planning policies:

- Core Policy 50 – Biodiversity and Geodiversity
- Core Policy 52 – Green Infrastructure

Neighbourhood Plan

The Joint Melksham Neighbourhood Plan, Neighbourhood Plan 1 (2020-2026) was formally adopted in July 2021. It gives the communities of Melksham Town and Melksham Without real local planning power in guiding the conservation and development of our area until 2026. Policy 13 – Biodiversity is relevant to this report.

UK Post-2010 Biodiversity Framework

The UK Biodiversity Action Plan (UK BAP) was succeeded in 2012 by the 'UK Post-2010 Biodiversity Framework' which demonstrates a whole-environment strategy on how the UK contributes to achieving the Convention on Biological Diversity's (CBD) 20 Aichi Biodiversity Targets. In England, 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services' (Defra, 2011) sets out the strategic direction for biodiversity policy in the future. The former UK BAP was used to draw up lists of species and habitats of 'principal importance' which continue to be regarded as priorities under the Post-2010 Biodiversity Framework and are identified under Section 41 of the NERC Act 2006; these species have been considered throughout this report.

Local Biodiversity Action Plan

The latest available Wiltshire Biodiversity Action Plan (BAP) was produced by the Wiltshire Biodiversity Partnership in 2008. The plan includes a Generic Action Plan, ten Habitat Action Plans and a Bat Species Action Plan, which covers all bat species in Wiltshire. The Wiltshire and Swindon Biodiversity Action Plan Steering Group have since published Landscape Biodiversity Areas which provides an additional framework for landscape-scale conservation with which to coordinate conservation efforts in Wiltshire and Swindon. The Site lies within Area 4: Cotswolds Limestone Lowlands, which highlights woodland, limestone grassland, neutral grassland and rivers as priorities for conservation.

Appendix 3 – Extended UK Habitat Classification Survey

A site walkover was undertaken on 10 January 2023 by Lindsay Taylor BSc MSc ACIEEM and Anna Galvin BSc MSc when weather conditions were dry with good visibility.

All habitats within the Site were identified, described and mapped during the field survey in accordance with the UK Habitat Classification (UKHab) (Butcher et al. 2020 (v1.1)) and Biodiversity Metric 4.0 classifications for hedgerows (Natural England 2023), with other linear and point features mapped using Phase 1 Habitat Survey symbology (JNCC 2010). Secondary UKHab codes (where relevant) have been mapped. A non-exhaustive botanical species list was compiled, with plant names following Stace (2019).

The survey was extended to highlight the potential presence of protected and priority species in accordance with CIEEM's Guidelines for Preliminary Ecological Appraisal (2017). This involved a search to identify the presence or potential presence of notable and protected species such as breeding birds, badger, dormouse, bats, reptiles and amphibians. Target Notes (TNs) were used to record any features or habitats of ecological interest. Where access allowed, adjacent habitats were also considered in order to assess possible impacts of the proposal in a wider context.

A digital map was produced using QGIS (QGIS Development Team (2018) Geographic Information System Open-Source Geospatial Foundation Project). The habitat map is shown in **Figure 1**. A plant species list is provided below.

UKHab Survey Results

The Site largely comprises modified grassland fields with little to no margins, rotationally grazed by livestock. Fields are bound primarily by native hedgerows, some of which are associated with ditches and mature trees. A watercourse, a tributary of the River Avon, runs from south to north through the grassland fields in the centre of the Site. New Road runs the length of the eastern boundary with a collection of farm buildings and residential property adjacent, and Sandridge Road runs the length of the southern boundary.

Photographs and brief descriptions are provided below, including a list of dominant vegetative species within each habitat.

Table 3.1: Habitat Summaries

Habitat Summary	Photograph
Field 1 – modified grassland field grazed by cows, no field margin, bound by hedgerows. Species include perennial rye grass, clover, cleavers, cock's-foot, dandelion, ground-ivy, dead nettle, herb Robert and creeping buttercup.	

Habitat Summary	Photograph
Field 2 – similar to Field 1, grazed modified grassland field with no margins bound by hedgerows. Additional species include chickweed and common sorrel.	
Field 3 – similar to Field 1, grazed modified grassland field with no margins bound by hedgerows. Additional species include cow parsley, crane's bill and lords and ladies.	
Field 4 – similar to Field 1, grazed modified grassland field with no margins bound by hedgerow, has watercourse running through centre. Additional species include common reed and aquatic vegetation associated with the watercourse.	

Habitat Summary	Photograph
Bare ground in periphery of Field 4 occupied by horses.	
Farmyard area with several barns (offsite), industrial farmyard equipment and piles of aggregate on bare ground.	
H1 – Species-rich hedgerow with ditch. 4m high x 1m wide. Hawthorn, blackthorn, bramble, elm, rose sp.	

Habitat Summary	Photograph
H2 – Species-poor hedgerow. 2m high x 2m wide hedgerow dominated by hawthorn with elm.	
H3 – Species-poor hedgerow with ditch. 2m high x 2m wide hedgerow. Margin along ditch has longer vegetation. Maple, ivy, blackthorn, rose spp.	
H4 – Species-poor hedgerow with ditch. 2m high x 1m wide hedgerow. Ditch dry towards the road and lined by wall. Elm, nettle, cleavers.	

Habitat Summary	Photograph
H5 – Species-poor hedgerow with trees. 2m high x 2m wide. Hedgerow dominated by hawthorn and blackthorn. Tree species include Lombardy poplar and ash.	
H6 – Species-poor hedgerow with ditch. 2m high x 2m wide. Elm, bramble, blackthorn, rushes, aquatic vegetation.	
H7 – Species-rich hedgerow with ditch. 2m high x 2m wide. Willow, elm, maple, blackthorn, hawthorn, rose spp., honeysuckle.	

Habitat Summary	Photograph
H8 – Species-poor hedgerow with ditch. 2m high x 2m wide hedgerow. Elm, bramble, blackthorn, honeysuckle, willow herb, aquatic vegetation.	
H9 – 1.6m high x 1m wide privet hedge.	
H10 – 2m high x 2m wide ornamental section of hedgerow. Blackthorn, hawthorn, elm, maple, lords and ladies.	

Appendix 4 – Badger Surveys

A badger survey was undertaken on 10 January 2023 by Lindsay Taylor BSC MSc ACIEEM. This survey was updated on 3 June 2024 by Ella Bond BSc.

The survey involved a thorough search of the Site for evidence of badger activity based on the methodology outlined by Harris, Creswell and Jefferies (1991). A search was made for:

- Setts, including earth mounds/ spoil, evidence of bedding and runways between setts;
- Latrines, often located close to setts, at territory boundaries or adjacent to favoured feeding areas;
- Prints and paths;
- Hairs within sett entrance or caught on nearby fencing; and,
- Other evidence including snuffle holes, feeding and playing areas and scratching posts.

Where setts were observed, their status and the level of activity were noted. Sett status can be broadly classified as:

Main sett – Sett within a badger territory that appears to be the largest (usually with at least five holes) and the most well used, with much activity in the vicinity, is categorised as the main sett. Main setts always have active badger runs leading away from them and are normally marked by latrines. Social groups have one main sett, which is the most important sett in the territory. It is used throughout the year and is the main breeding sett.

Annexe sett – Setts are categorised as annexe setts where they are assumed to form part of the main sett area but where the sett is unlikely to be directly linked by an underground passage to the main sett either due to a barrier (e.g. separated by a watercourse or ditch) or by distance. Annexe setts are normally linked to the main sett by a well-used path and lie within 150m of a main sett entrance.

Subsidiary sett – Setts that offer an alternative sett complex to the main sett are categorised as subsidiary setts. Subsidiary setts are normally, at least, 50m from the main sett and are not always obviously linked by a well-used path to the main sett (unlike annexe setts). Subsidiary setts often exhibit moderate levels of activity, are larger than outlier setts but smaller than main setts. Subsidiary setts are often marked by latrines.

Outlier sett – These setts often comprise just one or two entrances. They are used infrequently and can be found at the boundaries of a badger social group's territory.

Survey Results

One potential badger sett was identified during the survey along the northern boundary hedgerow (H7). A single entrance was noted within the hedgerow itself meaning access to view the entrance was limited by the dense hedgerow vegetation. No other entrances or signs of badger were noted, either within this hedgerow or anywhere else on Site. As such, it is considered likely that the sett is an outlier to a main sett located offsite.

Signs of rabbit and fox were noted throughout the Site, therefore it is possible that the entrance in H7 could also be attributed to these species rather than badgers. The limited access to the potential entrance, however, did not allow full inspection therefore, as a precaution, it is assumed to be badger.

Appendix 5 - Bats

The Site was assessed as having moderate suitability for bats in accordance with best practice guidance (Collins 2016 – the guidance relevant at the time of surveying). This was based upon the presence of continuous habitat, i.e. hedgerows and watercourses, that is well-connected to the surrounding landscape.

Considering the predicted impacts of the proposed development on bats, it was considered proportionate to undertake surveys once a month between April and October 2023, in accordance with Collins (2016) and BS:42020 (BSI 2013).

Manual Transect Survey

In accordance with guidelines for habitats of moderate suitability for bats (Collins, 2016), one walked transect survey visit was scheduled for each month, April to October 2023.

Activity surveys involved two experienced surveyors walking a pre-defined transect route covering all habitats of the Site and passing features with potential for use by foraging and commuting bats. Surveyors were equipped with a manual hand-held detector and recorder (Wildlife Acoustics Echo Meter Touch 2 Pro or Anabat Swift bat detectors with Elekon Bat Scanners). When a bat was encountered the time, species and flight direction/ behaviour was noted. Starting locations were altered between surveys to prevent biased results.

Transects commenced at sunset and continued for two hours. All surveys were completed during optimal weather conditions, as detailed in **Table 5.1**.

Table 5.1: Bat activity transect survey dates and personnel.

Date	Survey type	Sunset/ start time	End time	Transect length (time)	Weather **CC – Cloud Cover** **Wind – Bf - Beaufort Scale**	Personnel
25/04/2023	Dusk	20:21	22:21	2 hours	7 – 8^{0}C, 1 Bf, 20 – 70% CC, dry	HC, VB
15/05/2023	Dusk	20:52	22:52	2 hours	12^{0}C, 1 Bf, 0% CC, dry	LT, HC
13/06/2023	Dusk	21:25	23:25	2 hours	20 – 23^{0}C, 0 – 1 Bf, 0% CC, dry	HC, EB
17/07/2023	Dusk	21:15	23:15	2 hours	14 – 15^{0}C, 0 – 1 Bf, 10% CC, dry	HC, JC
07/08/2023	Dusk	20:46	22:46	2 hours	13 – 16^{0}C, 0 Bf, 5% CC, dry	HC, HK
11/09/2023	Dusk	19:33	21:33	2 hours	18 – 20^{0}C, 4 – 5 Bf, 90 – 100% CC, dry	HK, KO
23/10/2023	Dusk	18:00	20:00	2 hours	12 – 13^{0}C, 2 Bf, 40 – 50% CC, dry	EB, HC

Surveyors: **VB** – Vicki Baldwin BSc MSc (NE Level 1 bat class licence 2017-27581-CLS-CLS); **LT** – Lindsay Taylor BSc MSc ACIEEM (NE Level 1 bat class licence 2017-32853-CLS-CLS); **EB** – Ella Bond BSc; **HC** – Heather Chiles; **HK** – Hamish Kidd BSc; **KO** – Kit Owen BSc; **JC** – Joshi Cole BSc.

Automated Detector Surveys

Activity transects were supplemented with the use of static automated detectors to increase survey effort.

This involved the deployment of three static detectors (Titley Scientific Anabat Swift or Wildlife Acoustics Song Meter SM2) in the hedgerows throughout the Site for a minimum of five nights per month between April to October 2023, on the following dates:

- 25 – 29 April 2023;
- 15 – 19 May 2023;
- 13 – 17 June 2023;
- 17 – 21 July 2023;
- 8 – 12 August 2023;
- 11 – 15 September 2023; and
- 17 – 22 October 2023.

Details of detector locations can be found in **Figure (EBR-F2)**.

Bat Data Analysis

Wildlife Acoustics Kaleidoscope Pro software was used for processing and analysing static bat data. The confidence settings used are "neutral" with samples of all recordings, including "noise" files checked. Batches of noise files and pipistrelle calls are checked depending upon their characteristics which are grouped by a range of variables including background noise and strength of calls. All bat calls other than common pipistrelle, soprano pipistrelle and noctule are verified manually in full. Further identification of more cryptic species such as Myotis sp., brown long-eared *Plecotus auritus* and barbastelle *Barbastella barbastellus* is undertaken using Titley Scientific Analook software where necessary.

Transect data was extracted from Wildlife Acoustics Kaleidoscope Pro and processed through Microsoft Excel and QGIS (QGIS Development Team (2018) Geographic Information System Open-Source Geospatial Foundation Project) to produce heat maps of the use of the Site by all bats over the survey period. Further information was extracted to provide greater detail of how Annex II species are using the Site.

Data from the automated surveys was then analysed using Microsoft Excel and QGIS (QGIS Development Team 2018). To obtain an indication of relative bat activity, a calculation was made of the average number of bat passes for each species per night during each survey period. This data could then be used to present the results temporally and spatially using graphs and maps.

Ground Level Tree Assessment for Bat Roosting Potential

The trees on Site were assessed by Lindsay Taylor BSc MSc ACIEEM (Level 1 Bat Licence holder- Ref: 2017-32853-CLS-CLS) and Anna Galvin BSc MSc during the initial Site walkover for their bat roost potential in accordance with best practice methodology published by the Bat Conservation Trust (Collins 2016).

Trees were inspected from ground-level with the aid of binoculars for Potential Roost Features (PRFs) such as rot holes, hazard beams, cracks or splits, woodpecker holes, knot holes, man-made holes, cankers, gaps between overlapping stems/ branches, loose bark, dense ivy, epicormic growth and bat, bird or dormouse boxes. Signs indicating possible use by bats were also recorded such as bat droppings, odour, scratches, staining and audible sounds. Information collected about PRF's included a description, the height of the feature above ground level and the orientation of the feature in relation to the trunk.

Trees were then prescribed a category based on their potential to support roosting bats as detailed in **Table 5.2.** Locations are shown in **Figure (EBR-F1).**

Table 5.2: Bat roosting potential categories for trees

Suitability	Description of bat roosting potential (trees)
Negligible	Negligible habitat feature/s likely to be used by roosting bats.
Low	A tree with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A tree with one or more potential roost sites that are obviously suitable for use by larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Roost	Known or confirmed roost.

Roosting Bat Survey Results

One tree (T1) was identified as having bat roost potential during the ground level tree assessment. T1 is a mature oak with multiple holes on the southeast aspect of the main trunk and one branch cut at around 4m. Photographs can be found in **Table 5.3**. T1's location is shown in **Figure (EBR-F1)**.

Table 5.3: Description and photographs of PRF trees.

Tree reference	Species	Potential Roost Features (PRF)	Tree category (Collins 2016)	Photograph
T1	Oak sp.	Multiple holes on main trunk	PRF-Low	

Transect Survey Results

Five species were recorded during the walked transect surveys of the Site, including the following species:

- Common pipistrelle;
- Soprano pipistrelle;
- *Myotis* bat species;
- Noctule; and
- Serotine.

During the transect surveys, common pipistrelle was the most frequently recorded species (75.6%), followed by soprano pipistrelle (14%) with infrequent passes from noctule (7.7%). Annex II species were absent during the transect surveys.

Most bat passes were associated with field boundary hedgerows, although this is an expected spatial bias since transects largely followed field boundary hedgerows. Activity was homogenous across the Site, with one hotspot of concentrated activity at the southern boundary of the Site bordering Sandridge Road, **Figure (EBR-F2**). This is most likely due to foraging opportunities presented by streetlighting to generalist and light tolerant species such as common pipistrelle, as evidenced by the aforementioned species' high number of overall passes in comparison to other recorded species. **Table 5.4** shows a summary of bat passes recorded during each survey month.

Table 5.4: Summary of bat passes recorded during activity transects

Survey Date	Pp	Ppy	Msp	Nn	Es	Grand Total
25/04/2023	8	0	0	0	0	**8**
15/05/2023	4	3	0	0	0	**7**
13/06/2023	35	9	1	0	0	**45**
17/07/2023	43	2	0	12	0	**57**
07/08/2023	60	2	0	0	2	**64**
11/09/2023	35	9	5	11	0	**60**
23/10/2023	41	17	0	0	0	**58**
Grand Total	**226**	**42**	**6**	**23**	**2**	**299**

ES = Serotine bat; Msp = Myotis species; Nn = noctule; Pp = common pipistrelle; Ppy = soprano pipistrelle

Automated Detector Survey

The automated detectors were located as follows:

- Location 1 – in hedgerow 2 facing north into field 2;
- Location 2 – in hedgerow 6 facing north into field 4;
- Location 3 – in hedgerow 7 facing south into field 4; and

Four further species in addition to the five species identified during the transect surveys were recorded during the automated detector surveys: lesser horseshoe, greater horseshoe, barbastelle and long-eared species.

During the automated detector surveys, a total of 28,465 passes were registered with common pipistrelle again being the most frequently recorded bat species (24,737 passes = 86.9%), followed by soprano pipistrelle (1,270 passes = 4.46%), noctule (1,250 passes = 4.39%) and *Myotis spp.* (949 passes = 3.33%), all of which were recorded in similar frequency. Serotine and long-eared species make up 0.36% (102 passes) and 0.31% (87 passes) respectively.

Annex II bats were recorded in very low numbers: lesser horseshoe bats and barbastelle at 0.12% and 0.11% respectively (35 and 30 registrations out of 28,465) and greater horseshoe bats at 0.02% (a total of 5 registrations out of 28,465).

Locations and average number of passes per species are illustrated on **Figure (EBR-F2)**.

Location 1 recorded the most overall passes; (22,557 passes = 79.24%) of all passes over the survey period. Common pipistrelle bats were recorded especially frequently here with 83.86% (20,746 passes) of all common pipistrelle calls recorded at this location.

Despite being recorded in very low numbers, all Annex II species were recorded at all locations, **Figure (EBR F2)**. Location 2 recorded the highest number of passes for both the woodland specialist barbastelle (60% of all barbastelle calls recorded) and light-averse lesser horseshoe bat (65.7% of all lesser horseshoe calls recorded). Greater horseshoe bats however showed greatest affinity to locations 1 and 3 with two passes recorded at each.

Table 5.5: The total number of passes recorded for each species across all detectors.

Species	Passes (No.)	Percentage of total (%)
Common pipistrelle	24737	86.90
Soprano pipistrelle	1270	4.46
Noctule	1250	4.39
Myotis species	949	3.33
Serotine	102	0.36
Long-eared species	87	0.31
Lesser horseshoe	35	0.12
Barbastelle	30	0.11
Greater horseshoe	5	0.02
Total	**28465**	**100**

The highest numbers of bat activity were found to the south and east of the Site, with relatively similar numbers in the centre and north of the Site. Passes were generally dominated by widespread and common species, particularly common pipistrelle. When excluding pipistrelles, bat passes were found to be homogenous across the Site, with slightly higher activity in areas away from disturbance. Annex II species were found to be using the Site in small numbers, with activity concentrated towards the centre of the Site, as is to be expected with light-averse species such as lesser horseshoe. Overall, activity was largely focused on hedgerows, with this habitat type providing foraging and commuting opportunities for bats.

Appendix 6 – Breeding Bird Surveys

Breeding bird surveys were undertaken in April – June 2023 according to an adapted Common Bird Census (CBC) methodology (Bibby et al, 2000; Gilbert et al, 1998), consisting of a walked transect route encompassing the entire site, in suitable weather conditions (avoiding cold, windy and wet days, although showery days make acceptable survey weather). Surveys were undertaken by Craig Brakes BSc MSc PhD. Survey dates and weather conditions are summarised in **Table 6.1.**

Table 6.1: Dates, times and weather conditions for breeding bird surveys

Date	Visit	Surveyor	Time	Weather
09/04/2023	1	Craig Brakes	06:15 – 08:30	3^{0}C, 1 Bf, 8 okta, dry
15/05/2023	2	Craig Brakes	05:00 – 07:30	8^{0}C, 2 Bf, 7 okta, dry
24/06/20233	3	Craig Brakes	05:00 – 07:30	13^{0}C, 0 bf, 0 okta, dry

All notable bird species were recorded during the breeding bird survey, including: WCA 1981 Schedule 1 species, birds listed on the UK Red-list of Birds of Conservation Concern 5 (BoCC; Stanbury et al., 2021), birds listed in Section 41 of the NERC Act 2006 and Wiltshire BAP species. During the survey, information on species, their locations and behaviour was mapped and recorded.

Breeding Bird Survey Results

A total of 25 species were recorded during the breeding bird survey of the Site. Of these, 10 were notable species (at least Amber-listed BoCC 5, SPI, Local BAP or Sch1 WCA). Results of notable species are detailed in **Table 6.2,** and a full species list is provided in **Table 6.3.**

All of the notable species recorded as possible, probable and confirmed breeders within the Site were recorded in association with the hedgerows and grassland fields. There were no ground nesting species recorded within the Site.

Figure 3 illustrates the areas of the Site used by each notable species during the breeding season.

Table 6.2: Notable and protected species survey results

Species and Status				Number of birds in 2023				
Species	**Scientific Name**	**Conservation Status**	**Breeding Status**	**09/04**	**15/05**	**24/06**	**Peak Count**	**Recorded within Site Boundary**
Red Kite	*Milvus milvus*	Amber, WBAP	Non-Breeding	1	0	0	1	✓
Dunnock	*Prunella modularis*	Amber, S41	Probable	7	5	3	7	✓
Wren	*Trogolodytes troglodyte*	Amber	Probable	9	7	12	12	✓
Greenfinch	*Chloris chloris*	Red	Probable	1	0	3	4	✓
House Sparrow	*Passer domesticus*	Red, S41, WBAP	Probable	2	3	16	16	✓
Woodpigeon	*Columba palumbus*	Amber	Possible	0	7	2	7	✓
Stock Dove	*Columba oenas*	Amber	Non-Breeding	0	0	1	1	✓
Lesser Black-backed Gull	*Larus fuscus*	Amber	Non-Breeding	0	0	46	46	✓
Starling	*Sturnus vulgaris*	Red, S41, WBAP	Non-Breeding	0	0	1	1	✗
Rook	*Corvus frugilegus*	Amber	Non-Breeding	0	0	1	1	✗

Red = Red listed Bird of Conservation Concern 5 (BoCC5) (Stanbury et al., 2021); **S41** = Species of Principal Importance under S41 of NERC Act 2006; **Amber** = Amber listed BoCC5; **WBAP** = Wiltshire Biodiversity Action Plan species.

Table 6.3: Breeding bird survey results – complete species list

Common Name	Scientific Name
Barn owl	*Tyto alba*
Blackcap	*Sylvia atricapilla*
Blackbird	*Turdus merula*
Blue tit	*Cyanistes caeruleus*
Chiffchaff	*Phylloscopus collybita*
Buzzard	*Buteo buteo*
Carrion Crow	*Corvus corone*
Collared Dove	*Streptopelia decaocto*
Dunnock	*Prunella modularis*
Goldfinch	*Carduelis carduelis*
Great Spotted Woodpecker	*Dendrocopos major*
Great tit	*Parus major*
Greenfinch	*Chloris chloris*
Grey Heron	*Ardea cinerea*
House sparrow	*Passer domesticus*
Jackdaw	*Coloeus monedula*
Lesser Black-backed gull	*Larus fuscus*
Magpie	*Pica pica*
Red Kite	*Milvus milvus*
Robin	*Erithacus rubecula*
Rook	*Corvus frugilegus*
Starling	*Sturnus vulgaris*
Stock Dove	*Columba oenas*
Wood Pigeon	*Columba palumbus*
Wren	*Troglodytes troglodytes*

Appendix 7 - Dormouse Surveys

A dormouse tube survey was undertaken in accordance with The Dormouse Conservation Handbook (Bright *et al.*, 2006). 100 tubes were deployed throughout the hedgerows on Site on 04 April 2023 by Vicki Baldwin BSc MSc (NE level 1 class dormouse licence 2017-27945-CLS-CLS) and Ella Bond BSc at approximately 20m intervals. Each tube was fastened to the underside of a branch of a tree or hedgerow shrub at heights ranging from 0.5-1.5 m using plastic coated wire. Tubes were checked on 01/06/2023, 14/08/2023 and 03/10/2023 by Vicki Baldwin, Ella Bond and Heather Chiles BSc.

A survey must score a minimum probability score of 20 to provide sufficient survey effort to determine presence/likely absence of the species on a given site (based on 50 tubes). Scores can be doubled for the use of 100 tubes. **Table 5** details the months in which tubes were in-situ and the probability score.

Table 7.1: Index of probability of finding dormice present (based on best practice guidelines) and months nest tubes were present.

Month	Index of Probability (Bright *et al.*, 2006) for 50 tubes	Probability Score for Site
April	1	2
May	4	8
June	2	4
July	2	4
August	5	10
September	7	14
October	2	4
November	2	0
TOTAL SCORE		**46**

Dormouse Survey Results

Two dormouse nests were found inside the dormouse tubes deployed on Site, with one nest found on the northwest boundary hedgerow (H7) and one in an internal hedgerow in the southeastern section of the Site (H3) (locations are detailed in **Figure 1)**. This suggests that dormice are present on Site and are utilising the native hedgerow network for foraging, nesting and commuting purposes.

Appendix 8 – Riparian Mammal Survey

A riparian mammal survey was undertaken on 25 April 2023 and 06 September 2023 by Vicki Baldwin BSc MSc, Heather Chiles BSc, Anna Galvin BSc MSc and Ella Bond BSc. The survey involved a walkover of the watercourse and a survey of both riverbanks where accessible.

A detailed search was made along the river following current best practice methodologies (NRA 1994, Highways Agency 1999 and Strachan *et al*. 2011) for evidence of:

- Otter, including footprints, spraints, holts, runs, slides and feeding remains; and,
- Water vole, including burrows, droppings, footprints and feeding remains.

The survey included each riverbank, emergent fringe vegetation and overhanging trees/ exposed tree roots close to the water surface. During the survey, the main habitat type of each section of bank was recorded, and the locations of any evidence marked on a map.

Survey Results

The onsite watercourse and surface water drainage ditches provide very little suitable habitat for otter and would likely only be utilised by the species on an opportunistic basis during times of heavy spate. There is also limited suitable habitat for water vole, with the vegetated banks providing thin cover and foraging vegetation.

No evidence of either species was found during surveys.

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Ecology
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Appendix 8.2 Biodiversity Net Gain Statement and Assessment

Appendix 8.2: Biodiversity Net Gain Statement and Assessment

New Road Farm, Melksham

05 November 2025

Ecology
Arboriculture
Land Management

Report Details

Report Title	Appendix 8.2: Biodiversity Net Gain Statement and Assessment
Report Reference	1795B-BNG-LO

Quality Assurance & Revision Record

Revision	Date	Author	Checked By	Approver	Summary of Changes
V1	05 November 2025	Luke Owen BSc	Lindsay Taylor BSc MSC ACIEEM	Lindsay Taylor BSc MSc ACIEEM	

Disclosure

The content of this report that has been provided by GE Consulting is true, and has been prepared and submitted in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. Its contents are compliant with British Standard BS42020: 2013 Biodiversity Code of Practice for Planning and Development.

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Site Details

Site Name and Location	New Road Farm, Melksham
Central OS Grid Reference	ST 91966 64476
Client	Bloor Homes South West

Boundary



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1 Introduction

This report provides Appendix 8.2: Biodiversity Net Gain Statement and Assessment for New Road Farm, Melksham in relation to a full planning application. The surveys were commissioned by Bloor Homes South West.

The area within the application boundary is hereafter referred to as the 'Site'.

Biodiversity Net Gain (BNG) is an approach to development that aims to leave the natural environment in a measurably better state than it was initially and meets the requirements of the Government's 25 Year Environment Plan. The Environment Act (2021) requires most planning applications in England to deliver a 10% net gain in biodiversity.

1.1 Site Context

The Site lies to the north-east of Melksham and largely comprises modified grassland fields with little to no margins, rotationally grazed by livestock. Fields are bound primarily by native hedgerows, some of which are associated with ditches and mature trees. A watercourse, a tributary of the River Avon, runs from south to north through the grassland fields in the centre of the Site. New Road runs the length of the eastern boundary with a collection of farm buildings and residential property adjacent, and Sandridge Road runs the length of the southern boundary.

1.2 Description of Proposed Development

Proposals comprise a residential led scheme, consisting of an outline planning application for residential development; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; land safeguarded for a nursery and access points for pedestrians and cyclists. All matters are reserved except for access, the principal point of access is to be provided from a new northern arm onto an improved arrangement of the Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.

1.3 Aims

The aims of this report are to:

- Provide the national mandatory Biodiversity Net Gain information requirements.
- Provide the site baseline and an indicative post-development BNG assessment.

2 BNG Statement

2.1 National Mandatory Biodiversity Net Gain Information

Table 1 provides the BNG information required to support the planning application under Article 7 of The Town and Country Planning (Development Management Procedure) (England) Order 2015.

Table 1: National Mandatory Baseline BNG Information

Information required	Description	
Would the planning permission, if granted, be subject to the biodiversity gain condition?	Yes – meets criteria of a major development.	
Pre-development biodiversity value of the on-Site habitat on the date of application	Habitats	28.74
	Hedgerows	18.17
	Watercourses	5.00
Publication date of the biodiversity metric calculation tool used	July 2024	
Is an earlier date proposed?	No – the relevant date is the date of the planning application submission.	
Is there any evidence of habitat degradation?	No – there is no evidence of any unauthorised habitat degradation since the statutory cut-off date of 30 January 2020.	
Is there any irreplaceable habitat on Site?	No – there is no irreplaceable habitat within the Site boundary.	
Plan of on-Site habitat on the date of the application (or earlier date)	Refer to **Figure 1**.	

2.2 'Significant' Net Gain

What counts as 'significant' habitat enhancement varies depending on the scale of development and existing habitat. Based on the Site Landscaping Plans (Sheets 001 – 009 Rev G (Bloor Homes, 2025)), the following 'significant' on-site habitat enhancements, as defined by Government guidance, are predicted as detailed on **Figure 2**:

- ***Habitats of medium or higher distinctiveness****:* ponds, native species-rich hedgerows, mixed scrub, other neutral grassland, and individual trees (all medium distinctiveness) are proposed.
- ***Habitat creation or enhancement where distinctiveness is increased relative to the distinctiveness of the habitat before development***: the baseline was dominated by modified grassland (low distinctiveness). Mixed scrub, other neutral grassland, ponds and individual trees (all medium distinctiveness) proposed**.**

Therefore, a Habitat Management and Monitoring Plan (HMMP) will be required.

Note that a precautionary approach has been taken to assessing what significant net gain may be on

site post-development.

2.3 Biodiversity Gain Hierarchy

The biodiversity gain hierarchy has been followed during the design process as per **Table 2.**

Table 2: Application of the Biodiversity Gain Hierarchy

Step in the hierarchy	Application
First, in relation to onsite habitats which have a medium, high and very high distinctiveness, the avoidance of adverse effects from the development and, if they cannot be avoided, the mitigation of those effects	There are no very high distinctiveness habitats on site. High distinctiveness habitats (species-rich native hedgerow – associated with bank or ditch, and other rivers and streams), are largely being avoided and suitably buffered as part of the development, with no encroachment. However, watercourse sections 2 (F2) and Watercourse 6 (F4) (other rivers and streams) are losing a combined 29m, through the creation of an open span bridge and culvert diversions that are required for access. Due to the position of the watercourses, the loss of these sections is unavoidable. Medium distinctiveness area habitats (urban trees) are to be retained and protected as part of the development. There will be some loss of medium distinctiveness hedgerows requiring removal to facilitate the provision of access into and within the development and as such is unavoidable. This has been minimised, and the layout of the building, access and SuDS basins has been designed to avoid the RPA of trees and hedgerows.
Then, in relation to all onsite habitats which are adversely affected by the development, the adverse effect should be compensated by prioritising in order, where possible, the enhancement of existing onsite habitats, creation of new onsite habitats, allocation of registered offsite gains and finally the purchase of biodiversity credits	Some high distinctiveness habitat (other rivers and streams) will have an adverse effect from the development. However, there are opportunities for enhancement of the existing habitats on site and as such, and loss of other river and stream habitat will be compensated for by enhancement of these habitats. Some medium and low distinctiveness habitat will be adversely affected by the development. However, there are opportunities to enhance existing habitats and as such a total of 1.659km of hedgerow will be enhanced from 'native hedgerow' to 'species rich native hedgerow'. As the majority of the site constitutes low distinctiveness modified grassland, which will be lost in its entirety, there are no opportunities to enhance the existing on-site habitat. The habitat loss will therefore be compensated for by the creation of new on-site habitats. To compensate for the losses of modified grassland, areas of other neutral grassland and modified grassland will be created throughout the development. In addition, areas of mixed scrub, and a significant number of urban trees will be planted to compensate for these losses.

3 BNG Assessment Summary

A baseline and indicative post-development BNG assessment was undertaken using the statutory biodiversity metric (released in July 2024) following current guidance (Defra, 2024a). Further detail on the methodology is provided in **Appendix 2**.

The on-site baseline and indicative post-development BNG position are demonstrated in **Table 3**. Full details of the calculations are provided in the statutory metric calculation tool (GE Consulting, 2025). Condition assessments are provided in **Appendix 4**. Baseline and indicative post-development BNG plans are presented in **Figures 1** and **2**.

Table 3: Summary of on-Site BNG Metric Assessment

Unit Type	Onsite Baseline Units	Onsite Post-development Units	Net Unit Change	% Change
Habitat	28.74	33.01	+ 4.27	+ 14.85%
Hedgerow/ Linear	18.17	26.71	+ 8.54	+ 47.00%
Watercourse	5.00	5.70	+ 0.70	+ 13.95%

The indicative assessment indicates that a minimum 10% net gain is achievable on-site. This will need to be updated to reflect the final site layout following consent.

3.1 Temporary Impacts

A small area of modified grassland towards the north-east of the Site, c. 0.081ha, will be subject to a temporary impact. An outfall pipe is to be installed underground which will discharge into the swale (see **Figure 2** for location). The modified grassland will be re-instated, and the existing condition re-established within two years of the initial impact therefore whilst included within the metric to account for the area, it is considered as retained.

3.2 3.3 ‘De Minimis’

Whilst the proposed outfall will eventually discharge into the watercourse to the north of the Site, it will initially discharge into a swale before reaching the watercourse. Following construction, the swale will be maintained as modified grassland in the same condition as it currently exists therefore no riparian or watercourse encroachment is anticipated. As such, it is considered that the proposals within this location fall under the ‘de minimis’ area and no further impacts to the watercourse, other than those already described, are anticipated.

4 References

Defra (2024a) The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology July 2025. Available from: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides.

Defra (2024b) The Statutory Biodiversity Metric User Guide July 2025. Available from: https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides.

GE Consulting (2023a) Environmental Statement Chapter 8. Ref: 1795-ES-LT.

GE Consulting (2023b) Appendix 8.1 of ES Chapter - Ecological Baseline Report. Ref:1795-EBR-CM.

GE Consulting (2023c) Appendix 8.3 of ES Chapter – Statutory Biodiversity Metric Calculation Tool. Ref: 1795-SBM-CM.

JNCC (2010) *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit*. JNCC, Peterborough, ISBN 0 86139 636 7.

UKHab Ltd (2023) *UK Habitat Classification Version 2.0*. Available from: https://www.ukhab.org.

GE Consulting (2025) *1795B-EcIA-LO*



- Site Boundary
- g4 - Modified grassland
- r - Rivers and lakes
- Native hedgerow
- Native hedgerow - Associated with bank or ditch
- Native hedgerow with trees
- Native species rich hedgerow - Associated with bank or ditch
- Individual tree
- Dormouse nest
- Badger Sett
- Tree with Moderate Bat Roost Potential
- Veteran Tree (offsite)

Scale: 1:3,000

0 40 80 120 160 m

Map data ©2023 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.

Figure 1:
UK Habitat Survey and Protected Species Findings

Project:
New Road Farm, Melksham

Client:
Bloor Homes South West

Date:
1/11/2024

Drawn:
AG/CM

Ref:
1795B-EBR-F1

Revision:
1

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Key - Habitats:

- Site Boundary
- c1f - Horticulture - Allotments
- g3c - Other neutral grassland - Species-rich/ wildflower grassland
- g3c5 - Arrhenatherum neutral grassland
- g4 - Modified grassland - Amenity grassland
- h3h - Mixed scrub
- r - Watercourse
- u1 - Built-up areas and gardens - Residential dwellings and gardens
- u1b - Developed land, sealed surface - Roads, cycle paths and pavements
- u1b5 - Buildings
- u1c - Artificial unvegetated unsealed surface - LAPs/ LEAPs
- Temporary impact

Scale: 1:3,000

0 40 80 120 160 m

Map data ©2025 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.

Figure 2:
Post Development BNG Plan

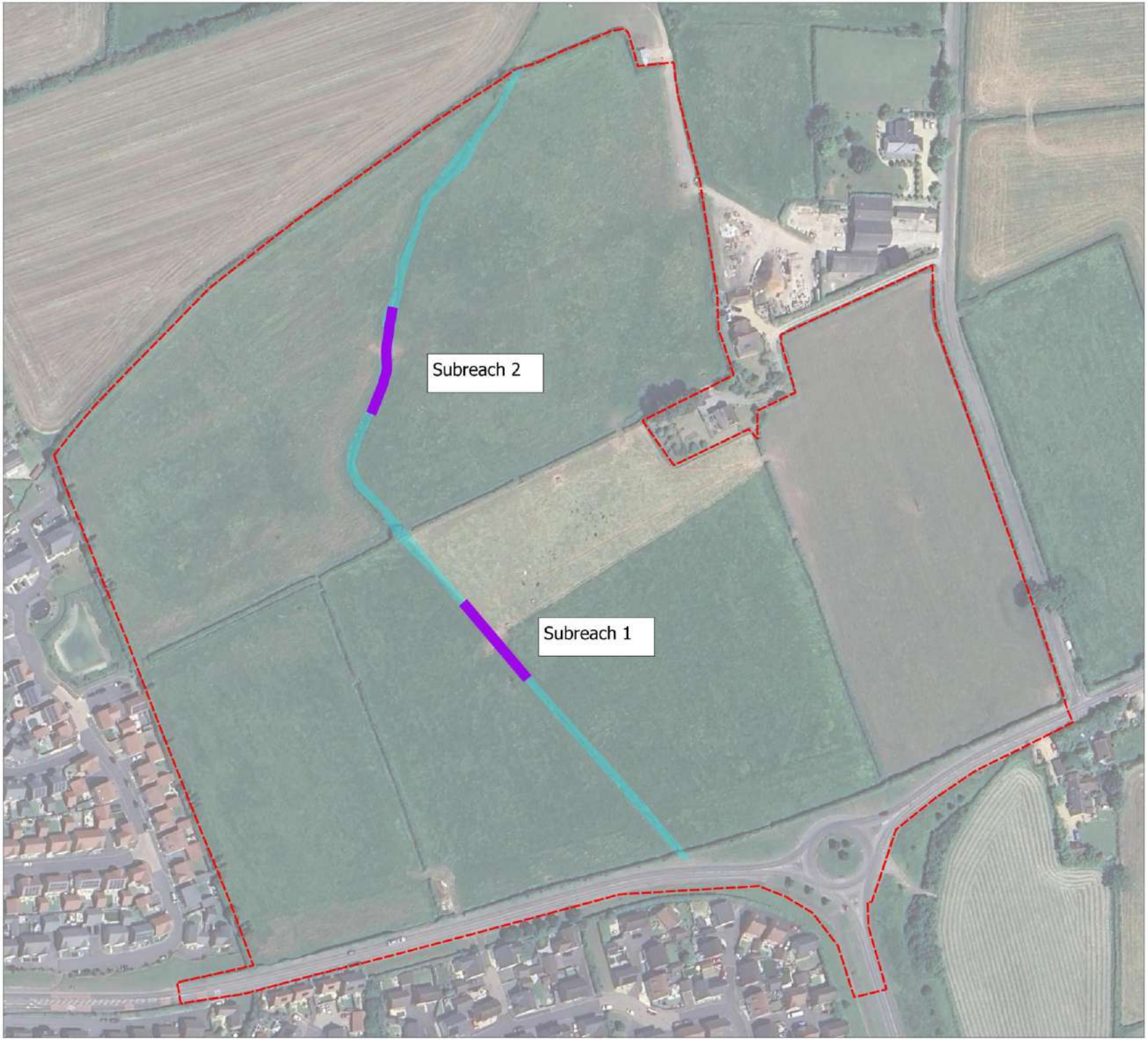
Project:
New Farm, Melksham

Client:
Bloor Homes South West

Date: 17/10/2025
Drawn: CM
Ref: 1795B-BNG-F2
Revision: 5

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Site Boundary

Watercourse

MoRPH 5 Subreach

Scale: 1:2,500

0 30 60 90 120 m

Map data ©2023 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.

Figure 3:
MoRPH5 Subreach Survey Locations

Project:
New Road Farm, Melksham

Client:
Bloor Homes South West

Date:
11/10/2024

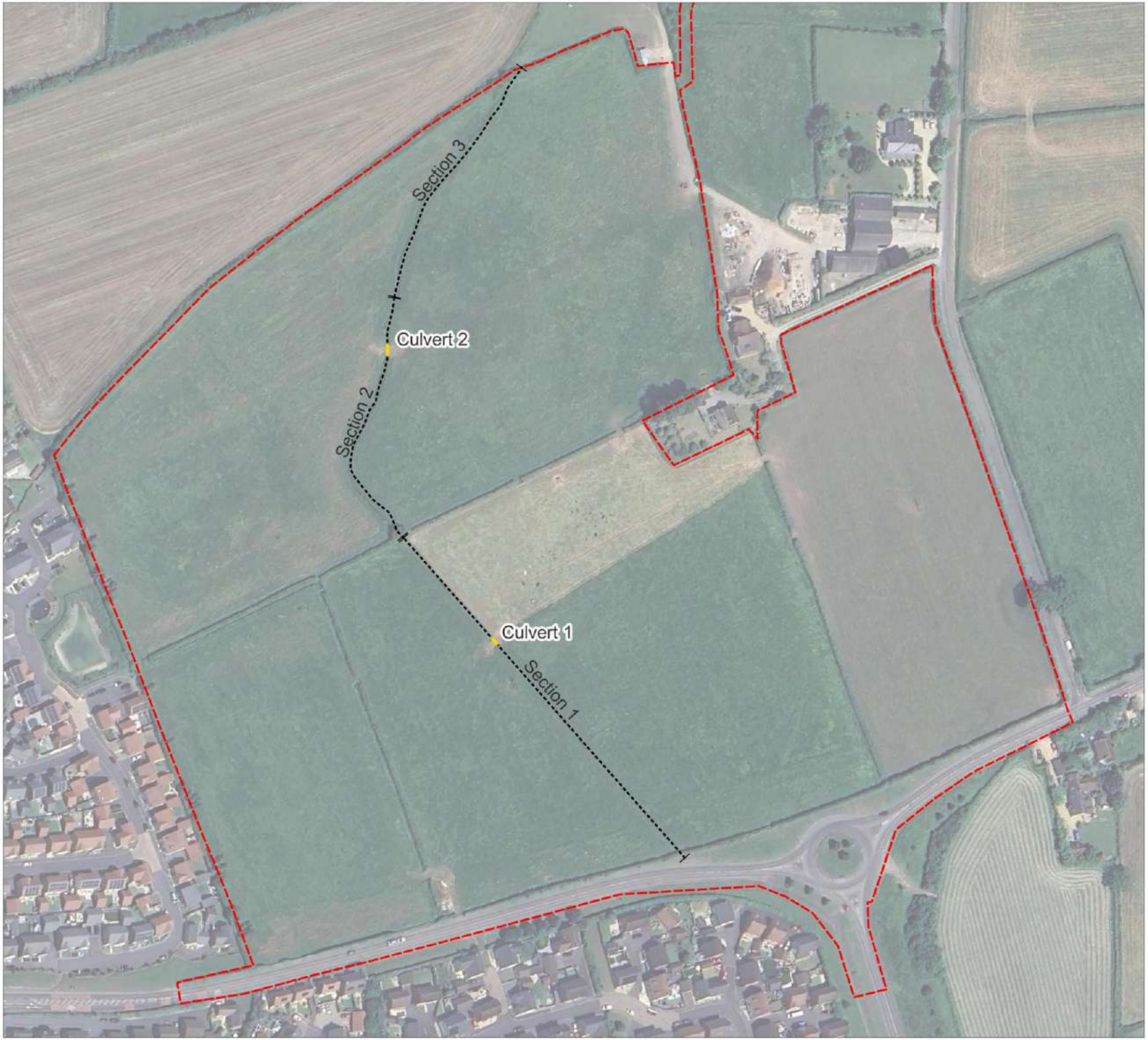
Drawn:
LT

Ref:
1795B-BNG-F3

Revision:
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Site Boundary

Scale: 1:2,500

0 30 60 90 120 m

Map data ©2023 Google, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies.

Figure 4:
Watercourse Sections to be Impacted

Project:
New Road Farm, Melksham

Client:
Bloor Homes South West

Date:
31/10/2024

Drawn:
LT

Ref:
1795B-BNG-F4

Revision:
-

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Appendix 1 – General Glossary of Terms

Annex I	Threatened bird listed on Annex I of the EC Birds Directive/ Habitats listed on Annex I of the EC Habitats Directive
Annex II	Species of community interest whose conservation requires the designation of SACs
BAP	Biodiversity Action Plan
BMCL	Bat Mitigation Class Licence
BNG	Biodiversity Net Gain
BoCC	Bird of Conservation Concern
CEMP	Construction Environmental Management Plan
CWS	County Wildlife Site
DBW	Daytime Bat Walkover
EcIA	Ecological Impact Assessment
EPS	European Protected Species
GLTA	Ground Level Tree Assessment
HPI	Habitat of Principal Importance required under Section 41 of the NERC Act 2006
HSI	Habitat Suitability Index
HMMP	Habitat Management and Monitoring Plan
IRZ	Impact Risk Zone
GCN	Great crested newt
JNCC	Joint Nature Conservation Committee
LBAP	Local Biodiversity Action Plan
LEMP	Landscape and Ecology Management Plan
LPA	Local Planning Authority
LWS	Local Wildlife Site
MMU	Minimum Mapping Unit
NBW	Night-time Bat Walkover
NE	Natural England
NERC Act	Natural Environment and Rural Communities Act 2006
NPPF	National Planning Policy Framework
NVA	Night Vision Aid
NVC	National Vegetation Classification Survey

OSWI	Other Site of Wildlife Interest
pCWS	Potential County Wildlife Site
POS	Public Open Space
PRA	Preliminary Roost Assessment
PRF	Potential Roost Feature
Ramsar	A wetland site designated to be of international importance under the Ramsar Convention
RPA	Root Protection Area
SAC	Special Area of Conservation
SPA	Special Protection Area
SPI	Species of Principal Importance required under Section 41 of the NERC Act 2006
SSSI	Site of Special Scientific Interest
UKHAB	UK Habitat Classification
UWS	Unconfirmed Wildlife Site
WCA	Wildlife and Countryside Act 1981(as amended)
ZOI	Zone of Influence

Appendix 2 – Biodiversity Net Gain Assessment Methodology

Site Survey and Condition Assessment

The Site was surveyed by Lindsay Taylor BSc MSc ACIEEM on 10 January 2023, comprising a UK Habitat Classification (UKHab) survey UK Habitat Classification (UKHab) (Butcher et al. 2020 (v1.1)) and Biodiversity Metric 4.0 classifications for hedgerows (Natural England 2023). An update survey was undertaken by Ella Bond in June 2024 to confirm current on-site conditions.

All habitats within the Site were identified, described and mapped during the field survey in accordance with the UK Habitat Classification (UKHab) (UKHab Ltd., 2023 (V2.0)) and Biodiversity Metric 3.1 (Defra, 2023) classifications for hedgerows, with other linear and point features mapped using Phase 1 Habitat Survey symbology (JNCC 2010). Primary habitats have been mapped to a minimum mapping unit (MMU) of 25m^2, although where features of note of a smaller scale are present, these have also been recorded and mapped.

Any habitats (e.g. traditional orchard) with no appropriate primary habitat label were assigned a secondary habitat code. Other secondary UKHab codes were recorded where relevant, although they are described qualitatively within this report for ease of reading.

Ditches were classified in accordance with best practice, i.e. if considered likely to hold water for <4 months of the year, they were considered to be dry and as such are not included as a ditch within the BNG assessment (Defra, 2024b).

Biodiversity Metric Methodology

The BNG assessment was undertaken as per the Statutory Biodiversity Metric User Guide (Defra 2024a).

The habitats identified during the walkover survey were compared to current and historic satellite imagery (including Google Earth Pro and Google Maps) to assess whether degradation has occurred between 30 January 2020 and the date of the survey. Where degradation has occurred in this timeframe, the habitats on Site immediately prior to the degradation was used as the baseline for the Site in line with government guidance.

The Site was divided up into distinct habitat parcels and linear features based on UKHab and Statutory Biodiversity Metric classifications and measured accordingly using the QGIS mapping tool. Where appropriate, individual trees that have been included within the metric calculations are represented using point symbols superimposed over area habitats. Their area has been calculated and included within the metric as per the Statutory Biodiversity Metric User Guide (ref: Appendix 8.3 – 1795-SBM-CM). All condition criteria information has been included in the User Comments of the baseline tab for all habitats for which a condition assessment is required.

The area of each habitat to be created, retained, and/or enhanced, as measured from the Illustrative Landscape Strategy in QGIS, was entered into the metric. These were then each given an appropriate target condition and strategic significance score.

The baseline BNG plan is shown in **Figure 1** and the indicative post-development BNG plan is shown in **Figure 2**.

Strategic Significance

The strategic significance score represents the local significance of the habitat based on its location and habitat type and is considered separately for each individual habitat. The value is determined by referring to

the relevant Local Nature Recovery Strategy (LNRS). Where this has not yet been published, LPA biodiversity and green infrastructure strategies that apply to the site have been referred to. Due to the Site and habitats not being located within a LNRS/ an area that has formerly been identified in a local strategy, all habitats were considered to have **Low** strategic significance.

Biodiversity Metric Principles

The Biodiversity Metric Principles have informed the assessment as per **Table 2.1**:

Table 2.1: Application of the Biodiversity Metric Principles

Principle	Application
Principle 1 - The metric assessment should be completed by a competent person	The metric was completed by an ecologist trained and experienced in the use of the metric.
Principle 2 - The use of this biodiversity metric does not override existing biodiversity protections, statutory obligations, policy requirements, ecological mitigation hierarchy or any other requirements. This includes consenting or licensing processes, for example woodlands	All other legislative and policy requirements have been met. See the ES Chapter 8 for further details (ref: 1795-ES-LT).
Principle 3 - This biodiversity metric should be used in accordance with established good practice guidance and professional codes	The latest User Guide and good practice guidance (including information within Planning Practice Guidance) has been followed.
Principle 4 - This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice	An ES has been produced taking into account all other ecological considerations on site.
Principle 5 - Biodiversity units are a proxy for biodiversity and should be treated as relative values	An ES has been produced taking into account all other ecological considerations on site and the requirements for species have been incorporated into the design.
Principle 6 - This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance	An ES has been produced taking into account all ecological considerations on site, including local requirements using survey and desk study data, with the metric used to show how habitat creation and enhancement is contributing to providing an uplift in biodiversity value of the Site, as required by the Environment Act.
Principle 7 - Habitat interventions need to be realistic and deliverable within a relevant project timeframe	The habitats proposed to be enhanced/ created have been specified based on site specific circumstances, including how these will likely be utilised and managed in the future. As such a precautionary approach has been taken to suggesting habitats to be created post-development and condition assessment.
Principle 8 - Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation	All habitat creation is taking place within the development site.
Principle 9 - This biodiversity metric does not enforce a minimum habitat	Proposed habitats have been designed to link to existing landscape features, including watercourses and hedgerows, to

Principle	Application
size ratio for compensation of losses. Proposals should aim to: *- maintain habitat extent -* *supporting more, bigger, better and more joined up ecological networks* *- ensure that proposed or retained habitat parcels are of sufficient size for ecological function*	enhance existing ecological networks. Significant landscape buffers of other neutral grassland and mixed scrub are proposed to offset area losses of this habitat and to maintain ecologically functional areas for species e.g. reptiles and bat foraging.

Assumptions

The following assumptions were made to complete the calculations:

- It is assumed that there will be a delay of two years between loss and creation of habitat.
- It is assumed the measures in the CEMP and HMMP will be followed to ensure that the proposed habitat retention, creation and enhancements are achievable.
- Tree size and status was estimated based on information collected during the PEA. This may need to be updated in line with detailed arboricultural information once available.

Limitations

There were no limitations associated with the site survey or baseline BNG calculations.

Appendix 3 – Rivers & Streams Biodiversity Net Gain Assessment

Desk Study

A desk-based survey was undertaken prior to the Site survey to establish the historic nature of the watercourse present, using historic OS maps and LiDAR that illustrate the topography of the Site (accessed via the National Library of Scotland: https://maps.nls.uk/).

Site Assessment

The Site was surveyed on 30 April 2024, comprising a River Condition Assessment using the Modular River Survey (MoRPh) (Gurnell et al., 2022). The assessment was undertaken using the MoRPh5 Survey Protocol by surveyor/s Lindsay Taylor BSc MSc ACIEEM, who is accredited to use the MoRPh5 approach, with assistance from Anna Galvin BSc MSc.

The survey area required is a minimum of 20% of the watercourse length that is either within or adjacent to the Site, ensuring all distinctive sections of the watercourse are included. This includes sections with distinctly varied features, condition and encroachment, and includes sections that will likely be impacted and/ or enhanced by the proposals.

The total length of the watercourse on Site (including 10m from the Site boundary) is 490m. The minimum survey length is therefore 98m. As the average width of the watercourse is <5m, two MoRPh5 sub-reaches consisting of 5 modules of 10m (a total length of 50m) was required to meet the minimum 20% survey requirement. The habitats along the length of the watercourse were homologous, therefore one sub-reach was surveyed in each field (F1 and F2), encompassing the existing culverts, as per the guidance. Locations of the sub reach are shown on **Figure 3**.

River Type Assessment

A desk-based River Type assessment was undertaken using Google Earth and data was input into the Cartographer portal (https://ge.cartographer.io). The results of the river type assessment were combined with the site assessment data to provide a final condition assessment for each section.

In addition to the condition assessment, watercourse and riparian zone encroachment were also included in the metric based on conditions recorded at the time of the survey.

Baseline Biodiversity Metric Methodology

The condition assessment results were entered for each section separately into the Statutory BNG metric which was undertaken as per the Statutory Biodiversity Metric User Guide (Defra 2024).

In addition to the condition assessment, watercourse and riparian zone encroachment were also included in the metric based on conditions recorded at the time of the survey.

Strategic significance

The strategic significance score represents the local significance of the habitat based on its location and habitat type. The value is determined by referring to catchment management plans and river strategies in the Local Nature Recovery Strategy (LNRS), where available. Although the Site is located within an area that has a catchment management plan, there is no active management of the watercourse in line with the plan, and therefore the river was considered to have **Low** strategic significance.

Limitations

There were no limitations associated with the site survey or baseline BNG calculations.

Post-development Biodiversity Metric Methodology

The impacts of the proposals on the watercourse as presented in the Planning Layout (Bloor Homes Ref: SW164-PD-1001P) were assessed using the Cartographer portal. The features of each section of watercourse were altered where impacts were predicted (negative impacts from in-channel or riparian zone interventions and positive impacts from enhancements).

Assumptions

The following assumptions were made to complete the calculations:

- Natural development of riparian features through hydrological effects via the removal of Culvert 2 will naturalise the river further and are accounted for in the calculations;
- No planting of aquatic marginal vegetation has been included in the calculation as colonisation from aquatic vegetation upstream will take place naturally;
- Vegetation on the bankside will not be allowed to encroach the river channel and block flow or over-shade;
- The flow rate may decrease due to the drainage strategy and installation of a wet attenuation basin however this is not expected to cause a significant impact to the watercourse;
- All habitat management, both riparian and within the channel, will be detailed in the HMMP and undertaken by the appointed management team;
- The design and landscaping will be acceptable to the Environment Agency;
- A sealed surface footpath/ cycleway will be present within the 10m bank top;
- Substrate run off from the surrounding area will not take place due to the drainage strategy to be implemented, with no expected increase in siltation of the watercourse; and
- Full mitigation measures will be put in place during construction to prevent pollution incidents.

Limitations

- Whilst the metric predicts that time to target condition is 5 years for enhancement of the watercourse, full establishment of bank top, bank face and channel margin vegetation (in particular trees) is expected to take longer than this, in line with time to target condition in the terrestrial sections of the metric.
- The enhancements targeted have been devised based on knowledge of the Site gained through detailed site survey at a single point in time as well as historic and current mapping and aerial imagery, including predictions based on current understanding of riverine ecology and morphology. However, as watercourses dependant on groundwater levels are dynamic systems that are subject to change over time due to surrounding land use as well as climate, the changes remain predictions only and there will need to be flexibility in adapting the approach and targeted indices to account for this.

Baseline Results

The river has been assessed as a straight/sinuous river in overall 'Fairly Poor condition', comprising 5.0 watercourse units. The southern section of the watercourse is very straight, suggesting the watercourse has been heavily modified in the past, likely for agricultural reasons. A more sinuous form appears in the northern section where, at the boundary of the Site, it continues along field boundaries. A description of each section is provided in **Table 3.1**. Detailed data for each of the 32 indices is available on request.

Table 3.1: Summary of the MoRPh5 surveys for each section surveyed

Section Description and Condition	Indicative Photograph
Sub-reach 1 (Fairly Poor condition) The riverbanks are predominantly free of structural vegetation, dominated by short/ creeping grasses/ herbs with occasional taller herbs. The 10m riparian zone on both sides is dominated by agriculturally grazed grassland. The bank face is composed predominantly of earth except for artificial materials where the existing culvert is located. The channel bed is composed of earth with occasional small areas of gravel/ pebble.	Upstream:  Downstream: 
Sub-reach 2 (Fairly Poor condition) – Similar to Sub-reach 1. The riverbanks are predominantly free of structural vegetation, dominated by short/ creeping grasses/ herbs with occasional taller herbs. The 10m riparian zone on both sides is dominated by agriculturally grazed grassland. The bank face is composed predominantly of earth except for artificial materials where the existing culvert is located. The channel bed is composed of earth with occasional small areas of gravel/ pebble.	Upstream: 

	Downstream: 

Post-development Results

Following receipt of the Planning Layout (Bloor Homes, 2025), the watercourse was split into three sections in accordance with where the predicted impacts are occurring. The sections are shown on **Figure 4** and referenced in the metric. Note, these sections do not include the 10m of watercourse outside the site that was included in the survey. A summary of the predicted impacts for each section and how this has been included within the metric is provided below:

- Section 1 (210m) - the location of the extension of the existing culvert (Culvert 1) from 3m to 19.5m to create the road crossing in the southern section.
- Section 2 (110m) - the section of the river containing the existing culvert (Culvert 2) in F2 which is scheduled to be removed. The riparian zone will be enhanced by landscaping. Watercourse encroachment has been amended to remove the culvert and riparian encroachment has been amended to include the footpath and LEAP on the western bank which will be within 10m of the bank top. Whilst this does improve the score, it doesn't take this section above the threshold from 'fairly poor' into 'moderate' condition.
- Section 3 (150m) - the location of a new culvert (Culvert 3) to create the road crossing in the northern section.

An overview of the impacts and enhancement actions proposed to be undertaken in each section is provided in **Table 2.2,** and the effects on each MoRPH index shown in **Table 2.3**.

Table 2.2: River Impacts, Compensation and Enhancement within the Riparian Zone for each MoRPh Index

	Index Description	Objective	Action	Prescription
Bank top	*B1 – Bank top vegetation structure*	Improve species diversity for invertebrates and provide a functioning corridor though the Site.	Planting of native mixed scrub and trees.	Mixed scrub - Plant holly, elder, hawthorn, blackthorn, hazel of local provenance. Trees – Plant individual scattered trees throughout the riparian zone. Native species such as field maple, willow, elder and alder. Planting in line with landscaping plan.
	B2 – Bank top tree feature richness	Improve habitat for invertebrates, riverine fauna	N/A	Allow to develop naturally.
	B3 – Bank top water-related features	N/A	N/A	N/A
	B4 – Bank top NNIPS cover	No presence of non-native invasive species.	Ensure invasive species do not colonise.	Monitor in line with HMMP.
	B5 – Bank top managed ground cover	Footpath to be created within riparian zone. Vegetation around hardstanding to be managed for wildlife. Create variety in sward height.	Area of footpath to be minimised where possible. Allow grassland to grow longer around margins with some shorter areas.	Adhere to landscape plan and HMMP and provide areas of tussocky grassland at bank top and in and around shrubs.
Bank face	*C1* - Bank face riparian vegetation structure	Improve species diversity for invertebrates through natural regeneration.	N/A	N/A
	C2 - Bank face tree feature richness	Improve habitat for invertebrates and riverine fauna through natural regeneration.	N/A	N/A
	C3 - Bank face natural bank profile extent	Other than the bridged sections and where the culvert is being removed, all banks to retain existing profiles.	Where culvert is being removed, banks to be reprofiled as per the existing banks.	Existing banks to be buffered, protected with temporary fencing and the profile retained. Use a digger to re-profile culverted section in line with existing banks.
	C4 - Bank face natural bank profile richness	N/A	N/A	Buffer, protect with temporary fencing and retain profile.

	Index Description	Objective	Action	Prescription
	C5 - Bank face natural bank material richness	N/A	N/A	Buffer, protect with temporary fencing and retain profile.
	C6 - Bank face bare sediment extent	N/A	N/A	Buffer, protect with temporary fencing and retain profile.
	C7 - Bank face artificial bank profile extent	N/A	N/A	Buffer, protect with temporary fencing and retain profile.
	C8 - Bank face reinforcement extent	N/A	N/A	Only use reinforcement where necessary.
	C9 - Bank face reinforcement material severity	N/A	N/A	Use coir or willow planting if reinforcement required in the future.
	C10 - Bank face NNIPS cover	No presence of non-native invasive species.	Ensure invasive species do not colonise.	Monitor in line with HMMP.
Channel-water margin	*D1* - Channel margin aquatic vegetation extent	Improve density and species diversity through natural regeneration.	Allow marginal vegetation species to colonise from upstream.	Allow to develop naturally.
	D2 - Channel margin aquatic morphotype richness	Improve density and species diversity.	Allow marginal vegetation species to colonise from upstream.	Allow to develop naturally.
	D3 - Channel margin physical feature extent	Other than the bridged sections and where the culvert is being removed, all banks to retain existing profiles.	Retain all features.	Buffer, protect with temporary fencing and retain profile.
	D4 - Channel margin physical feature richness	Retain feature richness.	Retain all features.	Buffer, protect with temporary fencing and retain profile.
Channel Bed	*E1 - Channel aquatic morphotype richness*	Retain feature richness.	Retain all features.	N/A
	E2 - Channel bed tree features richness	Retain feature richness.	Retain all features.	N/A
	E3 - Channel bed hydraulic features richness	Retain feature richness.	Retain all features.	N/A
	E4 - Channel bed natural features extent	Retain feature richness.	Retain all features.	N/A

Index Description	Objective	Action	Prescription
E5 - Channel bed natural features richness	Retain feature richness.	Retain all features.	N/A
E6 - Channel bed material richness	Retain feature richness.	Retain all features.	N/A
E7 - Channel bed siltation	Retain feature richness.	Retain all features.	N/A
E8 - Channel bed reinforcement extent	Retain feature richness.	Retain all features.	No reinforcement of the channel bed.
E9 - Channel bed reinforcement severity	Retain feature richness.	Retain all features.	No reinforcement of the channel bed.
E10 - Channel bed artificial features severity	Section 1 – culvert to be extended to make way for road crossing. Section 2 – culvert to be opened up and re-profiled to match existing banks. Section 3 – culvert to be extended to make way for road crossing.	Implement as per Planning Layout and Landscape Strategy.	Implement in accordance with CEMP.
E11 - Channel bed NNIPS extent	No presence of non-native invasive species.	Ensure invasive species do not colonise.	Monitor in line with HMMP.
E12 - Channel bed filamentous algae extent	No presence of filamentous algae.	Ensure filamentous algae does not colonise.	Monitor and manage in line with HMMP.

Table 2.3 – Watercourse Impacts as a Result of the Development

River Condition Assessment Indices *Green = positive indicators* *Red = negative indicators*		***Sub-reach 1*** *Green = positive impact* *Red = negative impact* *White = No change*		***Sub-reach 2*** *Green = positive impact* *Red = negative impact* *White = No change*		
		Baseline	***Post-Development (Section 1)***	***Baseline***	***Post-Development (Section 2)***	***Post-Development (Section 3)***
Bank Top	*B1 – Bank top vegetation structure*	*1*	*3*	*1*	*3*	*3*
	B2 – Bank top tree feature richness	*0*	*0*	*0*	*0*	*0*
	B3 – Bank top water-related features	*0*	*0*	*0*	*0*	*0*
	B4 – Bank top NNIPS cover	*0*	*0*	*0*	*0*	*0*
	B5 – Bank top managed ground cover	*-2*	*-2*	*-2*	*-4*	*-4*
Bank Face	*C1* - Bank face riparian vegetation structure	*1*	*1*	*1*	*1*	*1*
	C2 - Bank face tree feature richness	*0*	*0*	*0*	*0*	*0*
	C3 - Bank face natural bank profile extent	*3*	*3*	*3*	*3*	*3*
	C4 - Bank face natural bank profile richness	*2*	*2*	*2*	*2*	*2*
	C5 - Bank face natural bank material richness	*1*	*1*	*1*	*1*	*1*

River Condition Assessment Indices *Green = positive indicators* *Red = negative indicators*		***Sub-reach 1*** *Green = positive impact* *Red = negative impact* *White = No change*		***Sub-reach 2*** *Green = positive impact* *Red = negative impact* *White = No change*		
		Baseline	***Post-Development (Section 1)***	***Baseline***	***Post-Development (Section 2)***	***Post-Development (Section 3)***
	C6 - Bank face bare sediment extent	*1*	*1*	*1*	*1*	*1*
	C7 - Bank face artificial bank profile extent	*0*	*0*	*0*	*0*	*0*
	C8 - Bank face reinforcement extent	*-1*	*-1*	*-1*	*-1*	*-1*
	C9 - Bank face reinforcement material severity	*-2*	*-2*	*-2*	*-2*	*-2*
	C10 - Bank face NNIPS cover	*0*	*0*	*0*	*0*	*0*
Channel / Water Margin	*D1* - Channel margin aquatic vegetation extent	*0*	*0*	*1*	*1*	*1*
	D2 - Channel margin aquatic morphotype richness	*0*	*0*	*0*	*0*	*0*
	D3 - Channel margin physical feature extent	*0*	*0*	*0*	*0*	*0*
	D4 - Channel margin physical feature richness	*0*	*0*	*0*	*0*	*0*
	D5 - Channel margin artificial features	*0*	*0*	*-1*	*-1*	*-1*

River Condition Assessment Indices *Green = positive indicators* *Red = negative indicators*		***Sub-reach 1*** *Green = positive impact* *Red = negative impact* *White = No change*		***Sub-reach 2*** *Green = positive impact* *Red = negative impact* *White = No change*		
		Baseline	***Post-Development (Section 1)***	***Baseline***	***Post-Development (Section 2)***	***Post-Development (Section 3)***
Channel Bed	*E1* - Channel aquatic morphotype richness	*2*	*2*	*2*	*2*	*2*
	E2 - Channel bed tree features richness	*0*	*0*	*0*	*0*	*0*
	E3 - Channel bed hydraulic features richness	*0*	*0*	*0*	*0*	*0*
	E4 - Channel bed natural features extent	*0*	*0*	*0*	*0*	*0*
	E5 - Channel bed natural features richness	*0*	*0*	*0*	*0*	*0*
	E6 - Channel bed material richness	*1*	*1*	*2*	*2*	*2*
	E7 - Channel bed siltation	*-4*	*-4*	*-4*	*-4*	*-4*
	E8 - Channel bed reinforcement extent	*0*	*0*	*0*	*0*	*0*
	E9 - Channel bed reinforcement severity	*0*	*0*	*0*	*0*	*0*
	E10 - Channel bed artificial features severity	*-4*	*-**4***	*-4*	*0*	*-4*

River Condition Assessment Indices *Green = positive indicators* *Red = negative indicators*		***Sub-reach 1*** *Green = positive impact* *Red = negative impact* *White = No change*		***Sub-reach 2*** *Green = positive impact* *Red = negative impact* *White = No change*		
		Baseline	***Post-Development (Section 1)***	***Baseline***	***Post-Development (Section 2)***	***Post-Development (Section 3)***
	E11 - Channel bed NNIPS extent	*0*	*0*	*0*	*0*	*0*
	E12 - Channel bed filamentous algae extent	*0*	*0*	*0*	*0*	*0*
	Condition Assessment Score	*-0.36842105*	-0.26316	*-0.3400809*	*-0.08097166*	*-0.38866398*
	Condition Assessment	***Fairly poor***	***Fairly poor***	***Fairly poor***	***Fairly poor***	***Fairly poor***

Appendix 4 – Habitat Condition Assessment Sheets

Parcel /Feature Reference	Condition Criteria							Total score and Condition
	A - There are 6-8 vascular plant species per m^2 present, including at least 2 forbs. This criterion is essential for achieving Moderate or Good condition.	B - Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm).	C - Any scrub present accounts for less than 20% of the total grassland area.	D - Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	E - Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens).	F - Cover of bracken *Pteridium aquilinum* is less than 20%.	G - There is an absence of invasive non-native plant species (as listed on Schedule 9 of WCA).	
F1 – F4	Fail	Fail	Pass	Pass	Pass	Pass	Pass	5/7 Poor Condition (Fails Criterion A)

Table 4.1: Condition Assessment of Low Distinctiveness Grassland

Parcel /Feature Reference	Condition Criteria										Total score and Condition
	A1 - >1.5m average along length	A2 - >1.5m average along length	B1 – Gap between ground and base of canopy <0.5m for >90% of length	B2 - Gaps make up <10% of total length and no canopy gaps >5m	C1 - >1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: - measured from outer edge of hedgerow' and - is present on one side of the hedge (at least)	C2 – Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground	D1 - >90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	D2 - >90% of the hedgerow of undisturbed ground is free of damage caused by human activities	E1 – At least one mature tree per 30m stretch of hedgerow. A mature tree is one that is at least 2/3 expected fully mature height for the species	E2 – At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity	
H1	Pass	Fail	Pass	Pass	Pass	Fail	Pass	Pass	N/A	N/A	6/8 (Good)
H2	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	8/8 (Good)
H3	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	8/8 (Good)
H4	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	7/8 (Good)
H5	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass	9/10 (Good)
H6	Pass	Pass	Pass	Fail	Pass	Pass	Pass	Pass	N/A	N/A	7/8 (Good)
H7	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	8/8 (Good)
H8	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	8/8 (Good)
H9	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	8/8 (Good)
H10	Fail	Fail	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	6/8 (Moderate)
H11	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	7/8 (Good)
H12	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	N/A	N/A	7/8 (Good)
H13	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass	9/10 (Good)
H14	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass	8/10 (Moderate)
H15	Pass	Fail	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass	8/10 (Moderate)
H16	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Fail	Pass	9/10 (Good)

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Ecology
Arboriculture
Land Management

Appendix 8.3 Statutory Biodiversity Metric Calculation Tool

The Statutory Biodiversity Metric

Auditing and accounting for biodiversity

Calculation Tool

Version 1.0.3

Open Tool



The Statutory Biodiversity Metric
Start page

Project details			
Planning authority:	Wiltshire County Council		
Project name:	New Road Farm, Melksham		
Applicant:	Bloor Homes South West		
Application type:	Full		
Planning application reference:			
Completed by:	Chris Merrick		
Date of metric completion:	17 October 2025		
Reviewer:			
Calculation iteration:	1		
Planning authority reviewer:			
Date of planning authority review:			
Target % net gain:	10%		
Irreplaceable habitat present at baseline:	**No ✓**		
Total site area - including irreplaceable habitat area (hectares):	**15.03**	**Irreplaceable habitat site area (hectares):**	**0.00**
Total off-site area - including irreplaceable habitat area (hectares):	**N/A**	**Irreplaceable habitat area off-site (hectares):**	**N/A**

Main menu

Results

Cell style conventions	
⚠	Attention required
▲	Input error/rules and principles not met
	Use of this cell is not appropriate
	Enter data
	Automatic lookup
	Result

View all

Reset view

On-site baseline map — Insert

On-site baseline map reference number	

On-site post intervention map — Insert

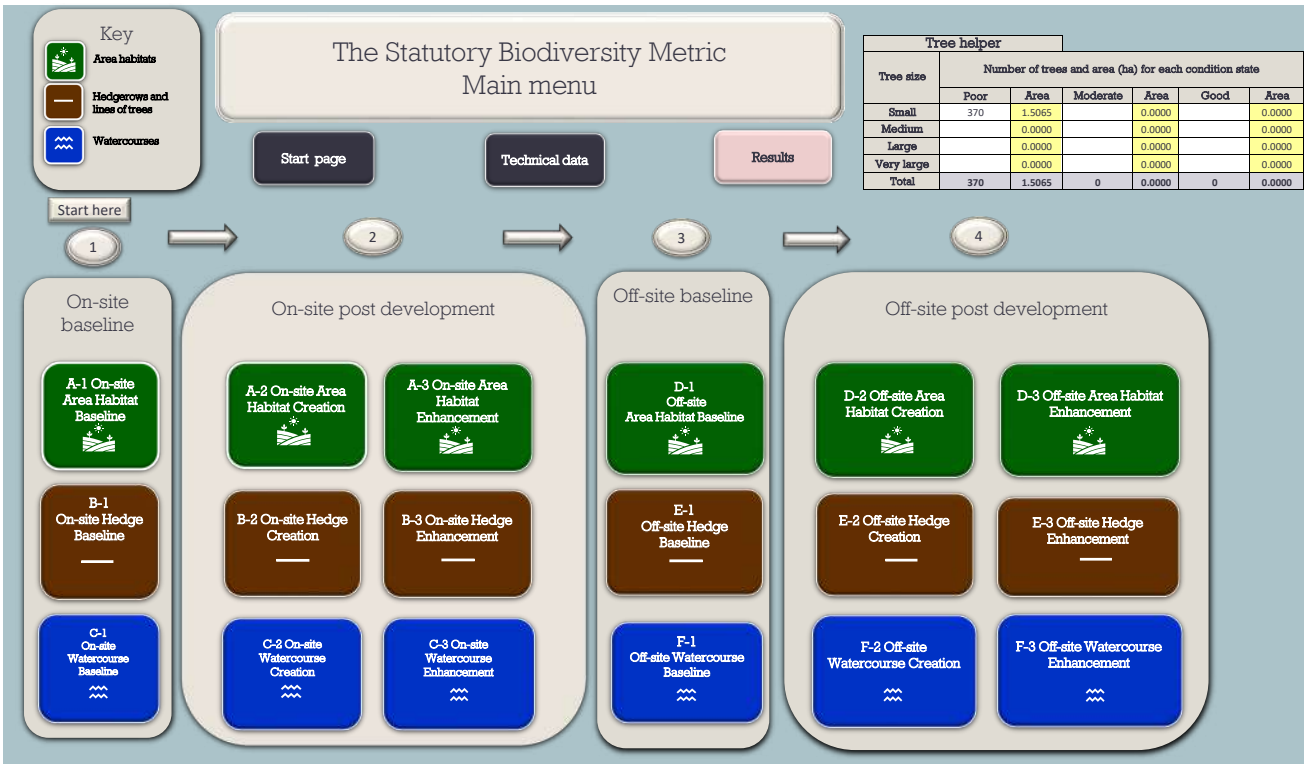
On-site post-intervention map reference number	

Off-site baseline map — Insert

Off-site baseline map reference number	

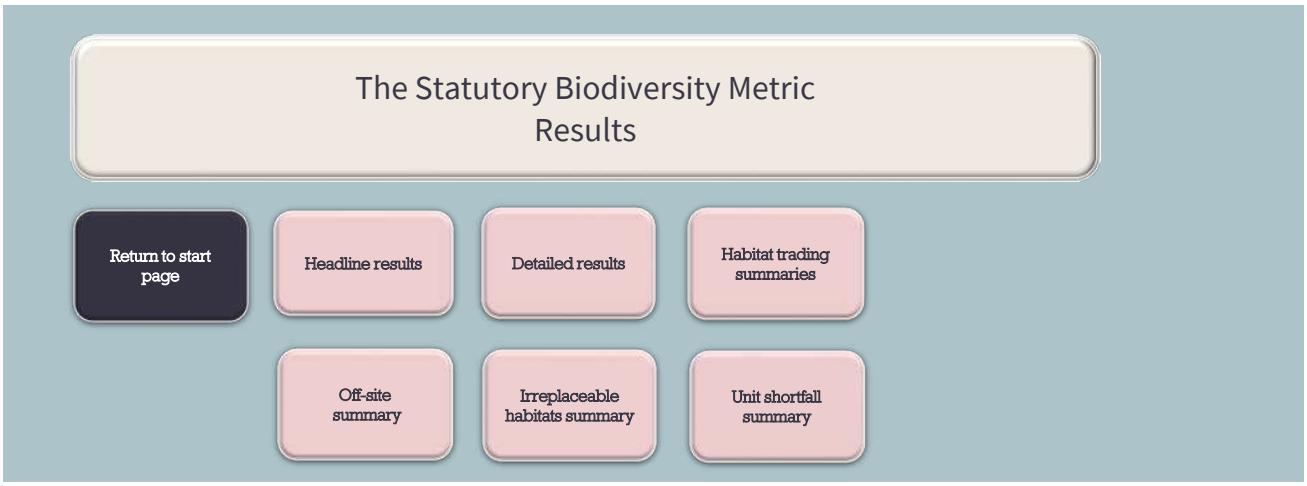
Off-site post intervention map — Insert

Off-site post-intervention reference number	



Tree helper

Tree size	Number of trees and area (ha) for each condition state					
	Poor	Area	Moderate	Area	Good	Area
Small	370	1.5065		0.0000		0.0000
Medium		0.0000		0.0000		0.0000
Large		0.0000		0.0000		0.0000
Very large		0.0000		0.0000		0.0000
Total	370	1.5065	0	0.0000	0	0.0000


The Statutory Biodiversity Metric
Results
Return to start page
Headline results
Detailed results
Habitat trading summaries
Off-site summary
Irreplaceable habitats summary
Unit shortfall summary

New Road Farm, Melksham

Headline Results

Return to results menu

Scroll down for final results ⚠

On-site baseline	*Habitat units*	28.74	
	Hedgerow units	18.17	
	Watercourse units	5.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	33.01	
	Hedgerow units	26.71	
	Watercourse units	5.70	
On-site net change (units & percentage)	*Habitat units*	4.27	14.85%
	Hedgerow units	8.54	47.00%
	Watercourse units	0.70	13.95%
Off-site baseline	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	4.27	
	Hedgerow units	8.54	
	Watercourse units	0.70	
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

FINAL RESULTS

Total net unit change	*Habitat units*	4.27

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)		
	Hedgerow units	8.54
	Watercourse units	0.70

Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)		
	Habitat units	14.85%
	Hedgerow units	47.00%
	Watercourse units	13.95%

Trading rules satisfied?	Yes ✓

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	28.74	31.61	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	18.17	19.99	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	5.00	5.50	0.00	No additional watercourse units required to meet target ✓

New Road Farm, Mollisham

Detailed Results

Return to results menu

Summary Figures

Net project biodiversity units (including all on-site & off-site habitat retention / creation)		
	Habitat units	4.87
	Hedgerow units	1.84
	Watercourse units	0.70

Total project biodiversity % change (including all on-site & off-site habitat creation + retained habitats)		
	Habitat units	14.80%
	Hedgerow units	47.00%
	Watercourse units	11.00%

Combined habitat retention and enhancement

	Habitats	Hedgerows	Watercourses
Total on-site and off-site baseline area / length	33.00	3.91	0.64
Total on-site and off-site baseline units	38.54	10.13	0.66
Total on-site and off-site baseline area / length retained	3.33	0.91	0.00
Total on-site and off-site baseline units retained	3.33	1.91	0.00
Total on-site and off-site area / length proposed for enhancement	0.00	1.99	0.00
Total on-site and off-site baseline units proposed for enhancement	0.00	3.84	0.00
Total on-site and off-site baseline area / length lost	14.60	0.97	0.00
Total on-site and off-site baseline units lost	30.61	1.86	0.00

Area habitats

On-site change by broad habitat type

Habitat group	Baseline: On-site existing area	Baseline: On-site existing value	Post-development on-site: On-site proposed area	Post-development on-site: On-site proposed value	On-site change: On-site area change	On-site change: On-site unit change
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	14.20	28.39	0.00	22.83	-13.37	-5.31
Woodland and shrub	0.00	0.00	0.47	2.93	0.47	2.93
Lakes	0.00	0.00	0.00	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00	0.00	0.00	0.00
Urban	0.00	0.00	0.00	0.00	0.00	0.00
Wetland	0.00	0.00	0.00	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.20	0.00	0.20	0.00	0.00	0.00
Individual trees	0.00	0.10	1.50	4.03	1.50	3.93

Off-site change by broad habitat type

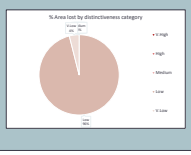
Habitat group	Baseline: Off-site existing area	Baseline: Off-site existing value	Post-development off-site: Off-site proposed area	Post-development off-site: Off-site proposed value	Off-site change: Off-site area change	Off-site change: Off-site unit change
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	0.00	0.00	0.00	0.00	0.00	0.00
Woodland and shrub	0.00	0.00	0.00	0.00	0.00	0.00
Lakes	0.00	0.00	0.00	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00	0.00	0.00	0.00
Urban	0.00	0.00	0.00	0.00	0.00	0.00
Wetland	0.00	0.00	0.00	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.00	0.00	0.00	0.00	0.00	0.00
Individual trees	0.00	0.00	0.00	0.00	0.00	0.00

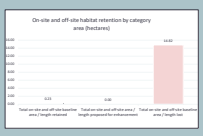
Combined on-site and off-site change by broad habitat type

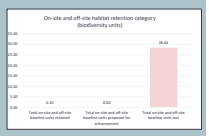
Habitat group	Baseline: Combined existing area	Baseline: Combined existing value	On-site and off-site post-development: Combined proposed area	On-site and off-site post-development: Combined proposed value	Combined change: Combined area change	Combined change: Combined unit change
Cropland	0.00	0.00	0.00	0.00	0.00	0.00
Grassland	14.20	28.39	0.00	22.83	-13.37	-5.31
Woodland and shrub	0.00	0.00	0.47	2.93	0.47	2.93
Lakes	0.00	0.00	0.00	0.00	0.00	0.00
Sparsely vegetated land	0.00	0.00	0.00	0.00	0.00	0.00
Urban	0.00	0.00	0.00	0.00	0.00	0.00
Wetland	0.00	0.00	0.00	0.00	0.00	0.00
Woodland and forest	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal sediment	0.00	0.00	0.00	0.00	0.00	0.00
Coastal saltmarsh	0.00	0.00	0.00	0.00	0.00	0.00
Rocky shore	0.00	0.00	0.00	0.00	0.00	0.00
Coastal lagoons	0.00	0.00	0.00	0.00	0.00	0.00
Intertidal hard structures	0.00	0.00	0.00	0.00	0.00	0.00
Watercourse footprint	0.20	0.00	0.20	0.00	0.00	0.00
Individual trees	0.00	0.10	1.50	4.03	1.50	3.93

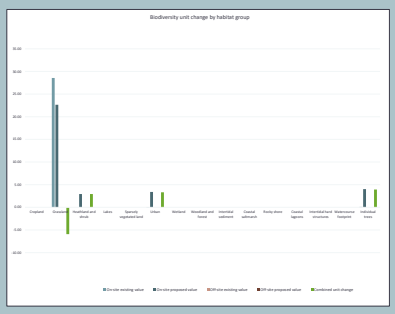
Combined area lost from baseline(s) by distinctiveness band

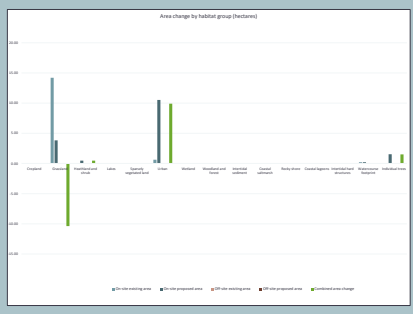
Category	Area lost (hectares)	Area lost (%)
V.High	0	
High	0	
Medium	0	
Low	14.5609	98
V.Low	0.0000	0











Hedgerows and lines of trees

On-site change by hedgerow type

Hedgerow type	Baseline: On-site existing length	Baseline: On-site existing value	Post-development on-site: On-site proposed length	Post-development on-site: On-site proposed value	On-site change: On-site length change	On-site change: On-site unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees	0.00	1.30	0.00	0.00	0.00	-1.17
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.20	0.20	0.21	1.08	0.01	1.19
Ecologically valuable line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.63	0.63	0.00	0.00	-0.63	-0.56
Line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00	0.00	0.00	0.00

Off-site change by hedgerow type

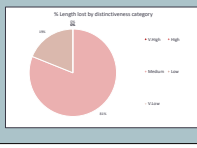
Hedgerow type	Baseline: Off-site existing length	Baseline: Off-site existing value	Post-development off-site: Off-site proposed length	Post-development off-site: Off-site proposed value	Off-site change: Off-site length change	Off-site change: Off-site unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00	0.00	0.00	0.00

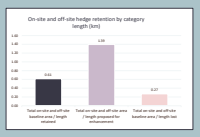
Combined on-site and off-site change by hedgerow type

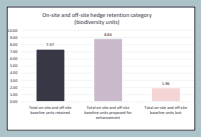
Hedgerow type	Baseline: Combined existing length	Baseline: Combined existing value	Post-development: Combined proposed length	Post-development: Combined proposed value	Change: Combined length change	Change: Combined unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow with trees	0.00	0.00	0.00	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow with trees	0.00	1.30	0.00	0.00	0.00	-1.17
Native hedgerow - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.20	0.20	0.21	1.08	0.01	1.19
Ecologically valuable line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Native hedgerow	0.63	0.63	0.00	0.00	-0.63	-0.56
Line of trees	0.00	0.00	0.00	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00	0.00	0.00	0.00
Non-native and ornamental hedgerow	0.00	0.00	0.00	0.00	0.00	0.00

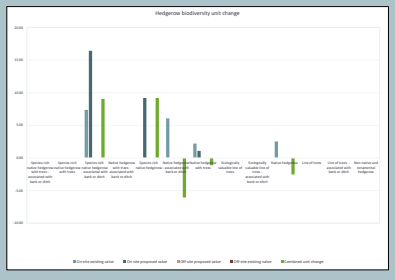
Combined length lost from baseline(s) by distinctiveness band

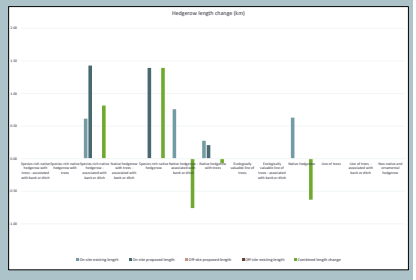
Category	Length lost (km)	Length lost (%)
V.High	0	
High	0	
Medium	0.3000	91
Low	0.001	09
V.Low	0	











Watercourses

On-site change by watercourse type

Watercourse type	Baseline: On-site existing length	Baseline: On-site existing value	Post-development on-site: On-site proposed length	Post-development on-site: On-site proposed value	On-site Change: On-site length change	On-site Change: On-site unit change
Priority habitat	0.0	0.0	0.0	0.0	0.0	0.0
Other rivers and streams	0.0	0.0	0.0	0.0	0.0	0.0
Ditches	0.0	1.3	0.0	0.4	0.0	0.7
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Culvert	0.0	0.0	0.0	0.0	0.0	0.0

Off-site change by watercourse type

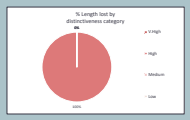
Watercourse type	Baseline: Off-site existing length	Baseline: Off-site existing value	Post-development off-site: Off-site proposed length	Post-development off-site: Off-site proposed value	Off-site Change: Off-site length change	Off-site Change: Off-site unit change
Priority habitat	0.0	0.0	0.0	0.0	0.0	0.0
Other rivers and streams	0.0	0.0	0.0	0.0	0.0	0.0
Ditches	0.0	0.0	0.0	0.0	0.0	0.0
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Culvert	0.0	0.0	0.0	0.0	0.0	0.0

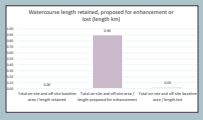
Combined on-site and off-site change by watercourse type

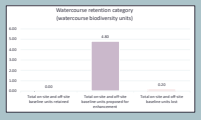
Watercourse type	Baseline: Combined existing length	Baseline: Combined existing value	Post-development on-site: Combined proposed length	Post-development on-site: Combined proposed value	On-site change: Combined length change	On-site change: Combined unit change
Priority habitat	0.0	0.0	0.0	0.0	0.0	0.0
Other rivers and streams	0.0	0.0	0.0	0.0	0.0	0.0
Ditches	0.0	1.3	0.0	0.4	0.0	0.7
Canals	0.0	0.0	0.0	0.0	0.0	0.0
Culvert	0.0	0.0	0.0	0.0	0.0	0.0

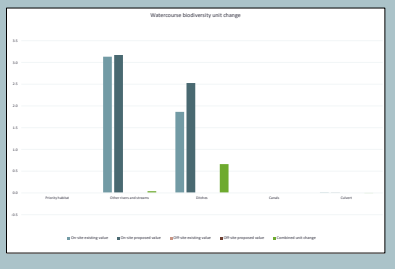
Combined length lost from baseline(s) by distinctiveness band

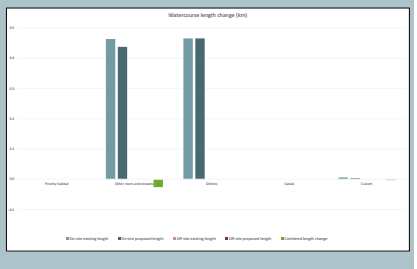
Category	Length lost (km)	Length lost (%)
V.High	0	
High	0.000	100
Medium	0	
Low	0	











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Trading summary hedgerows

Trading summary watercourses

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Same habitat required – bespoke compensation option ⚠	Yes ✓
High	Same habitat required =	Yes ✓
Medium	Same broad habitat or a higher distinctiveness habitat required (2x)	Yes ✓
Low	Same distinctiveness or better habitat required ≥	Yes ✓

Very High Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change	Unit losses
Grassland - Lowland dry acid grassland	Grassland	0.00	0.00	0.00	
Grassland - Lowland meadows	Grassland	0.00	0.00	0.00	
Grassland - Upland hay meadows	Grassland	0.00	0.00	0.00	
Heathland and shrub - Mountain heaths and willow scrub	Heathland and shrub	0.00	0.00	0.00	
Lakes - Aquifer fed naturally fluctuating water bodies	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Calaminarian grasslands	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Limestone pavement	Sparsely vegetated land	0.00	0.00	0.00	
Wetland - Blanket bog	Wetland	0.00	0.00	0.00	
Wetland - Depressions on peat substrates (H7150)	Wetland	0.00	0.00	0.00	
Wetland - Fens (upland and lowland)	Wetland	0.00	0.00	0.00	
Wetland - Lowland raised bog	Wetland	0.00	0.00	0.00	
Wetland - Oceanic valley mire[1] (D2.1)	Wetland	0.00	0.00	0.00	
Wetland - Purple moor grass and rush pastures	Wetland	0.00	0.00	0.00	
Wetland - Transition mires and quaking bogs (H7140)	Wetland	0.00	0.00	0.00	
Woodland and forest - Wood-pasture and parkland	Woodland and forest	0.00	0.00	0.00	
Rocky shore - High energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock - on peat, clay or chalk	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass on peat, clay or chalk	Intertidal sediment	0.00	0.00	0.00	
		0.00	**0.00**	**0.00**	**0.00**

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses; Like for like not satisfied	0.00

High Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project-wide unit change	Losses not yet accounted for
Grassland - Traditional orchards	Grassland	0.00	0.00	0.00	
Grassland - Floodplain wetland mosaic and CFGM	Grassland	0.00	0.00	0.00	
Grassland - Lowland calcareous grassland	Grassland	0.00	0.00	0.00	
Grassland - Tall herb communities (H6430)	Grassland	0.00	0.00	0.00	
Grassland - Upland calcareous grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Lowland Heathland	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Dunes with sea buckthorn (H2160)	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Upland heathland	Heathland and shrub	0.00	0.00	0.00	
Lakes - High alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Low alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Marl lakes	Lakes	0.00	0.00	0.00	
Lakes - Moderate alkalinity lakes	Lakes	0.00	0.00	0.00	
Lakes - Peat lakes	Lakes	0.00	0.00	0.00	
Lakes - Ponds (priority habitat)	Lakes	0.00	0.00	0.00	
Lakes - Temporary lakes ponds and pools (H3170)	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Coastal sand dunes	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Coastal vegetated shingle	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Inland rock outcrop and scree habitats	Sparsely vegetated land	0.00	0.00	0.00	
Sparsely vegetated land - Maritime cliff and slopes	Sparsely vegetated land	0.00	0.00	0.00	
Urban - Open mosaic habitats on previously developed land	Urban	0.00	0.00	0.00	
Wetland - Reedbeds	Wetland	0.00	0.00	0.00	
Woodland and forest - Felled/Replacement for felled woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland beech and yew woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Lowland mixed deciduous woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Native pine woodlands	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland birchwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland mixed ashwoods	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Upland oakwood	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Wet woodland	Woodland and forest	0.00	0.00	0.00	
Coastal lagoons - Coastal lagoons	Coastal lagoons	0.00	0.00	0.00	
Rocky shore - High energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Moderate energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Low energy littoral rock	Rocky shore	0.00	0.00	0.00	
Rocky shore - Features of littoral rock	Rocky shore	0.00	0.00	0.00	
Intertidal sediment - Littoral mud	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00	
Coastal saltmarsh - Saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Mussels	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral biogenic reefs - Sabellaria	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Features of littoral sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral muddy sand	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral seagrass	Intertidal sediment	0.00	0.00	0.00	
		0.00	**0.00**	**0.00**	**0.00**

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses; Like for like not satisfied	0.00

Medium Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change	Cumulative broad habitat change
Cropland - Arable field margins cultivated annually	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins game bird mix	Cropland	0.00	0.00	0.00	0.00
Cropland - Arable field margins pollen and nectar	Cropland	0.00	0.00	0.00	
Cropland - Arable field margins tussocky	Cropland	0.00	0.00	0.00	
Grassland - Other lowland acid grassland	Grassland	0.00	0.00	0.00	
Grassland - Other neutral grassland	Grassland	21.34	0.00	21.34	21.34 ✓
Grassland - Upland acid grassland	Grassland	0.00	0.00	0.00	
Heathland and shrub - Blackthorn scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Bramble scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Gorse scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hawthorn scrub	Heathland and shrub	0.00	0.00	0.00	2.93 ✓
Heathland and shrub - Willow scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Hazel scrub	Heathland and shrub	0.00	0.00	0.00	
Heathland and shrub - Mixed scrub	Heathland and shrub	2.93	0.00	2.93	
Lakes - Ponds (non-priority habitat)	Lakes	0.00	0.00	0.00	0.00
Lakes - Reservoirs	Lakes	0.00	0.00	0.00	
Sparsely vegetated land - Other inland rock and scree	Sparsely vegetated land	0.00	0.00	0.00	0.00
Urban - Cemeteries and churchyards	Urban	0.00	0.00	0.00	0.00
Urban - Biodiverse green roof	Urban	0.00	0.00	0.00	
Individual trees - Urban tree	Individual trees	3.93	0.00	3.93	3.93 ✓
Individual trees - Rural tree	Individual trees	0.00	0.00	0.00	
Woodland and forest - Other Scot's pine woodland	Woodland and forest	0.00	0.00	0.00	
Woodland and forest - Other woodland: broadleaved	Woodland and forest	0.00	0.00	0.00	0.00
Woodland and forest - Other woodland: mixed	Woodland and forest	0.00	0.00	0.00	
Intertidal sediment - Littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00	
Intertidal sediment - Littoral sand	Intertidal sediment	0.00	0.00	0.00	0.00
Intertidal hard structures - Artificial hard structures with integrated greening of grey infrastructure (IGGI)	Intertidal hard structures	0.00	0.00	0.00	
		28.20	**0.00**	**28.20**	

Medium Distinctiveness Summary

Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	28.20 ✓
Medium Distinctiveness Broad Habitat losses to be offset by trading up	0.00
Higher Distinctiveness Surplus Units minus Medium Distinctiveness Broad Habitat Deficit	0.00
Cumulative surplus of units	28.20 ✓

Low Distinctiveness

Habitat group	Group	On-site unit change	Off-site unit change	Project wide unit change
Cropland - Cereal crops	Cropland	0.00	0.00	0.00
Cropland - Horticulture	Cropland	0.00	0.00	0.00
Cropland - Intensive orchards	Cropland	0.00	0.00	0.00
Cropland - Non-cereal crops	Cropland	0.00	0.00	0.00
Cropland - Temporary grass and clover leys	Cropland	0.00	0.00	0.00
Cropland - Winter stubble	Cropland	0.00	0.00	0.00
Grassland - Modified grassland	Grassland	27.28	0.00	27.28 ⚠
Grassland - Bracken	Grassland	0.00	0.00	0.00
Heathland and shrub - Rhododendron scrub	Heathland and shrub	0.00	0.00	0.00
Lakes - Ornamental lake or pond	Lakes	0.00	0.00	0.00
Sparsely vegetated land - Ruderal/ephemeral	Sparsely vegetated land	0.00	0.00	0.00
Sparsely vegetated land - Tall forbs	Sparsely vegetated land	0.00	0.00	0.00
Urban - Bioswale	Urban	0.00	0.00	0.00
Urban - Bare ground	Urban	0.08	0.00	0.08 ⚠
Urban - Allotments	Urban	0.24	0.00	0.24 ✓
Urban - Facade-bound green wall	Urban	0.00	0.00	0.00
Urban - Ground based green wall	Urban	0.00	0.00	0.00
Urban - Ground level planters	Urban	0.00	0.00	0.00
Urban - Other green roof	Urban	0.00	0.00	0.00
Urban - Intensive green roof	Urban	0.00	0.00	0.00
Urban - Introduced shrub	Urban	0.00	0.00	0.00
Urban - Rain garden	Urban	0.00	0.00	0.00
Urban - Actively worked sand pit quarry or open cast mine	Urban	0.00	0.00	0.00
Urban - Sustainable drainage system	Urban	0.00	0.00	0.00
Urban - Vacant or derelict land	Urban	0.00	0.00	0.00
Urban - Vegetated garden	Urban	3.16	0.00	3.16 ✓
Woodland and forest - Other coniferous woodland	Woodland and forest	0.00	0.00	0.00
Coastal saltmarsh - Artificial saltmarshes and saline reedbeds	Coastal saltmarsh	0.00	0.00	0.00
Intertidal sediment - Artificial littoral coarse sediment	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mud	Intertidal sediment	0.00	0.00	0.00

Low Distinctiveness Summary

Low Distinctiveness net change in units	-23.93 ⚠
Cumulative surplus of units	4.27 ✓

Intertidal sediment - Artificial littoral sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral muddy sand	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral mixed sediments	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral seagrass	Intertidal sediment	0.00	0.00	0.00
Intertidal sediment - Artificial littoral biogenic reefs	Intertidal sediment	0.00	0.00	0.00
Intertidal hard structures - Artificial hard structures	Intertidal hard structures	0.00	0.00	0.00
Intertidal hard structures - Artificial features of hard structures	Intertidal hard structures	0.00	0.00	0.00
Heathland and shrub - Other sea buckthorn scrub	Heathland and shrub	0.00	0.00	0.00
		-83.93	**0.00**	**-83.93**

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Trading summary area habitats

Trading summary watercourses

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Same habitat required =	Yes ✓
High	Like for like or better	Yes ✓
Medium	Same distinctiveness or better habitat required	Yes ✓
Low	Same distinctiveness or better habitat required	Yes ✓
Very Low	Same distinctiveness or better habitat required	Yes ✓

Very High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Species-rich native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00
	0.00	0.00	0.00

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00
Remaining losses: like for like not satisfied	0.00

High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow with trees	0.00	0.00	0.00
Species-rich native hedgerow - associated with bank or ditch	9.06	0.00	9.06 ✓
Native hedgerow with trees - associated with bank or ditch	0.00	0.00	0.00
	9.06	0.00	9.06

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	9.06	✓
High Distinctiveness losses to be offset by trading up	0.00	
Higher Distinctiveness surplus units minus any high distinctiveness deficit	0.00	

Medium Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Species-rich native hedgerow	9.19	0.00	9.19 ✓
Native hedgerow - associated with bank or ditch	-6.07	0.00	-6.07 ⚠
Native hedgerow with trees	-1.12	0.00	-1.12 ⚠
Ecologically valuable line of trees	0.00	0.00	0.00
Ecologically valuable line of trees - associated with bank or ditch	0.00	0.00	0.00
	2.00	0.00	2.00

Medium Distinctiveness Summary

Units available from higher distinctiveness habitats	9.06	✓
Medium Distinctiveness net change in units	2.00	✓
Cumulative availability of units	11.07	✓

Low Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Native hedgerow	-2.53	0.00	-2.53 ⚠
Line of trees	0.00	0.00	0.00
Line of trees - associated with bank or ditch	0.00	0.00	0.00
	-2.53	0.00	-2.53

Low Distinctiveness Summary

Low Distinctiveness net change in units	-2.53	⚠
Cumulative availability of units	8.54	✓

Very Low Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change
Non-native and ornamental hedgerow	0.00	0.00	0.00
	0.00	0.00	0.00

Very Low Distinctiveness Summary

Very Low Distinctiveness net change in units	0.00	
Cumulative availability of units	8.54	✓

Return to results menu

Trading summary area habitats

Trading summary hedgerows

Trading Summary

Distinctiveness Group	Trading Rule	Trading Satisfied?
Very High	Same habitat required – bespoke compensation option ⚠	Yes ✓
High	Same habitat required =	Yes ✓
Medium	Same habitat required =	Yes ✓
Low	Better distinctiveness habitat required	Yes ✓

Very High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project-wide unit change
Priority habitat	0.00	0.00	0.00
	0.00	0.00	0.00

Very High Distinctiveness Summary

Very High Distinctiveness Units available to offset lower distinctiveness deficit	0.00	
Remaining losses: Like for like not satisfied	0.00	

High Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project-wide unit change	
Other rivers and streams	0.04	0.00	0.04	✓
	0.04	0.00	0.04	

High Distinctiveness Summary

High Distinctiveness Units available to offset lower distinctiveness deficit	0.04	✓
Remaining losses: Like for like not satisfied	0.00	

Medium Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change	
Ditches	0.68	0.00	0.68	✓
Canals	0.00	0.00	0.00	
	0.68	0.00	0.68	

Medium Distinctiveness Summary

Medium Distinctiveness Units available to offset Lower Distinctiveness Deficit	0.68	✓
Remaining losses: Like for like not satisfied	0.00	

Low Distinctiveness

Habitat group	On-site unit change	Off-site unit change	Project wide unit change	
Culvert	0.00	0.00	0.00	⚠
	0.00	0.00	0.00	

Low Distinctiveness Summary

Low Distinctiveness net change in units	0.00	⚠
Cumulative availability of units	0.70	✓

Project Name: New Road Ferry, Maltedam — Idox Reference

A-1 On-Site Habitat Baseline

Confidential / Show Columns | Condensed / Show Rows

Main Menu

AREA HABITAT SUMMARY

Total Net Unit Change	4.58
Total Net % Change	17.59%
Trading Rules Satisfied	Yes ✓

Please ensure the Quiescence details for any Quiescence Subplots recorded are included in the Quiescence tabs A

Ref	Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Required Actions to Meet Trading Rules	Habitat units
1	Quiescence Subplot	Quiescence Subplot	No	0.001	V.Low	0	N/A – Other	0	Protecting/expanding not on local strategy/ any local strategy	Low Strategic significance	1	Compensation Not Required	0.00
2	Urban	Bare ground	No	0.003	Low	2	Poor	1	Protecting/expanding not on local strategy/ any local strategy	Low Strategic significance	1	Same distinctiveness or better habitat required 2	0.00
3	Urban	Developed land; sealed surface	No	0.003	V.Low	0	N/A – Other	0	Protecting/expanding not on local strategy/ any local strategy	Low Strategic significance	1	Compensation Not Required	0.00
4	Grassland	Modified grassland	No	21.165	Low	2	Poor	1	Protecting/expanding not on local strategy/ any local strategy	Low Strategic significance	1	Same distinctiveness or better habitat required 2	42.33
5	Individual trees	Urban tree	No	0.094	Medium	4	Poor	1	Protecting/expanding not on local strategy/ any local strategy	Low Strategic significance	1	Same distinctiveness or better habitat required 4 or Like for Like Compensation cannot be found	0.37
6	Grassland	Modified grassland	No	0.08	Low	2	Moderate	2	Protecting/expanding not on local strategy/ any local strategy	Low Strategic significance	1	Same distinctiveness or better habitat required 2	0.16

Ref	Area restored	Area enhanced	Baseline units restored	Baseline units enhanced	Area habitat lost	Units lost	Trouble compensation agent for loses of V1000 or irreplaceable habitat	User comments	Planning authority comments	Habitat reference number
1	0.001		0.00	0.00	0.00	0.00		Low Distinctiveness tab for baseline details		
2			0.00	0.00	0.00	0.00				
3			0.00	0.00	0.00	0.00				
4			0.00	0.00	21.16	42.33				
5	0.094		0.37	0.00	0.00	0.00				
6			0.00	0.00	0.08	0.16		Temporary impact - site post-dev tab		

Total habitat area	22.33
Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	22.33

SP to hectare conversion tool	Select a unit	Hectares	SP

Total area lost (excluding area of individual trees, green walls and intertidal hard structures)	24.65

Project Name: New Road Farm, Melksham Map Reference:
A-2 On-Site Habitat Creation

Condense / Show Columns

Condense / Show Rows

Main Menu

Area habitat summary	
Total Net Unit Change	4.27
Total Net % Change	14.85%
Trading Rules Satisfied	Yes ✓
Area Check	Area Acceptable ✓

	Post intervention habitats																							
				Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty multipliers					Comments		
Ref	Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied	Habitat units delivered	User comments	Planning authority comments	Habitat reference number
1	Urban	Artificial unvegetated, unsealed surface	0.1237	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0		2	Standard time to target condition applied	2	0.931	Low	Standard difficulty applied	Low	1	0.00			
2	Urban	Developed land; sealed surface	4.512	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0		2	Standard time to target condition applied	2	0.931	Low	Standard difficulty applied	Low	1	0.00	Residential dwellings and other buildings		
3	Urban	Vegetated garden	1.76	Low	2	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1		2	Check details- Delay in starting habitat in required condition? ⚠	3	0.899	Low	Standard difficulty applied	Low	1	3.16			
4	Grassland	Other neutral grassland	0.6723	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	4.19	Wetland grassland within SUDS		
5	Heathland and shrub	Mixed scrub	0.4704	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	2.93			
6	Grassland	Modified grassland	0.3249	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4		2	Check details- Delay in starting habitat in required condition? ⚠	6	0.808	Low	Standard difficulty applied	Low	1	1.05			
7	Grassland	Other neutral grassland	2.75	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	17.14	Species-rich, wildflower grassland		
8	Urban	Allotments	0.132	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	1		2	Check details- Delay in starting habitat in required condition? ⚠	3	0.899	Low	Standard difficulty applied	Low	1	0.24			
9	Individual trees	Urban tree	1.5065	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10		2	Check details- Delay in starting habitat in required condition? ⚠	12	0.652	Low	Standard difficulty applied	Low	1	3.93			
10	Urban	Developed land; sealed surface	4	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	0		2	Standard time to target condition applied	2	0.931	Low	Standard difficulty applied	Low	1	0.00	Roads and pavements		
11	Grassland	Modified grassland	0.0807	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	4		2	Check details- Delay in starting habitat in required condition? ⚠	6	0.808	Low	Standard difficulty applied	Low	1	0.26	Temporary impact to account for installation of outfall pipe		
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		Total habitat area	16.33																	Total Units	32.91			

Site Area (Excluding area of individual trees, green walls, intertidal hard structures)	14.83

M² to hectares conversion tool:	Select a unit	Hectares	M²

Project Name: New Road Farm, Melksham	Map Reference:
B-1 On-Site Hedge Baseline	

Show/Hide Columns | Show/Hide Rows | Show/Hide Metric

Hedgerow summary	
Total Net Unit Change	8.84
Total Net % Change	47.08%
Trading Rules Satisfied	Yes ✓

Ref	Existing hedgerow habitats			Distinctiveness		Condition		Strategic significance				Habitat baseline	Comments							
	Hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Required Action to Meet Trading Rules	Total hedgerow units	Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost	User comments	Planning authority comments	Habitat reference number
1	H1	Species-rich native hedgerow - associated with bank or ditch	0.225	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	2.70	0.225		4.50	0.00	0.00	0.00			
2	H2	Native hedgerow	0.445	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.78		0.4	0.00	1.60	0.00	0.00			
3	H3	Native hedgerow - associated with bank or ditch	0.184	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.47		0.088	0.00	0.11	0.00	0.00			
4	H4	Native hedgerow - associated with bank or ditch	0.173	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	1.43		0.0994	0.00	0.80	0.08	0.64			
5	H5	Native hedgerow with trees	0.473	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	3.80		0.273	0.00	3.18	0.00	0.00			
6	H6	Native hedgerow - associated with bank or ditch	0.281	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	2.25		0.245	0.00	1.95	0.04	0.39			
7	H7	Species-rich native hedgerow - associated with bank or ditch	0.389	High	6	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Like for like or better	4.67	0.389		4.67	0.00	0.00	0.00			
8	H8	Native hedgerow - associated with bank or ditch	0.115	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.92		0.106	0.00	0.87	0.01	0.09			
9	H9	Native hedgerow	0.04	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.16		0.04	0.00	0.16	0.00	0.00			
10	H10	Native hedgerow	0.133	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.53		0.128	0.00	0.55	0.00	0.00			
11	H11	Native hedgerow	0.005	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.03			0.00	0.00	0.01	0.02			
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			2.88									18.17	0.61	1.38	7.27	8.84	0.37	1.69			

Project Name: New Road Farm, Melksham Map Reference:

B-2 On-Site Hedge Creation

Condense / Show Columns

Condense / Show Rows

Main Menu

Hedgerow summary	
Total Net Unit Change	8.84
Total Net % Change	47.00%
Trading Rules Satisfied	Yes ✓

	Proposed habitats			Distinctiveness		Condition		Strategic significance			Temporal multiplier						Difficulty risk multipliers				Hedge units delivered	Comments		
Ref	New hedge number	Habitat type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Standard Time to target condition (years)	Habitat created in advance (years)	Delay in starting habitat creation (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final time to target multiplier	Standard difficulty of creation	Applied difficulty multiplier	Final difficulty of creation	Difficulty multiplier applied		User comments	Planning authority comments	Habitat reference number
1	H11	Species-rich native hedgerow	0.0568	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	0.35			
2	H12	Species-rich native hedgerow	0.1283	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	0.80			
3	H13	Species-rich native hedgerow	0.0798	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	0.50			
4	H14	Species-rich native hedgerow	0.2179	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	1.36			
5	H15	Species-rich native hedgerow	0.1147	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	0.72			
6	H16	Species-rich native hedgerow	0.0892	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	0.56			
7	H17	Native hedgerow with trees	0.2074	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	10		2	Check details- Delay in starting habitat in required condition? ⚠	12	0.652	Low	Standard difficulty applied	Low	1	1.08			
8	H18	Species-rich native hedgerow	0.1271	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	5		2	Check details- Delay in starting habitat in required condition? ⚠	7	0.779	Low	Standard difficulty applied	Low	1	0.79			
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ject Name: New Road Farm, Melksham   Map Referen

B-3 On-Site Hedge Enhancement

Condense / Show Columns | Condense / Show Rows | Main Menu

Hedgerow Summary	
Total Net Unit Change	8.54
Total Net % Change	47.00%
Trading Rules Satisfied	Yes ✓

Baseline Habitats

Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Baseline strategic significance score	Baseline habitat units	Required Action to Meet Trading Rules
2	Native hedgerow	0.446	Low	2	Moderate	2	Low Strategic	1	1.784	Same distinctiveness band or better
3	Native hedgerow - associated with bank or ditch	0.184	Medium	4	Moderate	2	Low Strategic	1	1.472	Same distinctiveness band or better
4	Native hedgerow - associated with bank or ditch	0.179	Medium	4	Moderate	2	Low Strategic	1	1.432	Same distinctiveness band or better
5	Native hedgerow with trees	0.275	Medium	4	Moderate	2	Low Strategic	1	2.2	Same distinctiveness band or better
6	Native hedgerow - associated with bank or ditch	0.281	Medium	4	Moderate	2	Low Strategic	1	2.248	Same distinctiveness band or better
8	Native hedgerow - associated with bank or ditch	0.115	Medium	4	Moderate	2	Low Strategic	1	0.92	Same distinctiveness band or better
9	Native hedgerow	0.04	Low	2	Moderate	2	Low Strategic	1	0.16	Same distinctiveness band or better
10	Native hedgerow	0.139	Low	2	Moderate	2	Low Strategic	1	0.556	Same distinctiveness band or better

Post Intervention Habitats

Baseline ref	Proposed habitat	Change in distinctiveness and condition: Distinctiveness movement	Change in distinctiveness and condition: Condition movement	Length (km)	Distinctiveness	Distinctiveness Score	Condition	Condition Score	Strategic significance	Strategic significance (category)	Strategic significance multiplier
2	Species-rich native hedgerow	Low - Medium	Lower Distinctiveness Habitat -	0.4	Medium	4	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
3	Species-rich native hedgerow - associated with bank or ditch	Medium - High	Lower Distinctiveness Habitat -	0.089	High	6	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
4	Species-rich native hedgerow - associated with bank or ditch	Medium - High	Lower Distinctiveness Habitat -	0.0994	High	6	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
5	Species-rich native hedgerow - associated with bank or ditch	Medium - High	Lower Distinctiveness Habitat -	0.273	High	6	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
6	Species-rich native hedgerow - associated with bank or ditch	Medium - High	Lower Distinctiveness Habitat -	0.245	High	6	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
8	Species-rich native hedgerow - associated with bank or ditch	Medium - High	Lower Distinctiveness Habitat -	0.109	High	6	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
9	Species-rich native hedgerow	Low - Medium	Lower Distinctiveness Habitat -	0.04	Medium	4	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1
10	Species-rich native hedgerow	Low - Medium	Lower Distinctiveness Habitat -	0.139	Medium	4	Moderate	2	Area/compensation not in local strategy/ no	Low Strategic	1

Baseline ref	Temporal multiplier: Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Difficulty risk multipliers: Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied	Hedge units delivered	Comments: User comments	Planning authority comments	Habitat reference number
2	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	2.85			
3	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	0.99			
4	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	1.11			
5	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	3.03			
6	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	2.72			
8	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	1.21			
9	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	0.28			
10	5		2	Check details- Delay in starting habita	7	0.779	Low	Standard difficulty applied	Low	1	0.99			

Project Name: New Road Farm, Melksham Map

C-1 On-Site WaterC' Baseline

Condense / Show Columns | Condense / Show Rows | Main Menu

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	13.95%
Trading Rules Satisfied	Yes ✓

Existing watercourse type			Distinctiveness		Condition		Strategic significance			Watercourse encroachment		Riparian encroachment		Required Action to Meet Trading Rules	Ecological baseline
Ref	Watercourse type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier	Extent of encroachment	Multiplier	Extent of encroachment for both banks	Multiplier		Total watercourse units
1	Ditches	0.466	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	No Encroachment	1	No Encroachment/ No Encroachment	1	Same habitat required =	1.86
2	Other rivers and streams	0.207	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	No Encroachment	1	Major/Major	0.75	Same habitat required =	1.40
3	Culvert	0.003	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	N/A - Culvert	0.68	N/A - Culvert	1	Better distinctiveness habitat required	0.00
4	Other rivers and streams	0.11	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	No Encroachment	1	Major/Major	0.75	Same habitat required =	0.74
5	Culvert	0.003	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	N/A - Culvert	0.68	N/A - Culvert	1	Better distinctiveness habitat required	0.00
6	Other rivers and streams	0.147	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	No Encroachment	1	Major/Major	0.75	Same habitat required =	0.99
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Ref	Length retained	Length enhanced	Units retained	Units enhanced	Length Lost	Units Lost	Bespoke compensation agreed for losses of VHDH	Comments: User Comments	Planning authority comments	Habitat reference number
1		0.466	0.00	1.86	0.00	0.00				All ditches associated with hedgerows
2		0.195	0.00	1.32	0.01	0.08		Section of watercourse within F2. Riparian zone encroachment - agricultural grazing up to 0.5m from both bank tops		Section 1
3	0.003		0.00	0.00	0.00	0.00		Field entrance culvert		Culvert 1
4		0.11	0.00	0.74	0.00	0.00		Section of watercourse within F4 up to existing crossing Riparian zone encroachment - agricultural grazing up to 0.5m from both bank tops		Section 2
5		0.003	0.00	0.00	0.00	0.00		Field entrance culvert		Culvert 2
6		0.13	0.00	0.88	0.02	0.11		Section of watercourse within F4 from exsiting crossing to boundary. Riparian zone encroachment - agricultural grazing up to 0.5m from both bank tops		Section 3
	0.00	0.90	0.00	4.80	0.03	0.20				

Project Name: New Road Farm, Melksham   Map Reference:

C-3 On-Site WaterC' Enhancement

Condense / Show Columns | Condense / Show Rows | Main Menu

Watercourse summary	
Total Net Unit Change	0.70
Total Net % Change	13.98%
Trading Rules Satisfied	Yes ✓

Baseline habitats

Baseline ref	Baseline habitat	Length (km)	Baseline distinctiveness band	Baseline distinctiveness score	Baseline condition category	Baseline condition score	Baseline strategic significance category	Strategic significance	Baseline strategic significance Score	Required Action to Meet Trading Rules	Baseline habitat units
1	Ditches	0.466	Medium	4	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required =	1.864
2	Other rivers and streams	0.207	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required =	1.39725
4	Other rivers and streams	0.11	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required =	0.7425
5	Culvert	0.003	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Better distinctiveness habitat required	0.00408
6	Other rivers and streams	0.147	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same habitat required =	0.99225

Post-intervention habitats

Baseline ref	Proposed habitat	Change in distinctiveness and condition: Distinctiveness movement	Condition movement	Length (km)	Habitat distinctiveness: Distinctiveness	Score	Habitat condition: Condition	Score	Strategic significance: Strategic significance	Strategic significance	Strategic significance multiplier
1	Ditches	Medium - Medium	Poor - Moderate	0.466	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
2	Other rivers and streams	High - High	Fairly Poor - Fairly Poor	0.195	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
4	Other rivers and streams	High - High	Fairly Poor - Fairly Poor	0.11	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
5	Other rivers and streams	Low - High	Lower Distinctiveness Habitat - Fairly Poor	0.003	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1
6	Other rivers and streams	High - High	Fairly Poor - Fairly Poor	0.13	High	6	Fairly Poor	1.5	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1

Baseline ref	Temporal multiplier: Standard Time to target condition (years)	Habitat enhanced in advance (years)	Delay in starting habitat enhancement (years)	Standard or adjusted time to target condition	Final time to target condition (years)	Final Time to target multiplier	Difficulty multipliers: Standard difficulty of enhancement	Applied difficulty multiplier	Final difficulty of enhancement	Difficulty multiplier applied
1	4		2	Check details- Delay in starting habitat in required condition? ⚠	6	0.808	Low	Standard difficulty applied	Low	1
2	1		5	Check details- Delay in starting habitat in required condition? ⚠	6	0.808	Medium	Standard difficulty applied	Medium	0.67
4	1		5	Check details- Delay in starting habitat in required condition? ⚠	6	0.808	Medium	Standard difficulty applied	Medium	0.67
5	10		5	Check details- Delay in starting habitat in required condition? ⚠	15	0.586	Medium	Standard difficulty applied	Medium	0.67
6	1		5	Check details- Delay in starting habitat in required condition? ⚠	6	0.808	Medium	Standard difficulty applied	Medium	0.67

Baseline ref	Watercourse encroachment: Extent of encroachment	Multiplier	Riparian encroachment: Extent of encroachment for both banks	Multiplier	Watercourse units delivered	User comments
1	No Encroachment	1	Major/Major	0.75	2.53	No encroachment within the ditch channel. Encroachment on boths sides of ditch associated with H3, H4 and H5 via
2	No Encroachment	1	Major/Major	0.75	1.32	Watercourse encroachment = existing culvert to be opened up and replaced by open span bridge so no impedimen to the channel itself. Riparian encroachment = Removal of agricultural grazing within riparian zone however encroachment still major on both sides due to creation of road crossing and footpaths within
4	No Encroachment	1	Major/No Encroachment	0.87	0.86	Watercourse encroachment = existing culvert to be opened up therefore in channel encroachment removed. Riparian encroachment = Major on western bank due to creation of footpath within 10m of the bank top however no encroachment on eastern bank due to removal of agricultural grazing and 10m buffer between bank
5	No Encroachment	1	Major/Major	0.75	0.01	Watercourse encroachment = no in-channel encroachment. Crossing is to be open span bridge. Risprian encroachment = Major on both banks due to creation of road
6	No Encroachment	1	Major/Minor	0.84	0.98	Existing culvert to be opened up and reverted back to river channel. Channel and banks to be enhanced to match surroundings. Watercourse encroachement removed due to opening up of culvert. Riparian encroachment = Major of western bank due to creation of footpath c. 1-5 m of the bank top, and minor on the eastern bank due to developed area created c. 7-10m from

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Appendix 9.1 Landscape and visual base

Land at New Road, Melksham

Landscape and Visual Appraisal

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Bloor Homes South West

December 2025

Report Reference
edp7940_r001e

Document Control

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Report Title	Landscape and Visual Appraisal
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VERSION INFORMATION

	Author	**Formatted**	**Peer Review**	**Proofed by/Date**
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001a	MMm	LLl	WGa	-
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Section 2 Findings of EDP's Data Trawl 7
Section 3 Existing (Baseline) Conditions: Landscape Character 11
Section 4 Existing (Baseline) Conditions: Visual Amenity 18
Section 5 Conclusions and Recommendations 24

APPENDICES

Appendix EDP 1 Methodology: Thresholds and Definitions of Terminology used in this Appraisal

Appendix EDP 2 Figure 9.8 Representative Photoviewpoints (edp7940_d007c 05 November 2024 VMS/LTi)

Appendix EDP 3 Figure 9.9 Cumulative Photoviewpoints (edp7940_d012a 03 December 2025 VMS/LMa)

FIGURES

Figure EDP 9.1: Site Character and Context
(edp7940_d002c 05 November 2024 VMS/WGa)

Figure EDP 9.2: Environmental Planning Context
(edp7940_d003c 05 November 2024 VMS/WGa)

Figure EDP 9.3: Topographical Relief
(edp7940_d004c 05 November 2024 VMS/WGa)

Figure EDP 9.4: Published Landscape Character Assessments
(edp7940_d005c 05 November 2024 VMS/WGa)

Figure EDP 9.5: Findings of Visual Appraisal
(edp7940_d006c 05 November 2024 VMS/WGa)

Figure EDP 9.6: Constraints and Opportunities Plan
(edp7940_d011b 05 November 2024 MMm/LMa)

Figure EDP 9.7: CLVIA Routes and Photoviewpoint Locations
(edp7940_d010b 12 November 2024 Gyo/LMa)

Section 1
Introduction, Purpose and Methodology

INTRODUCTION

1.1 The Environmental Dimension Partnership Ltd (EDP) has been commissioned by Bloor Homes South West (hereafter referred to as 'the applicant') to undertake a Landscape and Visual Appraisal (LVA) of proposals to develop residential development at Land at New Road, Melksham (hereafter referred to as 'the site'). The site falls within Wiltshire Council Local Planning Authority (LPA) area and is briefly described in **Section 2** of this LVA. Full site details are given in the Design and Access Statement (DAS) accompanying the planning application.

1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cheltenham and Cardiff. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website (www.edp-uk.co.uk). EDP is a Registered Practice of the Landscape Institute[1] specialising in the assessment of the effects of proposed development on the landscape.

1.3 This LVA is part of a suite of documents accompanying an outline planning application for the proposed development summarised in **Section 6** of this LVA. The proposal is the development of 295 dwellings including access into the site and associated infrastructure and landscaping. The proposals are illustrated on the Illustrative Masterplan contained at **Appendix EDP 1**.

PURPOSE AND STRUCTURE OF THIS LVA

1.4 The purpose of this LVA is to identify the baseline conditions of the site and surrounding area and to determine those landscape and visual characteristics that might inform the design of the development proposals, including recommendations for mitigation. It then provides an appraisal of landscape and visual effects predicted to arise from development on the site with reference to the baseline analysis.

1.5 In undertaking the assessment described in this LVA, EDP has:

- Undertaken a thorough data trawl of relevant designations and background documents, described in **Section 3**;
- Assessed the existing (baseline) condition and character of the site and its setting, described in **Section 4**;
- Assessed the existing visual (baseline) context, especially any key views to and from the site (**Section 5**). The establishment of baseline landscape and visual conditions,

[1] LI Practice Number 1010

when evaluated against the proposed development, allow the identification and evaluation of landscape effects later in the LVA at **Section 7**;

- Described the landscape aspects of the proposed development that may influence any landscape or visual effects (**Section 6**);
- In **Section 7**, assessed the landscape and visual effects in accordance with the approach described below;
- Reached overall conclusions in **Section 8**; and
- Provided an analysis of the likely landscape and visual effects of the proposed scheme, which is determined by combining the magnitude of the predicted change with the assessed sensitivity of the identified receptors. The nature of any predicted effects is also identified (i.e. positive/negative, permanent/reversible).

METHODOLOGY ADOPTED FOR THE ASSESSMENT

1.6 The proposed development assessed by this LVA is not subject to an Environmental Impact Assessment (EIA). This LVA has, therefore, been undertaken in accordance with the principles embodied in 'Guidelines for Landscape and Visual Impact Assessment – Third Edition (LI/IEMA, 2013)' (GLVIA3) and other best practice guidance insofar as it is relevant to non-EIA schemes.

1.7 **Familiarisation**: EDP's study has included reviews of aerial photographs, web searches, LPA publications and landscape character assessments. EDP has also obtained, where possible, information about relevant landscape and other designations such as National Landscapes (formerly known as Areas of Outstanding Natural Beauty (AONB)), conservation areas, and gardens and parks listed on Historic England's 'Register of Historic Parks and Gardens of Special Historic Interest in England' (RPG).

1.8 **Field Assessment**: EDP has undertaken a comprehensive field assessment of local site circumstances, including a photographic survey of the character and fabric of the site and its surroundings, using photography from a number of representative viewpoints. The field assessment was undertaken by a suitably qualified landscape architect in fine weather in early March 2023. This has provided 'winter' conditions whereby leaf cover was absent, the field assessment enabled an appraisal to be made of the potential worst-case impacts, and it is those which are reported in this LVA.

1.9 **Design Inputs**: EDP's field assessment has informed a process whereby the development proposals have been refined to avoid, minimise or compensate for landscape effects. Such measures are summarised in **Section 6** and form an important part of the LVA process by enabling key constraints and opportunities to be incorporated into the design of the proposals.

1.10 **Assessment Methodology**: Predicted effects on the landscape resource arising from the proposed development (as detailed in **Section 7** of this LVA) have been determined in

accordance with the principles embedded within published best practice guidance insofar as the assessment adopts the following well-established, structured approach:

- Likely effects on landscape character and visual amenity are dealt with separately;
- The assessment of likely effects is reached using a structured methodology for defining sensitivity, magnitude and significance, which is contained as **Appendix EDP 2**. This framework is combined with professional judgement. Professional judgement is an important part of the assessment process; it is neither 'pro' nor 'anti' development but acknowledges that development may result in beneficial change as well as landscape harm;
- As advised in GLVIA3, the appraisal takes into account the effects of any proposed mitigation; and
- Typically, a 15-year time horizon is used as the basis for conclusions about the residual levels of effect. Fifteen years is a well-established and accepted compromise between assessing the shorter-term effects (which may often be rather 'raw' before any proposed mitigation has had time to take effect) and an excessively long time period.

STUDY AREA

1.11 To establish the baseline and potential limit of material effects, the study area has been considered at two geographical scales:

- First, a broad 'study area' was adopted, the extent of which is illustrated on **Figure EDP 9.1**. Based mainly on desk-based study, this broad study area allowed the geographical scope of the assessment to be defined based on the extent of views to/from the site, extent of landscape effects and the site's environmental planning context; and
- Second, following initial analysis and subsequent fieldwork, the broad study area was refined down to the land that is most likely to experience landscape effects. The extent of this detailed study area is 1km from the site boundary, although occasional reference may be made to features beyond this area where appropriate. This detailed study area is illustrated on **Figure EDP 9.1**.

THE SITE

1.12 The site's character and local context is illustrated on the aerial photograph contained as **Figure EDP 9.2**.

1.13 The site is located to the north-east of Melksham and centred on Grid Reference ST 92003 64414. The site comprises 10 irregularly shaped field parcels that are divided by typical managed hedgerows and a small brook that crosses the site. The site is bound by managed hedgerows to the north, east and south. The western boundary is formed by a hedgerow that runs along residential properties and gardens. New Road follows the site's eastern boundary and the A3102 Sandridge Common follows the southern boundary.

Section 2
Findings of EDP's Data Trawl

2.1 The findings of EDP's data trawl of relevant environmental and planning designations are illustrated on **Figure EDP 9.2** and summarised in this section.

BACKGROUND PUBLISHED EVIDENCE BASE DOCUMENTS

2.2 The following documents are relevant and will be discussed as appropriate later in this report:

- National Planning Policy Framework (NPPF; 2024);
- Wiltshire Core Strategy (Adopted January 2015);
- Joint Melksham Neighbourhood Plan (2020);
- West Wiltshire Landscape Character Assessment (2006); and
- Melksham Neighbourhood Plan – Local Landscape Character Assessment (2020).

2.3 There are no further Supplementary Planning Documents (SPD), guidance documents, Village Design Statements or Management Plans which relate to either landscape and visual matters, or Melksham specifically.

FINDINGS OF EDP DATA TRAWL

2.4 EDP has conducted a review of relevant planning policy and landscape designations to identify what 'value' the local authority places on the landscape and what value it has in planning terms. This review focuses on local plan policy since such policy is: (a) more specific to the site; and (b) reflects the advice of regional and national advice regarding landscape issues.

Landscape-related Designations and Other Considerations

2.5 Landscape-related designations and policy considerations within 3km of the site are shown on **Figure EDP 9.2**. In summary:

- National landscape designations: The site does not lie within a nationally designated landscape;
- Local landscape designations: The site is not located within any locally designated landscape; and
- Other landscape-related designations: The site does not lie within any other designated area, such as Green Belt, a green wedge or other policy area.

Heritage Matters

2.6 Heritage assets can influence the visual character of the landscape and enrich its historic value. This LVA addresses heritage assets only insofar as they are components of the wider contemporary landscape – not in terms of their significance and value as heritage assets, which is a matter addressed by a separate Heritage Assessment accompanying this application.

2.7 Within the near study area, the following heritage assets are the principal components of the contemporary landscape relevant to this LVA:

- Melksham Conservation Area lies approximately 980m west of the site;
- Seven listed buildings are located within 1km of the site. These are:
    i. Grade II listed Woodrow House Farmhouse approximately 590m to the north of the site;
    ii. Gate Piers and Garden Walls to Front of Woodrow House Farmhouse approximately 590m north of the site;
    iii. Grade II listed Forest Farmhouse approximately 780m north of the site;
    iv. Grade II listed Granary to Forest Farmhouse;
    v. Grade II listed Blackmore Farm approximately 300m east of the site;
    vi. Grade II listed 8 Church Lane approximately 310m west of the site; and
    vii. Grade II listed Church of St Andrew approximately 400m west of the site.

Ecology Matters

2.8 A separate Ecology Assessment considers the ecological assets on the site and within the study area. There are relatively few ecological designations within the study area. With reference to **Figure EDP 9.2**:

- There are several Sites of Special Scientific Interest (SSSI) more than 2.5km north-east of the site.

Arboricultural Matters

2.9 A separate Arboricultural Baseline Report considers the arboricultural assets on the site and within the study area. The following matters are relevant to the scope of this LVA:

- There are no arboricultural features within the site beyond the boundary hedgerows with intermittent hedgerow tree cover. There are several tree groups and lines of trees within hedgerows within the wider landscape;
- Where the site abuts residential development, there are trees of varying quality and species selection present in back gardens;

- Morast Wood Ancient Woodland lies approximately 1.58km to the east of the site;
- Hanging Wood Ancient Woodland lies approximately 1.54km to the east of the site; and
- Basin Covert Ancient Woodland lies approximately 1.97km to the east of the site.

Public Access and Rights of Way

2.10 As detailed briefly in **Section 2**, a review of the Wiltshire Council online interactive rights of way map reveals the following public rights of way (PRoW) within 1km of the site (refer to **Figure EDP 9.5**):

- The closest PRoW to the site is footpath MELW60, approx. 50m north of the site at its closest point;
- MELW59 approx. 400m north of the site;
- MELW61 approx. 500m north of the site;
- MELW47 approx. 700m north-east of the site;
- MELW40 approx. 550m east of the site;
- MELW26 approx. 200m east of the site;
- MELW27 approx. 250m south-east of the site;
- MELW27 approx. 270m south of the site; and
- Several shorter footpaths exist within the settlement.

2.11 There are no areas of Open Access Land (Countryside and Rights of Way (CRoW) Act 2000) within the detailed study area.

National Planning Policy Framework and Guidance

2.12 The NPPF, updated in 2024, includes planning policies and guidance requiring developers to respond to the natural environment and landscape character, integrating the development into its local surroundings. Under paragraph 187 it requires development to recognise the intrinsic character of the landscape.

Adopted Local Plan (Published)

Wiltshire Core Strategy 2015–2026

2.13 The statutory development plan relevant to the site comprises the Wiltshire Core Strategy 2015–2026, adopted on 20 January 2015. A review of the local planning policy circumstances, including relevant SPD and associated guidelines relevant to this assessment is contained below.

2.14 The following policies in the adopted local plan are considered relevant to this LVA:

- Core Policy 51 – Landscape: Development proposals should "*protect, conserve and where possible enhance landscape character*" and any negative impacts should be appropriately mitigated through "*sensitive design and landscape measures*";
- Core Policy 52 – Green Infrastructure: Development proposals should "*make provision for the retention and enhancement of Wiltshire's green infrastructure network*". Proposals should seek to enhance this by incorporating further links into this network; and
- Core Policy 57 – High Quality Design and Local Distinctiveness: Any development proposal should demonstrate "*a strong sense of place*" and is expected to "*be complementary to the locality*". Proposals should provide a positive response to the local landscape and townscape features.

2.15 An area to the west of the site is designated as a 'Special Landscape Area' (SLA). This policy is a 'saved policy 'from the West Wiltshire Local Plan and included in the Wiltshire Core Strategy. An SLA is defined as an area of locally designated, high landscape quality. The site is not located within the SLA.

Joint Melksham Neighbourhood Plan 2020–2026

2.16 The Joint Melksham Neighbourhood Plan was adopted in July 2021 prepared by Melksham Town and Melksham Without Parish Council. The following policies are relevant to the site in landscape terms:

- Policy 12: Green Infrastructure;
- Policy 13: Biodiversity;
- Policy 16: Trees and Hedgerows; and
- Policy 17: Landscape Character.

Section 3
Existing (Baseline) Conditions: Landscape Character

3.1 This section provides an assessment of the 'baseline' (existing) conditions in respect of the character of the site and its landscape context. It summaries any relevant published landscape assessments that contribute to a better understanding of the landscape context. Such assessments provide a helpful understanding of the landscape context; however, they rarely deliver sufficiently site-specific or the most up-to-date information to draw robust conclusions about the significance of any change proposed by the development. Therefore, EDP has undertaken its own assessment accordingly which covers the site itself. This is included further in this section.

NATIONAL CHARACTER ASSESSMENT

3.2 At the national level, the character of England has been described and classified in the National Character Area (NCA) profiles published by Natural England. The site and its surroundings fall within NCA 117 'Avon Vales'.

3.3 This NCA is described as: "*an undulating, low-lying landscape of mixed, predominantly pastoral agriculture and small limestone-built towns, cut by the River Avon and its tributaries*".

3.4 For the scale of the development proposed on the site, it is considered that the description of landscape character undertaken at the sub-regional level is more relevant in establishing the landscape resource baseline. As such, of much greater use are the more localised assessments described in the following paragraphs.

LOCAL LANDSCAPE CHARACTER ASSESSMENT

Wiltshire County Landscape Character Assessment (2005) and West Wiltshire District Landscape Character Assessment (2006

3.5 The site is covered by both the Wiltshire County Landscape Character Assessment (2005) and the West Wiltshire District Landscape Character Assessment (2007). Whilst there is much overlap between these two documents for the Melksham area, their concluding categorisation of landscape character types differs. For the purposes of this assessment the landscape character is derived from the most recent West Wiltshire Landscape Character Assessment.

3.6 The site falls within Landscape Type (LT) 12: Open Clay Vale, which contains the open lowland centred on the floodplains of the Rivers Thames and Avon.

3.7 The key characteristics of the Open Clay Vale LT are:

- "*Level land form with wide open skies and views to ridges and downs;*
- *Pastoral land use with some arable;*

- *Large scale geometric fields with hedgerows or open drainage channels defining boundaries;*
- *Presence of rivers, tributaries, drainage channels and open water bodies;*
- *Watercourses lined with riparian vegetation with prominent lines of willows (some pollarded);*
- *Floristically rich hay meadows;*
- *Settlement pattern varies from large towns and small scattered villages to sparse farmsteads;*
- *Buildings in varied materials of brick, render and stone;*
- *Crossed by major transport corridors, and a network of minor roads linking settlements;*
- *Historic use for transport evident in canals*."

3.8 This LT is further subdivided into Landscape Character Areas (LCA). These are discrete geographic areas that possess the common characteristics described for the LT. The site lies within LCA 12B: Avon Open Clay Vale, which is described as:

"*Avon Open Clay Vale is an extended area following the course of the River Avon from Great Somerford in the north to Bradford on Avon in the south. As well as the Avon the area is characterised by the presence of other rivers, tributary streams, lakes, and, to the south, the Kennet and Avon Canal. The Avon Open Clay Vale is a level, open area with views to the higher ground of the Limestone Ridge to the east. Land is predominantly intensively managed permanent pasture with some arable and small isolated pockets of meadow (such as Sutton Lane Meadow SSSI). Hedgerows, gappy or low flailed in places, enclose fields of varying size. There are sparse hedgerow trees plus willows lines (some pollarded) marking the waterways and poplar shelter belts. Sections of the area remain rural and tranquil despite major routes travelling through (the M4, A350, A342) plus railway lines in cuttings and embankments and the visual influence of modern large scale development on the edges of Chippenham, Trowbridge and Melksham. This urbanising influence is particularly prevalent to the south of the area while the northern section is more akin to area 12A with scattered settlement of small brick and stone built villages and farmsteads.*"

3.9 The local landscape within the study area generally follows the above description. The field parcels are defined by the intensive land use and the flat landform is defined by the abundance of streams and watercourses in the area. Due to its agricultural land use with few defining landscape features beyond field boundary hedgerows and the noticeable influence of Melksham, the LCA is considered to have medium value. There is a noticeable presence of residential development, which has an urbanising influence on the surrounding landscape. The LCA's susceptibility to residential development is reduced within the context of the existing settlements.

Melksham Neighbourhood Plan Local Landscape Character Neighbourhood Plan Evidence Base Report (2020)[2]

3.10 The Local Landscape Character Neighbourhood Plan Evidence Base Report (EBR) forms part of the evidence base to support content and policies in the adopted Joint Melksham Neighbourhood Plan. The EBR brings together evidence on landscape character and setting, including information from the Wiltshire Local Plan's evidence base in order to identify specific character areas surrounding Melksham. The site falls within 'Area 3: Open Clay Vale'.

3.11 The key characteristics of Area 3: Open Clay Vale are identified as:

- "*Flat, low-lying landscape (in places adjacent to the floodplain of the River Avon)*";
- "*Mixed use farmland, with 'horsey culture' as a significant element to the east of Melksham*";
- "*General sense of openness throughout the character area*";
- "*Road corridors lined in places with mature deciduous hedgerows and telegraph poles*";
- *"Pylons are also visible as dominant vertical elements in certain parts of the character area and large areas of solar farms are located in areas to the East of the Neighbourhood Plan area*";
- *"Comprehensive footpath network*";
- *"Narrow rural routeways"*;
- *"Scattered settlement pattern, with isolated farmsteads*"; and
- *"Brooks and stream corridors scattered across the landscape – notably Clackers Brook."*

EDP'S SITE CHARACTER ASSESSMENT

3.12 A site visit took place in early March 2023 during clear, dry weather conditions, with a second site visit taking place in April 2024.The visits were complemented by a review of aerial photography, mapping and field assessments from publicly accessible locations (e.g. from local roads and public rights of way (PRoW)).

3.13 The site lies on the north-eastern edge of Melksham and comprises 10 irregularly shaped field parcels contained by managed hedgerows on all sides. There is limited tree cover along the site's boundaries, mainly on the western edge where the site abuts residential gardens. The site is low lying and bisected by a ditch in its centre. New Road to the east and the A3102 follow the site's boundaries. There are residential dwellings overlooking the site

[2] Accessed at: https://www.melkshamneighbourhoodplan.org/; accessed on 04 April 2023.

along the western boundary and a farmstead and agricultural buildings within the centre of the eastern boundary. An aerial image of the site is illustrated at **Image EDP 3.1**.



Image EDP 3.1: Aerial image of the site (red line added by EDP, aerial image taken from google earth).

3.14 The site's landform is flat and low lying. There are limited landscape features beyond the boundary hedgerows, scattered hedgerow trees and the ditch running across the site. The boundary hedgerows are generally well managed and cut at a sufficient height to limit visibility into the site from adjacent roads (as shown in **Image EDP 3.2**). The boundary along New Road is lined by a drainage ditch, which appears to be a typical landscape feature in the local landscape. Where there are gaps in the hedgerow cover due to gated access and where vegetation has grown less vigorously, the site is open and visually connected with the local landscape and townscape.



Image EDP 3.2: View along the site's boundary from New Road. The road has an enclosed character due to the high hedgerows and there are limited views into the site.

3.15 The site is influenced by overlooking built form due to its location on the settlement edge. There are areas of residential development to the south and west of the site, which are visible within the context of the site (as shown in **Image EDP 3.3**). An isolated farmstead and agricultural buildings are located on the eastern boundary.



Image EDP 3.3: View across the site looking west towards Melksham. Dwellings within the settlement are visually prominent from within the site and have an urbanising influence in the local landscape. A farmstead, seen to the right in this image, lies adjacent to the site, which is a typical feature in the local area.

3.16 The site is not publicly accessible and there are no areas of access land or public footpaths within the site boundary. There appears to be no informal access or public use of the site and its land use is limited to agricultural/arable use.

3.17 The site contains several characteristic features for the local area. It contains highly managed fields with typical field boundaries, and drainage ditches are located in the site and on its boundary. There is a strong connection with the nearby settlement, which has an urbanising influence and introduces built form into the context of the site.

REVIEW OF SITE CIRCUMSTANCES AGAINST PUBLISHED DOCUMENTATION

3.18 Following a review of published landscape character appraisals and the site's circumstances, the site is considered to be broadly consistent with the identified characteristics in LCA 12B and Area 3. It is representative of typical field patterns which are generally medium sized and irregularly shaped. Field boundaries are made up of typical hedgerows, which make up the site boundaries as well as the internal divisions of the field parcels. Despite its proximity to Melksham, the site's character is generally open. The farmstead on the eastern boundary is typical in the local landscape.

3.19 The site lies in the context of Melksham's settlement edge. There is an opportunity to integrate residential built form with the existing settlement and enhance the current, stark boundary by creating a softer transition towards the open agricultural landscape. There is potential to enhance existing vegetation patterns and provide screening to development proposals.

INTERIM CONCLUSIONS: LANDSCAPE CHARACTER

Overall Sensitivity of LCA 12B: Avon Open Clay Vale

3.20 The susceptibility of the landscape and townscape resource is defined as the ability of the receptor (whether the overall character, individual fabric elements or perceptual aspects) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation. The landscape found within the study area is broadly representative of what is described in the LCA 12B description. There is an influence of agricultural land use, and the landform is generally flat due to the presence of water courses. Local settlements have considerable influence on the landscape and introduce built form into the local area. The landscape contains typical field boundaries, which are largely intact and create consistent structure throughout the landscape. Due to the existing areas of residential development, the susceptibility to residential built form on the settlement edge is reduced. The LCA is therefore considered to have medium sensitivity.

Overall Sensitivity of Area 3: Open Clay Vale

3.21 The local landscape in its baseline condition is broadly representative of what is described for Area 3. The existing land use and abundance of watercourses influences the landform and pattern of vegetation in the local landscape. Settlement areas have noticeable influence on the landscape character and there is a perceivable context of residential built form. The landscape is considered to have medium value, since field boundaries are generally intact and there is consistent structure across the landscape. However, the existing areas of residential development reduce the susceptibility to residential built form on the settlement edge. The LCA is therefore considered to have medium sensitivity.

Overall Sensitivity of the Site Character

3.22 In summary, the main character and valuable fabric of the site is to be found in the hedgerow boundaries and the existing ditch in the centre of the site. The site is not publicly accessible and therefore has no recreational value. Due to its location on the settlement edge, the site is strongly influenced by built form. The site is therefore considered to have medium value in landscape terms.

3.23 Whilst there are some higher quality elements within the site, namely the landscape features at the site boundaries, the settlement edge location means perceptually the site is impacted by the adjacent housing and poor-quality boundary treatments. The site is partly urbanised by existing built form immediately adjacent to it. The landscape of the site itself is considered to be of medium susceptibility to the change proposed. Therefore, the site is considered to have medium sensitivity.

3.24 The landscape character receptors to be assessed within this LVA have been summarised here for convenience:

Table EDP 3.1: Landscape Character Receptor Summary

Receptor	Overall Sensitivity
The Site and its Context	Medium
LCA 12B: Avon Open Clay Vale	Medium
Area 3: Open Clay Vale	Medium

Section 4
Existing (Baseline) Conditions: Visual Amenity

INTRODUCTION

4.1 Visual amenity (as opposed to 'visual character' described in the **Section 3**) is not about the visual appearance of the site, but has to do with the number, distribution, and character of views towards, from or within the site. An analysis of visual amenity allows conclusions to be reached about who may experience visual change, from where and to what degree those views would be affected by the proposed development.

4.2 This section describes the existing views; changes to views wrought by the proposed development are analysed in **Section 6**. An analysis of existing views and the 'receptors' likely to experience visual change is conducted in three steps described in turn below:

STEP ONE: DEFINING ZONES OF THEORETICAL AND PRIMARY VISIBILITY

4.3 The starting point for an assessment of visual amenity is a computer-generated 'Zone of Theoretical Visibility' (ZTV). The ZTV is derived using digital landform height data only and therefore it does not account for the screening effects of intervening buildings, structures, or vegetation, but it does give a prediction of the areas that, theoretically, may be able to experience visual change; it thus provides the basis for more detailed field assessment.

4.4 The ZTV is then refined by walking and driving local roads, rights of way and other publicly accessible viewpoints to arrive at a more accurate, 'field-tested' Zone of Primary Visibility (ZPV). The ZPV is where views of the proposed development would normally be close-ranging and open, whether in the public or private domain, on foot, cycling or in a vehicle. In this instance, the field assessment was undertaken in March 2023 in clear weather conditions and therefore confidently predicts the extent of wintertime views of the proposed development.

4.5 Beyond the ZPV lies a zone of visibility that is less open, being either partly screened or filtered. Views from within this zone would include the proposal – it may not be immediately noticeable, but once recognised would be a perceptible addition to the view.

4.6 **Figure EDP 9.5** illustrates the findings of the visual appraisal from which it can be seen that the ZPV is extremely limited due to the low lying, flat topography and visual containment by a strong framework of hedgerows and trees, notably to the south and east and built development to the north and west. The ZPV extends as follows:

- To the north the ZVP extends across local fields and beyond PRoW to the north of the site. Vegetation along field boundaries creates a layering effect beyond approximately 300m from the site and restricts visibility of the site;

- To the south, the site's boundary is gappy in places and lower, allowing views into the site. The ZPV is contained by the line of built development to the south and extends south along Eastern Way and across local fields. Residential built form on the A3102

to the south-east of the site screens the site in views and influences the ZPV, which extends to approximately 250m south;

- To the east, the ZPV extends into fields which are in agricultural use and not served by publicly accessible footpaths. There are views into the site from A3102 where the road slopes up slightly. The ZPV extends to approximately 150m east; and

- To the west the site is visually contained by built form within the settlement edge of Melksham.

STEP TWO: DEFINING RECEPTOR GROUPS

4.7 Within the ZPV and wider area, the people ('receptors') likely to experience visual change can be considered as falling into a number of discernible groups.

4.8 Within the ZPV and wider area, the people ('receptors') likely to experience visual change can be considered as falling into a number of discernible groups. These are summarised below:

- Users of PRoW;

- Road users on New Road;

- Road users on the A3102;

- Road users along rural minor lanes; and

- Residents.

STEP THREE: DEFINING REPRESENTATIVE VIEWPOINTS

4.9 Within the ZPV, there are clearly many individual points at which views towards the site are gained. EDP has selected a number of viewpoints that are considered representative of the nature of the views from each of the receptor groups. The selection of the representative viewpoints is based on the principle that the assessment needs to test the 'worst case' scenario, and in selecting these viewpoints, EDP has sought to include:

- A range of viewpoints from all points of the compass, north, south, east and west;

- A range of viewpoints from distances at close quarters at the site boundary and up to distant viewpoints at 3km and more from the site; and

- Viewpoints from all the above receptor groups.

4.10 The representation of views is supported by 12 photoviewpoints (PVP), the number and location of which has not been agreed with the LPA but has been informed by GIS analysis and site work. Their location is illustrated on **Figure EDP 9.5**. Photographs from the selected

viewpoints are contained in **Appendix EDP 2**. The purpose of these viewpoints is to aid assessment of a visual receptor(s). These viewpoints are not assessed separately.

Table EDP 4.1: Summary of Representative Photoviewpoints

PVP No.	Location	Grid Reference	Distance and Direction of View	Reason(s) for Selection and Sensitivity of Receptor
1	View from Footpath MELW60 - east	392072, 164933	84m from the site, looking south towards the site.	Mid-range view from footpath. Users of PRoW – high sensitivity.
2	View from Footpath MELW60 - west	391591, 164779	310m from the site, looking south-east towards the site.	Mid-range view from footpath. Users of PRoW – High sensitivity.
3	View from New Road	392207, 164840	10m from the site, looking south along the site boundary.	Close-range view looking south. Road Users – low sensitivity.
4	View from A3102 - east	392422, 164439	180m from the site, looking west.	Mid-range view along A3102. Road Users – low sensitivity.
5	View from Bridleway MELW26	393022, 164290	774m from the site, looking west north west	Mid-range view from footpath. Users of PRoW – high.
6	View from Footpath MELK104 and Eastern Way	392196, 164070	260m from the site, looking north-west.	Close-range view from PRoW and local road. Road Users – low sensitivity; Users of PRoW – high sensitivity.
7	View from A3102 - west	391850, 164226	15m from the site looking east.	Close-range view form A3102. Road Users – medium sensitivity.
8	View from A3102 within Melksham looking east	391569, 164220	270m from the site, looking east north east	Residents – high sensitivity.

PVP No.	Location	Grid Reference	Distance and Direction of View	Reason(s) for Selection and Sensitivity of Receptor
9	View from Bridleway SEEN55	392072, 164933	3.3km from the site, looking north-west.	Close-range view along A3102. Road Users – low sensitivity.
10	View from Woodrow Road and Footpath MELW59	391854, 165437	610m from the site, looking south.	Long-distance view from PRoW and local road to the north. Users of PRoW – high sensitivity. Road Users – low sensitivity.
11	View from Footpath LAC037	391851, 168044	3.2km from the site, looking south.	Long-distance view from PRoW near National Trust Property to the north of the site. Users of PRoW – high sensitivity.
12	View from Spye Park	394185, 167394	3.2km from the site, looking south west.	Long-distance view from elevated PRoW to the north east of the site. Users of PRoW – high sensitivity.

VISUAL BASELINE

Rights of Way Users

4.11 There is an extensive network of PRoW across in the study area as illustrated on **Figure EDP 9.5**. Footpath MELW60 is located to the north of the site and has partial views of the site and built form on the boundary of the site (as shown in **Photoviewpoint EDP 1**). To the west of the footpath, views of the site are filtered due to existing tree cover along field boundaries beyond the site boundary (As shown in **Photoviewpoint EDP 2**).

4.12 From the north, mid-range views of the site from PRoW are predominately screened and filtered due to existing vegetation patterns creating a layering effect within the low-lying landscape. As illustrated by **Photoviewpoint EDP 10**, there are no direct views of the site from this location. In long distance views, the intervening vegetation provides an effective visual screen, which limits visibility across the local landscape (as shown in **Photoviewpoint EDP 11**). From the north-east, due to elevation views of the site are afforded as shown in **Photoviewpoint EDP 12**.

4.13 There are limited footpaths to the east of the site. Bridleway MELW26 to the south-east has views towards the settlement edge and the site (as shown in **Photoviewpoint EDP 5**). Due to the local landform and intervening woodland to the east, there would be limited to no views towards the site in the middle distance.

4.14 Residential built form restricts views to the south of the site. Due to the predominantly flat landform and existing vegetation, there are filtered views from further afield. Vegetation creates a layering effect in long distance views which restricts views beyond the middle distance. As shown in in **Photoviewpoint EDP 9**, there are no views of the site from this location. It is considered that, due to the focus on the surrounding landscape and interest in the local area, users of local PRoW throughout the study area, although with some de sensitisation where views are possible of existing built form, large man-made features, or busy/major transport corridors, are considered to be high sensitivity receptors.

Road Users

New Road

4.15 New Road lies to the north-east of Melksham and connects to the A3102 in the south and Woodrow Road in the north. The road cuts across the local landscape with fields on either side, with few residential buildings and isolated farmsteads along the road. The road is lined by hedgerows on both sides, which typically have a drainage ditch alongside them. The southern third of the road follows the site's eastern boundary. Hedgerow field boundaries are generally of a varying height and in variable condition depending on the management and cutting regime applied to them. Surrounding the site, hedgerows are high, which results in the road feeling enclosed (as shown in **Photoviewpoint EDP 3**). There are glimpsed views of the site where there are gaps in the hedgerow to allows access into the agricultural land. Built form within the site and tree cover along field boundaries can be seen from the road.

Sandridge Road/Sandridge Common (A3102)

4.16 The A3120 lies to the south of the site and is the main approach to Melksham from the east. It is surrounded by farmland, with woodland blocks further to the east. There is an increase in residential built form closer to Melksham, including isolated farmsteads (as shown in **Photoviewpoint EDP 4**). The road meets New Road before entering a roundabout on the settlement edge, which is visually influenced by residential development along Eastern Way and within the settlement boundary. The site lies to the north of eastern way and abuts the settlement edge to the west. The western part of the A3102 follows the southern boundary of the site and is lined by a hedgerow to the north, and the curtilage of residential dwellings (including parking areas, access and front gardens) to the south. Where there are gaps in the hedgerow there are views into the site (as shown in **Photoviewpoint EDP 7**). From within the settlement, views along the road looking east are dominated by existing dwellings, which are a mixture of bungalows and 2–2.5 storey detached and semi-detached houses. The site is not visible from within the settlement (as shown in **Photoviewpoint EDP 8**).

Rural Lanes

4.17 There is a network of rural lanes present in the local landscape. Visibility across the study area is dependent on the existing vegetation and built form – due to the flat landscape there

are few expansive views from public vantage points across the landscape. Generally, views of the site experienced by vehicle receptors on rural lanes are glimpsed and heavily filtered. Beyond the middle-distance, views of the site are unlikely and would be screened by intervening vegetation and built form in long-distance views (as shown in **Photoviewpoint EDP 9**).

4.18 Overall, road users would experience views while travelling along a road at considerable speed – the A3102 and the majority of rural lanes have a national speed limit except where they are near or within settlement areas. Due to the visual connection with Melksham within the local landscape, the susceptibility to residential development is decreased. Road users are therefore considered to have low sensitivity within this context.

Residential Dwellings/Groups

4.19 Views from private residential properties, although likely to be of high to very high sensitivity to changes in the view, are not protected by national planning guidance or local planning policy. Accordingly, changes to the character, 'quality' and nature of private views are not a material planning consideration in the determination of a planning application. However, they remain relevant to this review of the predicted extent and nature of visual change, so are reviewed briefly below.

4.20 There are four groups of dwellings located within the context of the site. These are:

- Group of dwellings on the settlement edge to the west of the site;
- Group of dwellings within Melksham to the south of the site;
- Isolated dwellings on the boundary of the site; and
- Residential dwellings along the A3120 to the south-east of the site.

4.21 These dwellings are located either within the settlement extents or within a rural setting on the settlement edge. There is a noticeable relationship with existing built form in Melksham and susceptibility to residential development is therefore reduced. Residents are generally considered to have high sensitivity.

Section 5
Conclusions and Recommendations

RECOMMENDATIONS

5.1 The potential development of the site for residential development should consider the landscape and visual sensitivities identified within this report and seek to mitigate potential effects insofar as is possible, so as to reduce these to an acceptable level and integrate the site into its context at the eastern edge of Melksham.

5.2 Any well-designed proposal for development of this site should include the provision of planting, to provide visual filtering, improve the settlement edge of Melksham and help assimilate views of the development at the eastern edge of Melksham. The proposed location of opportunities for landscape treatments and enhancements are illustrated on **Figure EDP 9.6**.

5.3 The alignment of the ditch that runs north–south within the site should be retained and enhanced to provide a mosaic of onsite landscape fabric and habitats. This green corridor could also contribute to the recreational provisions on site, with the provision of routes through the space.

5.4 Other landscape and visual considerations for development of the site would include:

- Protection and enhancement of the existing site boundary and internal hedgerows. These should be integrated into the masterplan; and
- Provision of green buffers, particularly along the eastern boundaries, to filter views;

CONCLUSIONS IN RESPECT OF LANDSCAPE AND VISUAL AMENITY

5.5 If recommendations set out above can be integrated into the scheme, it should be possible to develop a scheme which provides new housing and other facilities while respecting the sensitivity of the site and surrounding context, and therefore minimising adverse effects on landscape character and visual amenity.

Appendix EDP 1
Methodology: Thresholds and Definitions of Terminology used in this Appraisal

A1.1 Landscape and Visual Assessments are separate, though linked procedures. Landscape effects derive from changes in the physical landscape fabric, which may give rise to changes in its character and how this is experienced. Visual effects relate to changes that arise in the composition of available views as a result of changes to the perception of the landscape, to people's responses to the changes and to the overall effects with respect to visual amenity.

A1.2 A number of factors influence professional judgement when assessing the degree to which a particular landscape or visual receptor can accommodate change arising from a particular development. Sensitivity is made up of judgements about the 'value' attached to the receptor, which is determined at baseline stage, and the 'susceptibility' of the receptor, which is determined at the assessment stage when the nature of the proposals, and therefore the susceptibility of the landscape and visual resource to change, is better understood.

A1.3 Susceptibility indicates "*the ability of a defined landscape or visual receptor to accommodate the specific proposed development without undue negative consequences"*[3]. Susceptibility of visual receptors is primarily a function of the expectations and occupation or activity of the receptor.

A1.4 **Table EDP A1.1** provides an indication of the criteria by which the overall sensitivity of a landscape receptor is judged within this assessment and considers both value and susceptibility independently.

Table EDP A1.1: Defining the Sensitivity of the Landscape Baseline

EDP Assessment Terminology and Definitions	
Landscape Baseline – Overall Sensitivity	
Very High	***Value***: Nationally/internationally designated/valued countryside and landscape features; strong/distinctive landscape characteristics; absence of landscape detractors.
	Susceptibility: Strong/distinctive landscape elements/aesthetic/perceptual aspects; absence of landscape detractors; landscape receptors in excellent condition. Landscapes with clear and widely recognised cultural value. Landscapes with a high level of tranquillity.
High	***Value***: Locally designated/valued countryside (e.g. Areas of High Landscape Value, Regional Scenic Areas) and landscape features; many distinctive landscape characteristics; very few landscape detractors.

[3] Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment, Third Edition Page 158.

EDP Assessment Terminology and Definitions	
	Susceptibility: Many distinctive landscape elements/aesthetic/perceptual aspects; very few landscape detractors; landscape receptors in good condition. The landscape has a low capacity for change as a result of potential changes to defining character.
Medium	***Value***: Undesignated countryside and landscape features; some distinctive landscape characteristics; few landscape detractors.
	Susceptibility: Some distinctive landscape elements/aesthetic/perceptual aspects; few landscape detractors; landscape receptors in fair condition. Landscape is able to accommodate some change as a result.
Low	***Value***: Undesignated countryside and landscape features; few distinctive landscape characteristics; presence of landscape detractors.
	Susceptibility: Few distinctive landscape elements/aesthetic/perceptual aspects; presence of landscape detractors; landscape receptors in poor condition. Landscape is able to accommodate large amounts of change without changing these characteristics fundamentally.
Very Low	***Value***: Undesignated countryside and landscape features; absence of distinctive landscape characteristics; despoiled/degraded by the presence of many landscape detractors.
	Susceptibility: Absence of distinctive landscape elements/aesthetic/perceptual aspects; presence of many landscape detractors; landscape receptors in very poor condition. As such landscape is able to accommodate considerable change.

A1.5 For visual receptors, judgements of susceptibility and value are closely interlinked considerations. For example, the most valued views are those which people go and visit because of the available view – and it is at those viewpoints that their expectations will be highest and thus most susceptible to change.

A1.6 **Table EDP A1.2** provides an indication of the criteria by which the overall sensitivity of a visual receptor is judged within this assessment and considers both value and susceptibility together.

Table EDP A1.2: Defining the Sensitivity of the Visual Baseline

Visual Baseline – Overall Sensitivity	
Very High	***Value/Susceptibility***: View is designed/has intentional association with surroundings; recorded in published material; from a publicly accessible heritage asset/designated/promoted viewpoint; nationally/internationally designated right of way; protected/recognised in planning policy designation.
	Examples: May include views from residential properties; National Trails; promoted holiday road routes; designated countrywide/landscape features with public access; visitors to heritage assets of national importance; open Access Land.

Visual Baseline – Overall Sensitivity	
High	***Value/Susceptibility***: View of clear value but may not be formally recognised e.g. framed view of scenic value or destination/summit views; inferred that it may have value for local residents; locally promoted route or PRoW.
	Examples: May include from recreational locations where there is some appreciation of the visual context/landscape e.g. golf, fishing; themed rights of way with a local association; National Trust land; panoramic viewpoints marked on OS maps; road routes promoted in tourist guides and/or for their scenic value.
Medium	***Value/Susceptibility***: View is not widely promoted or recorded in published sources; may be typical of those experienced by an identified receptor; minor road routes through rural/scenic areas.
	Examples: May include people engaged in outdoor sport not especially influenced by an appreciation of the wider landscape e.g. pitch sports; views from minor road routes passing through rural or scenic areas.
Low	***Value/Susceptibility***: View of clearly lesser value than similar views from nearby visual receptors that may be more accessible.
	Examples: May include major road routes; rail routes; receptor is at a place of work but visual surroundings have limited relevance.
Very Low	***Value/Susceptibility***: View may be affected by many landscape detractors and unlikely to be valued.
	Examples: May include people at their place of work, indoor recreational or leisure facilities or other locations where views of the wider landscape have little or no importance.

MAGNITUDE OF CHANGE

A1.7 The magnitude of any landscape or visual change is determined through a range of considerations particular to each receptor. The three attributes considered in defining the magnitude are:

- Scale of Change;
- Geographical Extent; and
- Duration and reversibility/proportion.

A1.8 **Table EDP A1.3** provides an indication of the criteria by which the geographical extent of the area will be affected within this assessment.

Table EDP A1.3: Geographical Extent Criteria

Landscape Receptors	Visual Receptor Criteria
Large scale effects influencing several landscape types or character areas.	Direct views at close range with changes over a wide horizontal and vertical extent.

Landscape Receptors	Visual Receptor Criteria
Effects at the scale of the landscape type or character areas within which the proposal lies.	Direct or oblique views at close range with changes over a notable horizontal and/or vertical extent.
Effects within the immediate landscape setting of the site.	Direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected.
Effects at the site level (within the development site itself).	Oblique views at medium or long range with a small horizontal/vertical extent of the view affected.
Effects only experienced on parts of the site at a very localised level.	Long range views with a negligible part of the view affected.

A1.9 The third and final factor in determining the predicted magnitude of change is duration and reversibility. Duration and reversibility are separate but linked considerations. Duration is judged according to the defined terms set out below, whereas reversibility is a judgement about the prospects and practicality of the particular effect being reversed in, for example, a generation. The categories used in this assessment are set out in **Table EDP A1.4**.

Table EDP A1.4: Factors Influencing Judgements on Magnitude of Change

Duration	Reversibility
Long Term (20+ years)	Permanent with unlikely restoration to original state e.g. major road corridor, power station, urban extension, hydrocarbons.
Medium to long term (10 to 20 years)	Permanent with possible conversion to original state e.g. agricultural buildings, retail units.
Medium term (5 to 10 years)	Partially reversible to a different state e.g. mineral workings.
Short term (1 to 5 years)	Reversible after decommissioning to a similar original state e.g. renewable energy development.
Temporary (less than 12 months)	Quickly reversible e.g. temporary structures.

Table EDP A1.5: Defining the Magnitude of Change to the Landscape and Visual Baseline

Magnitude of Change	
(Considers Scale of Proposal/Geographical Extent/Duration and Reversibility/Proportion)	
Very High	***Landscape***: Total loss/major alteration to key receptors/characteristics of the baseline; addition of elements that strongly conflict or fails to integrate with the baseline.
	Visual: Substantial change to the baseline, forming a new, defining focus and having a defining influence on the view.
High	***Landscape***: Notable loss/alteration/addition to one or more key receptors/-characteristics of the baseline; or addition of prominent conflicting elements.
	Visual: Additions are clearly noticeable, and part of the view would be fundamentally altered.

Magnitude of Change	
Medium	***Landscape***: Partial loss/alteration to one or more key receptors/characteristics; addition of elements that are evident but do not necessarily conflict with the key characteristics of the existing landscape.
	Visual: The proposed development will form a new and recognisable element within the view which is likely to be recognised by the receptor.
Low	***Landscape***: Minor loss or alteration to one or more key landscape receptors/-characteristics; additional elements may not be uncharacteristic within existing landscape.
	Visual: Proposed development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component.
Very Low	***Landscape***: Barely discernible loss or alteration to key components; addition of elements not uncharacteristic within the existing landscape.
	Proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline.
Imperceptible	In some circumstances, changes at representative viewpoints or receptors will be lower than 'Very Low' and changes will be described as 'Imperceptible'. This will lead to negligible effects.

PREDICTED EFFECTS

A1.10 In order to consider the likely level of any effect, the sensitivity of each receptor is combined with the predicted magnitude of change to determine the level of effect, with reference also made to the geographical extent, duration and reversibility of the effect within the assessment. Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each receptor, the level of effect can be derived by combining the sensitivity and magnitude in accordance with the matrix in **Table EDP A1.6**.

Table EDP A1.6: Determining the Predicted Levels of Effects to the Landscape and Visual Baseline

Overall Sensitivity	**Overall Magnitude of Change**				
	Very High	High	Medium	Low	Very Low
Very High	Substantial	Major	Major/-Moderate	Moderate	Moderate/ Minor
High	Major	Major/ Moderate	Moderate	Moderate/ Minor	Minor
Medium	Major/ Moderate	Moderate	Moderate/-Minor	Minor	Minor/ Negligible
Low	Moderate	Moderate/ Minor	Minor	Minor/ Negligible	Negligible
Very Low	Moderate/ Minor	Minor	Minor/-Negligible	Negligible	Negligible/ None

Table EDP A1.7: Definition of Effects

Definition of Effects	
Substantial	Effects that are in complete variance to the baseline landscape resource or visual amenity.
Major or Major/Moderate	Effects that result in noticeable alterations to much (*Major effect*) or some (*Moderate/Major effect*) of the key characteristics of the landscape resource or aspects of visual amenity.
Moderate	Effects that result in noticeable alterations to a few of the key characteristics of the baseline landscape resource or aspects of visual amenity.
Minor or Minor/Negligible	Effects that result in slight alterations to some (*Minor effect*) or a few (*Minor/Negligible*) of the key characteristics of the landscape resource or aspects of visual amenity.
Negligible or Negligible/None	Effects that result in barely perceptible alterations to a few (*Negligible effect*) or some (*Negligible/None effect)* of the key characteristics of the landscape resource or aspects of visual amenity.
None	No detectable alteration to the key characteristics of the landscape resource or aspects of visual amenity.

A1.11 Effects can be adverse (negative), beneficial (positive) or neutral. The landscape effects will be considered against the landscape baseline, which includes published landscape strategies or policies if they exist. Changes involving the addition of large-scale man-made objects are typically considered to be adverse, unless otherwise stated, as they are not usually actively promoted as part of published landscape strategies.

A1.12 Visual effects are more subjective as peoples' perception of development varies through the spectrum of negative, neutral and positive attitudes. In the assessment of visual effects, the assessor will exercise objective professional judgement in assessing the level of effects and, unless otherwise stated, will assume that all effects are adverse, thus representing the worst-case scenario. Effects can be moderated by maturation of landscape strategies.

A1.13 The timescale of each effect is also important, and effects are generally assessed at time stamps in the whole development life cycle: temporary (at a mid-point in construction), short-term (completion at year one), medium-term (typically 15 years), medium- to long-term (15+ years). In some cases, the operational phase of a scheme could be considered 'temporary'.

GLVIA GLOSSARY OF TERMS

TERM AND DEFINITION
Baseline
The existing (pre-development) landscape and visual context of a study area, including landscape fabric, landscape character and existing views. The landscape baseline is not static and may be changing for various reasons. The landscape baseline can also consider such factors and describe the likely future landscape character of the landscape, without the proposed development.
Effects
A predicted change in the environmental baseline as a result of the proposed development. Effects can be positive or negative.
Field Pattern
The pattern of hedges and walls that define fields in farmed landscapes (LI/IEMA 2002).
Intervisibility
Two points on the ground or two features are described as "intervisible" when they are visible from each other.
Landscape
Landscape results from the way that different aspects of our environment (physical, social, aesthetic and perceptual) interact together and are perceived by us: Physical elements – e.g. geology, landform, soils, flora and fauna; Social elements – e.g. land use, enclosure patterns, and the patterns, form and scale of settlements and other built development; Aesthetic factors – e.g. colour, form, visual texture and pattern, sounds, smells and touch; and Perceptual factors – e.g. memories, associations, stimuli and preferences.
Landscape Capacity
The degree to which a particular landscape character type or area is able to accommodate change without significant effects on its character. Capacity is likely to vary according to the type and nature of change being proposed.
Landscape Character
Landscape character arises from a distinct, recognisable and consistent pattern of physical and social elements, aesthetic factors and perceptual aspects in the landscape.
Landscape Character Areas (LCAs)
Single unique areas that are discrete geographical areas containing one or more landscape types.
Landscape Character Types (LCTs)
Generic units of landscape that display a distinct, consistent and recognisable landscape character.
Landscape Condition
Description of the maintenance and condition of landscape elements and the degree to which landscape elements are representative of the landscape character area.
Landscape Element
A physical component (both natural and manmade) of the landscape.
Landscape Fabric

TERM AND DEFINITION
The elements and features that constitute the physical components of the landscape, including ground vegetation, hedgerows, trees, shrubs, walls, fences and vernacular structures.
Landscape Units
An umbrella term for landscape character areas and landscape character types.
Landscape Value
The importance or value of the landscape to society, usually based on landscape designations or policies as indicators of recognised value.
Mitigation
Measures, including any process, activity or design that will avoid, reduce, remedy or compensate for the predicted effects of a development on the environmental baseline.
Public Access
Land with public access includes: **Definitive rights of way** – public footpaths, bridleways, cycle routes, Byways Open to All Traffic (BOATS) and highways. Shown on Definitive Rights of Way maps held by the Local Authority. **Permissive paths and bridleways** – routes where there is public access with the permission of the landowner. Such routes are usually closed at least one day a year to prevent establishment of a public right of way; **Public open space** – areas designated for specified public uses, usually in the ownership of the Local Authority. Includes parks and recreation grounds. Shown on Local Development Plans; **Beaches** – the public have permitted access to much of the foreshore (intertidal zone – between high and low tide marks) owned by the Crown Estate, and on land above high water mark owned by the Local Authority. Some beaches above high tide mark are privately owned and some beaches and foreshore have restricted access for military purposes; **Access land** – land where public access is currently permitted with the permission of landowners. Includes land outlined in purple on the OS Explorer (1:25,000) sheets and with: No symbol – land open to public with permission of owners; White oak leaf in purple box – National Trust, always open; Purple oak leaf in white box – National Trust limited access; Tree symbols in purple box – Forestry Commission; Single leaf in purple box – Woodland Trust; and White “AL” in purple box – other access land. **Open access land** – areas of mountains, moor, heath, down, common land and coastal foreshore that have been designated under Section 2 of the Countryside and Rights of Way Act 2000. The right of access is for walkers only and does not extend to cycling, horse riding or driving a vehicle, nor does the right of access apply to developed land, gardens or cultivated land. Under the CRoW Act 2000, there was a process of consultation that allowed the right of appeal for those with a legal interest in the land, and for sensitive ecological or archaeological sites to be excluded. Conclusive maps showing the areas designated as open access land (Registered Common Land and Open Country) are now available from Natural England (in England) and the Countryside Council for Wales (in Wales).
Viewing Distance
That distance that a viewpoint illustration should be held from the eye in order for the illustration to match the scale of the actual view when used in the field to identify the location and scale of the proposed development.

TERM AND DEFINITION
Visibility
Visibility is a measure of the distance that can be seen by the human eye at any one time. Daylight visibility will depend on several factors, including: Atmospheric transparency (governed by the solid and liquid particles held in suspension in the atmosphere); Degree of contrast between an object and the background against which it is observed; Position of the sun; and Observer's visual acuity.
Visual Receptor(s)
An individual observer or group of observers who are capable of experiencing a change in the view.
Zone of Theoretical Visibility (ZTV)
The ZTVs consider the 'bareground' situation and assume excellent visibility with no atmospheric attenuation. The ZTVs therefore represent the maximum potential, theoretical visibility i.e. the worst-case situation. In reality, other components of the landscape such as forestry, trees, buildings etc. will introduce screening effects which, coupled with the atmospheric conditions, will reduce this visibility, in some instances to a considerable extent.

Appendix EDP 2
Figure 9.8
Representative Photoviewpoints
(edp7940_d007c 05 November 2024 VMS/LTi)

Photoviewpoint EDP 1: View from Footpath MELW60 - east



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Grid Coordinates:	**392072, 164933**	Horizontal Field of View:	**90°**	Direction of View:	**S**
Date and Time:	**17/03/2023 @ 13:40**	Height of Camera:	**1.6m**	Distance:	**84m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**43m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**	client	**Bloor Homes South West**
drawing number	**edp7940_d007c**	project title	**Land at New Road, Melksham**
drawn by	**VMS**	drawing title	**Photoviewpoint EDP 1**
checked	**LTI**		
QA	**RBa**		

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Photoviewpoint EDP 2: View from Footpath MELW60 - west



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Grid Coordinates:	**391591, 164779**	Horizontal Field of View:	**90°**	Direction of View:	**SE**
Date and Time:	**17/03/2023 @ 13:57**	Height of Camera:	**1.6m**	Distance:	**310m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**44m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 2**

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Photoviewpoint EDP 3: View from New Road



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Grid Coordinates:	**392207, 164840**	Horizontal Field of View:	**90°**	Direction of View:	**S**
Date and Time:	**17/03/2023 @ 13:37**	Height of Camera:	**1.6m**	Distance:	**10m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**44m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**	client	**Bloor Homes South West**
drawing number	**edp7940_d007c**	project title	**Land at New Road, Melksham**
drawn by	**VMS**		
checked	**LTI**	drawing title	**Photoviewpoint EDP 3**
QA	**RBa**		

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Photoviewpoint EDP 4: View from A3102 - east



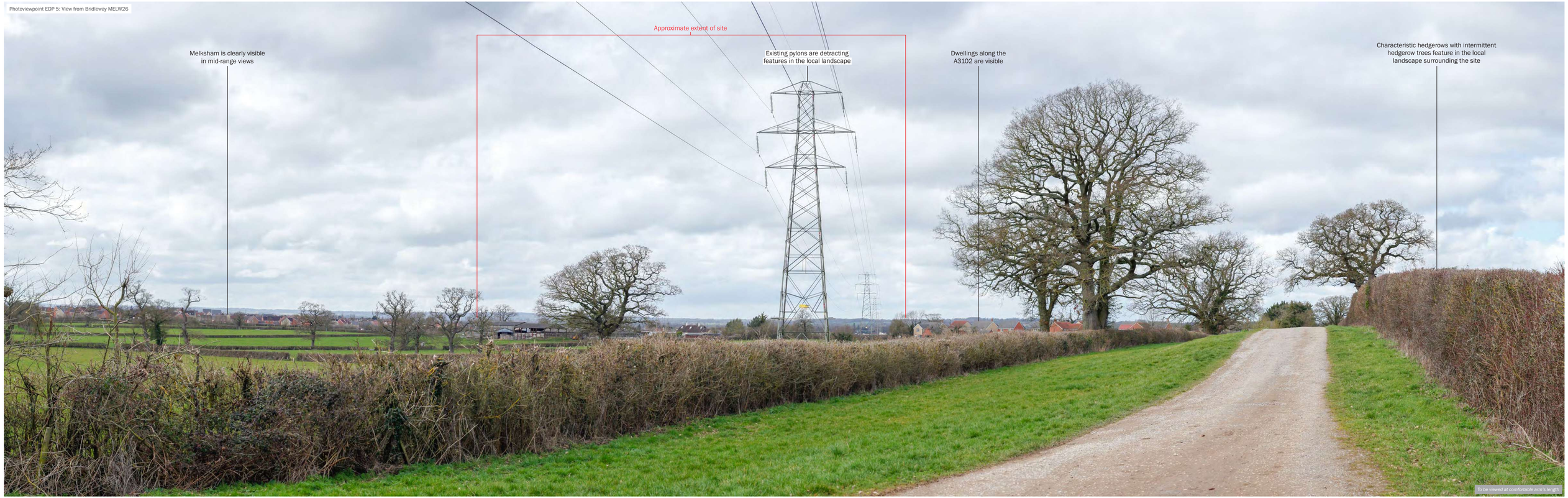
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Grid Coordinates:	**392422, 164439**	Horizontal Field of View:	**90°**	Direction of View:	**W**
Date and Time:	**17/03/2023 @ 12:35**	Height of Camera:	**1.6m**	Distance:	**180m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**45m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**	client	**Bloor Homes South West**
drawing number	**edp7940_d007c**	project title	**Land at New Road, Melksham**
drawn by	**VMS**		
checked	**LTI**	drawing title	**Photoviewpoint EDP 4**
QA	**RBa**		

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Photoviewpoint EDP 5: View from Bridleway MELW26



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Grid Coordinates:	**393022, 164290**	Horizontal Field of View:	**90°**	Direction of View:	**WNW**
Date and Time:	**17/03/2023 @ 13:12**	Height of Camera:	**1.6m**	Distance:	**774m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**52m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 5**

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Grid Coordinates:	**392196, 164070**	Horizontal Field of View:	**90°**	Direction of View:	**NNW**
Date and Time:	**17/03/2023 @ 12:21**	Height of Camera:	**1.6m**	Distance:	**260m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**45m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 6**

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Photoviewpoint EDP 7: View from A3102 - west



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Grid Coordinates:	**391850, 164226**	Horizontal Field of View:	**90°**	Direction of View:	**E**
Date and Time:	**17/03/2023 @ 12:07**	Height of Camera:	**1.6m**	Distance:	**15m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**45m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 7**

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Photoviewpoint EDP 8: View from A3102 within Melksham looking east



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Grid Coordinates:	**391569, 164220**	Horizontal Field of View:	**90°**	Direction of View:	**ENE**
Date and Time:	**17/03/2023 @ 12:00**	Height of Camera:	**1.6m**	Distance:	**270m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**46m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**30 JANUARY 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 8**

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Photoviewpoint EDP 9: View from Bridleway SEEN55

Approximate extent of site

Characteristic hedgerows with intermittent hedgerow trees feature in the local landscape surrounding the site

To be viewed at comfortable arm's length

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Grid Coordinates:	**392072, 164933**	Horizontal Field of View:	**39.6°**	Direction of View:	**NW**	date	**05 NOVEMBER 2024**
Date and Time:	**17/03/2023 @ 14:25**	Height of Camera:	**1.6m**	Distance:	**3.3km**	drawing number	**edp7940_d007c**
Projection:	**Planar**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**51m**	drawn by	**VMS**
Visualisation Type:	**1**	Enlargement Factor:	**100% @ A3**	Focal Length:	**50mm**	checked QA	**LTi RBa**

client	**Bloor Homes**
project title	**Land at New Road Farm, Melksham**
drawing title	**Photoviewpoint EDP 9**

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Photoviewpoint EDP 10: View from Woodrow Road and Footpath MELW59



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Grid Coordinates:	**391854, 165437**	Horizontal Field of View:	**90°**	Direction of View:	**S**
Date and Time:	**17/03/2023 @ 14:43**	Height of Camera:	**1.6m**	Distance:	**610m**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Canon 5D MK2, FFS**	aOD:	**41m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 10**

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Photoviewpoint EDP 11: View from Footpath LAC037



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Grid Coordinates:	**391851, 168044**	Horizontal Field of View:	**90°**	Direction of View:	**S**
Date and Time:	**17/03/2023 @ 14:59**	Height of Camera:	**1.6m**	Distance:	**3.2km**
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Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**
drawing number	**edp7940_d007c**
drawn by	**VMS**
checked	**LTI**
QA	**RBa**

client	**Bloor Homes South West**
project title	**Land at New Road, Melksham**
drawing title	**Photoviewpoint EDP 11**

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Photoviewpoint EDP 12: View from Spye Park



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Grid Coordinates:	**394185, 167394**	Horizontal Field of View:	**90°**	Direction of View:	**SW**
Date and Time:	**20/02/2024 @ 10:34**	Height of Camera:	**1.6m**	Distance:	**3.2km**
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Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**05 NOVEMBER 2024**	client	**Bloor Homes South West**
drawing number	**edp7940_d007c**	project title	**Land at New Road, Melksham**
drawn by	**VMS**		
checked	**LTI**	drawing title	**Photoviewpoint EDP 12**
QA	**RBa**		

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Appendix EDP 3
Figure 9.9
Cumulative Photoviewpoints
(edp7940_d012a 03 December 2025 VMS/LMa)

Cumulative Photoviewpoint EDP 1: Public Right of Way south of Blackmore Farm



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Grid Coordinates:	**393135, 163350**	Horizontal Field of View:	**90°**	Direction of View:	**NW**
Date and Time:	**20/02/2024 @ 13:10**	Height of Camera:	**1.6m**	Distance:	**1.3km**
Projection:	**Cylindrical**	Make, Model, Sensor:	**Sony A7 II.M2**	aOD:	**42m**
Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**03 DECEMBER 2024**	client	**Bloor Homes**
drawing number	**edp7940_d012a**		
drawn by	**VMS**	project title	**Land at New Road Farm, Melksham**
checked	**LMa**		
QA	**JFr**	drawing title	**Cumulative Photoviewpoint EDP 1**

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Cumulative Photoviewpoint EDP 3: Manor Farm



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Grid Coordinates:	**392790, 164587**	Horizontal Field of View:	**90°**	Direction of View:	**W**
Date and Time:	**20/02/2024 @ 11:39**	Height of Camera:	**1.6m**	Distance:	**575m**
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Visualisation Type:	**1**	Enlargement Factor:	**96% @ A1 width**	Focal Length:	**50mm**

date	**03 DECEMBER 2024**	client	**Bloor Homes**
drawing number	**edp7940_d012a**	project title	**Land at New Road Farm, Melksham**
drawn by	**VMS**		
checked	**LMa**	drawing title	**Cumulative Photoviewpoint EDP 3**
QA	**JFr**		

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Cumulative Photoviewpoint EDP 3a: Blackmore Farm



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Grid Coordinates:	**392479, 164465**	Horizontal Field of View:	**90°**	Direction of View:	**W**
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Projection:	**Cylindrical**	Make, Model, Sensor:	**Sony A7 II.M2**	aOD:	**45m**
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date	**03 DECEMBER 2024**
drawing number	**edp7940_d012a**
drawn by	**VMS**
checked	**LMa**
QA	**JFr**

client	**Bloor Homes**
project title	**Land at New Road Farm, Melksham**
drawing title	**Cumulative Photoviewpoint EDP 3a**

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Figures

Figure EDP 9.1: Site Character and Context
(edp7940_d002c 05 November 2024 VMS/WGa)

Figure EDP 9.2: Environmental Planning Context
(edp7940_d003c 05 November 2024 VMS/WGa)

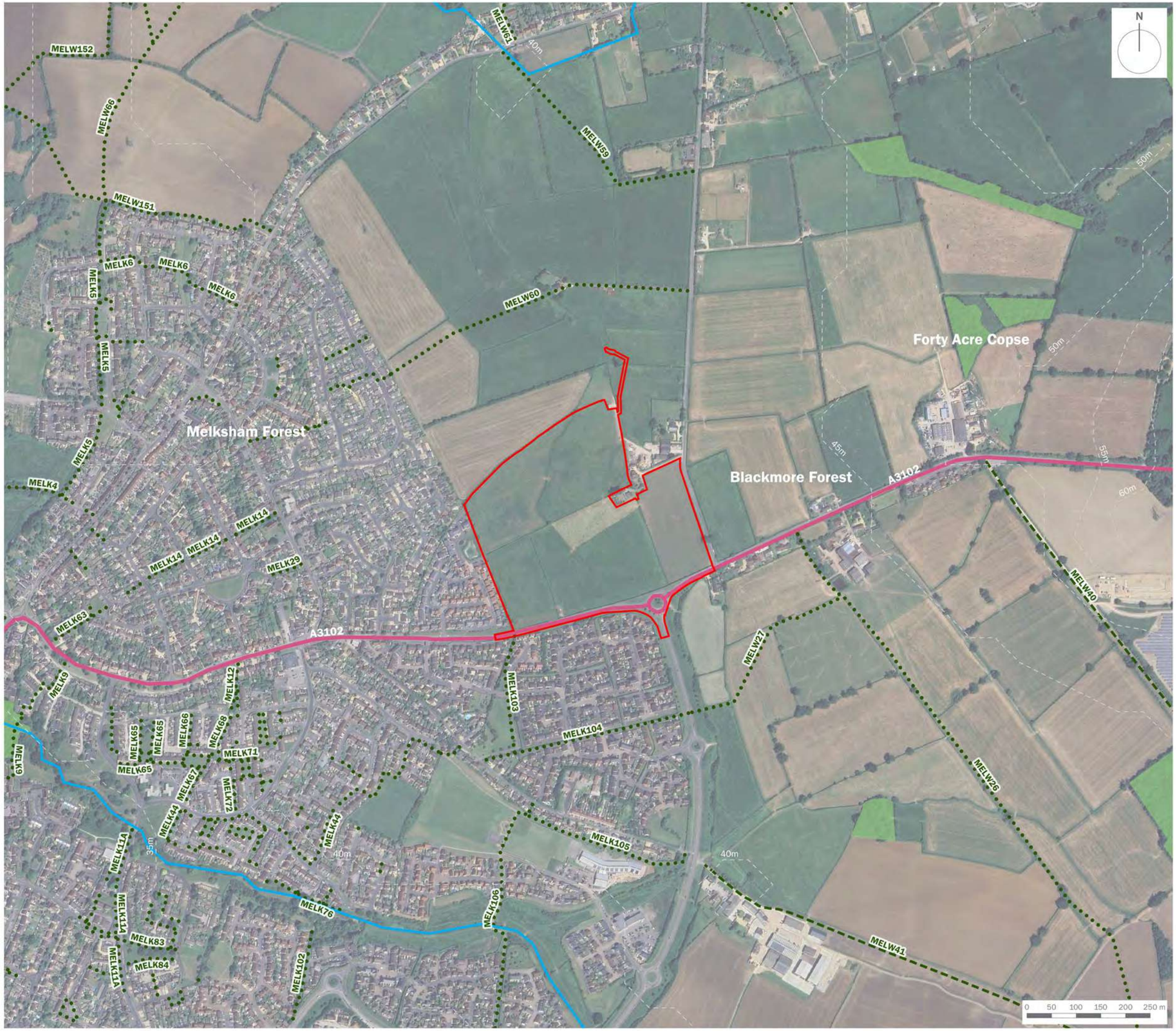
Figure EDP 9.3: Topographical Relief
(edp7940_d004c 05 November 2024 VMS/WGa)

Figure EDP 9.4: Published Landscape Character Assessments
(edp7940_d005c 05 November 2024 VMS/WGa)

Figure EDP 9.5: Findings of Visual Appraisal
(edp7940_d006c 05 November 2024 VMS/WGa)

Figure EDP 9.6: Constraints and Opportunities Plan
(edp7940_d011b 05 November 2024 MMm/LMa)

Figure EDP 9.7: CLVIA Routes and Photoviewpoint Locations
(edp7940_d010b 12 November 2024 Gyo/LMa)



Site Boundary

60m Contours (at 5m intervals)

National Forest Inventory

Water Course

A Road

Public Rights of Way (PROW)

Footpath

Bridleway

client

Bloor Homes South West

project title

Land at New Road, Melksham

drawing title

Site Character and Context

date	**05 NOVEMBER 2024**	drawn by	**VMS**
drawing number	**edp7940_d002c**	checked	**WGa**
scale	**1:7,500 @ A3**	QA	**GYo**

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Site Boundary

Range Rings (at 1km intervals)

1km Study Area

Ecology Considerations

Ancient Semi-Natural Woodland (ASNW)

Planted Ancient Woodland Sites (PAWS)

Site of Special Scientific Interest (SSSI)

Heritage Considerations

Melksham Conservation Area

Grade I Listed Building

Grade II* Listed Building

Grade II Listed Building

Registered Park and Garden

Landscape Considerations

Open Access Land (CRoW Act 2000)

Flood Zone 2

Flood Zone 3

client

Bloor Homes South West

project title

Land at New Road, Melksham

drawing title

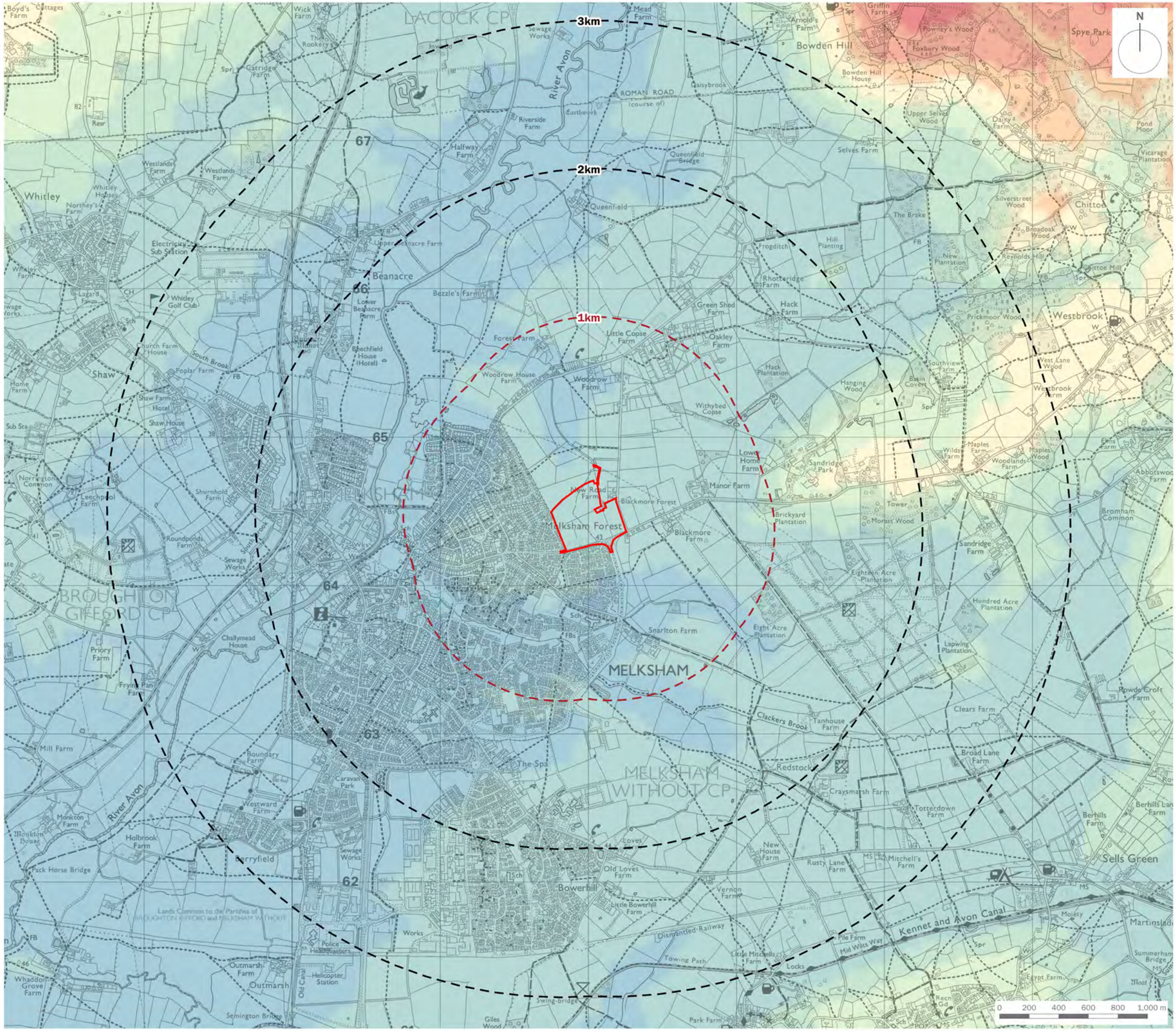
Environmental Planning Context

date	**05 NOVEMBER 2024**	drawn by	**VMS**
drawing number	**edp7940_d003c**	checked	**WGa**
scale	**1:25,000 @ A3**	QA	**GYo**

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Site Boundary

Range Rings (at 1km intervals)

1km Study Area

Elavation (aOD)

- <= 20m
- 20 - 40m
- 40 - 60m
- 60 - 80m
- 80 - 100m
- 100 - 120m
- 120 - 140m
- 140 - 160m
- > 160m

client

Bloor Homes South West

project title

Land at New Road, Melksham

drawing title

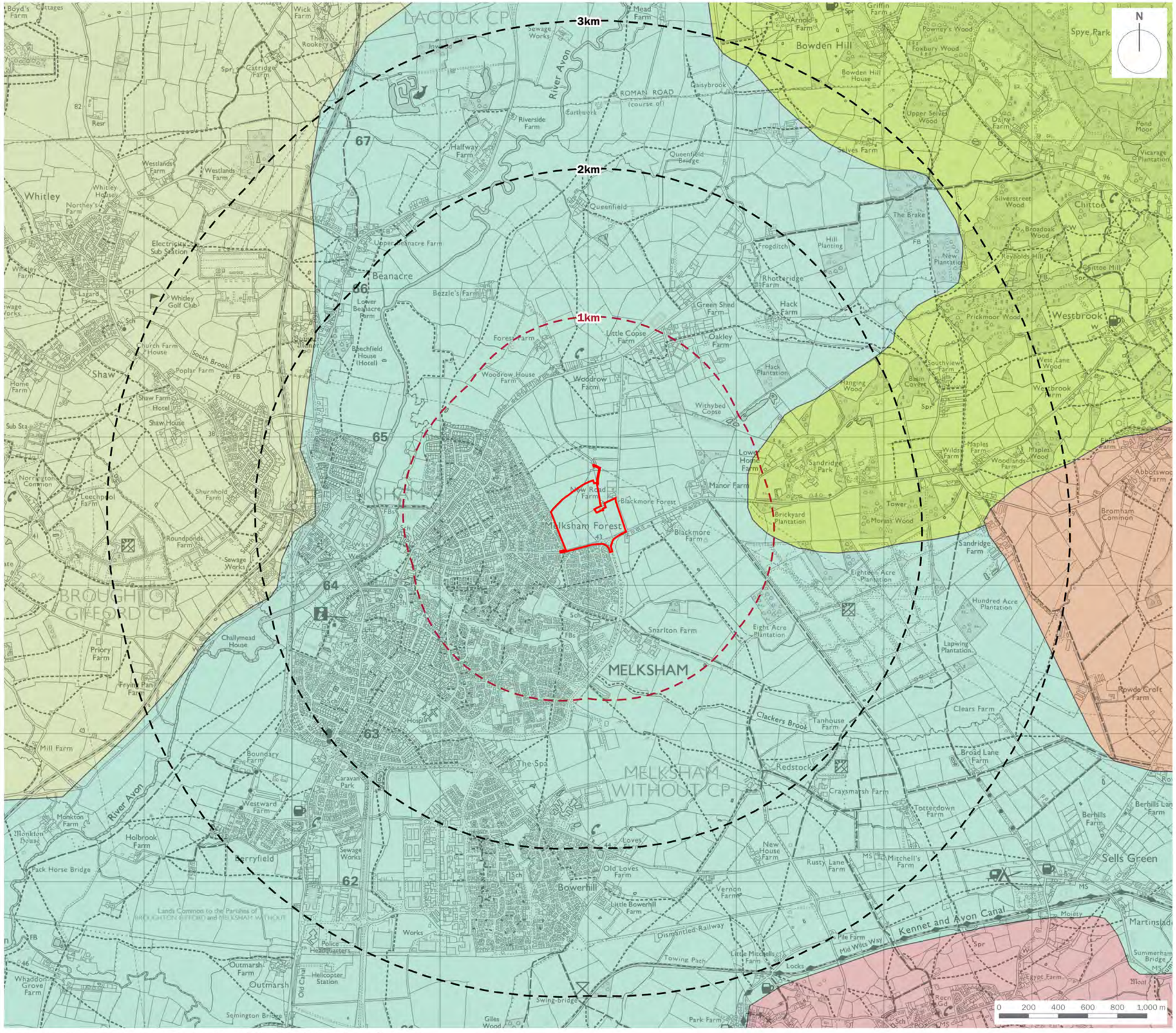
Topographical Relief

date	**05 NOVEMBER 2024**	drawn by	**VMS**
drawing number	**edp7940_d004c**	checked	**WGa**
scale	**1:25,000 @ A3**	QA	**GYo**

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Site Boundary

Range Rings (at 1km intervals)

1km Study Area

Landscape Character Areas

7C - Bowood Greensand Hills

11A - Calne Rolling Clay Lowland

11C - Trowbridge Rolling Clay Lowland

12B - Avon Open Clay Vale

16A - Malmesbury-Corsham Limestone Lowlands

client

Bloor Homes South West

project title

Land at New Road, Melksham

drawing title

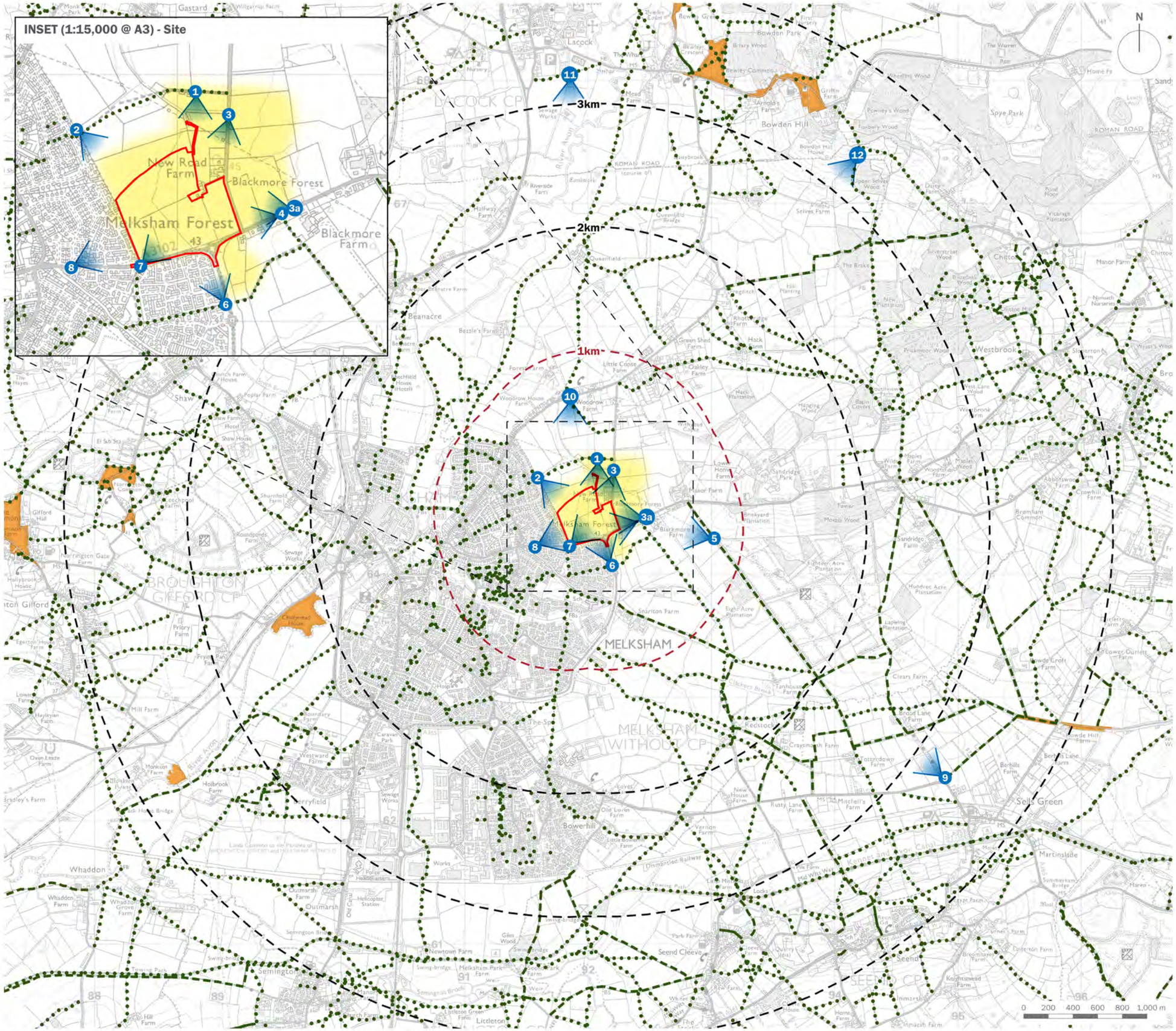
Published Landscape Character Assessments

date	**05 NOVEMBER 2024**	drawn by	**VMS**
drawing number	**edp7940_d005c**	checked	**WGa**
scale	**1:25,000 @ A3**	QA	**GYo**

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Site Boundary

Range Rings (at 1km intervals)

1km Study Area

Open Access Land (CRoW Act 2000)

Zone of Primary Visibility (ZPV)

Photoviewpoint Location

Public Rights of Way (PROW)

Footpath

Bridleway

Byway

Restricted Byway

client

Bloor Homes South West

project title

Land at New Road, Melksham

drawing title

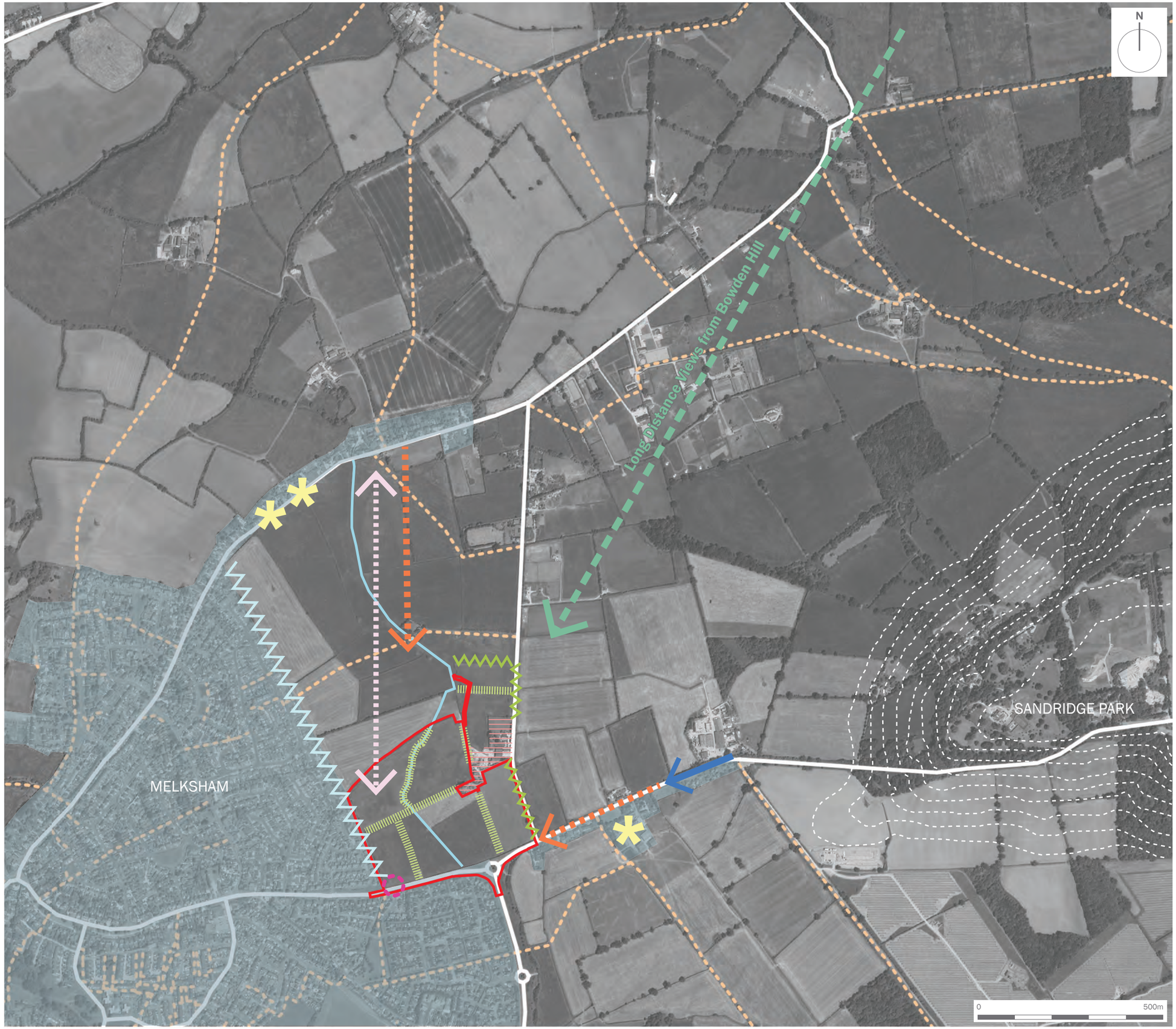
Findings of Visual Appraisal

date	**05 NOVEMBER 2024**	drawn by	**VMS**
drawing number	**edp7940_d006c**	checked	**WGa**
scale	**1:30,000 @ A3**	QA	**GYo**

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Site Boundary

Existing Builtform

Distinct Linear Urban Edge of Melksham

Existing Residential Properties along the Eastern Boundary

Existing Public Right of Way

Long Distance View From Bowden Hill

Filtered Close Range Views

Opportunity to Enhance Connectivity and Views

Opportunity to Enhance the Approach to Melksham

Enhance GI Corridors

Existing Watercourse

Opportunity for Landscape Treatment to Filter Views

Existing Field Gate Access

Existing Listed Building

Local Ridge Line around Sandridge Park

Existing Road Network

client

Bloor Homes South West

project title

Land at New Road Farm, Melksham

drawing title

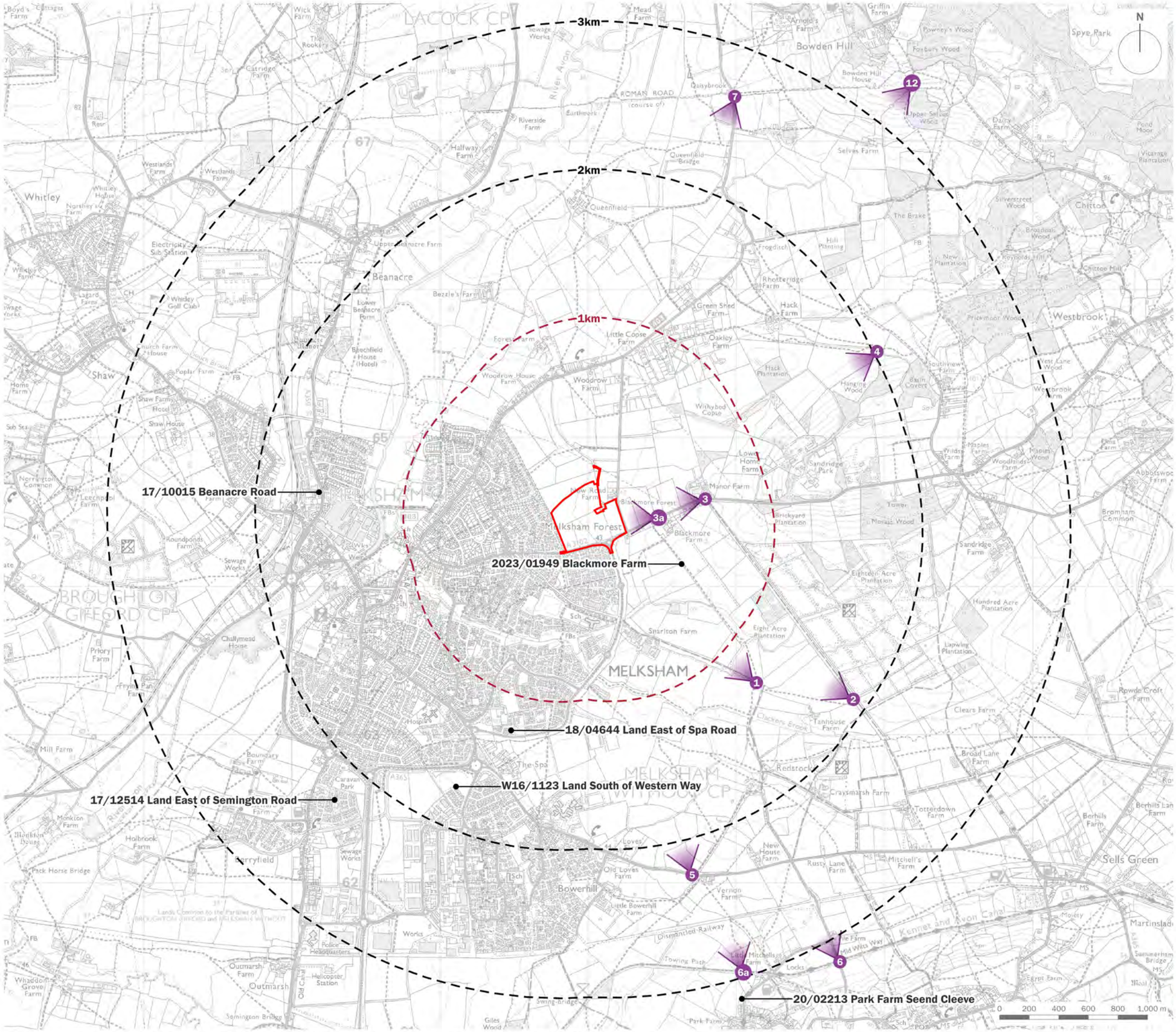
Constraints and Opportunities Plan

date	**05 NOVEMBER 2024**	drawn by	**MMm**
drawing number	**edp7940_d011b**	checked	**LMa**
scale	**1:10,000 @ A3**	QA	**GYo**

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Site Boundary

Range Rings (at 1km intervals)

1km Study Area

Cumulative Photoviewpoint Location

client

Bloor Homes

project title

Land at New Road Farm, Melksham

drawing title

CLVIA Routes and Photoviewpoint Locations

date	**12 NOVEMBER 2024**	drawn by	**GYo**
drawing number	**edp7940_d010b**	checked	**LMa**
scale	**1:25,000 @ A3**	QA	**DJo**

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Appendix 9.2 Landscape and visual effects

Land at New Road Farm, Melksham

Technical Appendix 9.2: Landscape and Visual Effects

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Bloor Homes South West

November 2024

Report Reference
edp7940_r004b

Contents

Assessment of Effects Table 1: Landscape Character 1

Assessment of Effects Table 2: Photoviewpoints 4

Assessment of Effects Table 3: Residential Receptors 14

	Report Ref: edp7940_r004			
	Author	**Formatted**	**Peer Review**	**Proofed by/Date**
004_DRAFT	MMm	CTi	WGa	-
004a	MMm	-	-	LLl 011124
004b	WGa	-	-	FJe 121124

Assessment of Effects Table 1: Landscape Character

Effects of moderate or greater are considered to be '**significant**' in visual terms

Effects of moderate/minor or lesser, are '**not significant**' in visual terms

Value	**Susceptibility**	**Sensitivity**	**Construction: Magnitude. Effect. Nature.**	**Operation Year 1: Magnitude. Effect. Nature.**	**Operation Year 15 and Beyond: Magnitude. Effect. Nature.**
Receptor: Site Landscape Character and Context					
Medium	Medium	Medium	Very High. Major. Adverse	Very High. Major/Moderate. Adverse	High. Moderate. Adverse
Description			**Magnitude of Change**		
The main character and valuable fabric of the site is found within boundary hedgerows, scattered hedgerows trees and a ditch running north-south across the site. The boundary hedgerows are generally well-managed and in good condition. The site is influenced by overlooking built form, adjacent road networks and pylons and associated overhead lines. An isolated farmstead and agricultural buildings are located adjacent to the east of the site. In terms of visual susceptibility, the site has some visual containment due to the surrounding built form and boundary vegetation. The susceptibility is considered to be **medium**. In terms of value, the site itself is undesignated, however, some distinctive features of the surrounding landscape context are present. The landscape features present within the site are of reasonable condition contributing to the aesthetic appeal to the site. The site is not publicly accessible, therefore there is no recreational value to the site. The site is influenced by landscape detractors by audibly from surrounding road network and visually from neighbouring built form and pylons and overhead wires. The value is considered to be **medium**. The overall sensitivity is judged to be **medium**.			**Construction Phase:** The construction of the proposed development would fundamentally change the land use from pasture to urban, creating a new focus. Construction activities would lead to notable loss or alteration to some existing vegetation, and the landscape fabric of the site. However, effects would only extend marginally beyond the site boundary to the wider context, principally in relation to perceptual effects of construction activities, lighting, noise and movement of materials to/from the site. Construction activities would not benefit from the mitigation integrated into the proposed masterplan, therefore the overall magnitude of change is considered to be **very high**. **Operational Year 1:** Likely effects of the operational phases of the development on the site's landscape resource have been assessed previously above, with this confirming a wholesale change in character across the site. The direct physical effects of the proposed development would be contained within the site boundary and not impact the wider context. However, it is likely that perceptual effects will extend beyond the site boundary, as landscape mitigation will not have matured yet. The proposed masterplan has been designed sensitively to integrate key landscape characteristic on site. The existing vegetation and central ditch have been retained and incorporated into the masterplan where possible. Development has been set back from the more sensitive eastern boundary of the development, with the addition of open space throughout the masterplan assisting in breaking up built form. The introduction of residential built form would not conflict with the surrounding baseline. In the short-term, the magnitude of change is considered to remain very high. **Operational Year 15:** In the long-term, the maturation of the landscape mitigation and enhancements, particularly along the site boundaries, would help to visually contain the site and create a new, positive settlement edge. This would reduce the magnitude of change to some extent but the fundamental change to the baseline still remains. Therefore, the magnitude of change is considered to be **high**.		

Value	Susceptibility	Sensitivity	Construction: Magnitude. Effect. Nature.	Operation Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
Receptor: LCA 12B: Avon Open Clay Vale					
Medium	Medium	Medium	Medium. Moderate. Adverse	Medium. Moderate/Minor. Adverse	Low. Minor. Adverse
Description			**Magnitude of Change**		
The susceptibility of the landscape resource is defined as the ability of the receptor (whether the overall character, individual fabric elements, or perceptual aspects) to accommodate the proposed scheme without undue consequences for the maintenance of the baseline situation. On the basis of the above considerations of susceptibility factors, whilst the landscape is broadly representative of the Host LCA, containing typical field boundaries that are largely intact. Due to the existing areas of residential development adjacent to the site, the susceptibility to residential development is reduced. Therefore, the susceptibility is considered to be **medium**. In terms of value, the area is undesignated landscape. The field parcels are defined by the intensive land use and the flat landform is defined by the abundance of streams and watercourses in the area. Due to its agricultural land use with few defining landscape features beyond field boundary hedgerows and the noticeable influence of Melksham, the value is considered to be **medium**. The overall sensitivity is judged to be **medium**.			**Construction Phase:** Likely direct effects of construction on the landscape character of the site itself have been assessed above, with this confirming an unavoidable wholesale change in its character. Effects would extend marginally beyond the site boundary to the wider landscape context, primarily in relation to visibility of construction activities, which extend beyond the site boundary. Generally, construction activities would be most acutely perceived by residents in close proximity to the site, those using PRoW in the area and those using the local road network, these effects would primarily be visual effects which are discussed in detail separately. The overall magnitude of change at the level of the character area is considered to be **medium**. **Operational Year 1:** Likely effects of the operational phases of the development on the site's landscape resource have been assessed above, with this confirming that there would be an unavoidable wholesale change in character across the site. The direct effects of the development would be contained within the site boundary and not impact the wider landscape character. Perceptual effects, in relation to visual changes, would extend beyond the site boundary into the wider context. However, the area is already heavily influenced by residential built form and road infrastructure. Therefore, the magnitude of change is considered to be **medium** as the integrity of the LCA would not be unduly harmed. **Operational Year 15:** In the long-term, the maturation of the landscape mitigation across the site would limit the perceptual effects experienced by the wider local landscape context. Therefore, the overall magnitude of change will reduce to **low**.		

Value	Susceptibility	Sensitivity	Construction: Magnitude. Effect. Nature.	Operation Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
Receptor: Area 3: Open Clay Vale					
Medium	Medium	Medium	Medium. Moderate. Adverse	Medium. Moderate/Minor. Adverse	Low. Moderate/Minor. Adverse
Description			**Magnitude of Change**		
Settlement areas have noticeable influence on the landscape character and there is a perceivable context of residential built form. The existing areas of residential development adjacent to the site reduce the susceptibility to residential built form, the susceptibility is considered to be **medium**. The local landscape baseline condition is broadly representative of what is described for Area 3. The existing land use and abundance of watercourse influences the landform and pattern of vegetation. Field boundaries are generally intact and there is a consistent structure across the landscape. The landscape is considered to have **medium** value. The overall sensitivity is judged to be **medium**.			**Construction Phase:** Effects would extend marginally beyond the site boundary to the wider landscape context, principally in relation to visibility of construction activities, lighting, noise and movement of materials to/from the site, which will extend beyond the site boundary. Construction activities would not benefit from mitigation integrated into the proposed development, therefore the magnitude of change is considered to be **medium**. **Operational Year 1:** Likely effects of the operational phases of the development on the site's landscape resource have been assessed previously above, with this confirming that there would be an unavoidable wholesale change in character across the site area. The direct physical effects of the proposed development would be contained within the site boundary and not impact the wider landscape character. Perceptual effects will extend beyond the site boundary into the wider context, as landscape mitigation will not have matured. It is unlikely that the proposed landscape framework will have matured sufficiently to provide any form of visual screening to the proposed development, however, the landscape character is already influenced by residential form. Therefore, the magnitude of change is considered to be **medium**. **Operational Year 15:** In the long-term, the maturation of the landscape mitigation across the site area, in combination with the existing established vegetation, would soften the perceptual effects. Therefore, the overall magnitude of change will reduce to **low**.		

Assessment of Effects Table 2: Photoviewpoints

Notes: The assessment of effects undertaken within this table is primarily with regard to Land at New Road Farm, Melksham. Cumulative sites, as detailed with **ES Chapter 9** and illustrated on **Figures xx9.5, 9.8 & 9.10**.

Effects of moderate or greater are considered to be '**significant**' in landscape terms
Effects of moderate/minor or lesser, are '**not significant**' in landscape terms

Photoviewpoint No.	**Photoviewpoint Name**	**Receptor**	**Sensitivity**	**Construction:** **Magnitude. Effect. Nature.**	**Year 1:** **Magnitude. Effect. Nature.**	**Operation Year 15 and Beyond:** **Magnitude. Effect. Nature.**
PVP EDP 1	View from footpath MELW60 - East	**PRoW Users**	**High**	Medium. Major/Moderate. Adverse	Medium. Moderate. Adverse	Low. Minor. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions.		This view is taken looking south from the eastern end of PRoW MELW60, which connects New Road and the settlement edge of Melksham. Built form adjacent to the site on New Road as well as Melksham's settlement edge are present within the view.		**Construction Phase:** It is likely that all construction activities would be seen from this viewpoint in middle range views. However, although the construction activity would form a new and recognisable element within the view, the local context is informed by residential built form and urban features and therefore construction activities would not fundamentally alter the prevailing character of the view. The proposed development is likely to give rise to a **medium** magnitude of change. **Operational Year 1:** Upon completion, the proposed development would be considered as an addition of elements that may be evident but do not necessarily conflict with the key characteristics of the exiting landscape or view. Development would be set back from the northern boundary, such that new landscape features would be introduced within the view along with SuDS features, however, these would not have matured. This gives rise to a **medium** magnitude of change. **Operational Year 15:** In the medium to long-term, newly planted landscape features within the proposed development would have likely matured enough to provide some visual mitigation and serve to break up the massing of the built form, such that the character of the view is likely to be similar to the baseline context, albeit with additional residential development within the view. The magnitude of change in the long-term is likely to be **very low**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **major/moderate, adverse, medium-term, temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate, adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to low resulting in a minor. Adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 2	View from footpath MELW60 – west	**PRoW Users**	**High**	High. Major/Moderate. Adverse	High. Major/Moderate. Adverse	Medium. Moderate. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions.		This view is taken looking south-west from the western end of PRoW MELW60 on the existing settlement edge of Melksham. The PRoW connects New Road and the settlement edge. A localised high point in the form of Sandridge Park is visible along side vegetated boundaries and pylons.		**Construction Phase:** Similar to **Photoviewpoint EDP 2**, it is likely that all construction activities would be seen, however, some lower-level activities would be screened by established field boundary vegetation. The existing settlement edge of Melksham is largely screen by boundary vegetation resulting in the introduction of the proposed development being clearly noticeable and somewhat conflict with the existing character of the view. This gives rise to a **high** magnitude of change. **Operational Year 1:** In the short-term, the proposed scheme would be clearly noticeable within mid-range views, with it becoming a newly recognised element within the view. Although, planting along the northern boundary and within the scheme would provide some softening to the view, it is unlikely that the landscape scheme would have matured sufficiently to provide visual mitigation. The proposed scheme would be clearly noticeable and, despite the presence of urbanising elements within the baseline view, the view would be fundamentally altered, giving rise to a **high** magnitude of change. **Operational Year 15:** In the medium to long term, the continued maturation of the landscape proposals throughout the site, in particular along the green corridor that runs along the northern boundary, would help to assimilate the proposed development into the surrounding context, however it would still remain a new and recognisable element within the view. Therefore, the magnitude of change is considered to be **medium**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **major/moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case major/moderate adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to medium resulting in a moderate. adverse, long-term, permanent level of effect which is **significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 3	View from New Road	**Road Users**	**Medium**	Medium. Moderate. Adverse	Medium. Moderate/Minor. Adverse	Low. Minor. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Receptors are likely to be part of moving traffic on a road with some existing urban influences including pylons and built form. The route overall has a rural character. The receptors on this road are considered to have a **medium** sensitivity.		This view is taken along New Road looking south towards the site. New Road defines the sites eastern boundary with boundary hedgerows well-managed and a typical landscape feature. Built form adjacent to the site is visible from this location.		**Construction Phase:** It is likely that taller construction elements would be visible from this location, with mature boundary vegetation limiting views of low-level construction activities. It is considered that taller construction activity is likely to be recognised by the receptor as a new and recognisable element to the view, giving rise to a **medium** magnitude of change **Operational Year 1:** In the short term, a large proportion of the proposed development would be screened from this location due to the presence of existing boundary vegetation within the view. However, it is possible that taller elements of the development, including rooftops, may be visible above the landscape features, due to the management of them. As the development is likely to be recognised by the receptor, the magnitude of change remains **medium**. **Operational Year 15:** In the medium to long-term, the landscape mitigation embedded within the masterplan would have continued to mature, particularly along the north-eastern boundary. This serves to mitigate views of built form from this location. Therefore, the proposed development would become a minor constituent within the view at worst, giving rise to a **low** magnitude of change.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate/minor adverse, medium-term, temporary level of effect which is **not significant** in visual terms. In the long-term, the magnitude of change is reduced to low resulting in a minor. adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 4	View from A3102 - east	**Road Users**	**Low**	Medium. Moderate/ Minor. Adverse	Medium. Minor. Adverse	Low. Negligible. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Receptors are likely to be part of moving traffic on a road with existing urban influences including pylons and built form. The receptors on this road are considered to have a **low** sensitivity.		This view is taken from the eastern approach to Melksham along the A3102. The settlement edge of Melksham is clearly visible alongside farmsteads and agricultural buildings.		**Construction Phase:** Low-level construction activities would largely be screened due to distance and intervening landscape features. Greater effects would be experienced by receptors experiencing views of taller construction activities. However, several pylons and associated overhead wires along with built form are present within the view. Therefore, the proposed development would being recognised by the receptor but not necessarily conflict the characteristic of the existing landscape baseline, giving rise to a **medium** magnitude of change. **Operational Year 1:** In the short-term, although the proposed development would benefit from visual mitigation as a result of existing landscape features and newly implemented landscape features, these would not have had a chance to mature. Therefore, the proposed development would remain a recognisable element within the view. The proposed scheme would create a new positive edge to the settlement, though bringing development closer to the receptor. Therefore, the magnitude of change would remain **medium**. **Operational Year 15:** In the medium to long-term, the landscape scheme (particularly along the eastern boundary) would have matured providing visual mitigation. As a result the proposed development would form a minor constituent within the view, and where visible is representative of the surrounding context, therefore the magnitude of change is considered to be **low**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate/minor**, **adverse**, **medium-term**, **temporary** level of effect which is **not significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case minor adverse, medium-term, temporary level of effect which is **not significant** in visual terms. In the long-term, the magnitude of change is reduced to low resulting in a negligible. adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 5	View from footpath MELW26	**PRoW Users**	**High**	Low. Moderate. Adverse	Very Low. Moderate/minor. Adverse	Very Low. Minor. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions.		This view is taken from PRoW MELW26 looking north-east towards the site. Built form of Melksham is clearly visible in mid-range views, with dwellings along the A3102 visible in closer range views. Characteristic hedgerows with intermittent hedgerow trees present within the view.		**Construction Phase:** The majority of low-level construction activities would not be seen from this location. However, there is potential for some taller elements of construction activities to be visible, albeit with reduced adverse effect due to distance and intervening landscape features and built form. During construction, where taller elements are visible, the proposed scheme would form a minor constituent of the view, giving rise to a **low** magnitude of change. **Operational Year 1:** In the short-term, the vast majority of the proposed development would be screened from this location due to intervening built form and landscape features resulting in the proposed development being barely discernible within the view and remaining similar to baseline conditions. Therefore the magnitude of change is considered to be **very low**. **Operational Year 15:** The proposed development would remain a barely noticeable component of the view, which would remain similar to the baseline situation, giving rise to a **very low** magnitude of change.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate/minor adverse, medium-term, temporary level of effect which is **not significant** in visual terms. In the long-term, the magnitude of change is reduced to very low resulting in a minor. adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 6	View from footpath MELK104 and Eastern Way	**Road Users**	**Low**	Medium. Moderate/Minor. Adverse	Medium. Minor. Adverse	Low. Negligible. Adverse
		PRoW Users	**Medium**	Medium. Moderate. Adverse	Medium. Moderate. Adverse	Low. Minor. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Receptors are likely to be part of moving traffic on a road with existing urban influences including pylons and built form. The receptors on this road are considered to have a **low** sensitivity. PRoW users are generally considered to be high sensitivity, however, due to the urban context of the PRoW route the sensitivity is considered to be medium.		This view is taken at the meeting point of PRoW MELK104 and eastern way. The view is taken looking north towards the site. Residential development that forms Melksham eastern settlement edge is visible to the east of the view as well as the farmstead located adjacent to the site.		**Construction Phase:** Some low-level construction activities would be seen in mid-range views due to intervening vegetation, all taller construction activities would be seen from this location. The proposed development would form a recognisable element within the view. However, it would not be out of character in comparison to the baseline, giving rise to a medium magnitude of change. **Operational Year 1:** In the short-term, the proposed development would be a new and recognisable element within views due to lack of landscape mitigation maturation. However, the baseline view is heavily influenced by urbanising elements such as existing built form, signage and street lighting. Therefore the magnitude of change remains medium. **Operational Year 15:** In the medium to long-term, the landscape proposals would have matured assisting in assimilating the proposal into the surrounding context. Where views are possible these would be limited to partial/glimpsed and would not be uncharacteristic of the baseline landscape. Therefore, the magnitude of change is considered to be low.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to low, resulting in a moderate/minor. adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 7	View from A3102 - west	**Road Users**	**Low**	High. Moderate/Minor. Adverse	High. Moderate/Minor. Adverse	Medium. Minor. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Receptors are likely to be part of moving traffic on a road with existing urban influences including built form. The receptors on this road are considered to have a **low** sensitivity.		This view is taken from the edge of Melksham along the A3102 looking north-west across the site. Isolated farmsteads adjacent to the site are visible within views despite intervening vegetated boundaries.		**Construction Phase:** Despite the presence of boundary vegetation, views of both low-level and taller construction elements would be visible within close range views due to gaps within the vegetation. The proposed development would be clearly noticeable and despite the presence of farmsteads would fundamentally alter the character of the view. This gives rise to a **high** magnitude of change. **Operational Year 1:** In the short-term, new built form would be seen within the immediate setting of the view, changing the character from rural to urban form. The proposed development would not benefit from embedded landscape mitigation resulting in it being clearly noticeable. This gives rise to a **high** magnitude of change. **Operational Year 15:** In the medium to long-term, the proposed development would remain recognisable, however, now softened by the landscape mitigation reducing the magnitude of change to **medium**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate/minor, adverse, medium-term, temporary level of effect which is **not significant** in visual terms. In the long-term, the magnitude of change is reduced to medium resulting in a minor. adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 8	View from A3102 within Melksham looking east	**Road Users**	**Low**	Low. Minor. Adverse	Very Low. Minor/Negligible. Adverse	Very Low. Minor/Negligible. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Receptors are likely to be part of moving traffic on a road and influenced by existing residential built form. The receptors on this road are considered to have a **low** sensitivity.		This view is taken from along the A3102 within Melksham looking east towards the site. Views of the site from this location are restricted due to the existing residential built form.		**Construction Phase:** The majority of low-level construction activities would not be seen from this location due to the intervening residential development. However, there is potential for some elements of taller construction activities, such as cranes, being visible. Where visible, the proposed scheme would form a minor constituent within the view, giving rise to a **low** magnitude of change. **Operational Year 1:** In the short-term, the vast majority of the proposed development would be screened from this location by the existing residential development. However, although unlikely due to distance and intervening built form, it is possible that some elements of the proposed development may be visible, in particular roof tops. However, these would form a barely noticeable component of the view, remaining similar to the baseline situation, giving rise to a **very low** magnitude of change. **Operational Year 15:** The proposed development would remain a barely noticeable element within the view, giving rise to a **very low** magnitude of change.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **minor**, **adverse**, **medium-term**, **temporary** level of effect which is **not significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case minor/negligible adverse, medium-term, temporary level of effect which is **not significant** in visual terms. In the long-term, the magnitude of change is reduced to low resulting in a minor/negligible. adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 9	View from Bridleway SEEN55	**PRoW Users**	**High**	No Effect	No Effect	No Effect
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions.		This view is taken from Bridleway SEEN55 circa. 3.3km south-east of the site. The view contains characteristic hedgerows with intermittent hedgerow trees and localised farmsteads.		**Construction Phase:** Construction activity would not be seen from this location and as such, there would be **no effect**. **Operational Year 1:** The proposed scheme would not be visible during operation and as such, there would be **no effect**. **Operational Year 15:** The proposed scheme would not be visible during operation and as such, there would be **no effect**.		During the temporary construction phase, receptors at this viewpoint would experience **no effect**. During the operational phase at Year 1, receptors at this viewpoint would experience **no effect**. In the long-term, receptors at this viewpoint would experience **no effect**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 10	View from Woodrow Road and MELW59	**PRoW Users**	**High**	Low. Moderate. Adverse	Low. Moderate. Adverse	Very Low. Minor. Adverse
		Road Users	**Low**	Low. Minor. Adverse	Low. Minor. Adverse	Very Low. Negligible. Adverse

Sensitivity of Receptor Explanation	Description of View	Magnitude of Change	Summary
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions. Receptors are likely to be part of moving traffic on a road and influenced by existing residential built form. The receptors on this road are considered to have a **low** sensitivity.	This view is taken from the meeting point of PRoW MELW59 and Woodrow Road to the north of the site. The view looks south towards the site across arable fields, with pylons and farmsteads present within the view as well as built form associated with Melksham.	**Construction Phase:** Majority of low-level construction activities would not be seen from this location; glimpses may be afforded where there are gaps in boundary vegetation, taller elements would be seen above lower boundary vegetation. However, these activities would be at a sufficient distance that they would form a small component in the view giving rise to **low** magnitude of change. **Operational Year 1:** In the short-term, the proposed development would form a new element within some of the view, however, it would not be uncharacteristic of the current baseline view. Where the built form of Melksham is visible the proposed development would form a new positive settlement edge, though bringing the development closer to the receptor. The distance between the receptor and the site results in the proposed scheme forming a small component of the view. Therefore, the magnitude of change is considered to be **low**. **Operational Year 15:** In the medium to long-term, landscape proposals would have matured serving to break up the appearance of built form and assisting in assimilating the proposal into the surrounding context. Where views are possible, these would be partial, at a sufficient distance and in line with the surrounding baseline context. Therefore, the magnitude of change is considered to be **very low**.	During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate, adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to very low, resulting in a minor, adverse, long-term, permanent level of effect which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 11	View from footpath LACO37	**PRoW Users**	**High**	Very Low. Minor. Adverse	No Effect.	No Effect.
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions.		This view is taken from PRoW LACO37 located circa. 3.2km north on the site. Layered boundary vegetation combined with distance limits visual connectivity with the site.		**Construction Phase:** All low-level construction activity would not be seen from this location. There is the potential for some taller elements to be seen above vegetated boundaries. However, these would be barely noticeable and at a long distance, therefore the magnitude of change is considered to be **very low**. **Operational Year 1:** The proposed scheme would not be visible during operation and as such, there would be **no effect**. **Operational Year 15:** The proposed scheme would not be visible during operation and as such, there would be **no effect**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate/minor**, **adverse**, **medium-term**, **temporary** level of effect which is **not significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience **no effect**. In the long-term, receptors at this viewpoint would experience **no effect**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction: Magnitude. Effect. Nature.	Year 1: Magnitude. Effect. Nature.	Operation Year 15 and Beyond: Magnitude. Effect. Nature.
PVP EDP 12	View from Spye Park	**PRoW Users**	**High**	Low. Moderate/Minor. Adverse	Low. Moderate/Minor. Adverse	Very Low. Minor. Adverse
Sensitivity of Receptor Explanation		**Description of View**		**Magnitude of Change**		**Summary**
Visual receptors using this route are likely to be doing so with the intention of enjoying the route and the surrounding landscape. This view is not recorded or promoted. Receptors at this location are considered to have **high** sensitivity due to the contribution to the local recreational provisions.		This view is taken from Spye Park circa. 3.2km to the north-east of the site. The view is taken from elevated land with views of the settlement edge of Melksham available.		**Construction Phase:** Due to the elevation of the receptor, it is likely that all construction activities would be seen from this location. However, the baseline view is heavily influenced by the existing built form of Melksham, with some intervening vegetation breaking up the view. During the construction phase of the development, the proposed scheme would form a minor constituent of long-distance views and would not conflict the existing baseline, giving rise to a **low** magnitude of change. **Operational Year 1:** During the short-term, the majority of the proposed development would be visible from this location, however, would not conflict with the baseline view due to the existing built form of Melksham being clearly visible. The proposed development would form a minor constituent of long-distance views, giving rise to a **low** magnitude of change. **Operational Year 15:** During the medium to long-term, the landscape mitigation would have matured forming a new positive settlement edge to Melksham, improving upon the stark linear nature of the existing settlement edge. Due to the landscape scheme assimilating the proposal into the surrounding context and being viewed as a small component in a long-range view, the magnitude of change is deemed to be **very low**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate/minor**, **adverse**, **medium-term**, **temporary** level of effect which is **not significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate/minor, adverse, medium-term, temporary level of effect which is **not significant** in visual terms. In the long-term, the magnitude of change is reduced to very low resulting in a minor. adverse, long-term, permanent level of effect which is **not significant**.

Assessment of Effects Table 3: Residential Receptors

Effects of moderate or greater are considered to be '**significant**' in landscape terms
Effects of moderate/minor or lesser, are '**not significant**' in landscape terms

Receptor: Group of dwellings on the settlement edge to the west of the site				
Sensitivity of Receptor Explanation	**Sensitivity**	**Construction:** **Magnitude. Effect. Nature.**	**Year 1:** **Magnitude. Effect. Nature.**	**Year 15:** **Magnitude. Effect. Nature.**
These dwellings are located on the settlement edge. There is a noticeable relationship with existing built form in Melksham and susceptibility to residential development is therefore reduced. Residents are generally considered to have high sensitivity.	**High**	High. Major. Adverse	High. Major/Moderate. Adverse	Medium. Moderate. Adverse
	Description of View	**Magnitude of Change**		**Summary**
	A group of circa. 12 dwellings located adjacent to the site's western boundary. Majority back onto the site, with a small number being side on to the site. A vegetated boundary is present between the receptors and the site, however, it does contain gaps/areas of lower vegetation.	**Construction Phase:** During construction it is likely that all construction activities would be seen from residential dwellings to the west of the site, fundamentally altering the current rural view. Existing vegetation is present along the site boundary, however, there are gaps affording views of the site as well as views from second floor windows. Therefore, it is considered the magnitude of change is **high**. **Operational Year 1:** During the short-term, the majority of the proposed development would be visible to residential receptors from this location. The proposed development would not benefit from the integrated landscape mitigation yet; therefore, the magnitude of change remains **high**. **Operational Year 15:** In the long-term, the landscape mitigation would have matured helping to assimilate the proposal into the local context. The proposal would still remain a recognised element within the view and therefore the magnitude of change is considered to be **medium**.	During the temporary construction phase, receptors at this viewpoint would experience a worst-case **major**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case major/moderate adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to medium resulting in a moderate. adverse, long-term, permanent level of effect which is **significant**.

Receptor: Group of dwellings within Melksham to the south of the site				
Sensitivity of Receptor Explanation	**Sensitivity**	**Construction:** **Magnitude. Effect. Nature.**	**Year 1:** **Magnitude. Effect. Nature.**	**Year 15:** **Magnitude. Effect. Nature.**
These dwellings are located within the settlement of Melksham. There is a noticeable relationship with existing built form in Melksham and susceptibility to residential development is therefore reduced. Residents are generally considered to have high sensitivity.	**High**	High. Major. Adverse	High. Major/moderate. Adverse	Medium. Moderate. Adverse
	Description of View	**Magnitude of Change**		**Summary**
	A group of 4 dwellings located along the A3102 facing the site, alongside a number of other dwellings set back from the A3102 by a vegetated boundary and grass verge.	**Construction Phase:** During construction it is likely that all construction activities would be seen from second floor windows of residential dwellings south of the site. Despite the intervening vegetation, it is likely that the view will be fundamentally altered by the presence of construction activity. The magnitude of change is judged to be **high**. **Operational Year 1:** During the short-term, the majority of the proposed development would be visible to residential receptors from this location. The proposed development would not benefit from the integrated landscape mitigation yet; therefore, the magnitude of change remains **high**. **Operational Year 15:** In the long-term, development is set back from the southern boundary with vertical landscape elements helping to assimilate the development into the local context. The proposal would still remain a recognised element within the view and therefore the magnitude of change is considered to be **medium**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **major**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case major/moderate adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to medium resulting in a moderate. adverse, long-term, permanent level of effect which is **significant**.

Receptor: Isolated dwellings on the boundary of the site				
Sensitivity of Receptor Explanation	**Sensitivity**	**Construction:** **Magnitude. Effect. Nature.**	**Year 1:** **Magnitude. Effect. Nature.**	**Year 15:** **Magnitude. Effect. Nature.**
These dwellings are located within a rural setting on the settlement edge. There is a noticeable relationship with existing built form in Melksham and susceptibility to residential development is therefore reduced. Residents are generally considered to have high sensitivity.	High	High. Major. Adverse	High. Major. Adverse	Low. Moderate/minor. Adverse
	Description of View	**Magnitude of Change**		**Summary**
	New Road Farm and associated dwellings is located adjacent to the site's eastern boundary. The cluster of buildings is bounded by vegetation and accessed off New Road.	**Construction Phase:** During construction it is likely that all construction activities would be seen in all close range views. Construction activity would fundamentally alter the view for these residential receptors. The magnitude of change is judged to be **high**. **Operational Year 1:** During the short-term, the majority of the proposed development would be visible to residential receptors from this location. The proposed development would not benefit from the integrated landscape mitigation yet; therefore, the magnitude of change remains **high**. **Operational Year 15:** In the long-term, development is set back from the eastern boundary with a large landscape buffer in place helping to assimilate the development into the local context and reduce visual impacts. The proposal would become only partially visible and therefore the magnitude of change is considered to be **low**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **major**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case major adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to low resulting in a moderate/minor. adverse, long-term, permanent level of effect which is **not significant**.

Receptor: Residential dwellings along the A3102 to the south-east of the site				
Sensitivity of Receptor Explanation	**Sensitivity**	**Construction:** **Magnitude. Effect. Nature.**	**Year 1:** **Magnitude. Effect. Nature.**	**Year 15:** **Magnitude. Effect. Nature.**
These dwellings are located on the settlement edge. There is a noticeable relationship with existing built form in Melksham and susceptibility to residential development is therefore reduced. Residents are generally considered to have high sensitivity.	High	Low. Moderate. adverse	Low. Moderate. adverse	Very Low. Moderate/minor. adverse
	Description of View	**Magnitude of Change**		**Summary**
	A number of individual properties along the A3102, the eastern approach to Melksham.	**Construction Phase:** During construction it is likely that only taller elements of construction activities would be seen, with low-level elements being screened by boundary vegetation combined with distance. Therefore it is judged that the magnitude of change is **low**. **Operational Year 1:** During the short-term, roof tops and higher elements within the site may be visible, however, these would only form only a minor constituent of the view and be in keeping with the surrounding baseline character. Therefore the magnitude of change is judged to be **low**. **Operational Year 15:** In the long-term, the integrated landscaping within the masterplan would have matured mitigating views of the built form. Therefore the magnitude of change is judged to be **very low**.		During the temporary construction phase, receptors at this viewpoint would experience a worst-case **moderate**, **adverse**, **medium-term**, **temporary** level of effect which is **significant** in visual terms. During the operational phase at Year 1, receptors at this viewpoint would experience a worst-case moderate, adverse, medium-term, temporary level of effect which is **significant** in visual terms. In the long-term, the magnitude of change is reduced to very low resulting in a moderate/minor. adverse, long-term, permanent level of effect which is **not significant**.

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Appendix 9.3 Cumulative assessment

Land at New Road Farm, Melksham

Technical Appendix 9.3: Cumulative Effects

Prepared by:
The Environmental Dimension Partnership Ltd

On behalf of:
Bloor Homes South West

November 2024

Report Reference
edp7940_r005a

Contents

Assessment of Effects: Cumulative Effects 1

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005_DRAFT	MMm	LLI	WGa	-
005a	MMm	-	-	MWI 011124

Assessment of Effects: Cumulative Effects

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction:	Operation Year 1:	Operation Year 15 and Beyond:
Photoviewpoint EDP 1	View from Footpath MELW60 - east	**Public Right of Way (PRoW) Users**	**High**	**Photoviewpoint EDP 1** is taken from a PRoW north of the site. From this location there would be no in-combination cumulative effects due to the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' not being visible within the same field of view as the proposed development. However, it is possible that receptors here would experience views of construction activities within the Site, in succession with the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)'. However, the addition of these elements would not conflict with the existing landscape context. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a **moderate adverse** effect, which is **significant.**	On completion, the cumulative magnitude of change would not alter and as with during construction, the cumulative magnitude of change of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' and the proposed development would appear as a continuation of built form along the A3102, with the proposed development being seen against the existing backdrop of Melksham. Therefore, the cumulative magnitude of change is judged to be **low**. The overall effect is judged to be moderate adverse effect, which is **significant**.	At Year 15, the cumulative magnitude of change would reduce as proposed landscape mitigation within the proposed development and Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would have matured. This will give rise to a very low cumulative magnitude of change. The overall effect is judged to be moderate/minor adverse effect, which is **not significant**.
Photoviewpoint EDP 2	View from Footpath MELW60 – west	**PRoW Users**	**High**	**Photoviewpoint EDP 2** is taken from the edge of Melksham along a PRoW to the north of the proposed development, and depending on timescales, there is a possibility that construction activities could be seen in combination with Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)', however, these would be barely discernible. Therefore, the cumulative magnitude of change is judged to be **very low**, giving rise to a moderate/minor adverse effect, which is **not significant**.	On completion, there would be no views of the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' as the proposed development would entirely screen the view. Effects would remain as set out within the LVIA.	On completion, there would be no views of the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' as the proposed development would entirely screen the view. Effects would remain as set out within the LVIA.
Photoviewpoint EDP 3	View from New Road	**Road Users**	**Medium**	It is possible that receptors here would experience views of construction activities within the site, in combination and in succession with Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)'. The Cumulative Site is located to the east (left) of the Site from this viewpoint, therefore, the proposed development would be viewed within the context of the Cumulative Site. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a moderate/minor, adverse effect which is **not significant.**	On completion, Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would read as an extension to the built form of Melksham, further urbanising the view from this location. Rooftops of the proposed development may be visible; however, they would result in a minor alteration to the overall cumulative situation. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a moderate/minor, adverse level of effect, which is **not significant.**	At Year 15, the proposed development would form a minor constituent of the view, if seen at all. Where views are possible, these would be seen in the context of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' reducing the incongruity, therefore the cumulative magnitude of change is judged to be **very low**, giving rise to a minor level of effect, which is **not significant**.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction:	Operation Year 1:	Operation Year 15 and Beyond:
Photoviewpoint EDP 4	View from A3102 - east	**Road Users**	**Low**	Photoviewpoint EDP 4 is taken from the A3102 along the eastern approach to Melksham. From this location there would be no in-combination cumulative effects due to the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' not being visible within the same field of view as the proposed development. However, if the receptor were to rotate their view towards the south, Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would be visible as well as the existing built form of Melksham, moderating the cumulative magnitude of change. Therefore, it is judged that the cumulative magnitude of change will be **low**, giving rise to a minor level of effect, which is **not significant**.	On competition, the addition of the proposed site would result in a minor alteration to the overall cumulative situation due to the backdrop of Melksham and the influence of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)'. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a minor level of effect, which is **not significant.**	At Year 15, the proposed development would become barely discernible due to maturation of landscape mitigation. Therefore, the cumulative magnitude of change is judged to be **very low**, giving rise to a minor/negligible level of effect, which is **not significant**.
Photoviewpoint EDP 5	View from footpath MELW26	**PRoW Users**	**High**	Photoviewpoint EDP 5 is taken from a PRoW to the east of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)', and, depending on timescales, there is a possibility that construction activities could be seen in combination with the cumulative site. However, views from this context would be influenced by the existing contextual setting. Therefore, cumulative magnitude of change is considered to be **very low**, giving rise to a moderate/minor adverse effect, which is **not significant**.	On completion, there would be no views of the proposed development as Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would entirely screen the view. Therefore, there would be **no cumulative effects** as a result of the proposed development.	At Year 15, there would be no views of the proposed development as Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would entirely screen the view. Therefore, there would be **no cumulative effects** as a result of the proposed development.
Photoviewpoint EDP 6	View from footpath MELK104 and Eastern Way	**Road Users** **PRoW Users**	**Low** **Medium**	It is possible that receptors here would experience views of construction activities within the site, in combination and in succession with Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)'. The Cumulative Site is located to the east (right) from this viewpoint; therefore, the proposed development would be viewed within the context of the Cumulative Site and existing built form of Melksham. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a moderate/minor, adverse effect at worst which is **not significant**.	On completion, the proposed development would read as an extension to the built form of Melksham and Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' leading to a minor alteration to the overall cumulative situation. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a moderate/minor, adverse level of effect, which is **not significant.**	At Year 15, the proposed development would form a minor constituent of the view, if seen at all. Where views are possible, these would be seen in the context of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' and Melksham, reducing the incongruity, therefore the cumulative magnitude of change is judged to be very **low**, giving rise to a minor level of effect, which is **not significant**.
Photoviewpoint EDP 7	View from A3102 - west	**Road Users**	**Low**	During the construction phase, the Cumulative Site (Land at Blackmore Farm) would not be visible and as a result there would be **no in-combination or in-succession cumulative effects** through the addition of the proposed development. Effects would remain as set out within the LVIA.	On completion, the Cumulative Site (Land at Blackmore Farm) would not be visible and as a result there would be **no in-combination or in-succession cumulative effects** through the addition of the Proposed Development. Effects would remain as set out within the LVIA.	At Year 15, the Cumulative Site (Land at Blackmore Farm) would remain not visible and as a result there would be **no in-combination or in-succession cumulative effects** through the addition of the proposed development. Effects would remain as set out within the LVIA.
Photoviewpoint EDP 8	View from A3102 within Melksham looking east	**Road Users**	**Low**	**Photoviewpoint EDP 8** is taken from within Melksham along the A3102. Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' is not visible from this location. Therefore, there are no additional cumulative effects, the level of effect would remain as identified within the LVIA.	**Photoviewpoint EDP 8** is taken from within Melksham along the A3102. Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' is not visible from this location. Therefore, there are no additional cumulative effects, the level of effect would remain as identified within the LVIA.	**Photoviewpoint EDP 8** is taken from within Melksham along the A3102. Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' is not visible from this location. Therefore, there are no additional cumulative effects, the level of effect would remain as identified within the LVIA.

Photoviewpoint No.	Photoviewpoint Name	Receptor	Sensitivity	Construction:	Operation Year 1:	Operation Year 15 and Beyond:
Photoviewpoint EDP 9	View from Bridleway SEEN55	**PRoW Users**	**High**	During the construction phase the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.	Post construction the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.	At Year 15, the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.
Photoviewpoint EDP 10	View from Woodrow Road and MELW59	**Road Users** **PRoW Users**	**Low** **High**	During construction, predominantly only taller elements of construction activity would be seen in combination with Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)'. Any change would be barely discernible. Therefore, the cumulative magnitude of change is judged to be **very low**, giving rise to a moderate/minor, adverse level of effect which is **not significant**.	On completion the proposed development would sit against the backdrop of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' and Melksham, allowing the proposed view to be seen within the same context resulting in it being barely discernible. Therefore, the cumulative magnitude of change is judged to be **very low**, giving rise to a moderate/minor, adverse level of effect which is **not significant**.	At Year 15, the proposed development would form a minor constituent of the view, if seen at all. Where views are possible, these would be seen in the context of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' and Melksham, reducing the incongruity, therefore the cumulative magnitude of change is judged to be **very low**, giving rise to a moderate/minor level of effect, which is **not significant**.
Photoviewpoint EDP 11	View from footpath LAC037	**PRoW Users**	**High**	During the construction phase the proposed development has the potential to be seen, however, it is a sufficient distance to cause no additional cumulative effects.	Post construction the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.	At Year 15, the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.
Photoviewpoint EDP 12	View from Spye Park	**PRoW Users**	**High**	During construction the addition of the proposed development alongside Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would increase the geographical area of urban elements, however, it would not be seen in isolation (due to the presence of Melksham) and is at a sufficient distance to form a minor alteration to the view. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a moderate, adverse level of effect which is **potentially significant**.	The addition of the proposed development alongside Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would increase the geographical area of development, however, it would not be seen in isolation and is at a sufficient distance to form a minor alteration to the view. Therefore, the cumulative magnitude of change is judged to be **low**, giving rise to a moderate, adverse level of effect which is **potentially significant**.	At Year 15, the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' and the proposed development would be barely discernible due to weathering and the proposed landscape mitigation maturing. Therefore, the cumulative magnitude of change is judged to be very low, giving rise to a moderate/minor level of effect which is **not significant**.
Cumulative Photoviewpoint EDP 1	Public Right of Way south of Blackmore Farm	**PRoW Users**	**High**	**Cumulative Photoviewpoint EDP 1** is taken from a PRoW to the south of Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)', and, depending on timescales, there is a possibility that construction activities could be seen in combination with the cumulative site. However, views from this context would be influenced by the existing contextual setting. Therefore, magnitude of change is considered to be **very low**, giving rise to a moderate/minor, adverse level of effect which is **not significant**.	On completion, there would be no views of the proposed development as Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would entirely screen the view. Therefore, there would be no cumulative effects as a result of the proposed development. Effects would remain as set out within the LVIA.	At Year 15, there would be no views of the proposed development as Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' would entirely screen the view. Therefore, there would be no cumulative effects as a result of the proposed development. Effects would remain as set out within the LVIA.
Cumulative Photoviewpoint EDP 2	Manor Farm	**Road Users**	**Low**	During the construction phase the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.	Post construction the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.	At Year 15, the proposed development would not be visible and as a result there would be **no cumulative effects** through the addition of the proposed development.
Cumulative Photoviewpoint EDP 3	Blackmore Farm	**Road Users**	**Low**	From this location there would be views towards the Cumulative Site 'Land at Blackmore Farm (Ref: PL/2023/01949)' and the proposed development as well as the existing built form of Melksham, moderating the cumulative magnitude of change. Therefore, it is judged that the cumulative magnitude of change will be **low**, giving rise to a minor level of effect, which is **not significant**.	On completion residential built form associated with Melksham, the Cumulative Site and the proposed development would be visible, moderating the cumulative magnitude of change. Therefore, it is judged that the cumulative magnitude of change will be **low**, giving rise to a minor level of effect, which is **not significant**.	At Year 15, the landscape scheme as part of the proposed development would have matured, moderating the cumulative magnitude of change. Therefore, it is judged that the cumulative magnitude of change will be **very low**, giving rise to a minor/negligible level of effect, which is **not significant**.

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