Land at Crow Green, Caxton Gibbet, Cambridgeshire

Site Promotion Document

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Contents

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1. Introduction

The Opportunity

Land at Crow Green, to the North East of Caxton Gibbet (Figure 1), provides the opportunity for a high-quality production and logistics business park of a strategic scale located at the junction of the A428/ A1198, north of the new settlement and Rural Centre of Cambourne and the A428 and to the south east of the Minor Rural Centre of Papworth Everard. The site is located in a transport corridor that has and continues to be the focus of substantial housing growth locally. It is located within close proximity of land that is committed in the South Cambridgeshire Local Plan to the west of Cambourne and at Bourn Airfield (Figure 2), which will provide approximately 6,000 new dwellings over the next twenty years, but without a commensurate scale in provision of new employment land.

The A428 corridor in the vicinity of the Cambourne is also set to be the focus of substantial new transport infrastructure investment, including a new grade separated junction at the A428/A1198 junction as part of the programmed dualling of the A428 to Caxton Gibbet to the A1 Black Cat roundabout, a public transport link between Cambourne and Cambridge and the development of the central section of East West Rail which will include provision of a new railway station to serve Cambourne. Crow Green is well located to take advantage of this new infrastructure provision and to provide the opportunity for future employees to adopt sustainable modes of travel to work.

The Cambridgeshire & Peterborough Independent Economic Review notes that logistics development is likely to both grow and change as new methods of transport and distribution become available. The enhanced connectedness of this part of the region to the UK transport network means that the site will be eminently suitable for high-tech manufacturing and R&D in conjunction with strategic scale logistics development, new opportunities for which are very limited in the A421/A428/A14 corridor between Bedford and Bury St Edmunds. The Cambridgeshire & Peterborough Local Industrial Strategy 2019 recognises the importance of business sectors that support the knowledge intensive economy of Cambridge. The site will be well suited to meet demand for specialist B Class industrial and commercial land uses to serve the highly constrained Cambridge market. Crow Green presents an opportunity to broaden the scope of the economy in the Greater Cambridge area within the Cambridge - Milton Keynes - Oxford Arc and contribute towards ambitious targets for economic growth.

ILLUSTRATIVE ESTATE ROAD AND ASSOCIATED GREEN INFRASTRUCTURE

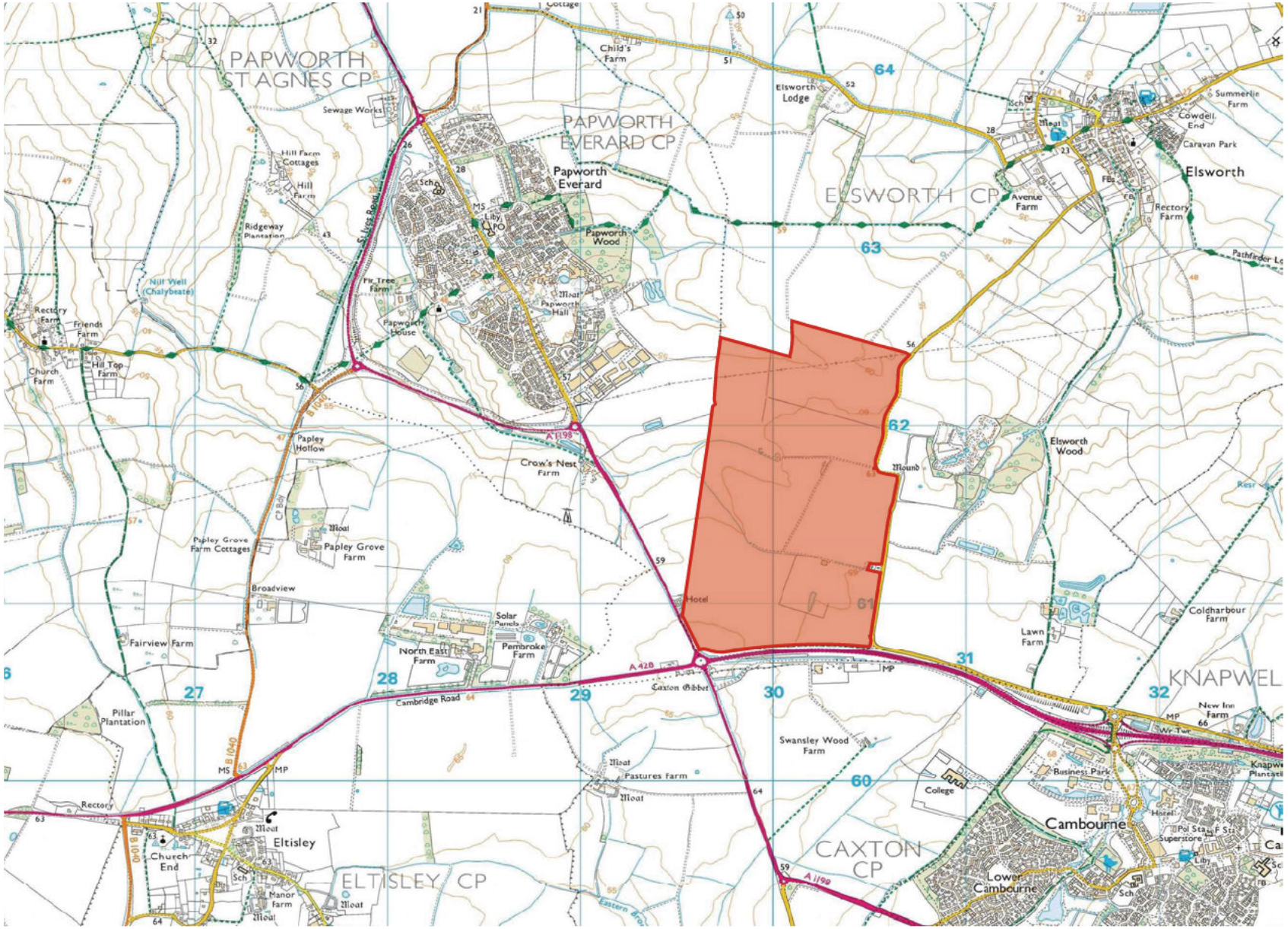


FIG 1 LOCATION PLAN

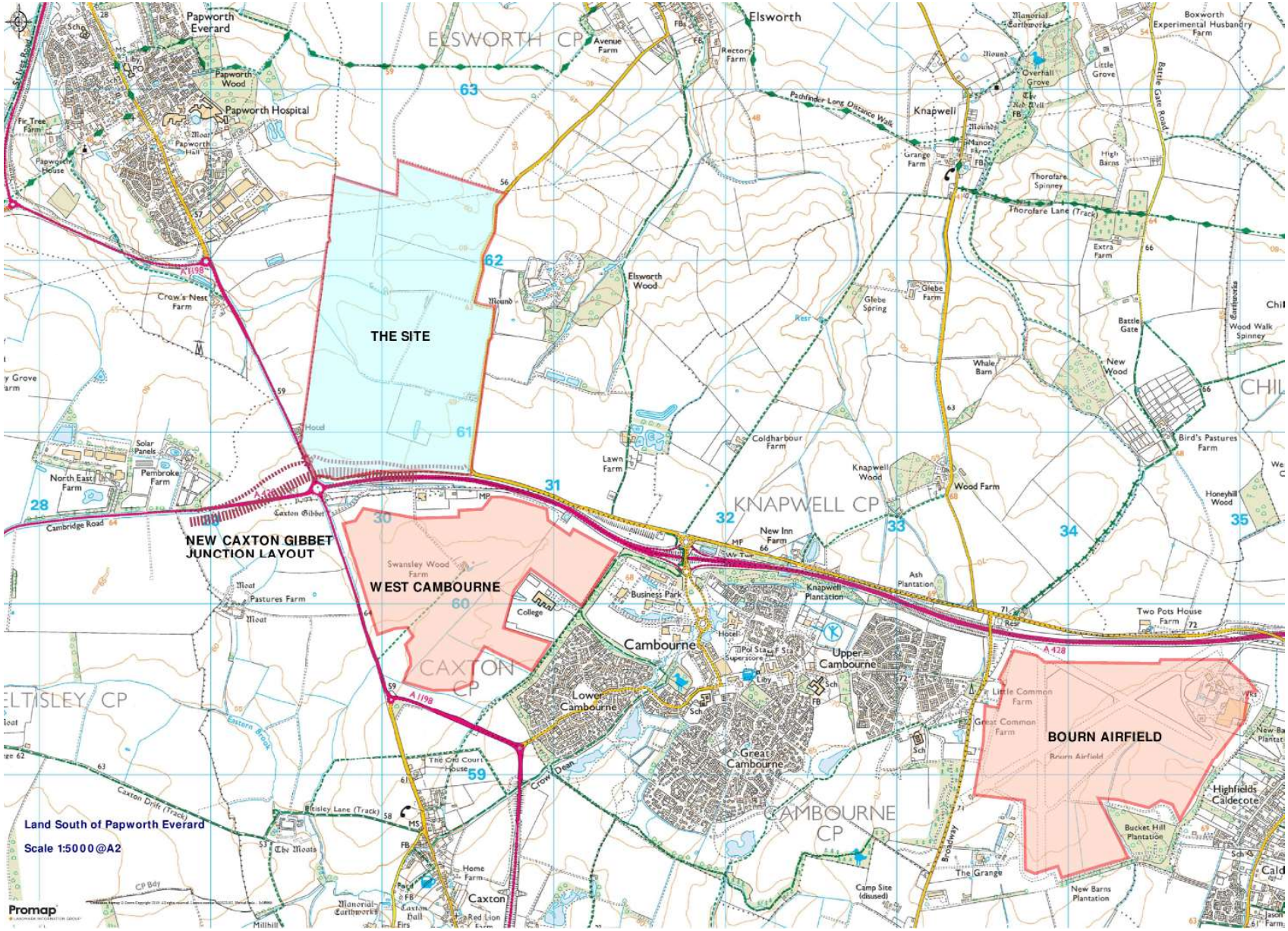


FIG 2 LAND SOUTH OF PAPWORTH EVERARD - COMPOSITE PLAN JULY 2019

2. The Consultant Team

2.1 Team

The consultant team responsible for this document has considerable experience in bringing forward, promoting, coordinating and delivering land for significant and strategic scale development sites and infrastructure projects. Each company has worked in partnership with landowners, Local Authorities and stakeholder partners, organising the delivery of technical work to promote sites through the planning and site allocation process.

The team consists of:

Carter Jonas: Planning, Economic Needs Assessment and Energy

Stantec: Highways, Transportation, Drainage, Flood Risk and Utilities

CSA: Landscape and Ecology

Orion: Heritage

Marstan BDB: Quantity Surveying

Stephen George + Partners : Masterplanning and Architecture

ILLUSTRATIVE DEVELOPMENT IN CONTEXT

3. Planning and Commercial Market Context

3.1 Local Plan and Emerging Greater Cambridge Local Plan

Crow Green is in South Cambridgeshire District, the site is agricultural land unallocated (Figure 3) for development and for planning policy purposes it is regarded as falling within the countryside where generally restrictive policies apply. However, the site is not within the Green Belt, nor is the site subject to any other planning policy or landscape designations that would preclude its allocation for development purposes.

The extant development plan for the Cambridge and South Cambridgeshire areas comprise the Local Plans that were adopted in 2018. Both local plans contain policies that commit the local authorities to an early review of the plans commencing in 2019 and the preparation of a Joint Local Plan for the Greater Cambridge area. The local authorities have now commenced an Issues and Options consultation 'the first conversation' as the first stage in preparation of the Greater Cambridge Local Plan (GCLP). The GCLP will replace the current adopted Local Plans and provide a development framework for housing and employment growth for a period to at least 2040 and possibly beyond.

The GCLP is being prepared against the background of the report to Government by the National Infrastructure Commission Partnering for Prosperity which has recognised the economic opportunity that is presented in the Cambridge – Milton Keynes – Oxford Arc. A Joint Declaration (March 2019) was signed by the Government and the local authorities within the Arc to deliver the identified priorities of Local Industrial Strategies (LIS). The Cambridgeshire & Peterborough LIS was agreed between Government and the Cambridgeshire & Peterborough Combined Authority in July 2019. It identifies the following priorities for the Combined Authority area, including Greater Cambridge:

- Improve the long-term capacity for growth in Greater Cambridge.
- Increase the sustainability and broaden the base of economic growth.
- Expand and build on the clusters and networks that have enabled Cambridge to become a global leader.

Land at Crow Green has been promoted for an allocation for employment development through the Council's 'call for sites' exercise as a well-connected and potentially highly sustainable strategic employment location that will assist in meeting the identified priorities for growth of the Greater Cambridge economy, including high-tech manufacturing, research and development and strategic scale logistics development.

Employment densities in modern logistics development can now approach those of manufacturing and whilst reliance on mechanised and computer picking systems increases, the required number of employees in such modern distribution facilities continues to grow. Job opportunities typically comprise a mix of professional, skilled, semi-skilled and unskilled jobs.

The importance of the logistics industry has long been recognised by Central Government. In 2011, the Department for Transport in its "Logistics Growth Review", highlighted the essential role of distribution in the UK economy. Paragraph 1 of this document states:

"The logistics sector is a hugely important part of the UK economy. It is an important business in its own right, with the output of core logistics activities in 2009 accounting for almost 9% of UK GVA and around 7% of total employment. It is also a critically important enabler of the success of other businesses of all sizes and sectors - from corner shops to supermarkets, manufacturers to eBay entrepreneurs, and energy companies to waste businesses."

FIG 3 EXISTING SITE PLAN

Paragraph 3 continues, *"Facilitating conditions for growth in the logistics sector is therefore critical to the Government's growth agenda".*

In December 2014, the Government in its National Policy Statement for National Networks had further quantified the value of the industry:

"The logistics industry, which directly employs over 2 million people across more than 190,000 companies generating over £90 billion annually underpins the efficient operation of most sectors of the wider national economy." (paragraph 2.42)

The NPPF singles out the storage and distribution sector as one of only three sectors for particular attention. Under the heading of 'Building a Strong Competitive Economy' and with regard to the identified requirement of the planning system to give significant weight to the need to support economic growth and productivity, paragraph 82 states:

"Planning policies and decisions should recognise and address the specific locational requirements of different sectors. This includes making provision for clusters or networks of knowledge and data-driven, creative or high technology industries; and for storage and distribution operations at a variety of scales and in suitably accessible locations."

The storage and distribution service sector, therefore, is not only recognised as a key economic sector in its own right, employing high levels of people directly, but also its essential role in supporting other key sectors that rely on efficient movement of goods is widely acknowledged.

ILLUSTRATIVE DEVELOPMENT IN CONTEXT

4. Site Assessment and Consultant Evaluation

4.1 Flood Risk and Surface Water Drainage

Flood Risk and Existing Watercourses

The Land at Crow Green is in Flood Zone 1, Low Probability from river flooding. The topography indicates that the land is at the head of the fluvial sub-catchment, with watersheds located at the road to the east and south of the site. The receiving watercourses from this land flow predominantly to the West of Papworth, but the northernmost extent of the site passes to a watercourse to the east that flows through the village. The latter watercourse is known to have some flood risk problems. No intensive development is proposed in this area. Furthermore, the surface water strategy gives an opportunity to provide some betterment to control the rapid agricultural run-off that is evident in the catchment. Most of the site is also shown to be at Low Risk of surface water flooding, with localised areas illustrated within the Gov.UK flood maps to be at medium and high risk of flooding. These areas relate to the existing watercourses traversing the central area of the site.

Fluvial flooding is typically defined as flooding caused by water in rivers rising above bank levels, while surface water flooding is flooding caused by heavy rainfall running off land and ponding in areas of low topography, as it flows towards a watercourse or land drain. In reality flooding is often caused by both sources of flood water combining. This area is not vulnerable to groundwater flood risk, or inundation from a registered reservoir.

The existing watercourses located within the site boundary do not appear to accept positively drained discharge from off site areas or runoff from catchment areas outside the red line boundary. The proposal is therefore focussed on conveyance and control of surface water flow at source, arising from within the development area. As the watercourses are not considered to receive external flow, there is some increased flexibility to sensitively realign these features to allow for the development of the site but to also facilitate opportunities to better control the flow at source and make them enhanced blue corridors through the site. The form of the realigned watercourses will be undertaken in agreement with the approving authorities and ensure there is no detriment to off site areas, but they will be designed to manage the existing Surface Water risk and will provide conveyance, attenuation and enhanced biodiversity.

The site is in a low risk flood area and is appropriate for the proposed development in accordance with NPPF Guidance.

Sustainable Surface Water Drainage Strategy

The proposed sustainable surface water drainage strategy for the site is being developed and informed by the existing site constraints and hydrological catchments. The surface water drainage will be carefully developed to address the proposed landscape and visual requirements, identified during the baseline analysis for the project, and to maximise opportunities for biodiversity and wider flood risk betterment.

Water quality will be managed to ensure the requirements of the Water Framework Directive (WFD) are being met, achieved through the application of the relevant guidance (CIRIA SuDS Manual). This has informed the Sustainable Drainage Strategy (SuDS) proposed for the site, which is detailed further below. In addition, the site is not located in a source protection zone or designated aquifer and therefore the sensitivity to groundwater is not seen as a constraint to the development and application of SuDS.

The Proposed Development will include a comprehensive Sustainable Drainage Strategy (SuDS) which will play an integral part of the landscaping proposals for the project. The proposed SuDS seeks to deliver long term mitigation by promoting infiltration where appropriate and attenuating and treating the development generated surface water runoff, where possible to provide betterment.

The SuDS will be designed so that it will be fully integrated within the wider landscape proposals and will provide opportunities, where practicable, to enhance localised amenity. A network of blue/green corridors will be established to convey flows to the attenuation facilities located primarily in the low-lying areas of the site. They will discharge at a controlled rate into the watercourse that forms the natural drainage path from the land.

As well as providing a drainage function, the SuDS will also form an important part of the project's biodiversity strategy. The proposed SuDS features will be designed so that they maximise opportunities for habitat creation and wildlife. This will include the introduction of appropriate marginal planting and native tree and shrub planting.

The prevailing surface water strategy to be adopted is a network of on-site planted channels which convey surface water to the proposed detention basins which will provide the necessary storage for the site prior to discharge to the existing watercourse located to the west of the site in a controlled manner. By controlling and attenuating run-off to normal flow rates (Qbar), the mitigation measures will provide significant betterment to the catchment for annual probability events greater than Qbar (equivalent to the 1 in 2 annual probability event), reducing rapid run-off at the head of the catchment.

Where feasible, upstream on plot drainage solutions such as bio-retention planters and permeable paving will be promoted to also provide pre-treatment for hard standing surfaces such as car parking areas (excluding those used for heavy good vehicles and in locations where storage might have implications with water quality). Piped networks and interceptors will still be appropriate in areas of the site due to risk from contamination from storage facilities and to suit parts of the emerging masterplan.

Opportunities will also be explored for containment for industrial re-use, such as rainwater harvesting (for either internal or external uses) and water-cooling systems. This is subject to the development end use, the effectiveness of such a system and regulatory requirements.

The surface water risks are manageable on the site and can provide a positive betterment to existing flood risk in the receiving watercourses. Adequate allowance has been made for space for water in the emerging proposal, which can be developed and delivered in accordance with the relevant SuDS guidance, approving stakeholder requirements and normal flood prevention design parameters.

4.2 Landscape and Visual

The site is not covered by any statutory or non-statutory designations for landscape character or quality. The site comprises large scale, undistinguished farmland to the south east of Papworth Everard. It lies within the Western Claylands Landscape Character Area, as described in South Cambridgeshire District Council's adopted District Design Guide.

The site forms part of a wider landscape of arable farmland, which is generally open with intermittent hedgerows and occasional shelter belts and woodland blocks. The site is also influenced by its proximity to the A428, the edge of Cambourne (with further expansion consented to the west of the settlement), overhead pylons, and employment uses at the edge of Papworth Everard. The proposed highway improvement scheme will see the realignment of the existing A428 dual carriageway north of Caxton Gibbet roundabout and the creation of a new roundabout and slip road leading from Ermine Street (A1198) across the south western part of the site. The proposed highway works will further disturb the character of the landscape within the southern part of the site.

The site is visible in the near distance from the A428 and from Brockley Road which follows the eastern edge of the site. There are also views available from sections of the Pathfinder Long Distance Walk, and longer distance views from the locations to the north and north east of the site. Views from within the settlements of Papworth Everard and Elsworth are unavailable due to the intervening topography and tree cover. Middle and long-distance views of the interior of the site from the east, west and south are more limited owing to a combination of topography, woodland / treed field boundaries and built development. Figure 4 gives context to middle and long-distance views assessed.

In order to address potential landscape and visual effects, the following key landscape considerations have informed the opportunities and constraints plan for development:

- Employment development to be located within the southern part of the site and set back some distance from the more visually sensitive ridge at the northern edge of the site;
- The largest buildings will be accommodated within the southern part of the employment area, which has the greatest capacity for development of this scale owing to its proximity to the A428, the proposed highway improvements and future mixed use expansion in west Cambourne;
- Development in the northern part of the employment area will be smaller in volume and height, providing a transition between the A428 corridor and the farmland to the north;
- A new woodland buffer, a minimum of 50m in depth, will be provided alongside the northern edge of the employment area; and
- The land to the north will provide an area for landscape / ecological mitigation, and potentially low level solar development.
- Potential residual arisings from the excavation of the building platforms can be sensitively landscaped within the northern area, assisting with the screening of the site.

The proposals will result in the loss of a swathe of relatively undistinguished farmland, which will be replaced by employment buildings and a potential solar farm. However, development in this location will benefit from a close association with the new A428 highway infrastructure and access points off the slip road leading from the realigned Caxton Gibbet Roundabout. New woodland and hedgerow planting at the site boundaries and within the land to the north of the site will add to the local tree cover, and will have a positive impact on landscape character in the medium to long term. Further afield, the undulating topography means that landscape effects on the wider Western Claylands LCA to the north and east of Papworth Everard, will be more limited.

The greatest visual effects will be experienced in the near vicinity of the site from Brockley Road to the east and in low sensitivity views from the A428. Views from the road will largely be from the section which follows the eastern edge of the site, as beyond this to the north, views are restricted by the falling landform. There will be little effect on views from the residential areas of Papworth Everard and Elsworth to the north west and north east respectively.

In views from sections of the Pathfinder Long Distance Walk, approximately 1.3km north and 2.3km north east of the site, the employment buildings will be visible beyond the intervening farmland and in the context of existing employment land at Papworth Business Park. Retention of the existing woodland blocks to the north of the development area will provide partial screening in the short term, and new woodland planting can add to the visual containment in the medium to long term. Impacts on long-distance views from the north and north east can be mitigated by carefully siting development away from the ridgeline to the north of the site.

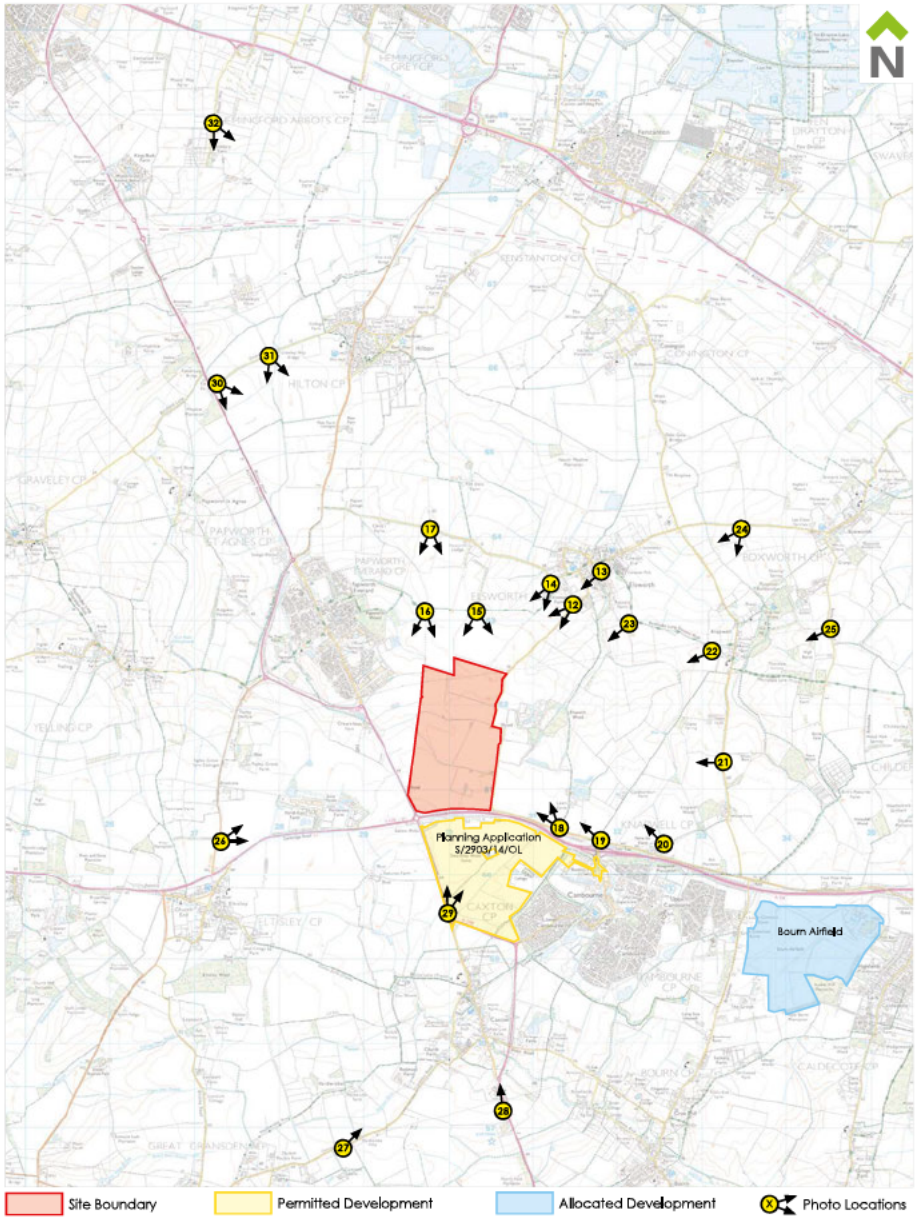


FIG 4 LOCATION AND MIDDLE TO LONG-DISTANCE VIEWS

4.3 Ecology & Biodiversity

The site (Figure 5) is dominated by arable land of inherently low ecological interest likely to support an impoverished flora and fauna. Following the mitigation hierarchy, scheme design has sought to retain and protect areas of greater ecological interest as far as possible, including remnant hedgerows, trees, woodland blocks and a protected roadside verge (PRV).

The site lies outside published Impact Risk Zones (IRZs) for this form of development for Elsworth Wood Site of Special Scientific Interest (SSSI) and Papworth Wood SSSI which lie to the east and northwest of the site, respectively. As such, no impacts are predicted in this regard.

It is acknowledged that development of the site would necessitate the loss of some areas of ecological interest, including a pond, a field ditch and some remnant hedgerows, as well as to displace certain notable or protected species associated with farmland habitats. However, there is substantial capacity within the site to mitigate all likely impacts, including those related to notable or protected species.

Furthermore, opportunities are available for the scheme to provide substantial ecological enhancements, with the potential to deliver measurable Biodiversity Net Gain (BNG) and contribute to wider ecological networks through extensive landscaping proposed.

FIG 5 HABITATS PLAN

4.4 Decentralised Energy

The South Cambridgeshire Local Plan (2018) contains policies which promote the integration of renewable and low carbon technologies into new developments, where appropriate and technically feasible, with due regard for site conditions and wider constraints.

The emerging GCLP, has identified Climate Change as one of its 'Big Themes'. This is being discussed as part of 'The First Conversation', which is seeking the views of the community to help identify ways for the mitigation of and adaptation to Climate Change. All of this is set against the backdrop of the commitment of SCDC, Cambridge City Council and Cambridgeshire County Council to achieving zero carbon by 2050.

The background to the First Conversation specifically refers to designing new communities, infrastructure and buildings to be energy and resource efficient, both in the way they are built and the way they are used over their lifespan. Furthermore, it is recognised that in order to deliver the appropriate climate change mitigation and adaptation for a development, consideration needs to be given to how this can be achieved, with the aim of integrating sustainable design into the earliest stages of the masterplanning process.

The Crow Green development offers an opportunity to embed the principles of sustainable design and construction, from the outset, in a major employment park. The first principle that will be considered as the scheme is developed, is how the buildings can be designed to be as energy efficient as possible. Where feasible, the remaining energy demand for the development will be met through the use of renewable and/or low carbon technology. The scale of the proposed development presents opportunities and challenges in this regard. The use of building-integrated renewable and low carbon energy technology will be considered alongside the use of site-wide energy solutions, which make the best use of the available local resources.

Initial work at Crow Green suggests that there may be scope to source a significant proportion of the development's energy needs through the use of on-site solar photovoltaic (PV) electricity generation. As the sceme develops, the scope for the location of this solar PV on the site's building roof-spaces or the surrounding land will be explored. The supply of low carbon heating and hot water provision will be evaluated, on an individual building basis and also with consideration of a site-wide solution incorporating a heat network. It is likely that heat pumps will form part of this evaluation, with the potential to utilise the renewable electricity generated by the on-site solar PV to drive the heat pumps.

The energy strategy for the development will be further informed by the recently adopted Greater Cambridge Sustainable Design and Construction Supplementary Planning Document (SPD).

ILLUSTRATIVE VEHICLE CHARGING POINT

Due to its location on part of the UK's strategic road network, the Crow Green development offers an opportunity to contribute to an improvement in the sustainable transport infrastructure within the local area. It is envisaged that ultra-rapid electric vehicle charging facilities will be provided as part of a roadside services area at the southern edge of the development.

The proximity of significant existing and proposed new residential development (Cambourne and Bourn Airfield) to the proposed Crow Green development, offer opportunities for a more sustainable travel strategy to be delivered. The ability of employees to choose more sustainable methods of travel to work, including walking and cycling, is enhanced by this close proximity.

ILLUSTRATIVE ON-SITE SOLAR PHOTOVALTAICS

4.5 Archaeology and Heritage

The site is in a landscape that was being utilised in the prehistoric period but there is little evidence for any permanent settlement prior to the Iron Age. There is an area of Iron Age/Roman settlement to the northwest and another to the south of the site. Cropmarks have been recorded at the very southern edge of the site which previous archaeological investigation established as being 1st century AD field systems. Given the evidence within the wider area around the site, the site is considered to have potential for further Iron Age/Roman remains. There is therefore a known potential for archaeological remains dating from the Iron Age/Roman period to be present in the south of the study site and a high potential is considered in the north east of the study site. The site is considered to have low potential for remains of other archaeological periods, although remains associated with Common Farm which used to stand in the south eastern part of the site. Based on the available evidence, any archaeological remains that survive within the site are unlikely to be of more than local significance and will not be a design constraint.

There are no designated heritage assets located within the site. The nearest listed structures are two mileposts alongside the A428 to the south/south west of the site, neither of which will be impacted upon. Papworth Everard Conservation Area is 650m to the north east at its nearest point to the site. There are no key views that include the site identified in the Conservation Area Appraisal and the site is considered to lie beyond the setting of the Conservation Area and the listed buildings within it. There is a cluster of listed buildings in Elsworth, including the Grade I Church of Holy Trinity, which are about 1.5km + to the north east of the site. Due to the intervening topography, the site is considered to lie beyond the setting of these designated heritage assets. Consequently, the proposed development of the site is considered to have no impacts on the significance of any designated heritage assets.

Figures 6 and 7 illustrate the Designated and Non-Designated areas.

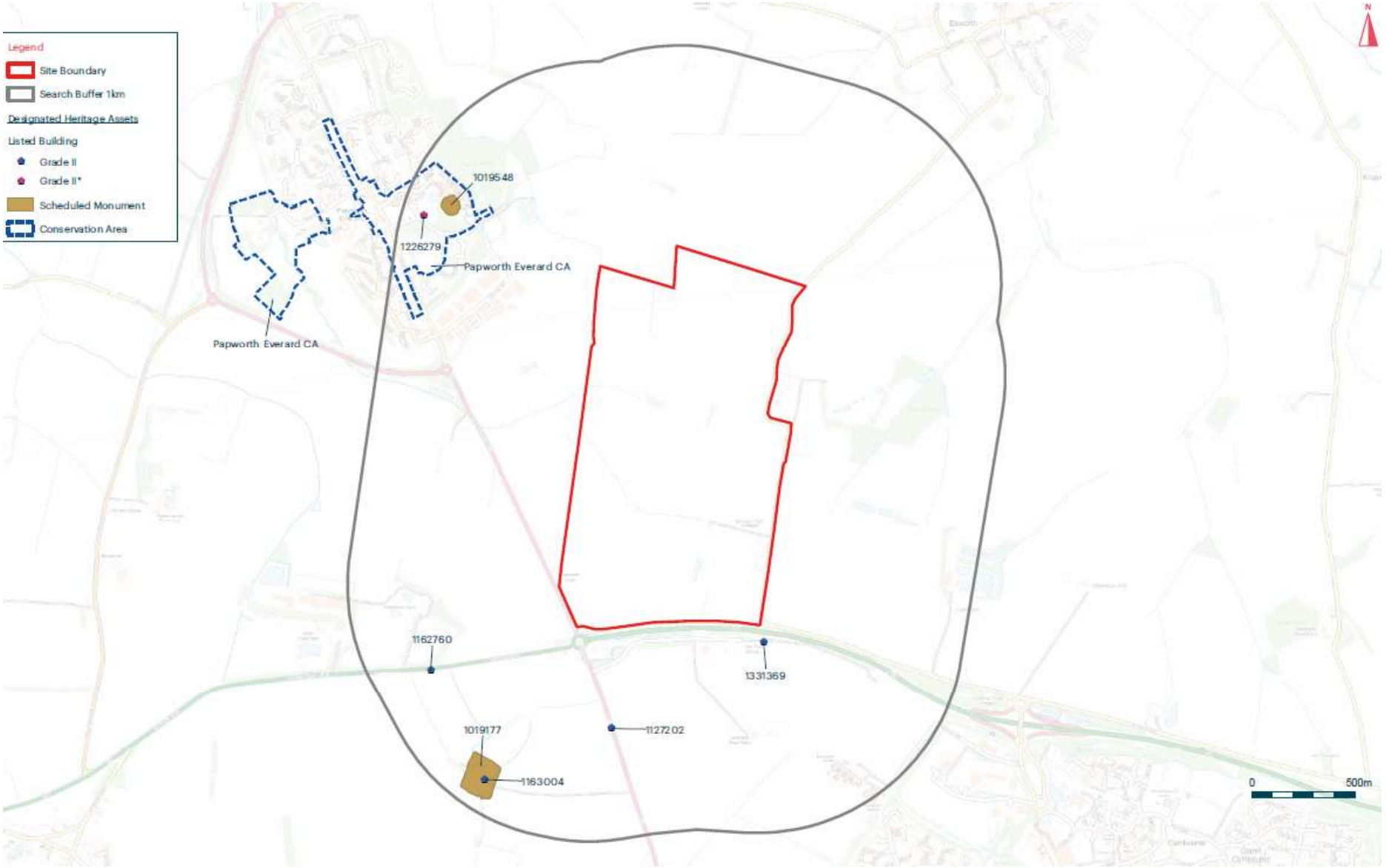


FIG 6 DESIGNATED AREAS

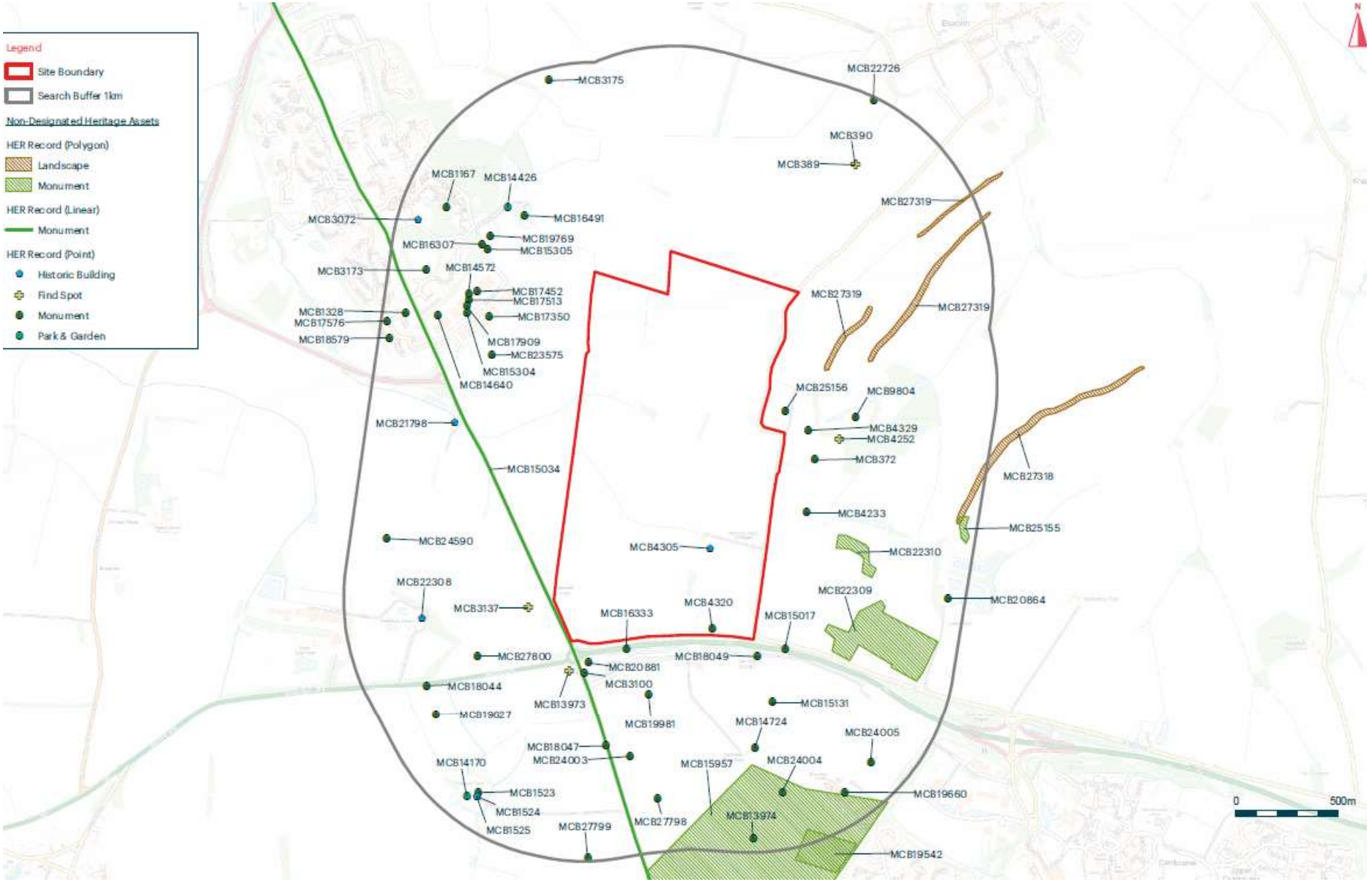


FIG 7 NON-DESIGNATED AREAS

4.6 Utilities

Caxton Gibbet Utilities
The existing utility infrastructure in the vicinity of the Caxton Gibbet site has been reviewed to consider potential points of connection for new utility supplies. Existing utility infrastructure is present along the A428 and A1198 Ermine Street which border the site, and at nearby Papworth Everard. A summary of the existing services is outlined below:

Electricity:
There is an existing 132KV overhead line that crosses the northern end of the site. The wayleave, height restrictions and stand-off area around the pylons will be a constraint on the development, but this is located outside of the proposed development envelope.

UK Power Networks have existing 11kV high voltage electricity infrastructure located along the A428 road and A1198 Ermine Street on the site's southern and western boundary. An 11kV electrical substation is also located 75m south of the site's southern boundary on the A428.

Potable Water:
The site is located within the South Staffordshire Water (previously Cambridge Water) network area. An existing 250mm water main runs along the A428 and A1198 Ermine Street on the site's southern and western boundary.

Gas:
There is a GTC owned 125mm Medium Pressure Gas main located approximately 700m west of the site which serves the Papworth Business Park, on the southern edge of Papworth Everard.

Foul Water:
Anglian Water have foul water infrastructure located 700m west of the site on the southern boundary of Papworth Everard. The nearest wastewater treatment works (Papworth Everard WRC) is located north of Papworth Everard.

Communications:
Asset records indicate that there is telecommunication infrastructure belonging to three major service providers in the immediate vicinity of the site, namely: Openreach, Virgin Media and Vodafone. This infrastructure runs within the A428, 50m south of the site. This indicates a choice of telecommunication services to the site is available, including fibre connections.

Conclusion
Existing utility infrastructure is present along the A428, A1198 Ermine Street and near the Caxton Gibbet site that may have capacity to serve the development. Enquiries have been made to the relevant utility companies to determine points of connection and to confirm available capacity. This will also identify if any potential upstream reinforcement works are required, with details and costs. Responses are currently awaited.

4.7 Highways and Transport Strategy

Transport Context

Key transport policy guidance seeks new developments that reduce the need to travel by car, with priority given to non-car modes of travel and promotion of accessibility by walking, cycling and public transport.

Land at Crow Green will help deliver these key transport policy aims. The development would provide an important source of local employment opportunities for nearby residential areas, including Cambourne, Papworth Everard and the proposed new developments at West Cambourne and Bourne Airfield. This will reduce the need for residents of these settlements to travel to employment locations further afield, for example in Cambridge, and in doing so reduce the impact on existing transport infrastructure and services.

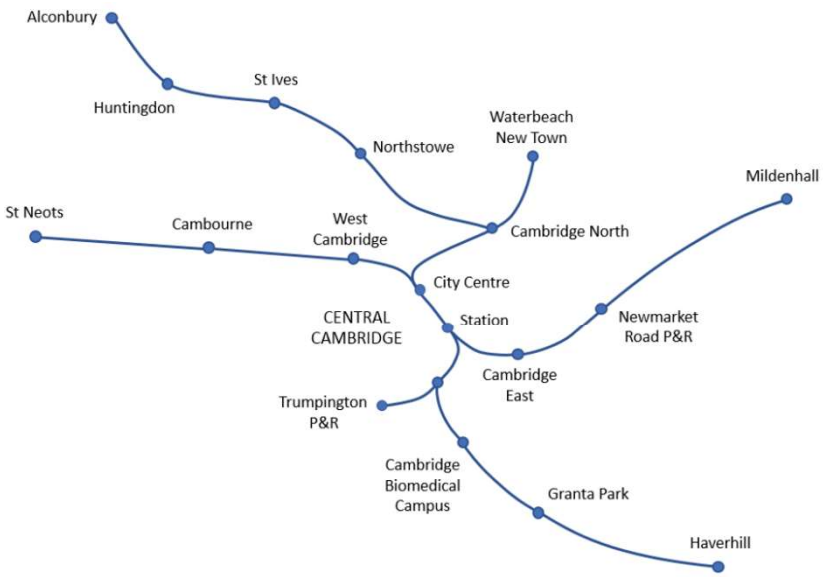


FIG 8 PROPOSED CAM NETWORK

Planned Transport and Highways Improvements

There are significant planned transport infrastructure projects near the site which are to be delivered in the short term, including a high-quality public transport link between Cambourne and Cambridge. The Combined Authority has announced that it will deliver this scheme as part of its plans for a comprehensive Cambridgeshire Autonomous Metro (CAM) (Figure 8). The project will provide a high-quality public transport connection between Cambourne and Cambridge City.

In the medium to longer term, the site will benefit from its proximity to East-West Rail, the preferred route of which would go via a new station serving Cambourne to the south of the site. This would provide a direct rail connection into Cambridge station, along with the proposed Cambridge South station at the Cambridge Biomedical Campus. To the west, East-West Rail will connect Cambourne with St Neots, Bedford, Milton Keynes and Oxford (Figures 9 and 10).

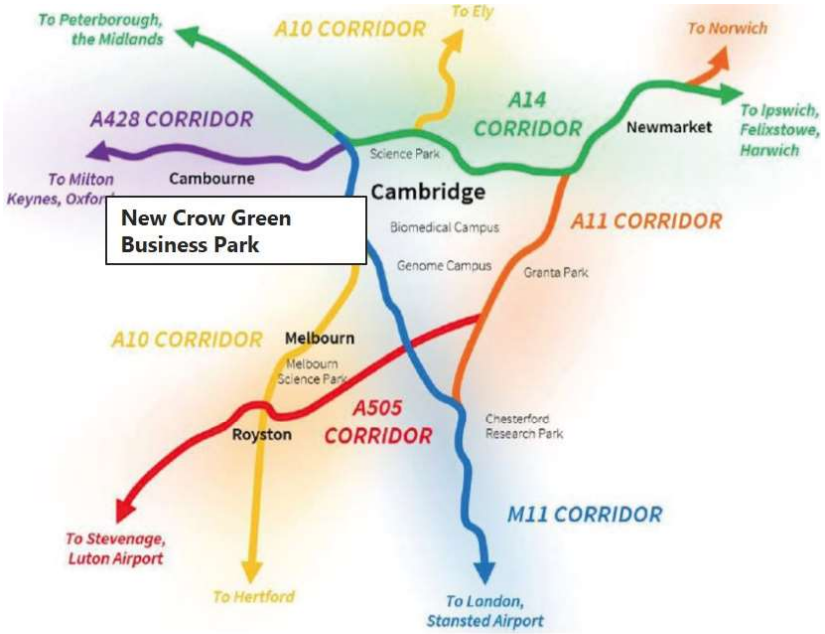


FIG 9 CORRIDORS PLAN

FIG 10 INDICATIVE ROUTE OF EAST – WEST RAIL AT CAMBOURNE

The planned A428 Caxton Gibbet – Black Cat improvements (Figure 11) will improve the strategic accessibility of the site, and mean that there will be appropriate access for large goods vehicles from the strategic road network such as the A1 and A14.

FIG 11 HIGHWAYS ENGLAND'S PROPOSED CAXTON GIBBET JUCTION

Transport Strategy for Crow Green

Reduce the Need to Travel by Car

Cambourne and West Cambourne are within reasonable walking and cycling distance of the site, and therefore the Site provides good opportunities for residents of these settlements to work at a nearby location that is accessible by non-car modes. This reduces their impact on the wider highway network, assisting with an important transport policy aim.

Promote Walking and Cycling

Improvements would be made to the existing pedestrian and cycle provision, including new pedestrian and cycleways along the A1198 to link the site with Cambourne. This link would connect with the proposed cycleway that will run along the southern boundary of the site, immediately north of the east-bound A428 on-slip from the improved Caxton Gibbet junction.

Pedestrian and cycle improvements will also be introduced along Brockley Road between the A428 Cambourne junction and the site.

These improvements are shown indicatively on Figure 12 below and would significantly enhance the pedestrian and cycle accessibility of the site with Cambourne, West Cambourne and the proposed East West Rail station at Cambourne. These are all within 2 miles of the site, which is a reasonable cycling distance and could also attract some walking trips.

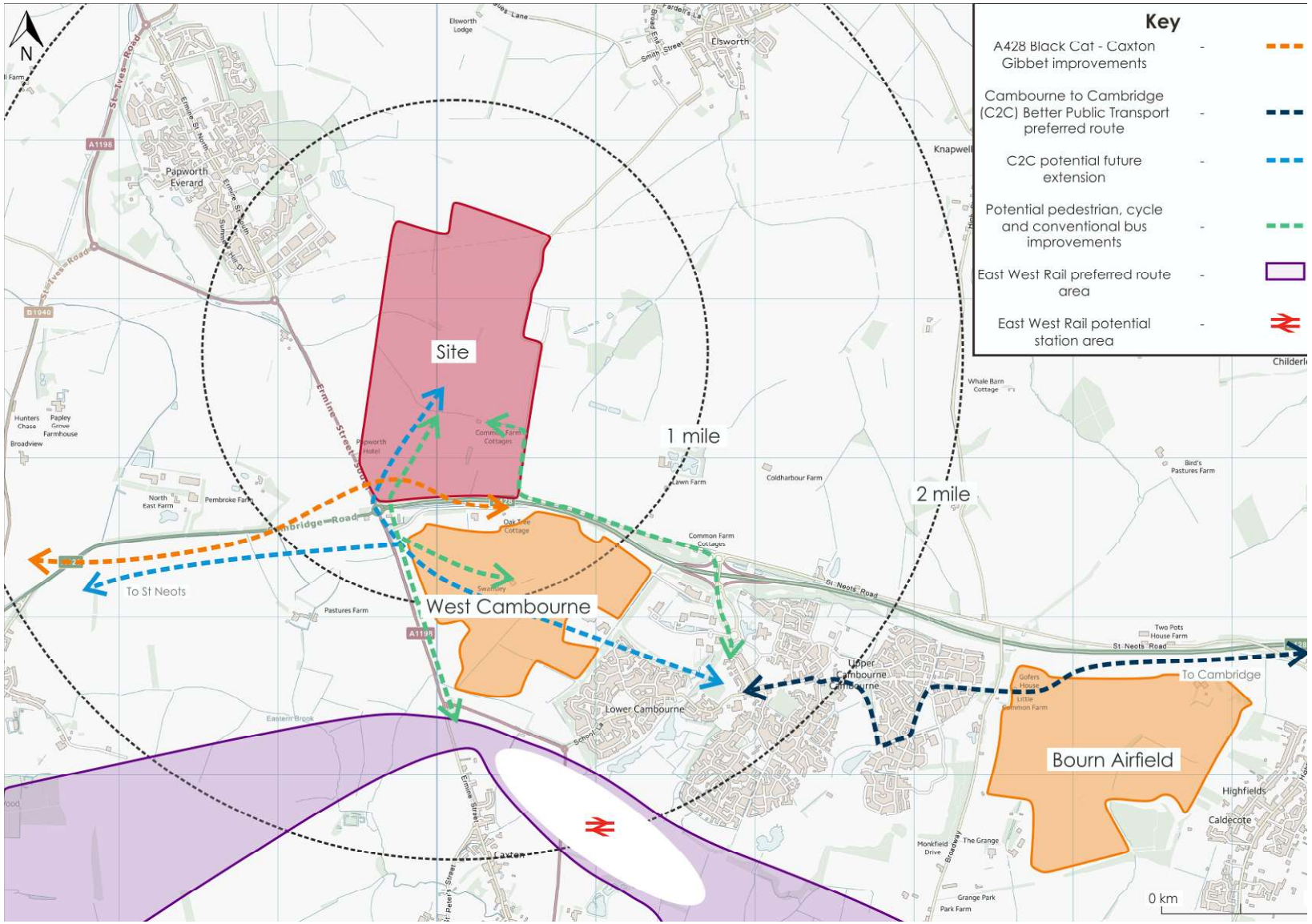


FIG 12 PEDESTRIANS, CYCLE AND PUBLIC TRANSPORT IMPROVEMENTS

Maximise Public Transport Opportunities

The CAM and East-West Rail will provide a step-change in the public transport accessibility of the site. In combination with walking and cycling improvements, they will deliver excellent opportunities for workers of the development to be able to use public transport as their main means of accessing the Site, and therefore limit the number of car trips generated by the development. This accessibility will be across a wide area, including key residential areas both local and regionally along the Cambridge – Milton Keynes – Oxford Arc.

The development will seek a connection with any westward extension of the CAM network, so that employment provided at the Site is accessible by public transport for residents of a wide area, including Cambridge, Cambourne and St. Neots.

Conventional bus services could be extended into the Site, to further enhance public transport accessibility. These services could route via the southern section of Brockley Road, providing access directly off the A428 or via Cambourne.

Indicative extensions and routings of these public transport services are shown in Figure 12 above, which also shows the accessibility of the site with the proposed East West Rail station at Cambourne. A shuttle bus could be provided between the station and the Site to further enhance its non-car accessibility for future employees.

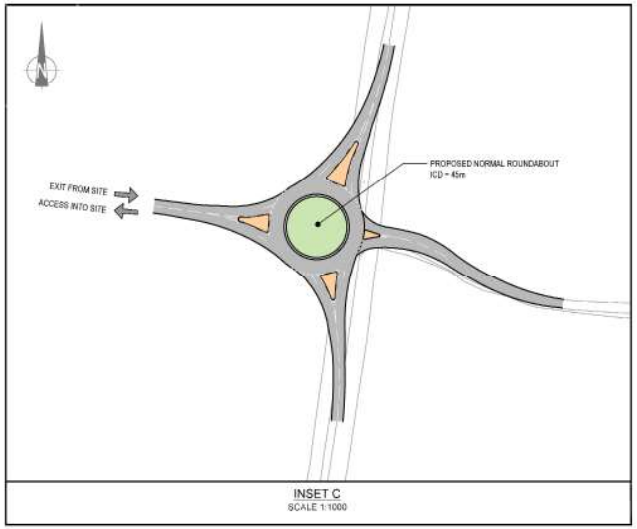
Vehicular Access Strategy

The site access strategy does not require any changes to the Highways England A428 and Caxton Gibbet improvement proposals.

Access is currently proposed via a new 3-arm roundabout at the southern section of Brockley Road immediately east of the site. There is significant frontage along Brockley Road so the location of this access could be shifted further north. Access to the wider local highway network would then be via the A428 Cambourne junction to the east.

Subject to further design work and agreement with Highways England, a new left-in entry-only access could also be delivered into the site via the east-bound A428 on-slip. This would need to be in combination with the Brockley Road access. It would enable vehicles travelling to the site to be able to access the site from the A428 Caxton Gibbet junction. All vehicles leaving the site would need to exit via the Brockley Road roundabout and then the A428 Cambourne junction. Indicative arrangements are shown in Figure 13 below.

Further access arrangements could be possible subject to more detailed design and agreement with Highways England, but it is considered that a number of deliverable access opportunities are possible.



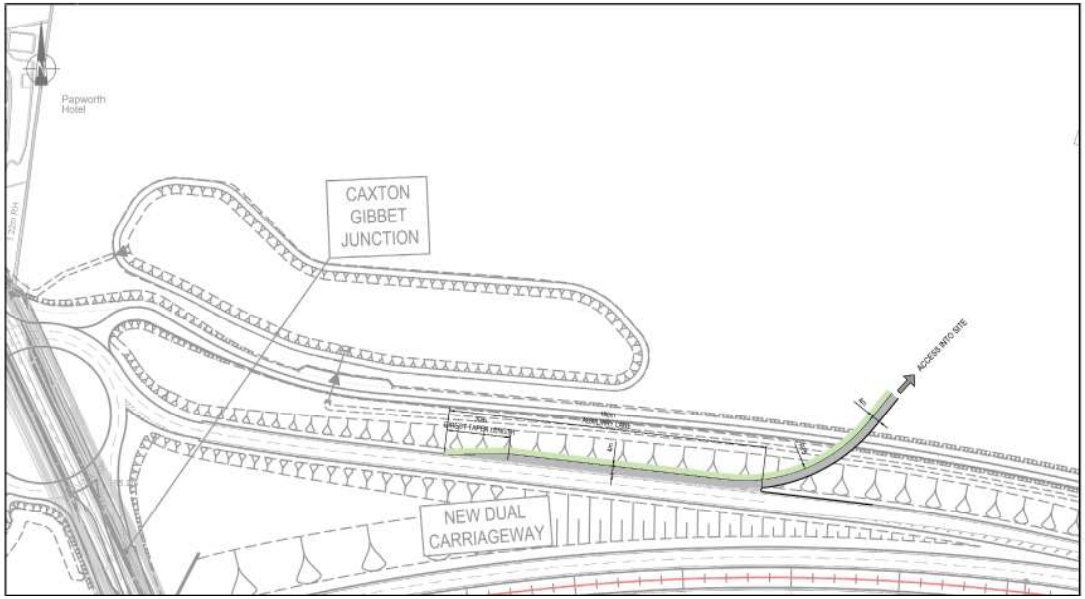


FIG 13 POTENTIAL VEHICULAR ACCESS ARRANGEMENTS VIA ROGUES LANE / BROCKLEY ROAD AND ENTRY ONLY ACCESS VIA THE A428 EASTBOUND ON-SLIP AT NEW CAXTON GIBBET JUNCTION

Summary

The emphasis for the site's transport strategy is on reducing the need to travel before then prioritising non-car modes of travel, focussing on opportunities for access by walking, cycling and public transport.

With the implementation of this strategy, it is considered that the site is deliverable, accords with national and local transport policy guidance, and that therefore there are no transport nor highways reasons why Crow Green, Caxton Gibbet should not be allocated for employment development in the Greater Cambridge Local Plan.

5. Development Opportunity

Framework

The emerging Opportunities and Constraints Plan (Figure 14) and Development Framework Plan (Figure 15) have been landscape led. The long-distance views from the north, particularly from Elsworth and the Pathfinder Long Distance Walk, have influenced both the extent and scale of development within each defined zone. The resultant Development Framework identifies that approximately 77 hectares (190 acres) of the total site of approximately 164 hectares (406 acres) can be used for built development with the remainder for green infrastructure and on-site solar photovoltaic electricity generation. This allows four zones (A to D) to the south with a considerable area for landscape, SuDS and ecological mitigation to the north and west. The latter areas will mitigate visual impact and, with the land to the north, provide an opportunity for the installation of on-site solar photovoltaics.

As a result, the zoning and height of buildings has been considered and reflected in the emerging proposal. As noted on the Development Framework Plan, buildings will increase in scale as development moves south towards the A428. The initial masterplanning work that has been undertaken demonstrates that the site can accommodate a range of end-user requirements within Use Classes B1b (R&D), B1c (light industry), B2 (general industrial) and B8 (storage & distribution) plus an additional area allocated for roadside services accessed from the improvements to the A428. The emerging Development Framework will cater for a wide range in building sizes and height and offer an attractive market facing approach for occupiers and end-users.

It is proposed that the principal access to the development will be from the south (improvements to the A428) with a secondary access and new junction from Brockley Road to the east.

Sustainability

The Cambridgeshire Design Guide encourages the shift away from the use of the car towards other modes of transport including cycling and walking. The emerging Opportunities and Constraints Plan illustrates the opportunity to provide a network of footways and cycleways as part of the proposed site and green infrastructure which connect the surrounding development and provide connectivity to open green space for both public and staff use on site. A movement hierarchy will also be introduced to ensure vehicle separation from cyclists and pedestrians.

Character

The open nature of the site and its surroundings offers considerable benefits in creating an environment in which to work and enjoy leisure opportunities such as cycling, running and walking. This will provide an important role in attracting and retaining staff.

The character of the site will be introduced at the proposed focal points located at the key entrances to the site. These will be defined by their own landscape character and inform a hierarchy and clarity of space, context, direction and movement. Whilst the nature of this type of development will create a character of its own, the Development Framework will reflect its rural context by providing considerable areas of open ponds, proposed and retained woodland and hedgerow planting and links for pedestrians and cyclists relating to a network of roadside swales which will further enhance connectivity and ecology.

Jobs

There is potential on the site for flexibility and a range of occupiers and end users. Our economic needs work demonstrates that there is significant interest in light industrial and manufacturing space and for warehousing and distribution. Furthermore, the local and

regional employment strategies identify a need for R&D and 'spin-out' manufacturing process space. There is a great deal of synergy in R&D, manufacture and logistics locating together to create an exciting innovative hub.

Recent industry research shows that the face of distribution has changed beyond recognition. There is a clear potential for the technical R&D and manufacturing that is emanating from places in Cambridgeshire (e.g. robotics and computer programming) will find application in the distribution sector. Materials and products will continue to need to be moved regionally, nationally and internationally.

Other trends have also been noted in recent industry research:

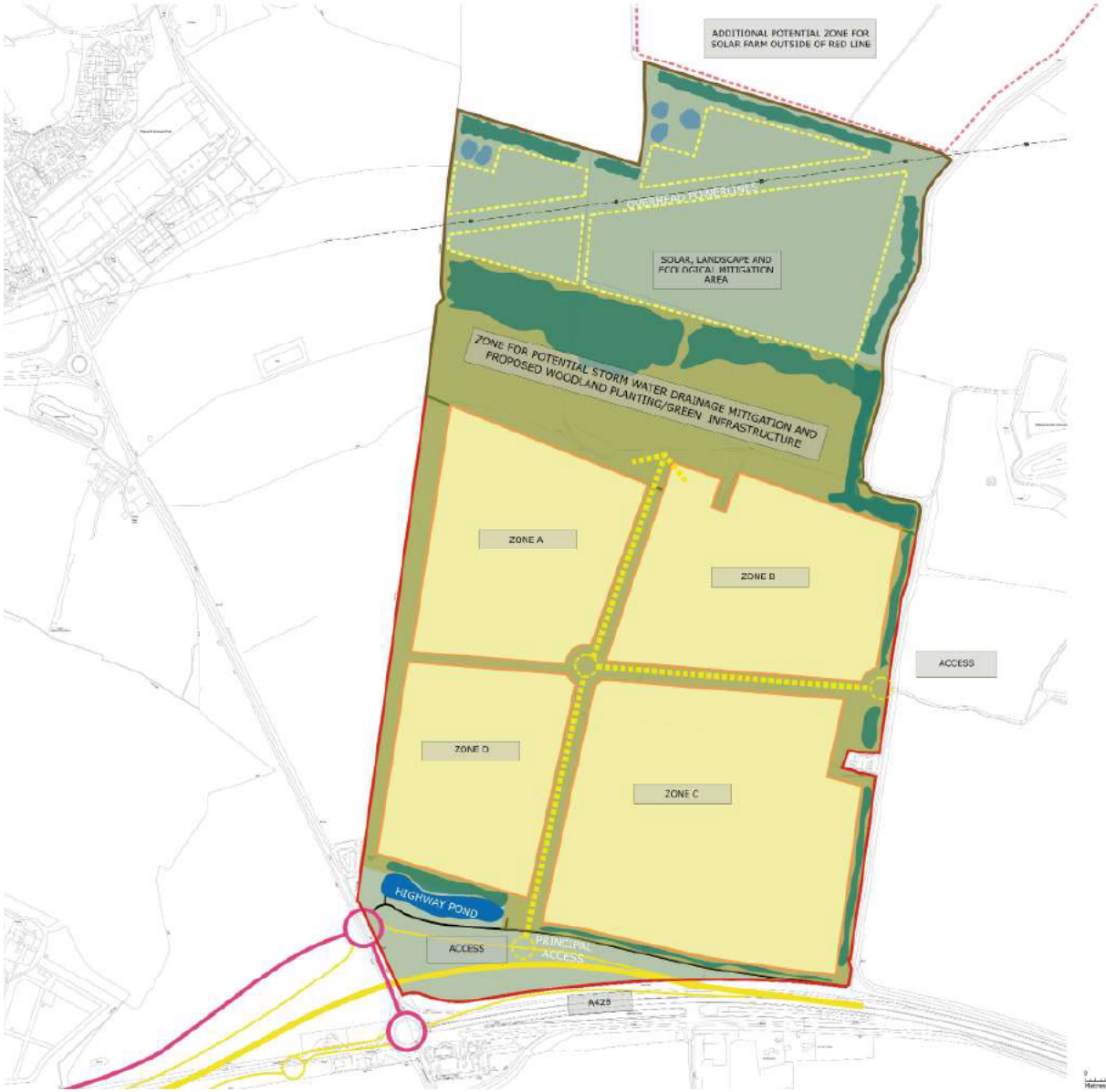
- Retail has 'become logistics' with the increase in internet shopping for all types of goods.
- There is a continuing trend for operators to offer next day delivery which increases the need for a network of centres and increases competition.
- "shed and beds" is a trend for the co-location of homes and jobs and the need for a range of shift types and workers from a range of demographic and educational back grounds.
- Activities that take place in distribution centres are often high or added value activities. It is not just a case of moving an object from one place to another and there is often the need to repackage or assemble a product from a range of components.
- Automation does not mean a drop in employment density, quite the reverse given the need for software engineers and programmers.

Operational Employment

Using 'employment density' figures from the Homes & Communities Agency (HCA) guide to estimate employment it is possible to estimate the direct employment likely to be generated by the proposed development once operational. Given the diversity of potential uses, a range of employment scenarios can be derived. It is estimated that the scheme could provide between 4,500 and 6,500 new jobs FTE depending upon configuration and layout of buildings. This work will be refined as the scheme is further developed.

ILLUSTRATIVE BUILDING ELEVATION

FIG 14 CONSTRAINTS AND OPPORTUNITIES PLAN



AREA SCHEDULE:

Areas for each zone as noted on the plan.

TOTAL SITE AREA :
164.37 hectares / 406.16 acres

TOTAL DEVELOPABLE AREA :
76.62 hectares / 189.31 acres

POTENTIAL GROSS AREA FOR SOLAR :
23.02 hectares / 56.89 acres

AREA FOR GREEN INFRASTRUCTURE :
40.49 hectares / 100.06 acres
(Includes land north of development zones, excludes land for solar and includes land for mitigation ponds)

ZONE A
Building Class Use: B1b/B1c/B2/B8
Maximum Floor Space: 74,322sq.m.

ZONE B
Building Class Use: B1b/B1c/B2/B8
Maximum Floor Space: 59,551sq.m.

ZONE C
Building Class Use: B1b/B1c/B2/B8
Maximum Floor Space: 122,353sq.m.

ZONE D
Building Class Use: B1b/B1c/B2/B8 and Roadside Services
Maximum Floor Space: 49,238sq.m.

KEY:

- Site Boundary
- Potential Development Zones
- Proposed A428 road charges
- Proposed new carriageway
- Proposed access / private roads
- Existing overhead power lines
- Proposed estate road infrastructure including roads and cycle routes
- Zone for potential storm water drainage mitigation and proposed woodland planting/green infrastructure

FIG 15 DEVELOPMENT FRAMEWORK PLAN

6. Summary

In preparing the GCLP the local planning authorities must deliver suitable policies and sites that will enable ongoing economic growth and which will also provide for complimentary business sectors to grow. This provision must include sufficient land and sites in sustainable locations allocated specifically for the development and growth of high-tech and advanced manufacturing and logistics businesses.

Crow Green at the junction of the A1198 / A428 is just such a location. The site is beyond the Cambridge Green Belt, substantial and broadly level, baseline technical studies evidenced above have demonstrated that:

- The site may be sustainably accessed and drained;
- That its development would have no adverse impacts on heritage assets and that suitable strategic scale landscape provision can mitigate visual impacts;
- That biodiversity net gain is anticipated;
- Sustainability and decentralised energy considerations are being considered from the outset and will be developed as the scheme evolves; and
- It has the potential to deliver between 4,500 – 6,500 new FTE jobs.

The site is in close proximity to planned new transport infrastructure to be delivered in the short term:

- The Cambourne to Cambridge (C2C) Guided Busway which is being delivered as part of the Cambridge City Deal; and,
- The programmed A428 dualling between Caxton Gibbet and the Black Cat roundabout on the A1, which will give a high standard of access to the strategic highway network east-west, as well as the north-south corridors of the M11 and A1.

In the medium to longer term, the site will benefit from its proximity to the planned Expressway and the East-West Rail link, with a new railway station serving Cambourne. Strategically located in an area that will see major housing growth over the next twenty years and where there is the clear potential to provide a development that can be linked to existing and planned transport infrastructure, Crow Green provides a unique opportunity to secure substantial growth that meets national and regional priorities for economic development that will be sustainable.

ILLUSTRATIVE B1c/R&D/HIGH-TECH MANUFACTURING DEVELOPMENT

SGP

Architects + Masterplanners

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

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