

CARDIFF GATE PONTPRENNAU

Design and Access Statement

DRAFT

November 2021

ISSUE DATE	18/11/21
DOCUMENT STATUS	Final
REVISION	E
AUTHOR	GR
CHECKED BY	BW
AUTHORISED BY	BW

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VISION

Our vision for Cardiff Gate has been shaped by the placemaking opportunities of the Site and the aspiration to bring forward a vitalising mixed-use development to vacant and underused land in a sustainable location.

The scheme would support the delivery of proposed strategic connections, make a positive contribution to housing supply, generate new employment opportunities, create welcoming public spaces, encourage active and sustainable travel choices through improvements to highways infrastructure, ensure a climate responsive design, and support biodiversity through an enhanced green infrastructure network.

It will be a locally distinctive, attractive, and integrated place to live, work, and visit.



Bird's eye view of Cardiff Gate International Business Park - looking west



Bird's eye view of the illustrative proposals - looking south





1. INTRODUCTION

Cardiff Gate Pontprennau | Design and Access Statement

1.1. DOCUMENT SCOPE & PURPOSE

This Design and Access Statement (DAS) supports an Outline Planning Application relating to the development of land at Cardiff Gate, Pontprennau. It has been prepared by Barton Willmore on behalf of Cardiff Gate International Business Park (CGIBP), drawing on a specialist consultant team.

This Application is seeking Outline Permission for:

“Outline planning application for vehicular, pedestrian and cycle accesses, residential (Use Class C3), flexible food and drink/retail (Use Class A1/A3), offices (Use Class B1), car dealership (Sui Generis Use), car parking and reconfigured highway arrangements and associated public open space, drainage, landscaping and engineering works”

DOCUMENT STRUCTURE

This document is arranged and presented to reflect the requirements of a DAS as set out by Planning Policy Wales (PPW) and Technical Advice Note 12: Design (TAN 12). It is structured to ensure the rationale for design is clearly understood by decision makers, stakeholders, and local people.

Chapter 1 (Introduction) provides a short summary of the proposals and introduces the Site and its key features.

Chapter 2 (Context & Site Analysis) provides a summary of relevant planning policy and explores the Site's local and site-specific physical contexts, including sections covering transport, landscape, ecology, and local character.

Chapter 3 (Design) describes how the proposals have been formulated and presents design elements to be fixed as part of the outline planning consent, including the Parameter Plans, and supporting illustrative design material that demonstrates how the proposals could develop, including the Illustrative Masterplan.

Chapter 4 (Conclusion) summarises the key benefits of the scheme.

SITE LOCATION & SURROUNDINGS

The Site is located within the Cardiff Gate International Business Park, 7km north east of Cardiff City Centre and immediately adjacent to Junction 30 on the M4.

The area to the west of the Business Park, whilst currently undeveloped, comprises the proposed employment element of the North East Cardiff Strategic Site (Strategic Site F) allocated within the Council's Local Development Plan (LDP). As set out in the LDP, the Council have a requirement for a public transport link to be provided from the Strategic Site to the Business Park.



Site Location Plan

1.2. SITE DESCRIPTION

The Site comprises areas of underutilised land within the existing urban area and settlement boundary of Cardiff and includes land identified for sustainable transport improvements that will benefit the development proposals and the local area.

The Site covers approximately 7.55ha, consisting of grassland, scrub compacted bare earth, and associated highways land.

Vacant land to the north of Malthouse Avenue, known as **Plot 14**, is bound by Woodsy Close to the east, car parking to the west, and Parkwall Road to the north. Its edges feature very steep slopes, including a large earth bund adjacent to Parkwall Road. It covers approximately 1.46ha.

Vacant land to the south of Malthouse Avenue, known as **Plot 12**, is bound by woodland to the east, St Mellons Road to the south, and existing commercial development to the west and north. It covers approximately 4.04ha.

The Site partly adjoins Strategic Site F to the west of Parkwall Road and would provide public transport and active travel connections to this LDP allocation.

Land to the east, at Beck Court and St Mellons Road, would be re-designed to provide public transport and active travel connections to the south.

Highways land at Malthouse Avenue and Woodsy Close is included to facilitate access and to deliver sustainable transport improvements, including a new pedestrian and cycleway.



Site Image A: View from southern boundary of Plot 12



Site Image B: View from Malthouse Avenue of existing highways and Plot 14

PARKWALL ROAD

WOODSY CLOSE

MALTHOUSE AVE.

PLOT 14

PLOT 12

BECK COURT

ST MELLONS ROAD (B452)

Site Plan on Aerial





2. SITE & CONTEXT ANALYSIS

Cardiff Gate Pontprenau | Design and Access Statement

2.1. PLANNING POLICY

Development Plan

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan unless material considerations indicate otherwise. The statutory Development Plan for the area comprises the Cardiff Local Development Plan (LDP) which was adopted in 2016 and covers the period 2006–2026 along with the national development framework 'Future Wales: The National Plan 2040' (February 2021).

Relevant policies within the LDP include:

- » Policy KP5 (Good Quality and Sustainable Design);
- » Policy KP8 (Sustainable Transport);
- » Policy EC1 (Existing Employment Land);
- » Policy EC3 (Alternative Use of Employment Land or Premises);
- » Policy T5 (Managing Transport Impacts);
- » Policy EN13 (Air, Noise, Light Pollution and Land Contamination);
- » Policy W2 (Provision for Waste Management Facilities in Development); and
- » Policy KP2 (F): North East Cardiff (West of Pontprennau).

Future Wales policies with immediate relevant Development Management Implications include:

- » Policy 2 (Shaping Urban Growth and Regeneration – Strategic Placemaking) – sets out strategic placemaking principles of creating a mix of uses, providing a variety of housing types and tenures, building places at a walkable scale, increasing population density at densities that can support public transport and local facilities, establishing a permeable network of streets, promoting a plot-based approach to development and integrating green infrastructure. Supporting text notes that new developments in urban areas should aim to have a density of at least 50 dwellings per hectare, with higher densities in more central and accessible locations.
- » Policy 6 (Town Centre First) states that significant new commercial, retail, education, health and leisure and public services must be located within town and city centres. The supporting text notes that the policy applies to facilities of a significant scale.
- » Policy 9 (Resilient Ecological Networks and Green Infrastructure) – States that in all cases, action towards securing the maintenance and enhancement of biodiversity (to provide a net benefit), the resilience of ecosystems and green infrastructure assets must be demonstrated as part of development proposals.
- » Policy 12 (Regional Connectivity) – For non-residential developments LPAs should seek a minimum of 10% of car parking spaces to have electric charging points.
- » Policy 13 (Supporting Digital Communications) – In relation to digital infrastructure new developments should include the provision of Gigabit capable broadband infrastructure from the outset.

- » Policy 16 (Heat Networks) – Large scale mixed-use development (100 or more dwellings or 10.000 sqm) should, where feasible, have a heat network with a renewable / low carbon or waste heat energy source. Planning applications for such development should prepare an Energy Masterplan to establish whether a heat network is the most effective energy supply option and, for feasible projects, a plan for its implementation.

Relevant national planning policy and guidance is set out below:

- » Planning Policy Wales (11th Edition, 2021);
- » Development Management Manual;
- » Technical Advice Note (TAN) 5: Nature Conservation and Planning;
- » TAN 11: Noise;
- » TAN 12: Design; and
- » TAN 23: Economic Development.
- » Relevant Supplementary Planning Guidance prepared at the local level is set out below:
- » Managing Transportation Impacts (Incorporation Parking Standards) (2018);
- » Safeguarding Business and Industrial Premises (2017); and
- » Waste Collection and Storage Facilities (2016).

DESIGN POLICY

Additional policies and guidance relevant specifically to design have also been considered in the development of proposals at Cardiff Gate, including within Planning Policy Wales (Feb 2021) and Technical Advice Note 12 (Mar 2016).



Planning Policy Wales – Edition 11 February 2021

Paragraph 3.3 states that “Good design is fundamental to creating sustainable places where people want to live, work and socialise. Design is not just about the architecture of a building but the relationship between all elements of the natural and built environment and between people and places. To achieve sustainable development, design must go beyond aesthetics and include the social, economic, environmental, cultural aspects of the development, including how space is used, how buildings and the public realm support this use, as well as its construction, operation, management, and its relationship with the surrounding area.

Paragraph 3.4 states that “... Meeting the objectives of good design should be the aim of all those involved in the development process and applied to all development proposals, at all scales. These objectives can be categorised into five key aspects of good design” (see diagram)

This Outline Application aims to demonstrate how the five key aspects of good design have been considered, including:

- » Character;
- » Access;
- » Movement;
- » Environmental Sustainability; and
- » Community Safety.



Objectives of Good Design (PPW February 2021 - page 26)

2.2. LOCAL FACILITIES

There are a wide range of facilities and services sustainably accessible to the Site within the local area.

Pontprennau Primary School lies approximately 400m to the south of the Site, within safe walking distance. There are a range of other educational facilities nearby, including Corpus Christi High School, which is approximately 4.6km away. An additional primary school and secondary school are being proposed at the North East Cardiff Strategic Site.

In terms of healthcare facilities, the Site is located approximately 400m walk away from Pontprennau Dentalcare, Pontprennau Medical Centre and Pontprennau Pharmacy.

Main food and non-food retail facilities are located within 500m of the Site at Cardiff Gate Retail Park which contains a Supermarket, coffee shop, gym and a range of other retail stores. Additionally, within CGIBP is a hotel, pub, crèche, private doctor/dental surgeries and motorway services with a petrol filling station, coffee shop and convenience store.

The Site is accessible to a wide range of parks and leisure facilities with playing field and tennis court located on Heol Pontprennau approximately 400m walk away.

WALKING & CYCLING

The Site is located in a highly accessible location that has high-quality and extensive pedestrian routes in its vicinity, as well as a good provision of cycling routes.

Malthouse Avenue is an appropriate route for walking and cycling with street lighting, pedestrian footways on both sides, and a

30mph speed limit suitable for cycling. This route provides access to a shared footway/cycleway (Croescadarn Road), which connects to the nearby primary school, and a PRoW, which connects to St Mellons Road and the Rhymney Trail via Plot 12.

Rhymney Trail, a traffic-free route providing access towards the city centre from the north-east of Cardiff, terminates to the immediate south of the Site. This route provides sustainable access from the Site to the Cardiff East Park & Ride.

PUBLIC TRANSPORT

The Site is accessible by bus, with stops located within safe and convenient walking distance of the Site. Stops on nearby Hoel Pontprennau are served by eight buses per hour on weekdays, reduced to 6 buses per hour on weekends. Stops within the CGIBP (Malthouse Avenue) are served by two buses per hour on weekdays only.

The approximate bus journey time between the Site and the city centre is between 35-40 minutes. This is comparable to car journey times to the same destination, particularly during peak hours, with bus services benefiting from significant bus priority measures on the A48 and Newport Road.

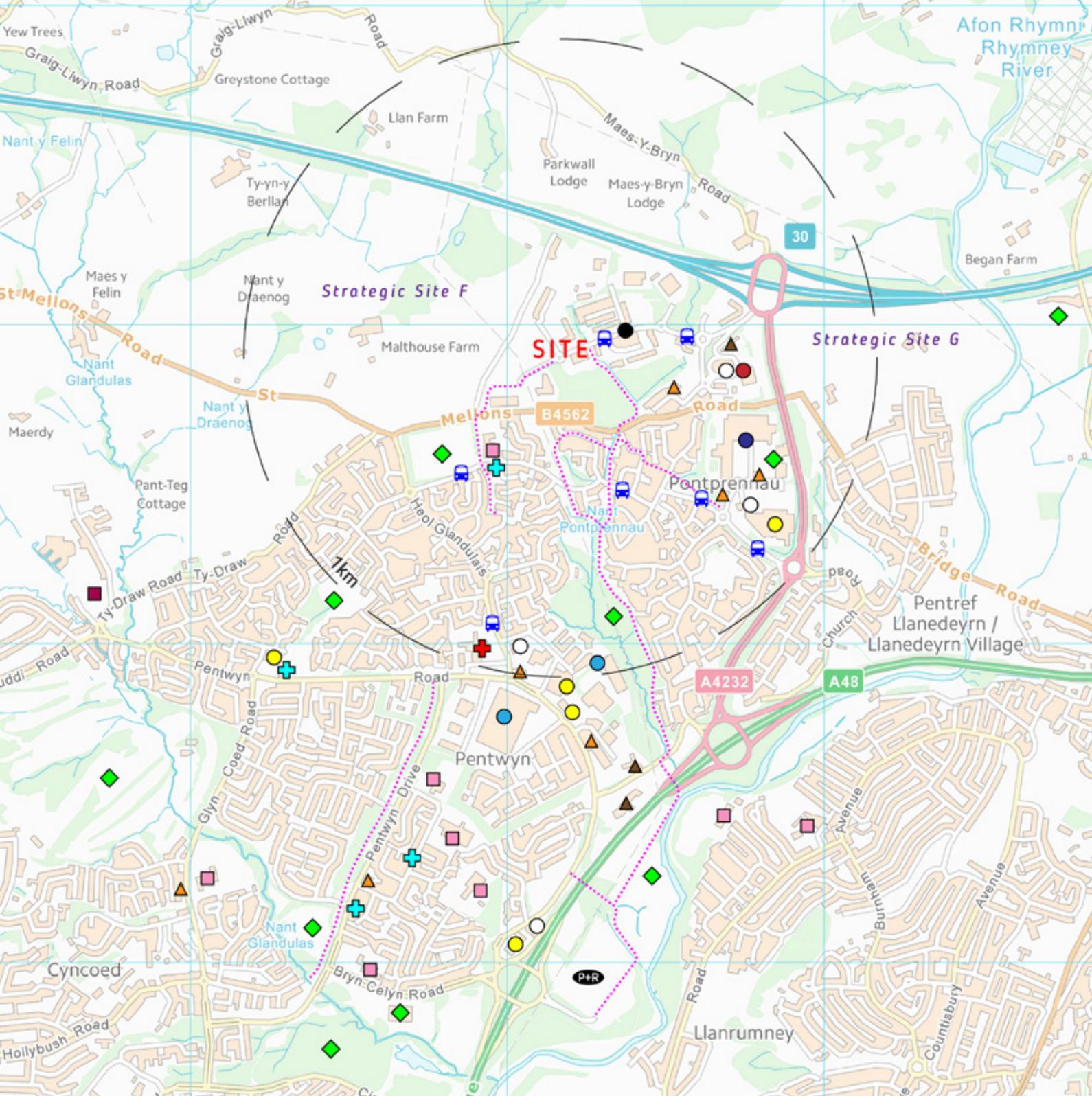
The Site is located 4.2km east of Lisvane & Thornhill Station and 11.2km north east of Cardiff Central Station.



Pontprennau Medical Centre



Pontprennau Primary School



-  Site Boundary
-  Supermarket
-  Primary School
-  Secondary School
-  Hospital
-  Medical
-  Leisure / Playing Fields / Parks
-  Retail Park
-  Industrial Estate
-  Motorway Services
-  Petrol Station / Car Repair
-  Restaurant / Pub / Take-away
-  Hotel
-  Key Pedestrian/Cycle Routes
-  Bus Stop (in close proximity to Site)
-  Cardiff East Park & Ride

Local Facilities Plan

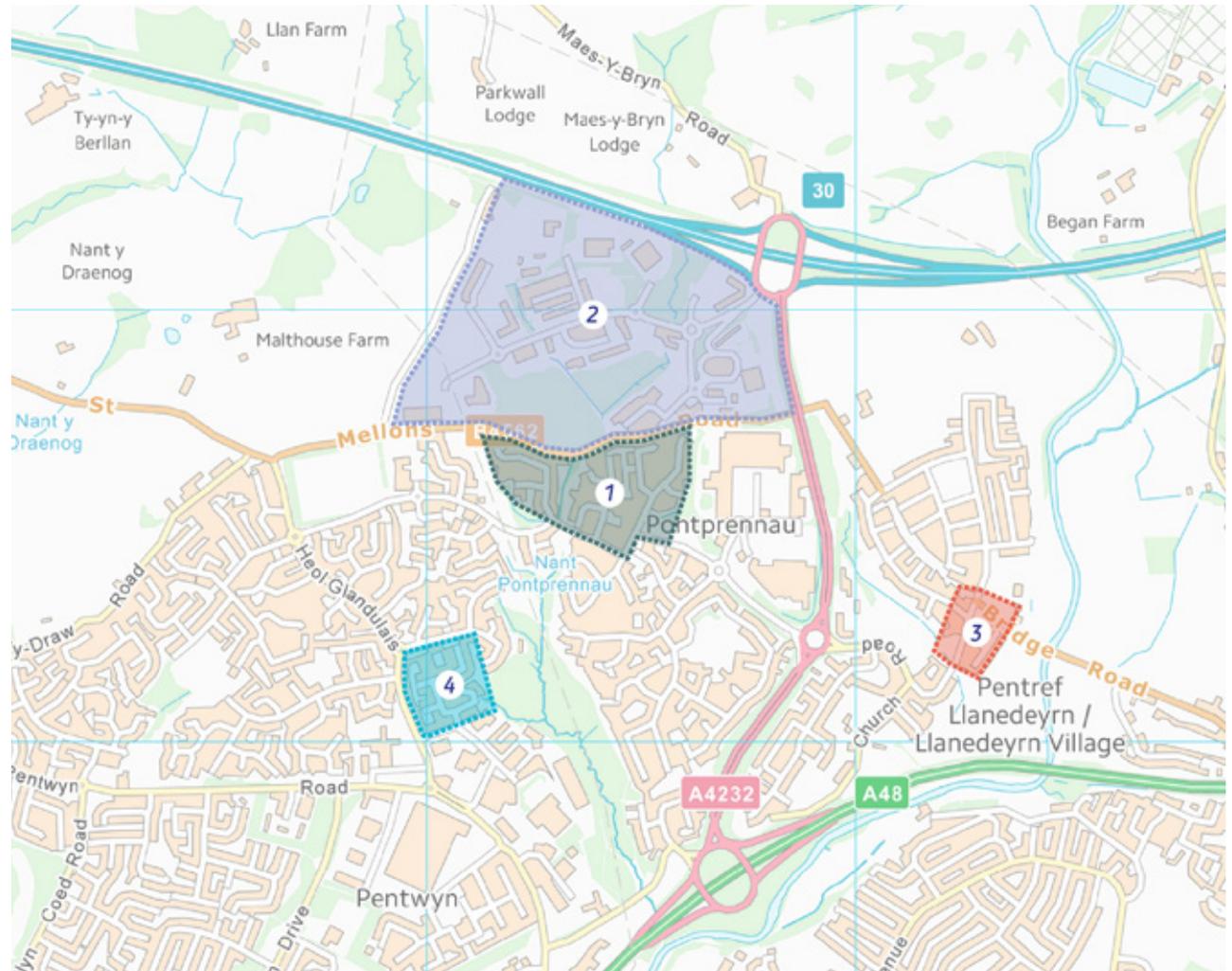
2.3. LOCAL CHARACTER

To ensure that the development proposals at CGIBP are responsive to the characteristics of the surrounding built environment, relevant local areas have been assessed to identify distinctive features that will inform a unique design response.

The plan shown opposite identifies a range of local areas that have been analysed within this section, including:

- 1 Clonakilty Way / Cord Drive / Greenacre Drive
- 2 Cardiff Gate Business Park
- 3 St Ederyrns Village
- 4 Blackberry Way / Enbourne Drive

Each area explores five key design elements, including urban form, built form, car parking, architectural details, and open space.



Local Character Study Areas



Family housing in Pontprenau

CLONAKILTY WAY / CORK DRIVE / GREENACRE DRIVE

This suburban residential area of Pontprennau was developed during the 1990s. It is located immediately south of the site, bordered to the north by St Mellon Road, by Heol Pontprennau to the south, and Cardiff Gate Retail Park to the east. A green corridor and Nant Pontprennau stream bisect the development



Aerial view

Urban Form

- » Low/Medium density.
- » Generally back-to-back and single sided blocks.
- » Primary movement route extending from Heol Pontprennau, leading to a number of poorly connected, gently curving tertiary streets and many cul-de-sacs. Some cul-de-sacs are linked via pedestrian footpaths however in general cul-de-sacs should be avoided due to the impact on pedestrian movement.
- » Development tends to back or side on to areas of open green space.
- » Development fronts onto movement networks, providing active frontages and maximising natural surveillance. Some dwellings side onto primary movement routes.

Built / Plot Form

- » Mix of detached and semi-detached family housing with some short runs of terraces.
- » Largely consistent building line with some variation in set-backs creating interest in the street scene.
- » Building heights respond well to the existing built form and character of Pontprennau, comprising predominantly 2 storey dwellings.
- » Dwellings generally front on to both sides of a corner, aiding

legibility and the creation of active frontage. There are some instances of blank façades overlooking the public realm, reducing natural surveillance in these areas.

- » A number of dwellings comprise steps up to front doors in response to site topography.

Car Parking

- » On-plot parking to the front or side of dwelling.
- » Many dwellings have integral garages.
- » Some use of parking courtyards (up to 12 parking spaces).
- » Driveways often slope up toward houses in response to site topography.

Architectural Materials and Details

- » Mix of red brick, red multi brick, buff brick and light coloured render.
- » Roofs are generally pitched gables. Some examples of gable roofs with flat tops. Tiles are a mix of red and grey tones.
- » White window frames, doors and downpipes. Some variation to this on larger, detached dwellings.
- » Contrasting brick details including quoins and window surrounds add interest to the street scene.

- » Protruding features including front porches and bay windows help enrich the street scene. There are some examples of dormers over garages. Some use of chimneys on detached dwellings.

Public Realm / Open Space

- » Area of public open space to the south-east of the development comprising pedestrian footpaths, attenuation pond, board walk and mature trees. This is partly overlooked by dwellings along High Bank and Greenacre Drive.
- » Green corridors provide wildlife connections and amenity space. These are poorly overlooked.
- » There is a lack of street trees throughout the development however front boundary treatments generally comprise shrub and tree planting contributing to a green and suburban character.
- » Some examples of brick wall and railing boundary treatments.



Red brick detached dwelling with gable front



Steps to front entrance in response to topography



Detached dwelling overlooking open space



2-storey detached house

CARDIFF GATE BUSINESS PARK

Cardiff Gate Business Park borders the eastern boundary of the site. It is located adjacent to the M4, accessed via junction 30, and north of St Mellons Road. The 40 ha site began construction in the 1980s and comprises a range of commercial offices, a Welcome Break service station, retail stores, motor showrooms and service centres, fast food restaurants and an Ibis Hotel.



Aerial view

Urban Form

- » Primary access via the M4 / Pentwyn Link Road junction.
- » Primary movement route (Malthouse Avenue) curves through the site leading to a series of cul-de-sacs providing access to the various buildings within the site.
- » A public right of way extends from St Mellons Road through to Malthouse Avenue.
- » The development is currently split into three blocks with buildings often occupying their own plot. Development is divided by surface car parks, a significant area of woodland planting, and the proposed development site.
- » Pedestrian movement is generally restricted to pedestrian footways alongside the carriageway of streets.

Built / Plot Form

- » Scale of buildings generally reflects the use and location of the area, with offices generally up to 3 storeys in height. There are some 4 storey elements at entrance ways. Car dealer buildings are generally of a similar height to office buildings however are of a larger massing.
- » Plot ratio reflects the use of the buildings and is generally in proportion to the size of the site.

Car Parking

- » Large surface car parks serving individual buildings. Car parking somewhat dominates the street scene.

Architectural Materials and Details

- » There is a general consistency in materials and architectural details ensuring buildings visually relate to one another. Office buildings tend to comprise buff brick with some reconstituted stone elements.
- » Fenestration results in a vertical emphasis on office buildings. Floor to ceiling glass entrance ways are a common feature. Doors and window frames are white or grey.
- » Offices typically comprise hip or hip and valley roofs in grey tones.
- » Retail and car dealer buildings are generally steel framed warehouse structures, often with a horizontal emphasis.

Public Realm / Open Space

- » A large area of woodland follows the route of Nant Pontpennau, extending from the M4 through to the western edge of the site, helping to soften the built form.
- » Significant tree planting throughout the development helping to green the area.
- » With the exception of the area of woodland bisecting the development, there is little in the way of public open space within development blocks.



Large office block with surface car park to front



Mercedes-Benz dealership with flat roof and large glass windows



Street trees along Malthouse Avenue



Audi dealership with large glass windows

ST EDEYRN'S VILLAGE

St Edeyrn's Village is located west of Pentwyn Link Road, west of Cardiff Gate Business Park within the north western area of Cardiff. The development is partly constructed having gained outline planning consent in 2014 for up to 1020 homes. Distinctive elements of the central core of the development have been identified on the following pages.



Aerial view

Urban Form

- » Higher density core (40-55dph).
- » Generally back-to-back perimeter blocks with some single sided blocks and mews blocks.
- » Primary movement route extends in from Pentwyn Link Road, looping through the site and providing access to a network of connected tertiary streets.
- » Development fronts onto movement networks, providing active frontages and maximising natural surveillance.

Built /Plot Form

- » Predominately semi-detached dwellings linked by covered parking spaces along primary movement route. Some terraced houses along side streets.
- » Mix of 2, 2.5 and 3 storey buildings. An increase in scale on approach to the central area of the development and within the local centre helps to define the primary movement route, contribute toward a sense of place and aid legibility.
- » Largely consistent building line along the primary movement route creating a sense of rhythm in the street scene.
- » Local centre buildings step back from the carriageway to create space for pedestrian movement, shrub and tree planting, and to provide space for car parking. An increase in the scale of buildings in this area helps define the space and aid wayfinding.

- » Dwellings tend to front on to both sides of a corner, aiding legibility and the creation of active frontage.

Car Parking

- » On-plot parking to the side of dwellings along the primary movement route. On-plot parking to the front of dwellings along side streets. Parking courtyard to the rear of the local centre serving apartments.
- » Car parking to the front of buildings within the local centre.

Architectural Materials and Details

- » Coherent and consistent contemporary approach to a traditional architectural style comprising a mix of red brick and render. Key buildings comprise reconstituted stone and cladding, aiding legibility. The use of timber cladding on landmark buildings helps create a visually pleasing place.
- » Roofs are generally pitched, often steeply, with gable fronts. Tiles are a mix of red and grey tones. Front gables on key buildings adds interest in street scene.
- » Consistent use of grey frames, doors and downpipes.
- » Architectural features include dormers, protruding window surrounds, cream coloured cladding between first and second floor windows and some porch overhangs.

Public Realm / Open Space

- » Grass verge with street trees along primary movement route. Formal tree planting helps soften the built form.
- » There is an area of open green space on approach to the local centre, adjacent to retained hedgerows forming part of a green corridor and incorporating an existing public right of way which provides connections south along Church Road to eventually link with pedestrian routes along Rhymney river, and west toward Petwyn Link Road and then Cardiff Gate Retail Park.
- » The local centre comprises a small area of green open space, further softening the built form and providing a visual link between the development and the retained hedgerows along Bridge Road.



Consistent red brick and render materials palette



Contemporary detailing and increased scale defines the centre



Use of reconstituted stone on key buildings



Mix of building heights and roof styles add interest to the street

BLACKBERRY WAY / ENBOURNE DRIVE

Blackberry Way / Enbourne Drive is residential area centrally located within Pontprennau. It was developed during the early 2000s and is located close to Spire Cardiff Hospital along Croescadarn Road. The development is accessed via Croescadarn Close. Nant Pontprennau and associated woodland planting border the site to the east. The Avenue Industrial Park is located immediately south of the development.



Aerial view

Urban Form

- » Medium - high density.
- » Mix of back-to-back, single sided blocks and mews style blocks.
- » Primary movement route extending from Croescadarn Close. Blackberry Way loops through the development leading to a series of tertiary streets in the form of cul-de-sacs and a loop road providing access to apartments. In general cul-de-sacs should be avoided due to the impact on pedestrian movement. Pedestrian only route through from the roundabout in the centre of the development to the apartments within the northern part of the site.
- » The development is relatively enclosed with one access point in and out and bordered on all sides by tree planting.
- » Development fronts onto movement networks, providing active frontages and maximising natural surveillance.

Built/Plot Form

- » Predominately apartments and terraced houses. Some detached and semi-detached dwellings.
- » Mix of 2, 2.5 and 3 storey buildings. Some flats over garages (FOGs).
- » Dwellings tend to front on to both sides of a corner, aiding legibility and the creation of active frontage.

- » Largely consistent building line with dwellings often set back to provide for car parking to the front. Many dwellings comprise small front gardens set back by approximately 2m, with some variations where front gardens follow the curve of the street. Apartment buildings along the northern edge of the site and some terraced houses along side streets do not feature boundary treatments.

Car Parking

- » On-plot parking to the front and side of dwellings.
- » Apartments comprise a mix of courtyard parking and undercroft parking bays. Parking courtyards also comprise covered bicycle parking stands.
- » Terraced dwellings often feature garages to the ground floor, limiting active frontages in these locations.

Architectural Materials and Details

- » Coherent and consistent materials palette comprised a mix of red and buff brick with use of render on key buildings and on the ground floor of apartment buildings or to emphasise key features. This aids legibility and adding variety to the street scene.
- » Simple and traditional architectural style.
- » Houses typically comprise pitched roofs with gable fronts on key buildings. Apartments feature hipped roofs, some with gable fronts. Tiles are grey in tone.

- » Consistent use of white frames, doors and downpipes. There is one exception to this on a detached dwelling within the eastern part of Blackberry Way. Vertical emphasis of fenestration.
- » Architectural features include dormers, contrasting window surrounds in reconstituted stone, Juliet balconies, porch overhands, and contrasting brick banding. The ground floor 3 storey of terraced houses and apartments is often in a contrasting brick or render to the upper floors.
- » Use of retaining walls along northern edge of development in response to site topography.

Public Realm / Open Space

- » Grass verges with street trees at entrance to the development. Formal tree planting helps soften the built form.
- » There is little in the way of public open green space within The development.
- » Mature trees border the development and help soften the built form in its setting.
- » Boundaries typically comprise shrub planting or small areas of lawn. There are some examples of low brick wall boundary treatments. Many boundaries are defined by car parking spaces with strips of shrub or hedgerow planting between dwellings.



3-storey grouped housing with contrasting brick details



Grass verges and street trees to soften the streetscape



Simple traditional-feel grouped housing with planted boundaries



Terminating viewpoint at Blackberry Way

2.4. ACCESS & MOVEMENT

The Site is located within the Cardiff Gate International Business Park (CGIBP), which is bound to the north by the M4, to the east by Pentwyn Link Road, to the south by St Mellons Road, and to the west by Strategic Site F (SSF) of the Local Plan.

The vacant plots of CGIBP can be accessed directly or in-directly (via other access roads) by Malthouse Avenue, a single lane carriageway, with footways adjacent to both sides. It is lit and subject to a 30-mph speed limit.

Malthouse Avenue in turn provides access to a shared footway/cycleway (Croescadarn Road), which connects to the nearby Pontpennau Primary School, and a PRoW, which connects to St Mellons Road and the Rhymney Trail via Plot 12.

There is the potential for walking, cycling and public transport links between SSF and CGIBP, which would connect the Site directly to local centres, district centres and education facilities anticipated to come forward as part of SSF.

The plan opposite demonstrates potential access to vacant land and key opportunities for new connections and improvements.

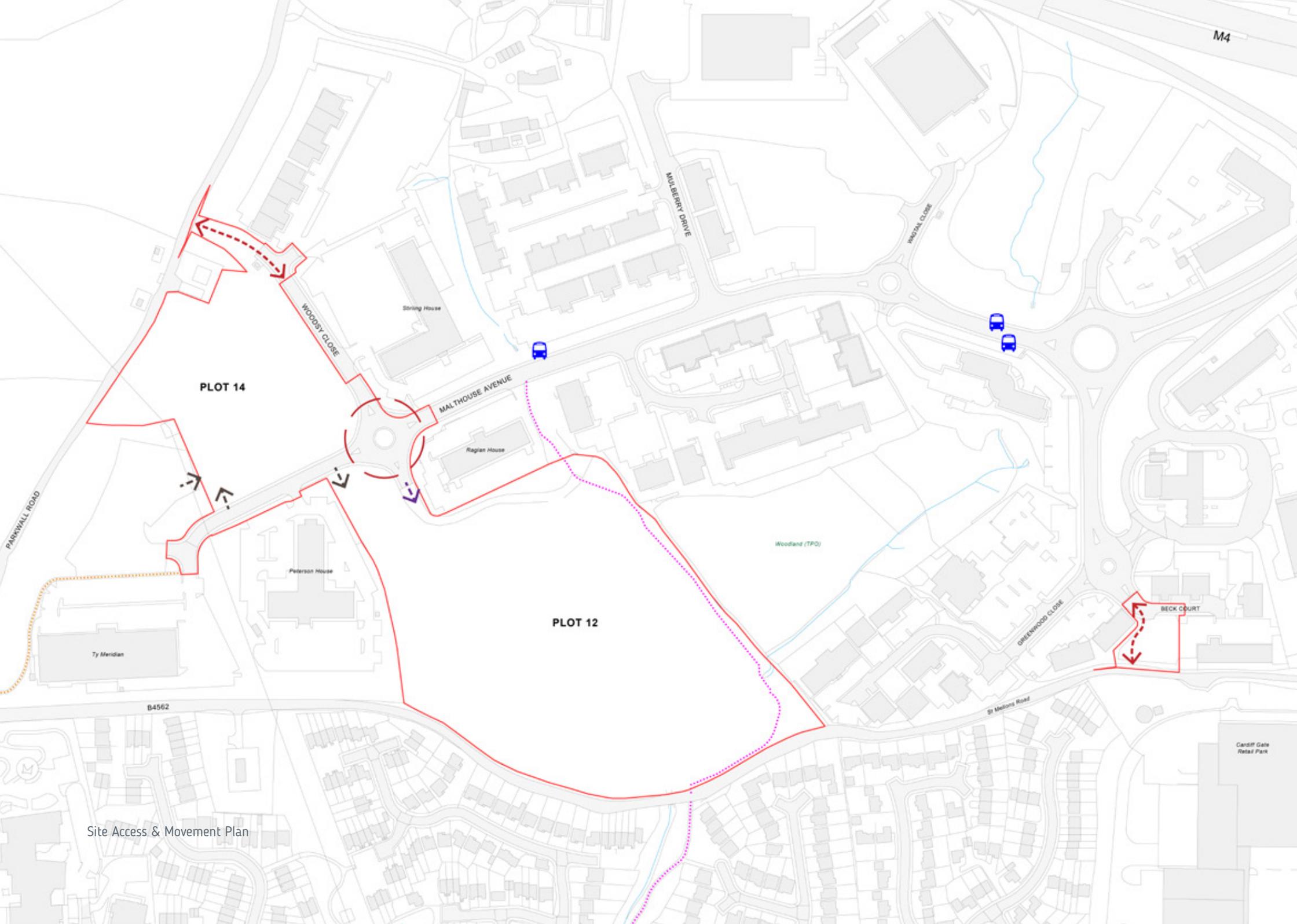


Public Right of Way adjacent to St Mellons Road



Existing condition of Malthouse Avenue





PLOT 14

PLOT 12

Site Access & Movement Plan

2.5. LANDSCAPE

Plot 12 consists predominantly of unimproved neutral grassland, bramble scrub, open scrub, and bare earth (where scrub clearance works have taken place). Its boundaries are lined with native species-rich hedgerows, semi-mature trees, and mature trees, with an area of semi-natural broadleaved woodland (TPO) adjacent to the eastern Site boundary.

Plot 14 similarly consists of unimproved neutral grassland, bramble scrub, open scrub, and bare earth. Its edges feature very steep slopes, including a large earth bund adjacent to Parkwall Road.

The Site lies within the settlement boundary of Cardiff as defined by the Council's adopted LDP and is allocated for employment use with an extant planning consent for office development (Use Class B1). The Site is bounded by existing employment / commercial scale buildings to the east and south with allocated residential / commercial development within the adjacent Strategic Site to the west. The principle of development at the Site is therefore firmly established whilst the scale, form and parameters of the proposed development are considered to be appropriate and sensitive to the Site's context in relation to surrounding existing / proposed uses and also the Site's wider context within the urban area of Cardiff. The detailed form of development is considered to be capable of being adequately controlled at reserved matters stage.



Woodland area adjacent to eastern boundary of Plot 12



View from Plot 12 towards St Mellons Road and existing housing



Aerial view (Google Earth) of Plot 14, showing steep slopes and large earth bund



PLOT 14

PLOT 12

Site Plan on Aerial showing contours

2.6. ECOLOGY

The habitats and features of the Site have been provisionally evaluated and graded into categories, which are identified on the included plans and described below.

International, National & County Value - No parts of the site are considered to fall into any of these categories.

District Value - The hedgerows and scrub habitats of the Site support dormouse, a European Protected Species, which is known to occur in the surrounding area. These features are therefore assessed as being of District value since they form part of a larger complex of interconnected habitats which are used by this rare and declining species.

High Local Value - The section of watercourse (Nant Pontprennau) and the remaining areas of neutral semi-natural grassland are considered to be of High Local value for wildlife. These contain local species such as pignut and common spotted-orchid.

Local Value - The brash-piles, scrub, stone pile, and species poor semi improved grassland are considered to have no greater than Local value for wildlife. These habitats provide some foraging and nesting opportunities for birds and invertebrate species, and are likely to be of value to small mammals, possibly including hedgehog.

Negligible Value - The areas of hardstanding and disturbed bare ground, and the stands of invasive nonnative plant species, are all considered to have Negligible potential for wildlife.

The site does not contain or lie immediately adjacent to any statutory or non-statutory sites of nature conservation interest.



Species-rich hedgerow along western boundary of Plot 12



Hardstanding surfaces and dense scrub north of Woodsy Close



Scrub habitats along northern boundary of Plot 14

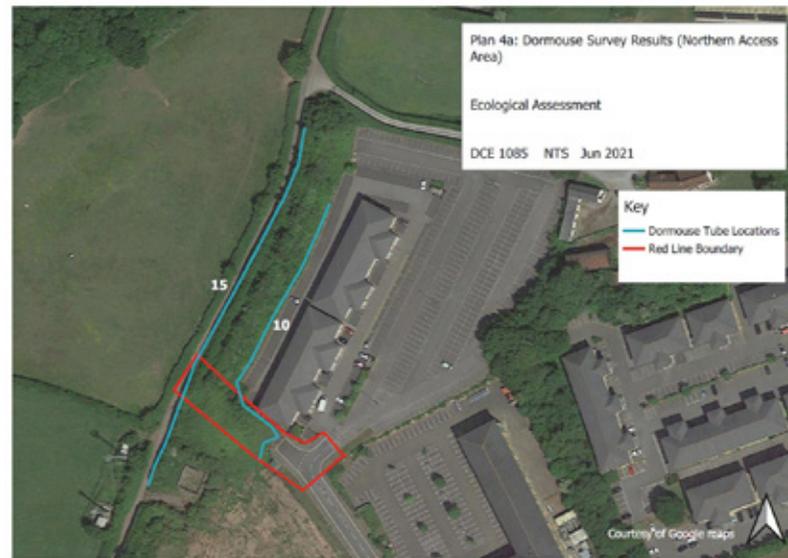


Tree and hedgerow habitats along St Mellons Road



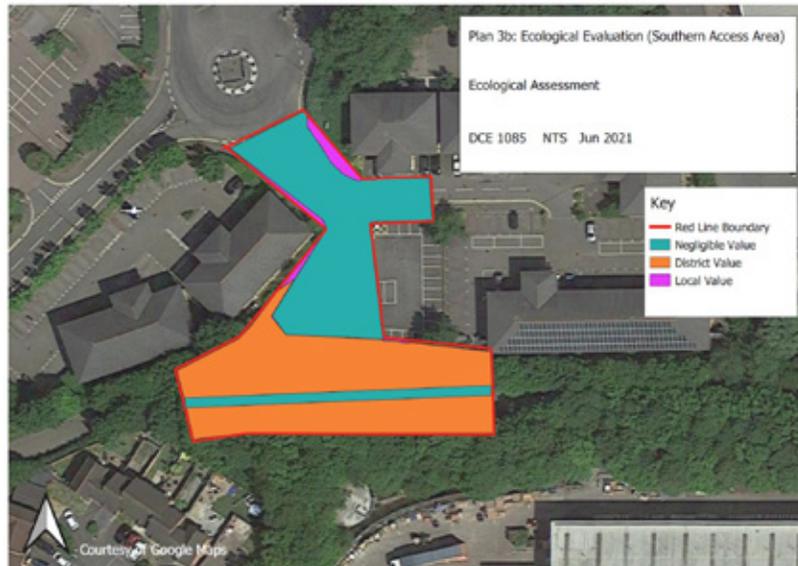
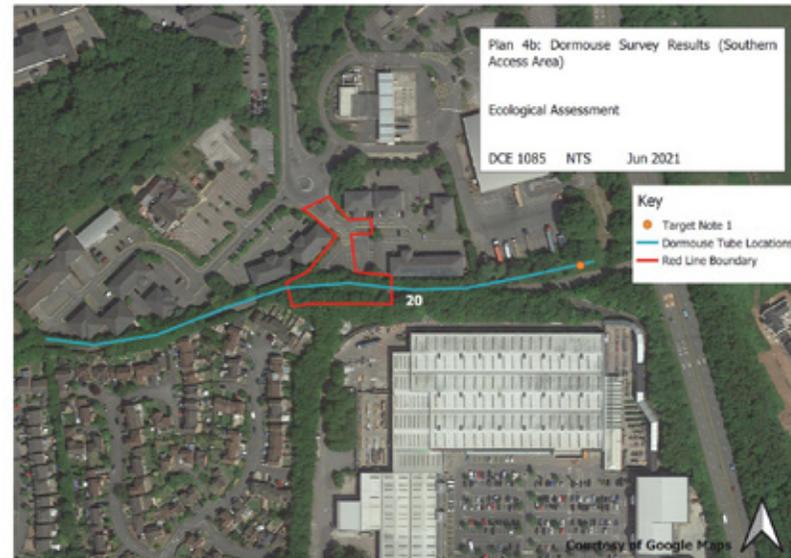
Ecology Assessment Plans (DCE Ecology) - Plot 12 & Plot 14

Refer to associated Ecological Assessment for detailed assessment, included within the application pack.



Ecology Assessment Plans (DCE Ecology) - Northern Access Area

Refer to associated Ecological Assessment for detailed assessment, included within the application pack.



Ecology Assessment Plans (DCE Ecology) - Southern Access Area

Refer to associated Ecological Assessment for detailed assessment, included within the application pack.

2.7. DRAINAGE

The Site is located entirely within Flood Zone A, as set out by the TAN 15 Development Advice Map, and is therefore not considered a constraint in planning policy terms.

The uneven landform of Plot 12 slopes from north to south with an overall level change of approximately 20m. A culverted section of an existing watercourse, known as 'Nant Pontprennau', crosses the south eastern area of Plot 12.

Plot 12 has recently been cleared of overgrowth (circa winter 2019/2020) to allow for the re-profiling of the Site to commence as well as further survey works. There are a series of manholes within the site, visible following the re-profiling works. Dŵr Cymru Welsh Water (DCWW) asset records show public sewers within the site boundary. It is understood these chambers are for a foul water sewer and the partial culverting of Nant Pontprennau.

The landform of Plot 14 is highest in the north-western corner atop the existing bund with a level of approximately 83.1m AOD, with the site's low point of 66.9m AOD 180m away in the south-eastern corner.

There are two high pressure gas mains within Plot 14, parallel to Woodsy Close. Suggested easements are 12m to commercial development, and 30m to residential development, which are to be confirmed with Wales & West Utilities. Dŵr Cymru Welsh Water (DCWW) asset records show public sewers immediately east of the plot boundary, with water mains running parallel to gas mains within the plot boundary.

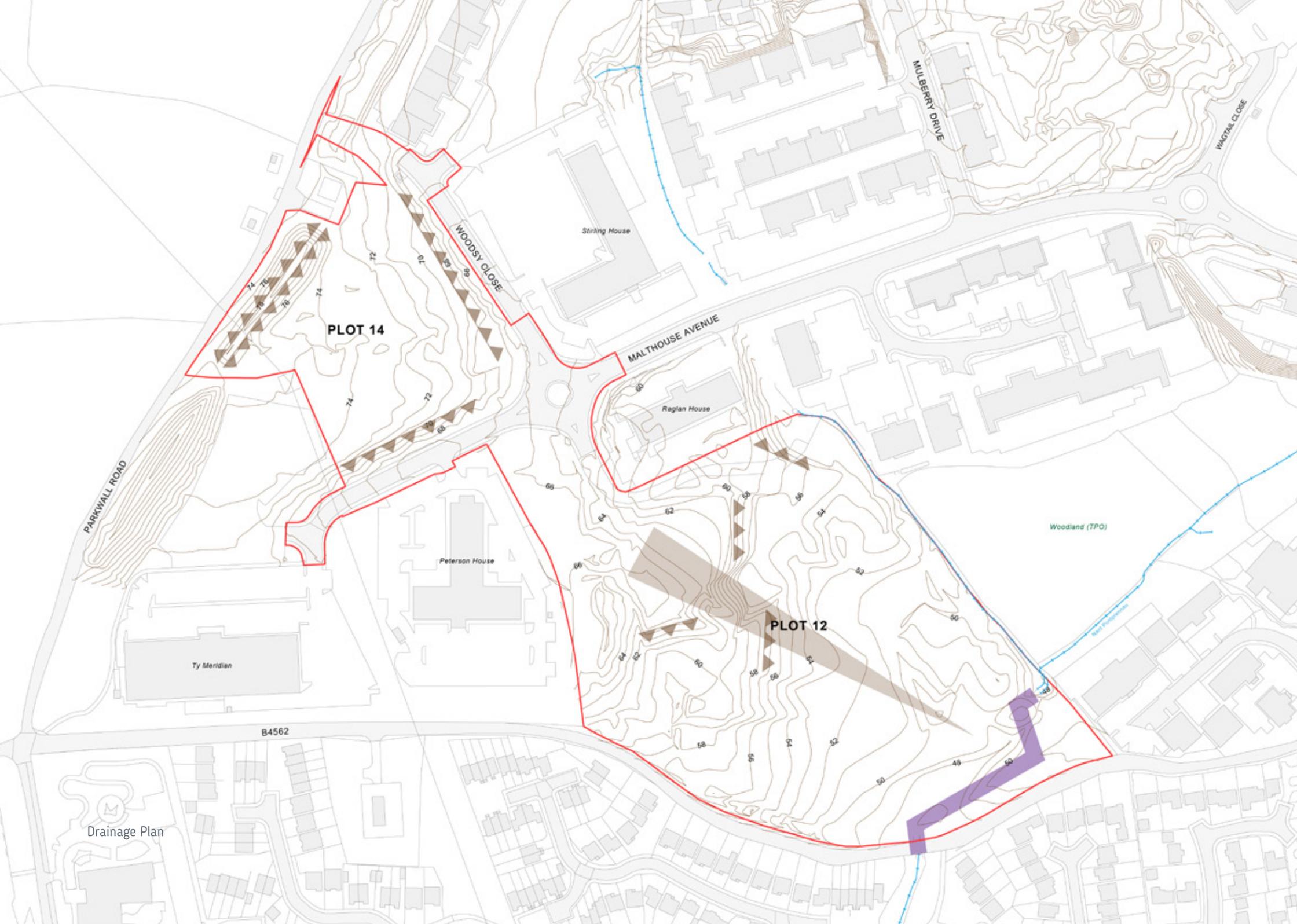
The landform of Site land at Beck Ct is relatively flat, sloping gently east from 53m AOD to 49m AOD, and comprises a car park and highways land.



Nant Pontprennau watercourse (near to east boundary of Plot 12)



Drainage Plan (showing Site land at Beck Ct)



PARKWALL ROAD

MULBERRY DRIVE

WINDFALL CLOSE

WOODY CLOSE

Stirling House

MALTHOUSE AVENUE

Raglan House

Peterson House

Woodland (TPO)

Ty Meridian

B4562

PLOT 14

PLOT 12

Drainage Plan

2.8. ARBORICULTURE

The Site has a number of arboricultural constraints that need to be considered in the development design phase, as shown on the plans adjacent and opposite.

This text summary has been extracted from the Arboricultural Report, including tree survey data, tree constraints plan, and arboricultural impact assessment, which forms part of this application submission.

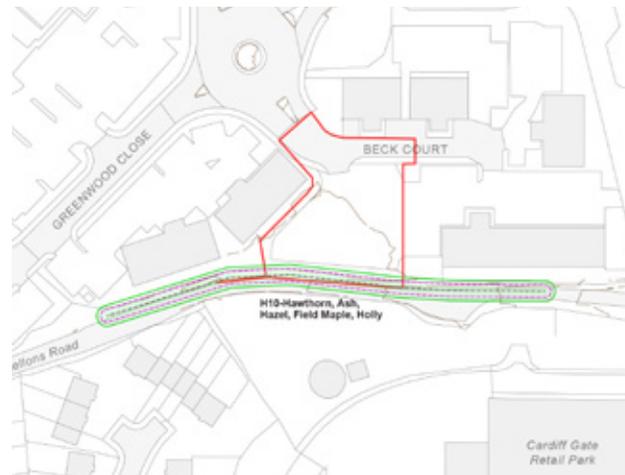
To facilitate the indicative proposals, presented later in this document, 25 meters section of trees and 117 meters of hedgerow are identified to be removed. All of these trees and hedgerows are of low quality that should not present a constraint to development. The removal of these trees and hedgerows can be readily mitigated for through suitable compensatory tree planting.

The indicative proposals will not cause a long-term adverse impact onto the local amenity of the area through tree loss. Mitigative tree, hedgerow and shrub planting will be required for the loss of the trees on this site through a combination of different diverse tree/shrub species and varied nursery aged stock.

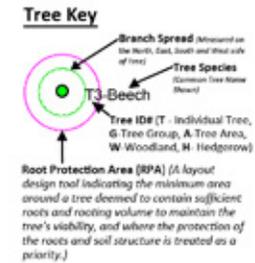
The construction of development whilst complying to a suitable scheme for tree protection will ensure that no significant long term adverse arboricultural impact occurs onto the health of any retained trees on or adjacent to this Site or to the long-term amenity of the area.

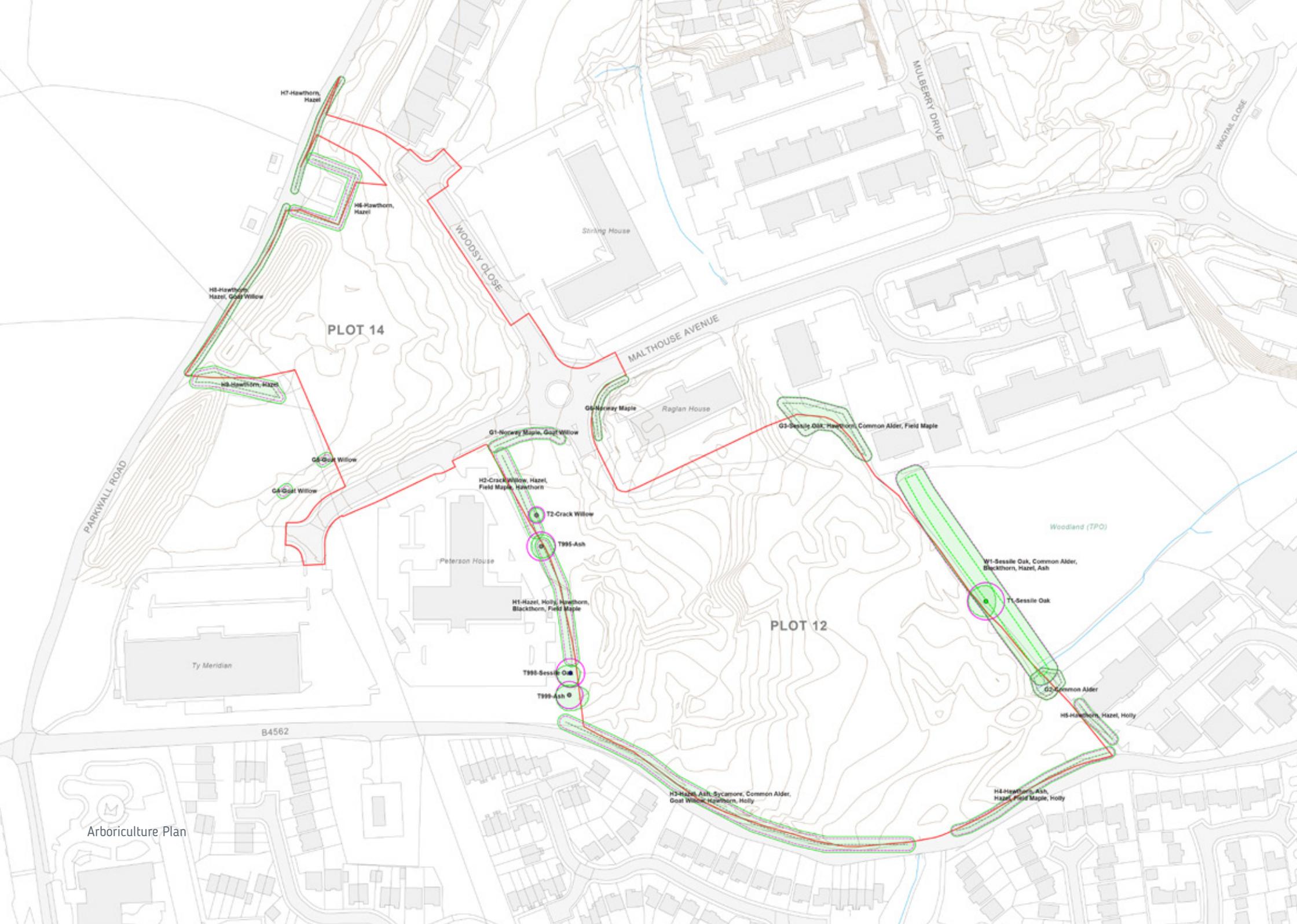


Tree group to east boundary of Plot 12 (Tree ID#W1)



Arboricultural Plan (showing Site land at Beck Ct)





2.9. UTILITIES

Plot 12

There are a series of manholes and sewers within the development plot, made visible following the recent re-profiling works. Dŵr Cymru Welsh Water (DCWW) asset records also show public sewers within the site boundary. It is understood these manhole chambers are for an adopted foul water sewer and the partial culverting of Nant Pontprennau watercourse. Easements for the adopted sewer are assumed at 6m and are to be confirmed by DCWW.

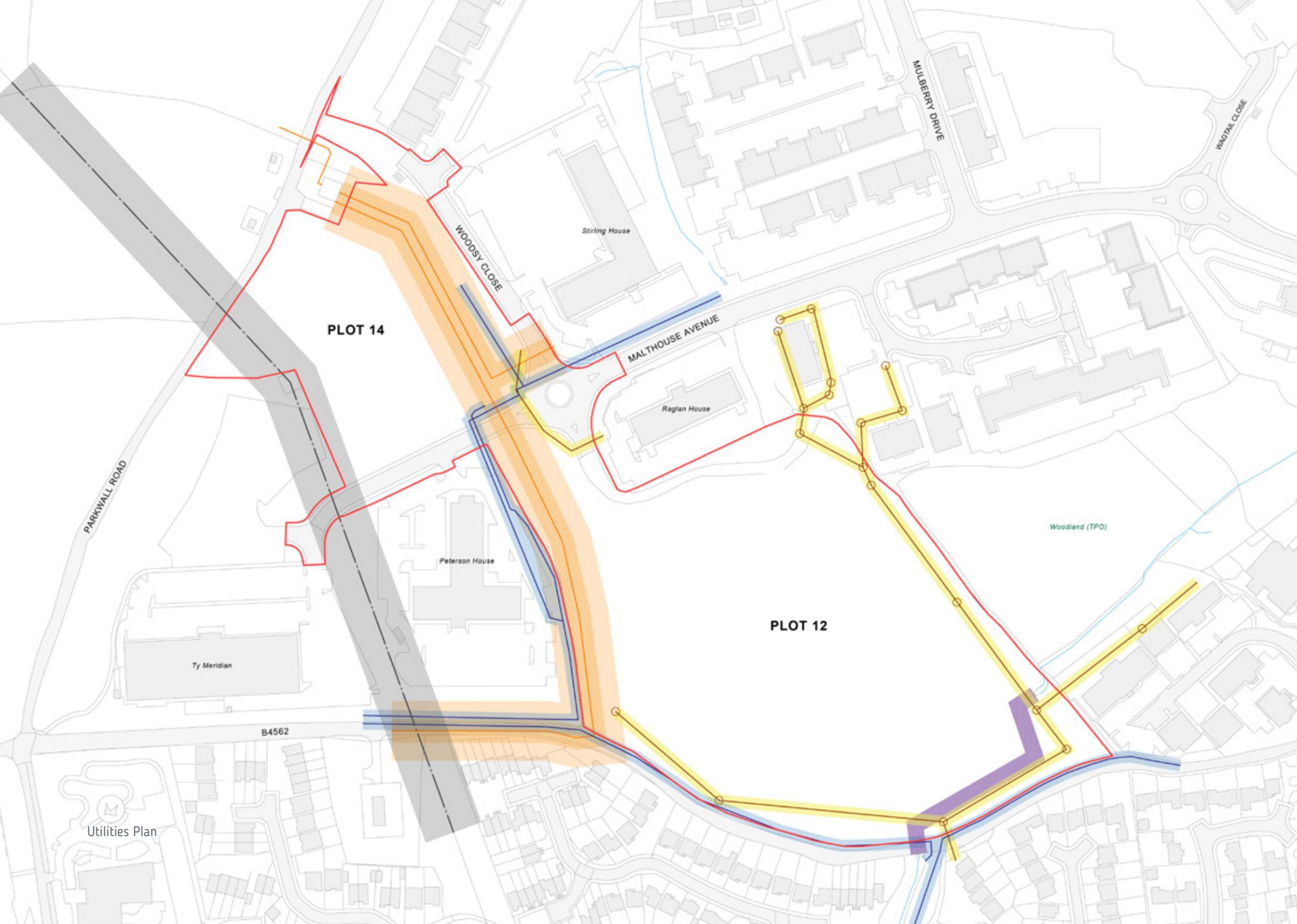
Plot 14

Notably high voltage overhead cables bound the plot's western boundary, with a pylon also forming part of the site's current boundary treatment; a 30m easement corridor has been included within the constraints plan. There are also 2no. high pressure gas mains, running parallel to the eastern boundary. Suggested easements are noted on the proposed layouts and to be confirmed with Wales & West Utilities. Dŵr Cymru Welsh Water (DCWW) asset records show public sewers immediately east of the site boundary, with water mains running parallel to the gas mains within the site boundary.



View from Malthouse Avenue of high voltage overhead cables on pylons (near to western boundary of Plot 14)

	Site Boundary
	High voltage overhead cables on pylons with 30m easement corridor
	Water main with 6m easement corridor
	Foul sewer with 6m easement corridor
	Culverted watercourse with 6m easement corridor
	High pressure gas main showing required easement corridors (12m to commercial use and 30m to residential use)



PLOT 14

PLOT 12

PARKWALL ROAD

WOODY CLOSE

MALTHOUSE AVENUE

MULBERRY DRIVE

WINDFALL CLOSE

Stirling House

Raglan House

Peterson House

Ty Meridian

Woodland (TPO)

B4562

Utilities Plan

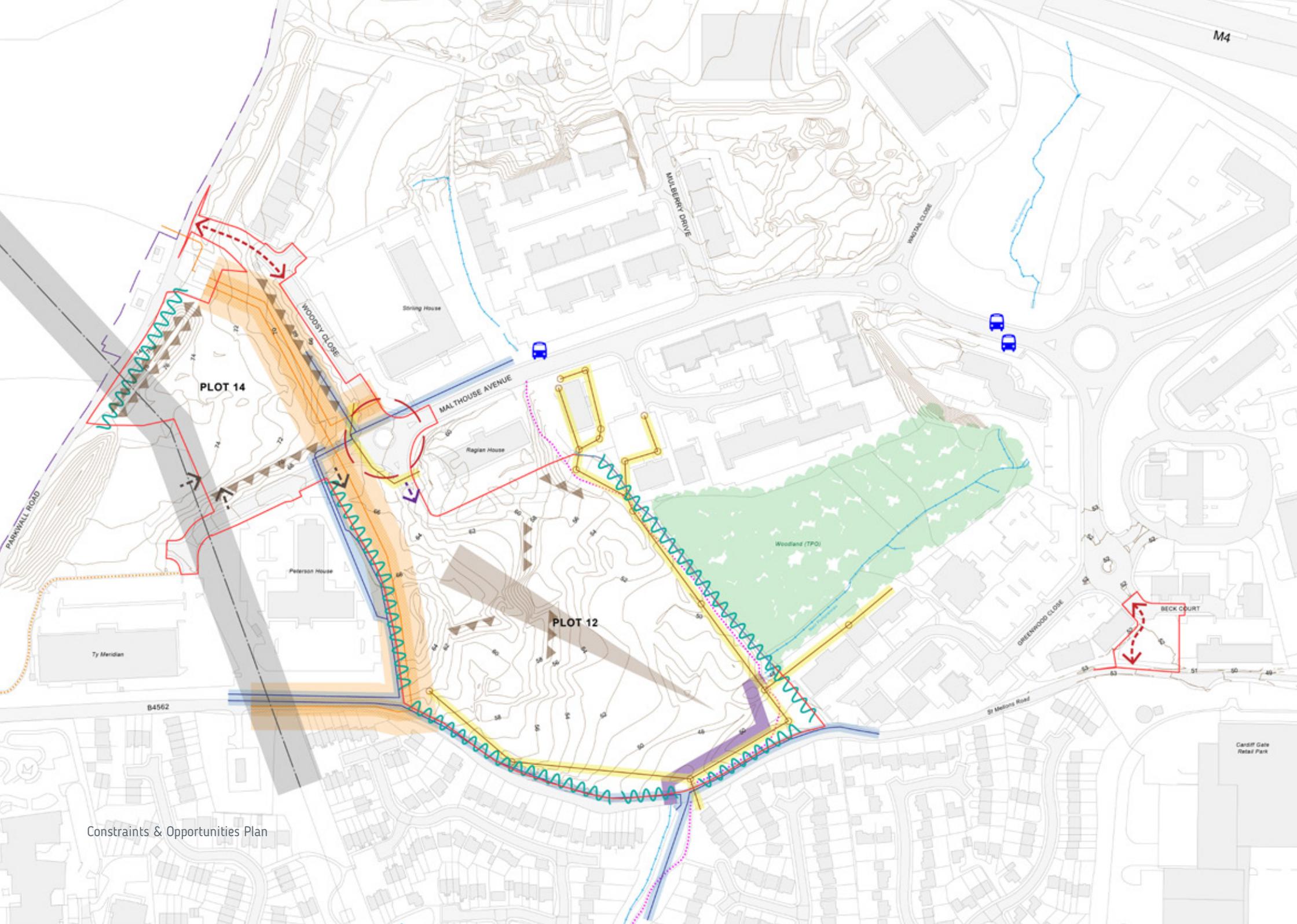
2.10. CONSTRAINTS & OPPORTUNITIES SUMMARY

The main findings from the technical assessments are shown on the opposite plan, which identifies important features that will influence the design of the Site.

A summary of the main considerations is set out below:

- » Opportunity to connect a bus corridor from the west through Malthouse Avenue to Beck Court and back on to St Mellons Road (B4562);
- » Opportunity to improve the condition of associated highways land to facilitate access to the vacant plots, vitalise the public realm, and provide new cycle connections;
- » Plot 12 consists predominantly of unimproved neutral grassland, bramble scrub, open scrub, and bare earth (where scrub clearance works have taken place). Its boundaries are lined with native species-rich hedgerows, semi-mature trees, and mature trees, with an area of semi-natural broadleaved woodland (TPO) adjacent to the eastern Site boundary;
- » Plot 14 similarly consists of unimproved neutral grassland, bramble scrub, open scrub, and bare earth. Its edges feature very steep slopes, including a large earth bund adjacent to Parkwall Road;
- » Site land at Beck Ct is relatively flat and comprises a car park, several trees, and highways land;
- » High-level ecological value areas are identified at the boundaries of the vacant plots, to be retained and enhanced where possible;
- » Steep landform, particularly within Plot 14, presents a significant constraint to development;
- » The Site is located entirely within Flood Zone A, as set out by the TAN 15 Development Advice Map, and is therefore not considered a constraint in planning policy terms;
- » High voltage overhead cables and a pylon bound the western edge of Plot 14 - a 30m easement corridor has been shown;
- » Two high pressure gas mains run parallel to the eastern boundary of Plot 14, and the western boundary of Plot 12. Suggested easements have been shown, relative to proposed land uses;
- » A culverted section of an existing watercourse, known as 'Nant Pontprennau', crosses the south eastern area of Plot 12;
- » The Site contains no designated built heritage assets. It is not considered that any archaeological assessment is required given that the plots comprise vacant development plot where earthworks and ground preparation have previously taken place;
- » The uses to be proposed are compatible with the surrounding residential and employment uses in terms of amenity impacts and noise generation.





PLOT 14

PLOT 12



3. DESIGN

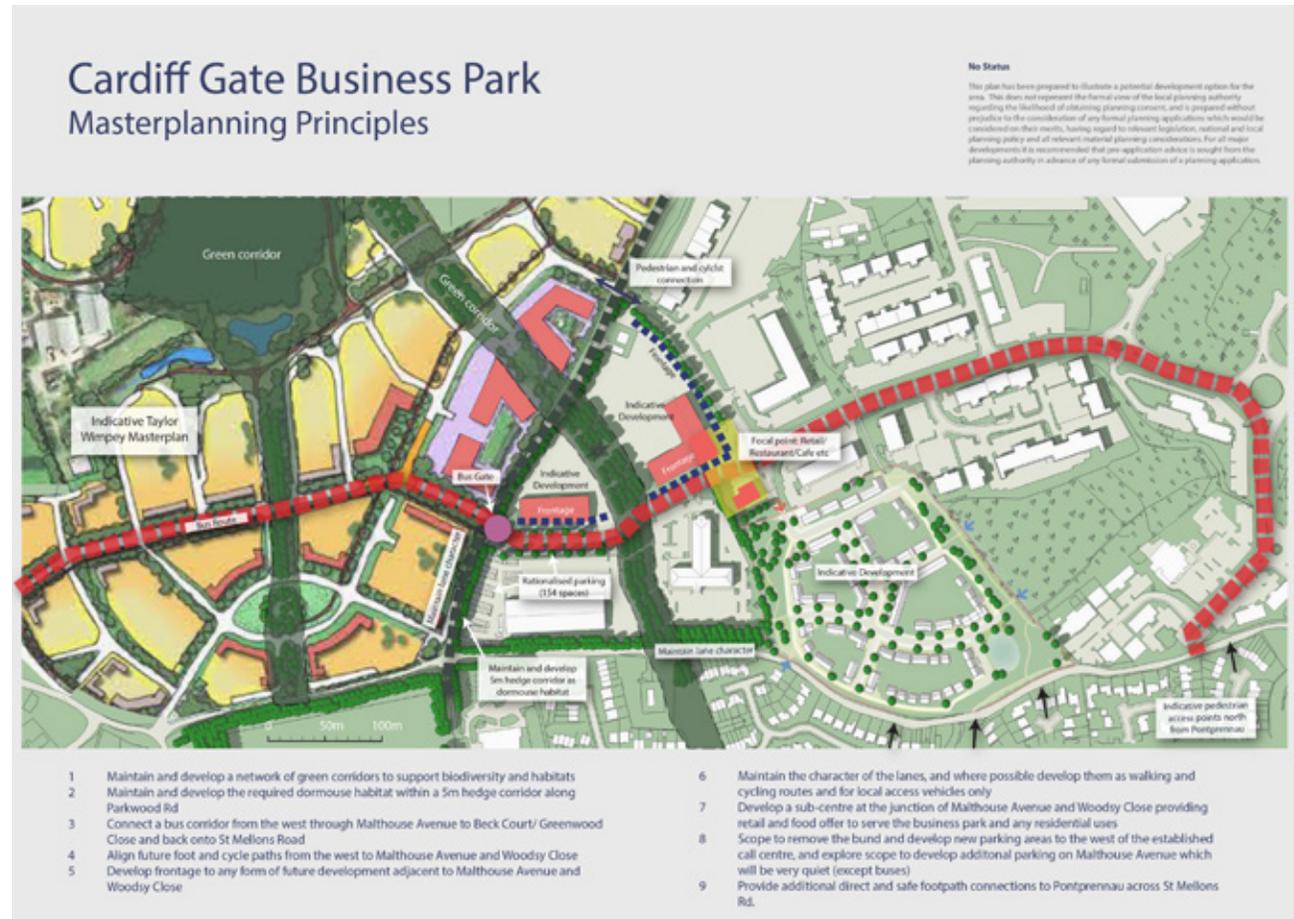
Cardiff Gate Pontprennau | Design and Access Statement

3.1. PRE-APPLICATION CONSULTATION

Pre-application dialogue has taken place with the Council over the course of 2020 and 2021 (CCBC Ref: PA.20/00067/MJR) to help inform the development proposal and assessment work undertaken in support of the planning application.

In terms of planning policy the Council confirmed that the principle of development is accepted on the basis of the mix of uses proposed, the period of marketing previously undertaken to secure employment uses, and also the provision of the active travel / bus link to the adjacent Strategic Site.

The process for determining the mix of uses and the design principles has been aided by the Council's 'Masterplanning Principles', shown opposite.



'Cardiff Gate Business Park - Masterplanning Principles' prepared by the Cardiff Council to illustrate a potential development option and to inform pre-application discussions.

Changes were made to the proposals to enhance their placemaking benefits and address comments from the Council's Urban Design Officer. All comments have now been addressed and are reflected in this current submission. An extract of the Urban Design Officer's response to the pre-app is below:

"Thanks for consulting me on this. I am really pleased with it. The applicant has pretty much covered off all of the issues and opportunities that we had discussed, and responded very positively: connectivity, frontages and suggestions for future plot development, green corridors retained and developed, lane character intact, some reasonable notion of a housing layout.

I would request that the consent conditions future development to be "broadly in accordance with the principles and layout presented on approved drawing 9310 " so that we retain some flexibility but can fall back on this work as necessary.

I am particularly pleased to see reference to bus and cycle connectivity and the indicative highway and junction improvements shown. It would make a huge difference to the quality of the connectivity and the character of the place, without reducing the opportunity to access by traffic: detail to resolve in due course - I understand"

3.2. INTERPRETATION

Contextual analysis and site assessment work undertaken by the project team, and a thorough pre-application consultation process with Cardiff Council, has prompted a rationale for design, which aims to maximise the opportunities identified.

The Development Framework Plan, shown opposite, illustrates key masterplanning principles to which future detailed design proposals are to be broadly in accordance with. This includes access, connectivity, frontages, indicative development layouts, open spaces, and enhanced green corridors.

Principles that have been interpreted from the 'Cardiff Gate Business Park - Masterplanning Principles' plan (referenced on page 46), prepared by the Cardiff Council, include:

- 1** Connect a bus corridor from the west through Malthouse Avenue to Beck Court and back on to St Mellons Road (B4562).
- 2** Develop frontages of future buildings on to Malthouse Avenue / Woodsy Close.
- 3** Develop a sub-centre at the corner Malthouse Avenue / Woodsy Close to service existing and future businesses and residents, including public realm improvements to adjacent highways. Indicative layout shown, including space created for retail/commercial uses.
- 4** Develop Plot 12 (residential) to improve integration with neighbouring residential areas, existing trees with preservation order, and access to the PROW.
- 5** Maintain and develop a network of green corridors and Ecotones (where appropriate) to support biodiversity.

Other supporting principles include:

- a** Cycle lane to be provided on Malthouse Avenue, with on-street parking on one side to be removed/re-distributed.
- b** Bund adjacent to Parkwall Road to be retained where possible, identified as a high level ecological value area.
- c** Watercourse to be opened up and Ecotone provided to woodland edge.
- d** Create an attractive gateway to CGIBP at Beck Court, particularly for pedestrians and cyclists.
- e** Area for parking / private space.

	Site Boundary
	Boundary of Strategic Site F (SSF)
	Public Right of Way (Llanedern No.14)
	Strategic pedestrian/cycle path
	Informal leisure route
	Bus/Pedestrian/Cycle access to SSF
	Bus egress through Becks Court including improvements to adjacent public realm and parking
	Existing bus stop
	Additional bus stop
	Main vehicular access to development
	Potential alternative access to Plot 14
	Retained high level ecological value area including associated bund adjacent to Parkwall Road
	Green corridor
	Indicative formal play area location
	Indicative attenuation location
	Indicative improved route/junction
	Indicative built form and frontage
	Indicative development block

3.3. PARAMETER PLANS

STATUS OF PROPOSALS

This section sets out design elements to be fixed as part of the outline planning consent, including parameters for: Land Use and Access; and Building Heights. These parameters provide a framework for future, more detailed designs.

LAND USE & ACCESS

The proposed land use and access parameters have been determined as part of a comprehensive masterplanning process, which has considered contextual and site assessment work.

Vacant land to the north of Malthouse Avenue, known as **Plot 14**, covers approximately 1.46ha and provides up to approximately 0.71ha of mixed-use development.

Access into the 'Mixed-Use Area' is to be provided via Malthouse Avenue. Access could alternatively be provided via adjacent land to the west, which is currently used for car parking.

Vacant land to the south of Malthouse Avenue, known as **Plot 12**, covers approximately 4.04ha and provides up to approximately 2.36ha of residential development and a small area of commercial development, which is partially situated on existing highways land that is to be consolidated within modifications to Malthouse Avenue as part of strategic improvement proposals to the access and movement network.

The four-armed roundabout with Woodsy Close and Malthouse Avenue will be removed and replaced with a priority junction, which will provide a better experience for pedestrians and cyclists, allow the junction to operate in safer and more efficient

manner, and facilitate the delivery of commercial development that will create sub-centre to service existing and future businesses and residents.

A new pedestrian and cycleway will be provided along Malthouse Avenue, extending from the SSE (company) access to the west and the Malthouse Avenue / Wagtail Close roundabout to the east, taking advantage of the proposed removal of the Woodsy Close / Malthouse Avenue roundabout.

A future bus corridor through Malthouse Avenue will be facilitated through the proposal of a bus/pedestrian/cycle access to Strategic Site F via Woodsy Close, and a bus egress through Beck Court on to St Mellons Road (B4562).

Development of Plot 12 will provide convenient access to an existing Public Right of Way.

Areas of 'Public Open Space' comprising different features and typologies will form a comprehensive strategic green infrastructure, including: protection and enhancement of green corridors and Ecotones (where appropriate) to support biodiversity; provision of easily accessible open space for the use and enjoyment of the local community; space for sustainable water management; pedestrian and cycle links; and play facilities.



BUILDING HEIGHTS

The proposed Scale Parameter Plan indicates the maximum building heights in response to a combination of contextual factors, proposed land uses, and urban design principles.

Proposed maximum building heights within the 'Mixed-Use Area' area are up to 12.5m high.

Proposed maximum building heights within the 'Commercial Area' area are up to 11m high.

Proposed maximum building heights within the northern section of the residential area are up to 12.5m high (3 storeys), and up to 11m high (2.5 storeys) within the southern section. The contrast of heights in Plot 12 will help to establish a responsive character to existing housing in Pontprennau.

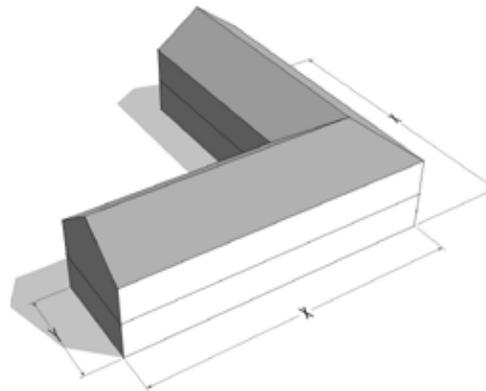
	Length (x)		Width (y)	
	Min	Max	Min	Max
Standard residential building	4m	75m	7m	15m
Corner residential building	4m	100m	7m	15m
Employment building	10m	150m	8m	40m



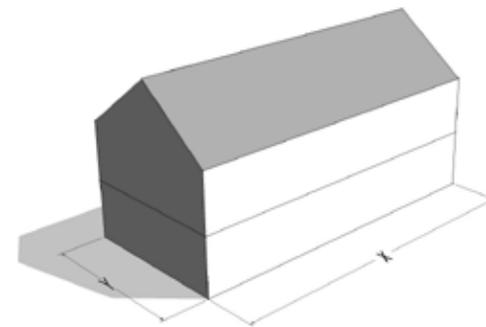
Notes:-

Heights are measured from the highest adjacent finished ground level to the ridge of the roof. In residential areas incidental elements such as chimneys may exceed the ridge by up to 1.5m.

Some re-modelling of the existing ground levels will be necessary to achieve appropriate development platforms. Finished ground levels are not known at this stage and these could vary up to +/- 2 metres from known AOD heights



Corner building



Standard building

3.4. ILLUSTRATIVE MASTERPLAN

The Illustrative Masterplan, presented opposite, further evolves the design framework and parameters to show how the vision and aspirations for the proposed development could be delivered to provide a healthy, vibrant, and sustainable mixed-use development at CGIBP, Pontprennau.

The illustrative proposals will provide a bespoke and locally distinctive built environment, settled within an attractive and multi-functional green infrastructure network. The targeted retention and enhancement of existing landscape features, has underpinned much of the emerging masterplan and has formed the basis for the creation and character of new spaces that will provide civic amenity and links into existing urban fabric.

The design provides for up to 150 dwellings, with a range of typologies including affordable housing. The properties would be designed to accommodate modern lifestyles, with dwellings and spaces designed to support flexible and remote working. Additional co-working spaces could also be provided within the proposed sub-centre at the corner Malthouse Avenue / Woodsy Close to service existing and future businesses and residents.

Strategic improvements to the local movement network will establish greater permeability with the surrounding neighbourhoods, and help to encourage active and sustainable travel by providing a better experience for pedestrians and cyclists.

The existing Public Right of Way along the east side of the Site (footpath Llanedeyrn No 14) will be enhanced by a wider area of wildflower grassland, amenity grassland, and tree planting. This will provide recreational space, a buffer to the protected woodland, a play space, and a natural setting around an attenuation feature.

The existing west and north-west boundaries provide wildlife corridors and small areas of habitat, which are to be retained and enhanced within the proposals. The illustrative masterplan shows how these areas will be widened to allow for significant planting that will improve the resilience of the habitat. The wildlife strips also provide additional opportunities for informal pedestrian and bicycle routes, thereby improving accessibility across the Site.

There is an aspiration to create a Hillside Park adjacent to Woodsy Close that wraps around the Malthouse Avenue. The space will be more formal in its character and act as managed open amenity space to provide an attractive and usable edge to the proposals.

Further descriptions of the indicative proposals is provided throughout the following sections.

-  Site Boundary
-  Public Right of Way (Llanedern No.14)
-  Strategic pedestrian/cycle path
-  Informal leisure route
-  Bus/Pedestrian/Cycle access to SSF
-  Bus egress through Becks Court including improvements to adjacent public realm and parking
-  Improved route/junction
-  Indicative built form - Residential
-  Indicative built form - Commercial
-  Indicative residential development (higher density)
-  Indicative residential development (lower density)
-  Key frontage
-  Existing bus stop
-  Additional bus stop
-  Main vehicular access to development
-  Indicative formal play area location
-  Indicative attenuation location
-  De-culverted watercourse including Ecotone provided to woodland edge

3.5. CHARACTER & APPEARANCE

The development proposals at CGIBP will seek to add variation to the scheme by establishing three character areas, determined through the assessment and design process.

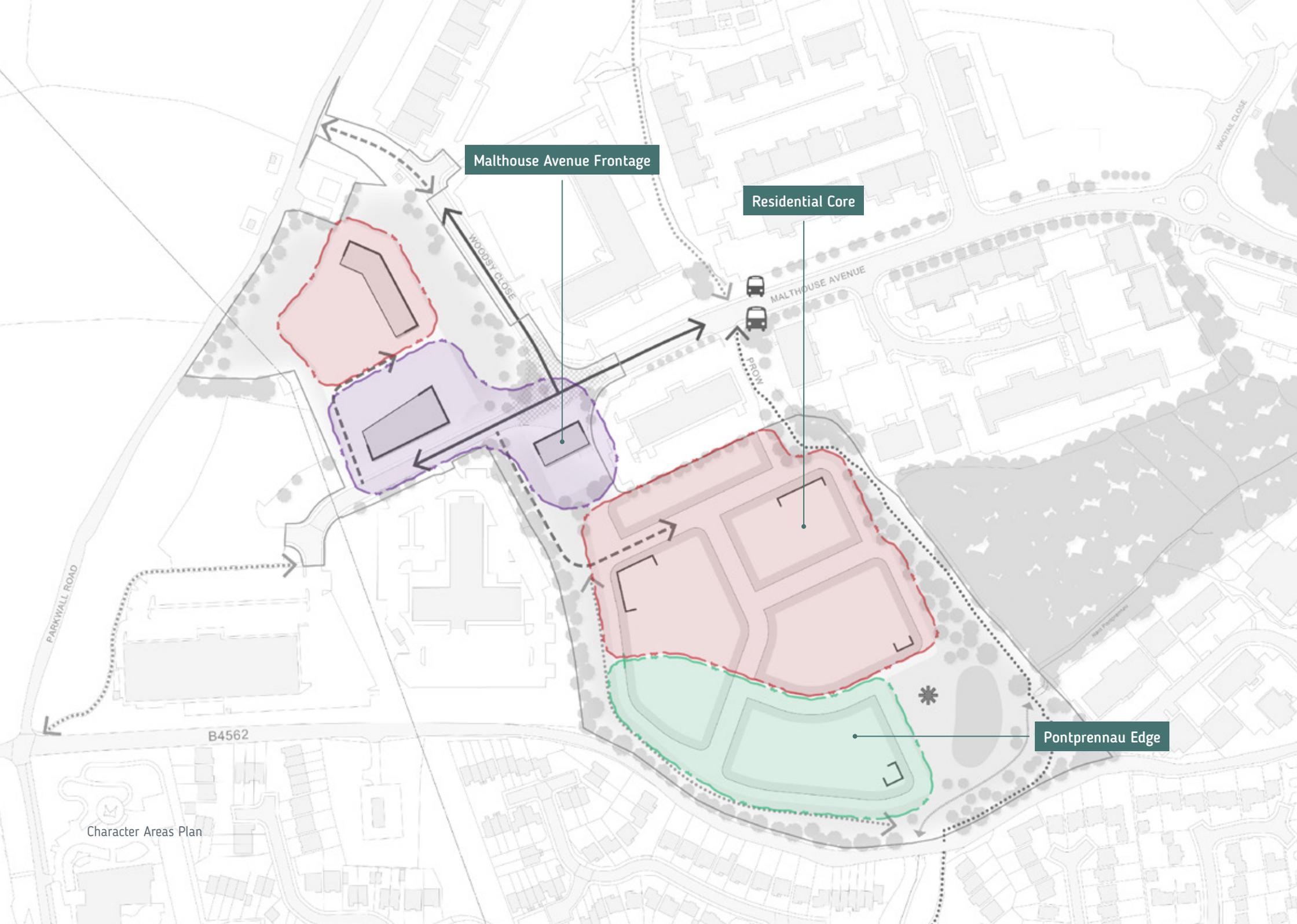
The distinction of character areas, through varying elements of scale, density, form, land use, typologies, building appearance, and landscaping treatments, will help people find their way around, contribute towards a sense of place, and provide a level of richness and delight to the new community.

The four character areas include:

- » Residential Core
- » Pontprennau Edge
- » Malthouse Avenue Frontage

These are identified on the adjacent plan and described over the following pages with supporting imagery and references to the local context.





Malthouse Avenue Frontage

Residential Core

Pontprennau Edge

PARKWALL ROAD

WOODY CLOSE

MALTHOUSE AVENUE

PROW

B4562

RESIDENTIAL CORE



The Residential Core area comprises residential uses only and is characterised by an increased scale and density.

Key Characteristics

- » Contemporary feel with increased scale (up to 3-storey) and density to appropriately enclose streets and spaces, including linked houses and apartments – response to surrounding built form massing.
- » Variety of roofscapes and crisp detailing.
- » Rectilinear urban form with streets oriented within Plot 12 to create view corridors towards the PROW and woodland area.
- » Strong and continuous building lines.
- » Use of street trees / landscaping to soften the streetscape.
- » Parking on plot or to rear.
- » Key buildings located to terminate prominent views and vistas, distinguished by contrasting building details, and/or an increase in height above the surrounding buildings.



Local precedent: contemporary building with crisp detailing at St Edeyrn's Village Centre.



Local precedent: 3-storey apartment buildings at Blackberry Way. Trees help to soften the streetscape.

PONTPRENNAU EDGE



The Pontprennau Edge area comprises residential uses only and is characterised by semi-detached and detached properties that will incorporate positive contextual references of the adjacent residential area to create a coherent transition into the new development.

Key Characteristics

- » More traditional and informal feel with reduced scale (up to 2.5-storey) and density, including semi-detached and detached dwellings with brick or brick/render walls and tile roofs.
- » Protruding and gable features to animate the streetscene.
- » Combination of straight and gently curving streets to soften the streetscape and ensure a sensitive integration with the green edges and Pontprennau to the south.
- » Variation of building lines and roofscapes to establish more informal street scenes. Mix of pitched roofs, pitched with gable fronts, and some gable dormers.
- » Parking on plot.
- » Key building to be located at the PROW access point to help create a gateway to the Site, distinguished by contrasting building details, projection forward of the established building line, and/or an increase in height above the surrounding buildings.



Local precedent: detached homes overlooking an attractive informal green space.



Local precedent: mix of materials and detailing at Clonakilty Way.

MALTHOUSE AVENUE FRONTAGE



The Malthouse Avenue Frontage area will comprise commercial uses only and is characterised by a more contemporary feel that will provide critical human-scale frontage to the streetscape and compliment the formal landscaping.

Key Characteristics

- » Contemporary feel with boulevard-style streets, formal tree and shrub planting, and crisp detailing to buildings.
- » Rectilinear urban form.
- » Large building massing and scale (up to 12.5m high).
- » High-quality buildings with 'human scale' frontage to assist with legibility.



Local co-working spaces could be provided within the proposed sub-centre at the corner Malthouse Avenue / Woodsy Close to service existing and future businesses and residents.



Local precedent: large office buildings with formal tree and shrub planting at Malthouse Avenue.



Local precedent: attractive car dealership building at the business park with large plate glass windows.



Bird's eye view of the indicative proposals - looking south



3.6. ACCESS & MOVEMENT STRATEGY

The development proposals at Cardiff Gate are supported by an access and movement strategy that will provide betterment to the existing arrangement, including: new bus, pedestrian, and cycle connections; a new pedestrian / cycleway along Malthouse Avenue; and the conversion of the Malthouse Avenue / Woodsy Close roundabout into a priority junction.

The access and movement strategy has been developed in response to a series of key design principles that will help to create a safer and more sustainable transport network for existing and future communities, including:

- » 'Sustainable Hierarchy of Movement' - The proposals will develop a clear hierarchy of movement that prioritises pedestrians and cyclists, followed by public transport, to achieve a sustainable travel mode split, and provide travel choice and accessibility for all;
- » 'Sustainable Travel Choices' - The proposals will be well-served by public transport with frequent services, and will facilitate the provision of a strategic bus, pedestrian, and cycle connection into the neighbouring Strategic Site F (SSF).
- » 'Sustainable Travel Corridors' - The proposals will provide attractive, integrated, and direct walking and cycling routes that will encourage active travel to local destinations.
- » 'Integration with Neighbouring Areas' - The proposals will be well-connected into the existing movement network, with direct walking and cycling links throughout the Site that will provide connections to CGIBP, Cardiff Gate Retail Park (CGRP) and Pontprennau. The proposals will enhance bus connectivity in the area.

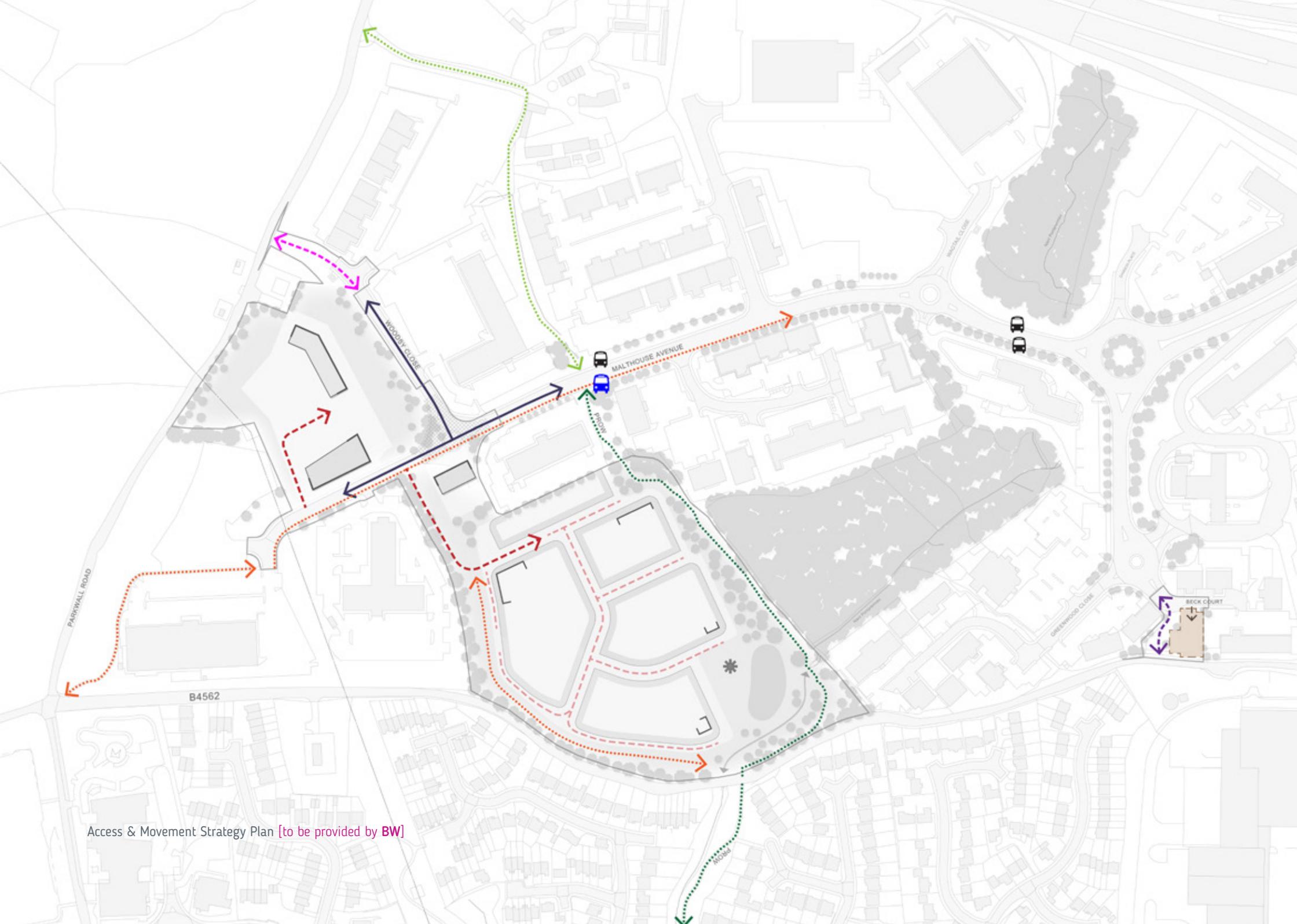
The access and movement proposals are summarised on the plan shown opposite, and described in further detail over the following pages.

Internal Movement Network

The permeability of the Site with surrounding neighbourhoods has been a crucial feature of the design process. Walking and cycling routes will follow direct desire lines within the Site, and will include traffic free and recreational routes, connecting into and extending the existing network of routes in the local area. Currently there are footways on at least one, or for the majority, both sides of carriageways within CGIBP. These links will provide real, viable alternatives to users of the Site to access local facilities and will facilitate a shift towards active travel being the primary mode of travel for users of the Site.

The Site will have one access onto the external highway network, which will be from the spine road on the eastern boundary of the Site to the M4 Junction 30 Roundabout. Plot 12 will be accessed via a new access off Malthouse Avenue to the south with Plot 14 also being accessed off Malthouse Avenue to the north, directly west of the Plot 12 access. The alteration to the Malthouse Avenue / Woodsy Close roundabout means both accesses will be a priority junction with appropriate spacing between the existing accesses within CGIBP. All new internal streets that include carriageways, pedestrian/cycleways and footways will be designed to adoptable standards with active travel considered at the forefront of the design.



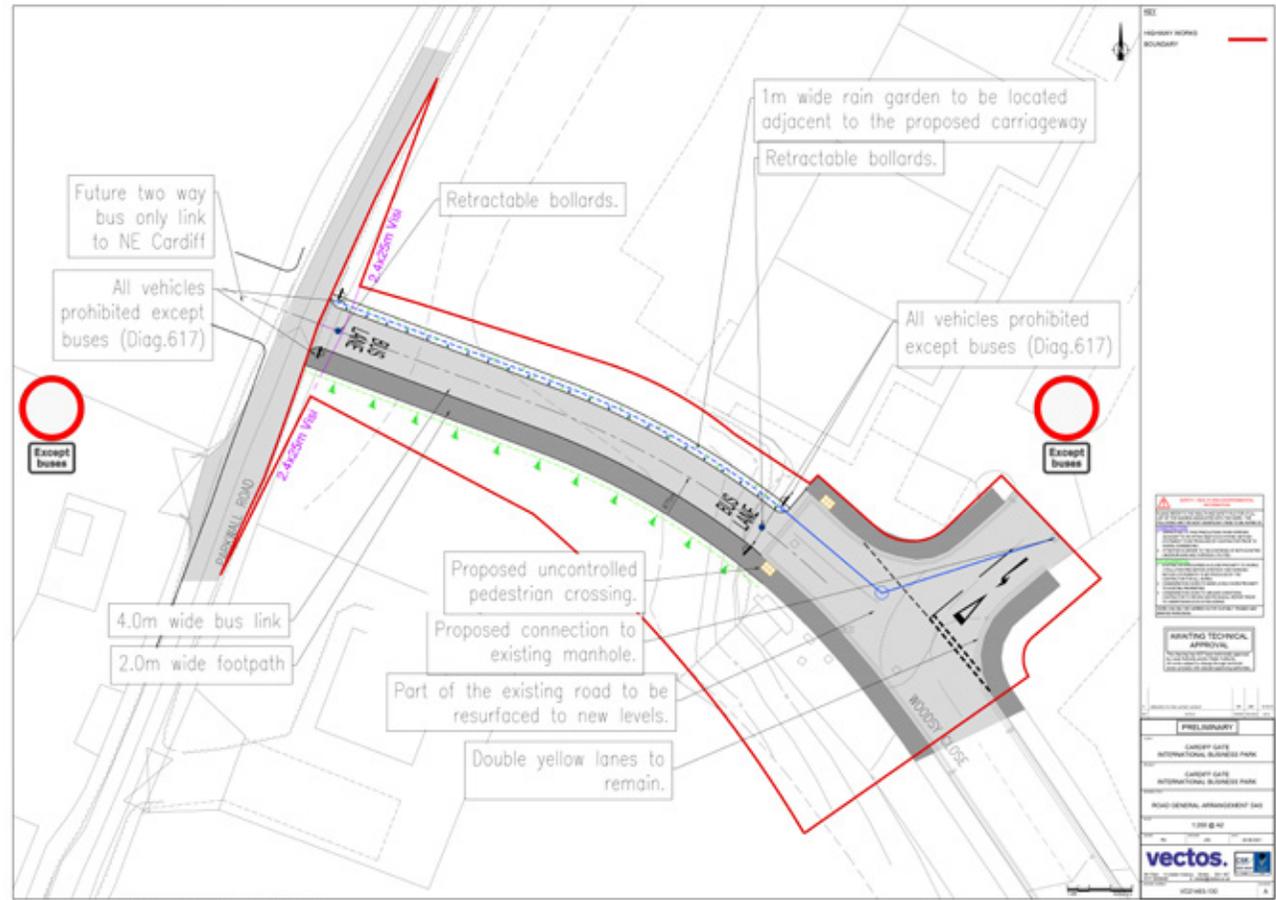


Access & Movement Strategy Plan [to be provided by BW]

Bus, Pedestrian and Cycle Connection to Strategic Site F

As part of the indicative development proposals a new bus, pedestrian and cycle connection will be provided at the western site boundary connecting the Site with SSF, located directly to the west. This new link, the indicative design of which is shown adjacent, will extend off Woodsy Close into SSF.

The purpose of this link is to allow for a new SSF funded bus service to route through the Site from the west, connecting SSF to the local highway network that links into the rest of Cardiff and Cardiff City Centre.



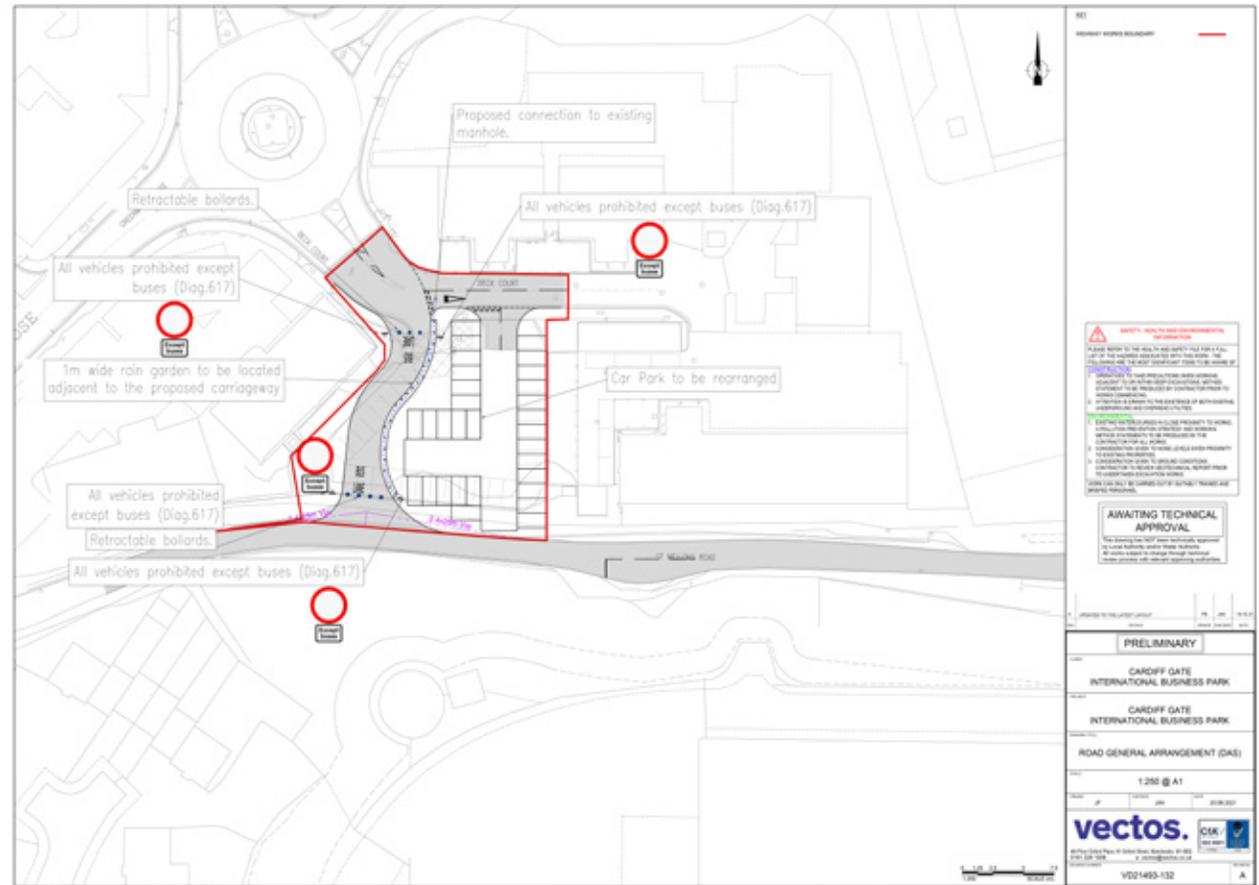
Illustrative proposal of bus, pedestrian and cycle connection to Strategic Site F

* A more detailed version of this plan is included separately as part of the application submission

Bus Egress through Beck Court

To allow for the new bus route to link through the Site, a new bus egress at Beck Court is also proposed linking onto St Mellons Road. This new bus egress will also facilitate improved bus access to Strategic Site G.

The delivery of a bus egress at Beck Court requires the reconfiguration of an existing car park, and will result in the loss of vegetation. This provides an opportunity to create an attractive gateway into CGIBP from the south east.



Illustrative proposal of bus egress through Beck Court

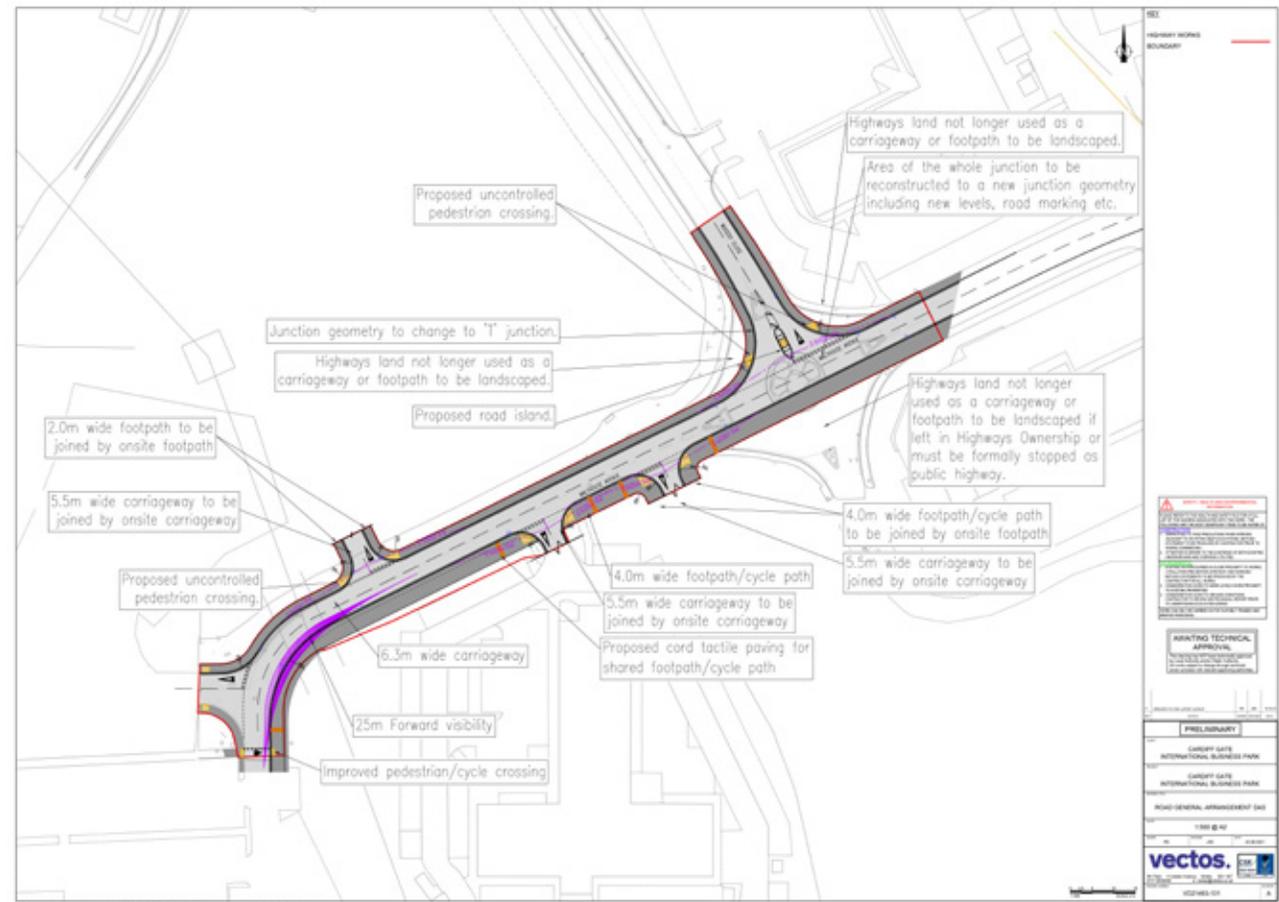
* A more detailed version of this plan is included separately as part of the application submission

Malthouse Avenue / Woodsy Close Alteration

As part of the indicative development proposals the four-armed roundabout with Woodsy Close / Malthouse Avenue will be removed and replaced with a priority junction. This new arrangement, the indicative design of which is shown adjacent, will alter Woodsy Close into the minor arm and allow better alignment for Malthouse Avenue which will operate as the major arms to the west and east. This arrangement will provide a better experience for pedestrians and cyclists and will allow the junction to operate in safer and more efficient manner.

Site Access for Vehicles

The Site will have one access onto the external highway network, which will be from the spine road on the eastern boundary of the Site to the M4 Junction 30 Roundabout. Plot 12 will be accessed via a new access off Malthouse Avenue to the south with Plot 14 also being accessed of Malthouse Avenue to the north, directly west of the Plot 12 access. The alteration to the Malthouse Avenue / Woodsy Close roundabout means both accesses will be a priority junction with appropriate spacing between the existing accesses within CGIBP. The indicative access arrangement to each of the plots is shown adjacent. Both Site accesses will be subject to a Stage 1 Road Safety Audit (RSA).



Illustrative proposal of alteration to roundabout and access to vacant plots

* A more detailed version of this plan is included separately as part of the application submission

Pedestrian and Cycleway on Malthouse Avenue

As part of the indicative development proposals a new pedestrian and cycleway will be provided along Malthouse Avenue linking from the SSE (company) access to the west to the Cardiff Audi / Malthouse Avenue three-armed roundabout to the east. This new link, the indicative design of which is shown adjacent, will extend along Malthouse Avenue and take advantage of the proposed removal of the Malthouse Avenue / Woodsy Close Roundabout.



Illustrative proposal of ped-cycle link along Malthouse Ave. (outside proposed highway works boundary)

* A more detailed version of this plan is included separately as part of the application submission

DRAINAGE STRATEGY FOR ACCESS PROPOSALS

The following illustrative waste and water management strategies relate to the access proposals only.

Bus, Pedestrian and Cycle Connection to Strategic Site F

Following the required standards for the new road, the surface water drainage from the new carriageway of the bus link and new footpath must be treated, attenuated, and discharged at controlled discharge rate to an existing drainage system.

It has been proposed that a new footpath falls toward the carriageway which falls toward the adjacent rainwater garden. The rainwater garden to be installed adjacent to the proposed bus link.

The surface water will fall on the footpath and carriageway and will be directed to the rainwater garden. Flush kerb will allow the water to enter the rainwater garden. Surface water will be treated in the rainwater garden and attenuated, also some water will infiltrate or evaporate before entering the perforated pipe located under the rainwater garden. Water than will follow the pipe to the manhole and discharge to an existing drainage system.

Proposed drainage system will provide all required elements of the sustainable drainage system.

Site Access to Plot 12

The levels for both accesses to plot 12 falls away from the Malthouse Avenue. Therefore, the drainage for both accesses will be part of the plot 12 drainage system and will not connect to the existing Malthouse Avenue drainage network.

All drainage for the plot 14 will be designed separately to the required standards and to provide treatment, attenuation, and controlled discharge from the site.

Site Access to Plot 14

Due to the level differences the access to plot 14 will be draining toward the Malthouse Avenue. It is understood that the change to the main junction from an existing roundabout to 'T' type junction reduces drainage catchment area and therefore additional small area of the access can be also directed to the existing drainage system.

All drainage for the plot 14 except an access will be designed separately to the required standards and to provide treatment, attenuation, and controlled discharge from the site.

Malthouse Avenue / Woodsy Close Alteration

The standard is different for the changes to the existing highways comparing to new highways. There is no requirement to provide additional water treatment and attenuation if the existing catchment area remain similar as before.

Proposed changes to the existing junction, namely change from the roundabout to 'T' junction and some changes to the carriageway along Malthouse Avenue will not increase the current catchment area of the drainage system.

Therefore, it has been proposed to utilise an existing drainage system located in the road.

Due to the layout changes, there will be some road gullies which can remain, subject to current condition and level adjustment and there will be number of proposed additional road gullies to be installed and connected to existing drainage network.

All footpaths to drain to the carriageway.

Bus Egress through Beck Court

Following the required standards for the new road, the surface water drainage from the new carriageway of the bus link must be treated, attenuated, and discharged at controlled discharge rate to an existing drainage system.

It has been proposed that the carriageway will fall toward the adjacent rainwater garden. The rainwater garden to be installed adjacent to the proposed bus link.

The surface water will fall on the carriageway and will be directed to the rainwater garden. Flush kerb will allow the water to enter the rainwater garden. Surface water will be treated in the rainwater garden and attenuated, also some water will infiltrate or evaporate before entering the perforated pipe located under the rainwater garden. Water than will follow the pipe to the manhole and discharge to an existing drainage system.

Proposed drainage system will provide all required elements of the sustainable drainage system.

Area of an existing car park will be reduced providing a betterment in the drainage catchment area.



Example of sustainable urban drainage systems integrated into streets

3.7. ENVIRONMENTAL SUSTAINABILITY

GREEN INFRASTRUCTURE STRATEGY

The Green Infrastructure Strategy Plan, presented opposite, illustrates: development areas; existing and proposed green infrastructure elements; associated access and transport links; drainage / SUDS features / multi-functional components; greenways + enhanced existing/proposed GI frameworks; and open space and play provision.

All the existing areas of Green Infrastructure along the boundaries are to be retained and additional areas of greenspace and tree planting are proposed. Overall, there will be a considerable ecological enhancement/ biodiversity net gain as a result of areas of new high-quality greenspace and the enhancement of existing greenspace.

New Public Open Space on the East Boundary

The existing Public Right of Way along the east side of the site (footpath Llanedeyrn No 14) will be enhanced by a wider area of wildflower grassland, amenity grassland, and tree planting. This wider landscape buffer along the east side of the site will provide recreational space and improve the quality of the pedestrian route, as well providing a buffer between the protected woodland and the stream to the east of the site. The woodland and stream to the east of the site is likely to accommodate a significant amount of wildlife, so enhancing the edge will provide resilience to this adjacent area of habitat and help protect it from the impacts of the proposed development.

This approach will accord with the principle outlined in Future Wales 2040: “identify areas which should be safeguarded and created as ecological networks for their importance for adaptation to climate change, for habitat protection, restoration or creation, to protect species, or which provide key ecosystems services, to ensure they are not unduly compromised by future development”

This area will provide playspace, well connected to the wider public rights of way network, and a natural setting around the proposed attenuation pond. The pond will be incorporated as a feature in the public open space and will provide a stepping stone for wildlife travelling along the stream that runs along the eastern side of the site.

Due to the likelihood of bats in the adjacent woodland and the potential impact from artificial lighting, the area to the west of the attenuation pond will be planted with a native hedgerow. This area of hedgerow will help limit light and noise spill from the developed area to the west and improve the quality of this space for recreational users and wildlife.

The mixture of amenity grassland, wildflower planting, and tree and hedgerow planting will result in a greater amount of edges and habitats for wildlife and improve the quality of this area of public open space. The connectivity to the residential areas to the south of the site will allow existing residents to utilise this area of public open space and improve the recreational facilities within the wider area.



Amenity grassland, wildflower planting, and public open space



Amenity grassland, wildflower planting, and landscaped paths

Enhancement of the West and North-West Boundaries

The existing west and north-west boundaries provide wildlife corridors and small areas of habitat. The proposed strategy shows how these areas will be widened and planted with hedgerows and wildflower planting. This will improve the resilience of the habitat within these areas and provide them protection from fragmentation and further damage. The wildlife strips also provide additional opportunities for informal pedestrian and bicycle routes, thereby improving accessibility across the site. It is likely that the existing hedgerow along the west boundary of the site provides routes for bats and other light-sensitive wildlife, so the additional area of buffer planting will help limit the impact of the development on these species.

Integration of Blue and Green Infrastructure

The proposal includes integration between blue and green infrastructure, allowing for maximisation of the proposed greenspace. It is proposed that drainage features within the open spaces are to be natural in their character with an appropriate planting mixture. More urban drainage features included within the streetscape will be less naturalistic in their appearance but still feature planting appropriate to their use and setting.

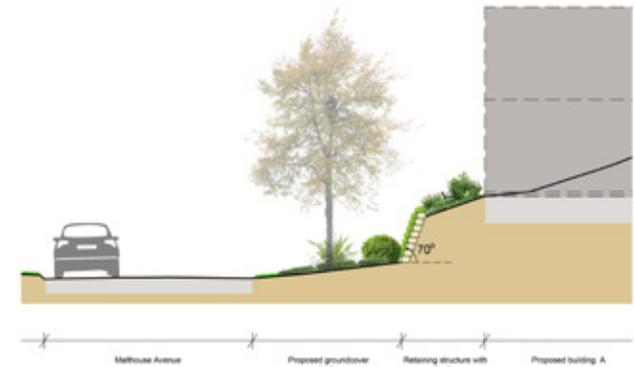
Hillside Park

There is an aspiration to create a Hillside Park adjacent to Woodsy Close. The space will be more formal in its character and act as managed open amenity space to provide an attractive and usable edge to the proposed development. Maintaining this space an open landscaped area will ensure that important ecological connections are maintained north-south through the site.

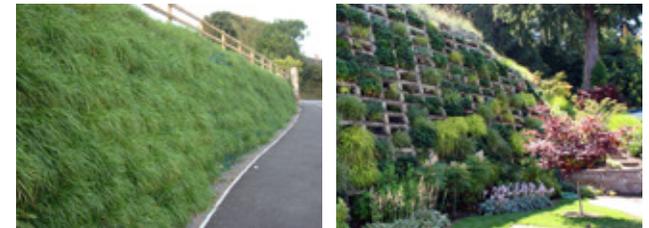
The existing level change leading from Hillside Park and along the frontage with Malthouse Avenue should be subject to detailed design as one space. Achieving a level building plot and maintaining active frontage to Malthouse Avenue requires the potential use of a green wall system. This will ensure continuity of GI and tree planting along the Malthouse Road frontage whilst softening the impacts of any potential retaining structures. Examples of suitable solutions are shown adjacent; such as a vegetated geo wall system or 'living wall' or vegetated criblock wall.

Connectivity Through the Site

The proposed wildlife area along the southern boundary of the site, and the alignment of the tree-lined internal roads in the southern part of the site, allows easy connectivity to public open space and provides east-west stepping stones for animal species to travel along. The improved connectivity across the site will reduce habitat fragmentation and isolation of animal species. The integrated areas of habitat will also provide greater connectivity for pedestrians and cyclists moving north-west to south-east.



Indicative section of Hillside Park frontage to Malthouse Lane



Examples of 'living wall' and vegetated criblock wall

Bus Egress Through Beck Court

The key spatial principles that have driven the GI proposals for the bus egress area, shown opposite, include:

- » Enclose the car parking with proposed hedging to reduce visual prominence;
- » Include tree planting to offset the loss of hedgerow and tree planting along St Mellons Road;
- » Include structural tree planting with suitable specification to ensure compatibility with bus movements and visibility requirements; and
- » Incorporate rain gardens into soft landscape areas. These can be planted species that enhance biodiversity value.



Green Infrastructure Strategy Plan (Bus Egress)

ENERGY & RESOURCE EFFICIENCY

The development will seek to minimise its carbon footprint to create a sustainable community that is appropriate and responsive to the location. Features will be confirmed through the determination of reserved matters applications but would potentially include:

- » proposed dwellings and buildings orientated to maximise solar gain and reduce energy demands;
- » enhancement to landscape through additional tree planting and retention of high quality periphery trees;
- » attenuation ponds providing both surface water management and ecological benefits;
- » maximise proximity to local facilities and employment opportunities through new connections;
- » ensure easy access to public transport;
- » potential to accommodate EV charging points.

A fabric first approach is encouraged in the reduction in energy demand and increase in energy efficiency to be achieved through improved u-values before providing any optional renewable generation.

Water is a valuable resource and water conservation is key to environmental and sustainable design. It is proposed that low water usage fittings will be utilised throughout the development to minimise water consumption, these will include; flow restrictor on wash hand basin taps and dual flush WCs.

WATER & WASTE MANAGEMENT

The following illustrative waste and water management strategies for the development plots are summarised from associated reports, which are submitted within the application pack and provide further detail.

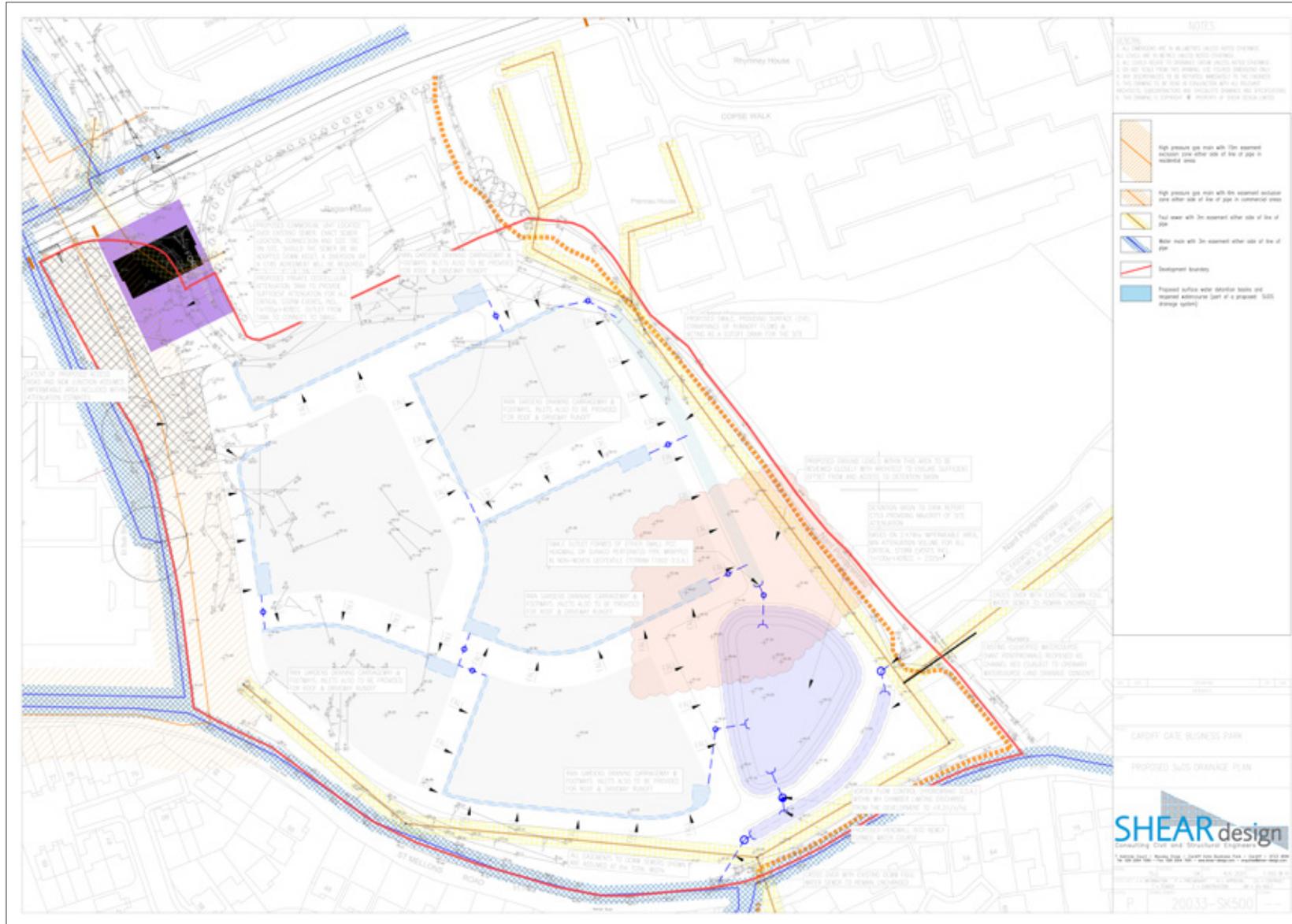
Plot 12

The surface water drainage network serving the indicative development proposals consists of various SuDS features to ensure that where possible, all impermeable catchments are drained via SuDS features that improve the water quality of the run-off and mitigate the risk of polluting the downstream network. The site-specific SuDS features for this development include: bio-retention system (rain-garden); swale / conveyance ditch; and a detention basin.

It is proposed that surface water runoff from carriageways and footways is to be collected and conveyed into a swale/ ditch running north-south near to the eastern boundary. It is intended that this will discharge into a detention basin, providing the majority of attenuation for the site. The swale is proposed along the eastern boundary to provide both shallow conveyance of runoff and as a cutoff drain to the site boundary. To aid future maintenance arrangements and conveyancing, a private geocellular attenuation tank will be proposed beneath the small car park of the commercial unit with a flow control limiting discharge to the swale and basin to <math><2.0\text{l/s}</math>.

Treatment of runoff from the commercial unit will be achieved by feeding into the SuDS features downstream. A series of rain gardens are also proposed to the back of footways and intended to be included within areas of highway to be offered for adoption by Cardiff Council. Larger forebays are proposed near outlets and at the assumed low points to provide further treatment and access for maintenance. Runoff from proposed highways will be achieved through a combination of kerb drainage units with pop-outs placed at suitable points and castellated kerbs. The inclusion of rain-gardens and a large swale to receive the majority of all highway runoff, significantly improves water quality through a reduction of pollutants.

Surface water discharge from the development will be limited to 4.31l/s/ha as agreed with Cardiff Council SAB on adjacent development sites within the Business Park. This results in a peak flow rate of 12.2l/s (restricted via a vortex flow control) for all critical storm events up to (and including) the 1 in 100 year + 40% climate change provision. The drawing referenced opposite illustrates our proposal, which will be presented to Cardiff Council under a SABS pre-application process and will be suitably amended following any future discussions or receipt of formal comments. Under Cardiff Council's role as SAB and LLFA, SuDS features such as the rain-gardens, swale and basin proposed will be offered for adoption and future maintenance completed by Cardiff Council.



Illustrative Drainage Strategy - Plot 12

Plot 14

The surface water drainage network serving the proposed development consists of various SuDS features to ensure that where possible, all impermeable catchments are drained via SuDS features that improve the water quality of the run-off and mitigate the risk of polluting the downstream network. The site-specific SuDS features for this development include: permeable paving, and bio-retention systems (rain-gardens).

It is proposed that surface water runoff from carriageways and footways is to be collected and conveyed by permeable paving and conventional gullies to rain gardens along the eastern boundary. It is intended that this will discharge into a geocellular attenuation tank to the rear and eastern side of Building A, providing the majority of attenuation for the site. The adoption of the rain-gardens to the back of footways/parking areas is to be discussed with Cardiff Council.

Total surface water discharge for Plot 14 will be restricted to 3.1/s (based upon the agreed rate of 4.31 l/s/ha with Cardiff Council on another Cardiff Gate development site). This will be restricted by a vortex flow control for all critical storm events up to (and including) the 1 in 100 year + 40% climate change provision. The drawing referenced opposite illustrates our proposal, which will be presented to Cardiff Council under a SABS pre-application process and will be suitably amended following any future discussions or receipt of formal comments. Under Cardiff Council's role as SAB and LLFA, additional SuDS features may be offered for adoption and future maintenance completed by Cardiff Council.

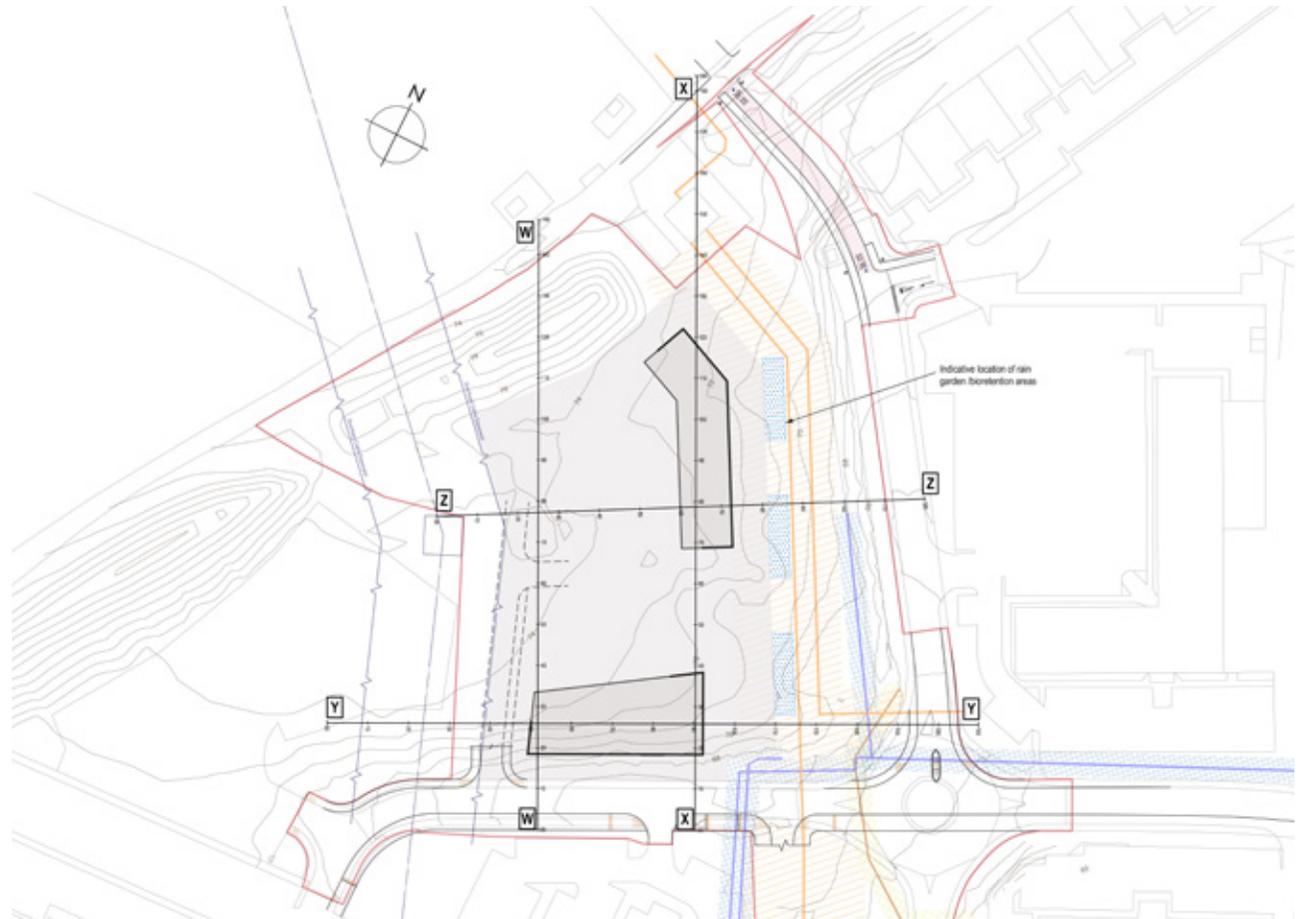


Example of bio-retention systems (rain gardens)

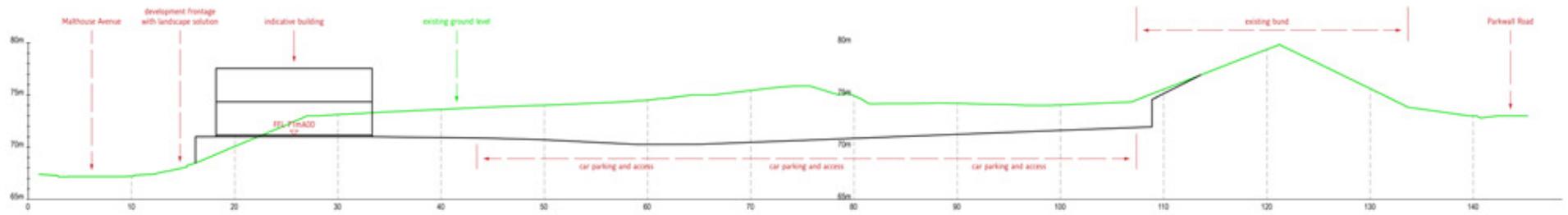
3.8. ILLUSTRATIVE SITE SECTIONS

The illustrative site sections help to show how the indicative development proposals would manage the change of levels within Plot 14 to deliver the design strategies, including green infrastructure and drainage.

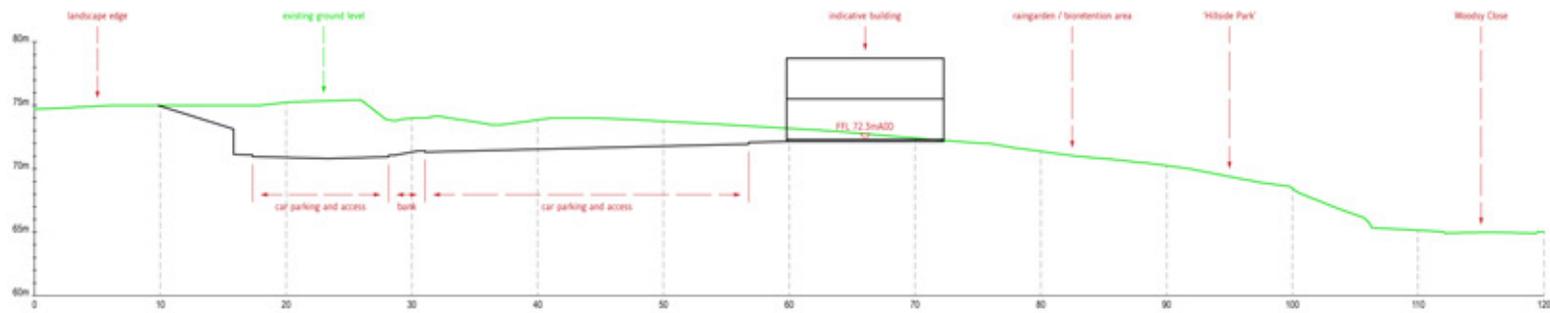
The illustrative site sections are shown over the following pages, and are located on the adjacent plan.



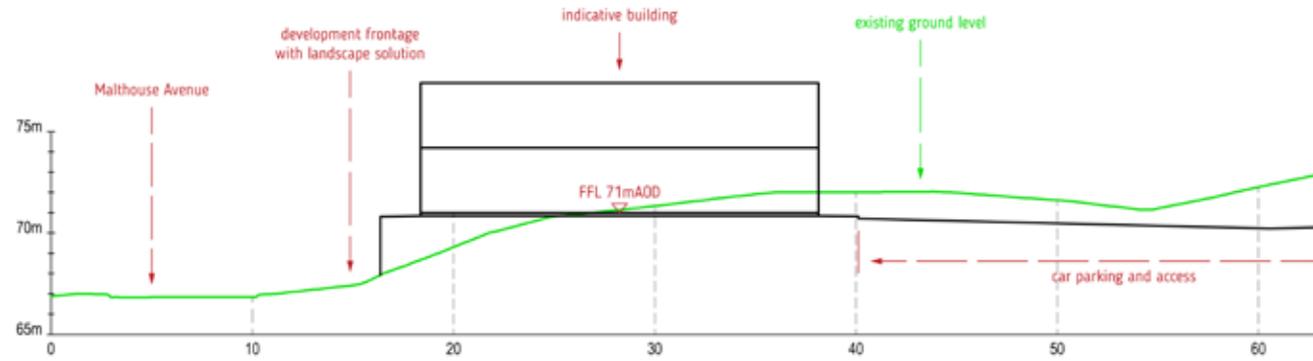
Illustrative Site Sections Location Plan



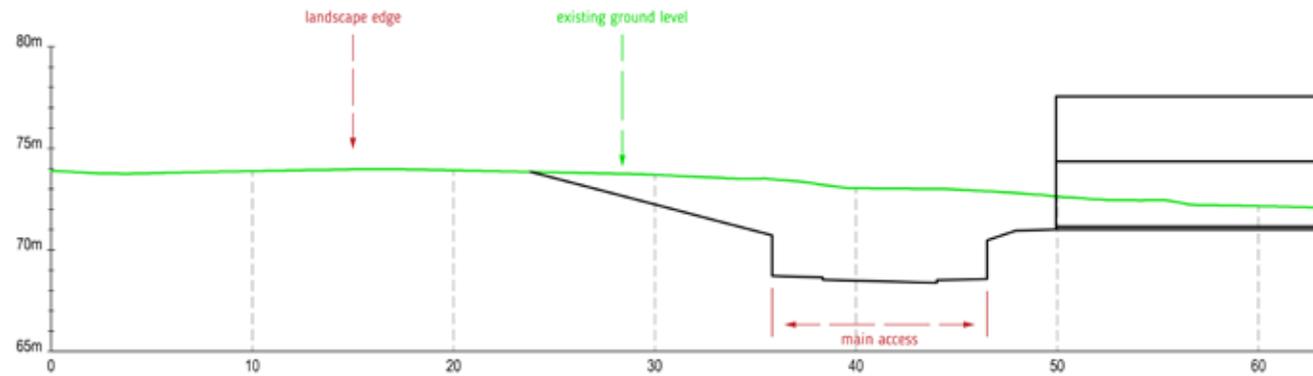
Site Section W-W



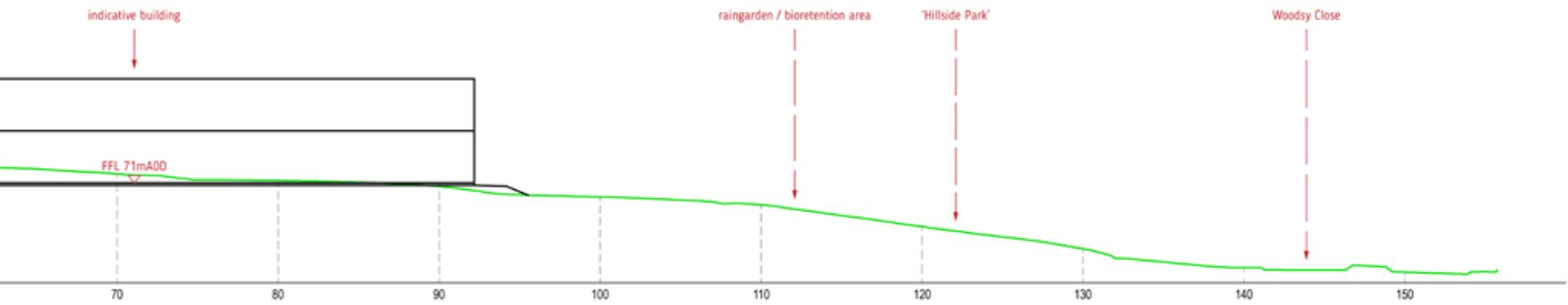
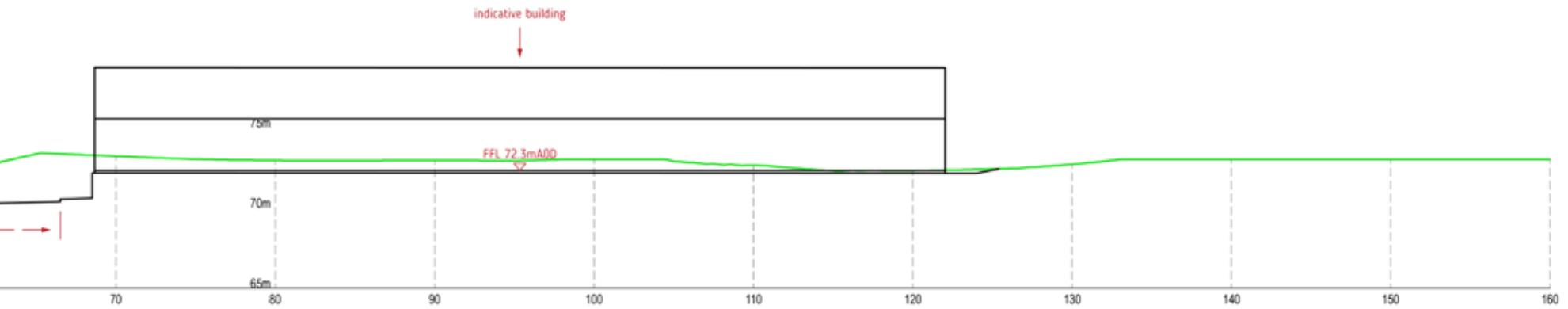
Site Section Z-Z



Site Section Y-Y



Site Section Z-Z



3.9. COMMUNITY SAFETY STRATEGY

New development at Cardiff Gate will create an environment that feels safe without compromising design quality in accordance with the cohesive communities and well-being goals outlined within the PPW (Feb 2021).

The community safety strategy at Cardiff Gate is underpinned by the following key principles:

- a** streets and public spaces are to be appropriately overlooked (front doors and windows to habitable rooms should be along the streets);
- b** public and private spaces are to be clearly defined;
- c** streets, paths, and public spaces are to be well-lit for night time safety;
- d** children will have safe and easy access to play areas and local learning;
- e** low traffic speeds and traffic calming interventions to help prioritise active travel and community integration within residential streets;
- f** ensure all routes are accessible for users of all abilities; and
- g** ensure that public spaces are arranged in such a way that it looks attractive and contributes to a positive atmosphere.



Community Safety Strategy Plan

3.10. RESPONSE TO PLANNING POLICY

The development proposals would broaden the mix of uses within the Cardiff Gate International Business Park as part of a high quality, mixed-use scheme on vacant development plots in a sustainable location.

The scheme would bring vacant/underused land into beneficial use with associated regeneration benefits, would promote the efficient use of land, make a positive contribution to housing supply, and deliver a resource efficient and climate responsive design. The scheme would help combat climate change by delivering landscape and SuDS proposals, including new trees, and incorporating EV charging.

The provision of more active uses along the newly created sustainable transport link to the adjacent North East Cardiff Strategic Site should all be warmly welcomed, as with the provision of landscape, public realm and highway improvements within the Business Park. These will help ensure the Strategic Site connects successfully with the Business Park and create a vibrant, landscaped 'place' with significantly enhanced biodiversity befitting the site's location, in direct contrast to the existing vacant development plots.

The proposals have been assessed against local and national policies and guidance and are considered to be policy compliant, with no demonstrable or compelling reasons which indicate sufficient harm to warrant refusal of the application, with all material factors, policy implications and issues raised through the pre-application engagement with the Council having been satisfactorily addressed.

It is, therefore, considered that the proposals are an acceptable development which meets the requirement of Section 38(6) of the 2004 Act and the Well-being of Future Generations (Wales) Act 2015 and therefore should be approved.



4. CONCLUSION

Cardiff Gate Pontprennau | Design and Access Statement

4.1. CONCLUSION

Our vision for Cardiff Gate has been shaped by the placemaking opportunities of the Site and the aspiration to bring forward a vitalising mixed-use development to vacant and underused land in a sustainable location.

The scheme would support the delivery of proposed strategic connections, make a positive contribution to housing supply, generate new employment opportunities, create welcoming public spaces, encourage active and sustainable travel choices through improvements to highways infrastructure, ensure a climate responsive design, and support biodiversity through an enhanced green infrastructure network. It will be a locally distinctive, attractive, and integrated place to live, work, and visit.

This Design and Access Statement (DAS) has been provided in support of an Outline Planning Application relating to the development of land at Cardiff Gate, Pontprennau.



Bird's eye view of the indicative proposals - looking south



