



 **TRITAX SYMMETRY**
A TRITAX BIG BOX COMPANY

Symmetry Park Gloucester—
A Deliverable Development
Delivery Document

October 2020

Logistics - New Jobs - Early Delivery

Executive Summary

The logistics sector is an integral part of modern life, ultimately comprising of goods being moved from one location to another, ending up with a consumer. Logistics underpins our daily lives and is an essential part of the national infrastructure.

2020 has been an extraordinary year for the Logistics Sector. When the UK went into Lockdown in March 2020, due to the Covid-19 pandemic, online shopping soared hitting the 5-year growth forecast in just 3 months. This seismic jump in online shopping has accelerated an existing market trend, and the change in consumer behaviour has now been established as habit.

The statistics for the take up of storage and distribution facilities in Quarter 3 this year has totalled 38.6 million square feet which is 3.6% higher than the previous record in 2016 as a whole (Savills UK Logistics Market Overview – Q3 2020). This demonstrates confidence within the industry that the online shopping habit is here to stay.

Symmetry Park West and East are strategically located in Gloucestershire, adjacent to junction 12 of the M5. The sites are appropriate for large scale warehouse and distribution centres which would meet the needs of the sector where an average unit size is 266,000 square feet (Savills Data, 2019).

In 2020 a comprehensive package of technical assessments and stakeholder engagement has been undertaken to examine the development opportunities and constraints of both sites. These assessments have informed the illustrative masterplans for the sites which present deliverable developments and could deliver circa 2 million square feet of modern warehousing.

- Land Portfolio of 3,900 acres, capable of accommodating 42 million square feet of B8 logistics space

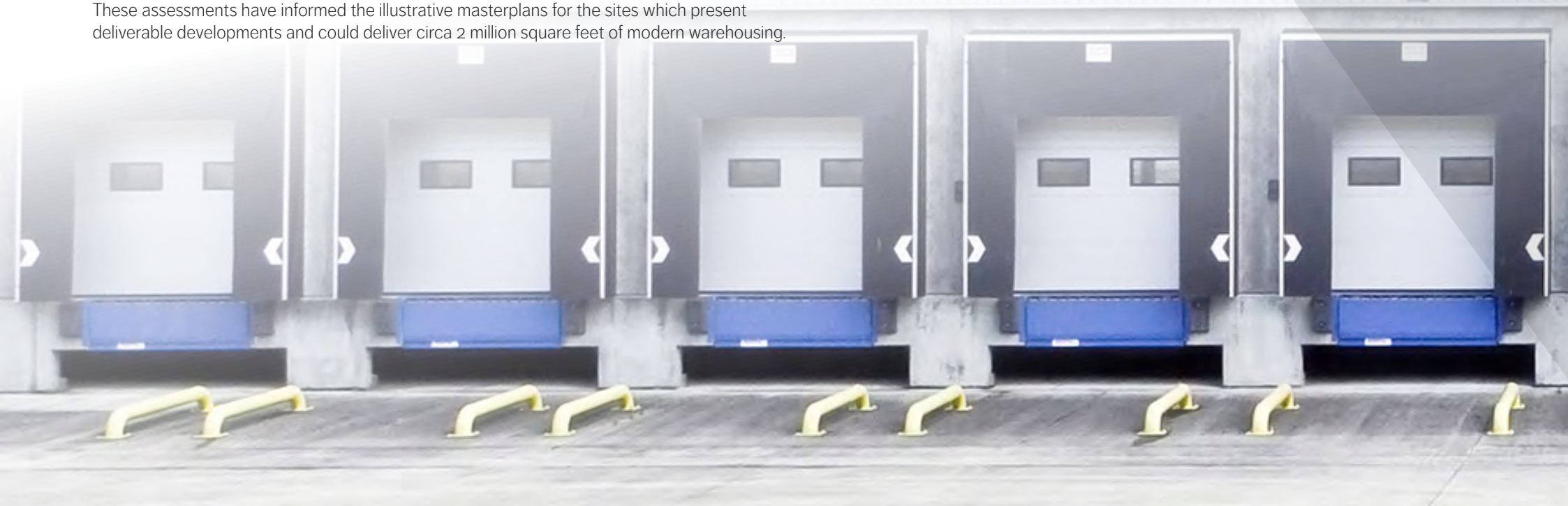
- Spec Build programme of units between 55,000 square feet – 333,000 square feet

- End of development value of £3 billion

- Tritax Symmetry is owned by Tritax Big Box REIT (TBBR) a FTSE 250 company with a Portfolio value of c.£4.18bn

- Tritax Symmetry are one of the first developers to commit to delivering all new developments to 'net zero carbon' in construction

- Gold leaf members of the UK Green Building Council.



Contents

	page
1. Introduction	1
2. The Strategic Context	2
3. The Vision	5
4. Opportunities and Constraints	6
5. Introducing the Masterplan	38
6. Deliverable Proposals	42





1. Introduction

Further to the Symmetry Park Gloucester Vision Document (January 2020) which set out the Vision for the development of strategic employment uses on two parcels of land; Land to the West of Gloucester Road and Land to the East of Gloucester Road (**Symmetry Park West and Symmetry Park East**), a portfolio of detailed technical work and engagement with key stakeholders has been undertaken over the past 6 months and is presented within this Delivery Document which demonstrates that the sites are ideally located to meet the needs of the logistics sector and are immediately deliverable.

This document sets out:

- The Strategic Context
- Our Vision
- The detailed technical work and engagement undertaken which has investigated the constraints and opportunities the sites present
- How the technical work has informed our masterplan for the sites
- And finally presents a deliverable development.



2. The Strategic Context

The Need for Storage & Distribution

The Demand of Consumers

The logistics sector is an integral part of modern life, ultimately comprising of goods being moved from one location to another, ending up with a consumer. People have become more reliant on online shopping over the years and therefore the demand for logistics is ever increasing. Underpinning the logistics sector is the need for modern warehousing and distribution space.

As set out in the British Property Federation (BPF) report 'What Warehousing Where?', "Households generate demand for goods of all types, from cars to carpets to coffee to clothes" As more homes are built to achieve the Government's annual target of 300,000 new homes a year, the requirement for warehouse space will continue to grow exponentially. "What Warehousing Where" sets out that 69 square feet of warehousing space is required for every new dwelling built.

Furthermore, during 2020 the world has been hit by the Covid-19 pandemic which saw a national lockdown in the UK lasting 3 months. During this period the increase in online shopping soared with online sales between March to May 2020 hitting the 5-year growth forecast in just 3 months.

Online sales increased from 21.9% in March to 32.8% in May. This increase resulted in an unprecedented strain on the logistics sector.

The pandemic has accelerated an existing market trend for online shopping, and the change in consumer behaviour has now been established as habit.

Confidence within the industry that the online shopping habit is here to stay is highlighted in the take up of storage and distribution space in 2020 which has already reached record levels by Quarter 3. Take up in 2020 has totalled 38.6 million square feet which is 3.6% higher than the

previous record in 2016 as a whole (Savills UK Logistics Market Overview – Q3 2020).

The Demand for Jobs

In addition to the demand for storage and distribution facilities to meet the demands of the consumers, is the demand for new jobs. The UK has recently plunged into a recession deeper than the financial crisis in 2008/09 as a result of the pandemic and unemployment figures are rising. New jobs are required to address this unemployment and aid economic recovery. The development of new storage and distribution facilities to facilitate the logistics sector can help in this respect.

The Occupiers of logistics building are very diverse and provide a very diverse range of employment opportunities a significant proportion of which would be office based, IT and engineering based roles. In line with guidance contained in the Government's Employment Densities guide the employment development on Symmetry Park West and East would create circa 2,500 jobs.

Location/Background Context

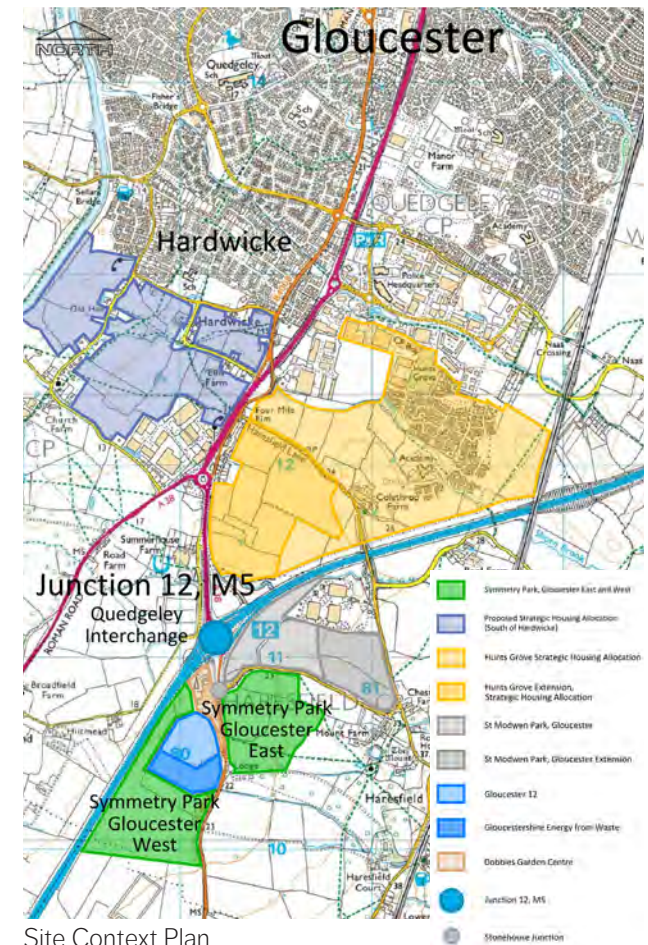
The parcels of land to the west and east of Gloucester Road are located in Stroud District, Gloucestershire.

Gloucestershire has a strategic position in the UK located at a crossroad between Wales and London, and the West Midlands and the South West.

The sites are located on land surrounding **Quedgeley Interchange**, where Junction 12 of the M5 intersects the B4008. The B4008 runs between Stroud and Gloucester.

In addition to the major highway infrastructure, the sites are also surrounded by further urbanising features such as the Gloucestershire Energy from Waste, and various employment uses including Gloucester 12 and St Modwen Park, Gloucester which already dominate the land to the south east of Quedgeley Interchange.

The sites formed part of the RAF Moreton Valence Airfield (Haresfield Airfield), a Second World War military airfield which opened in 1939 and closed in 1962 (see image below). During the Second World War it was equipped with three concrete runways and a range of aircraft hangars. (Pastscape, Historic England).



Planning Policy Context

Gloucestershire Economic Needs Assessment 2020

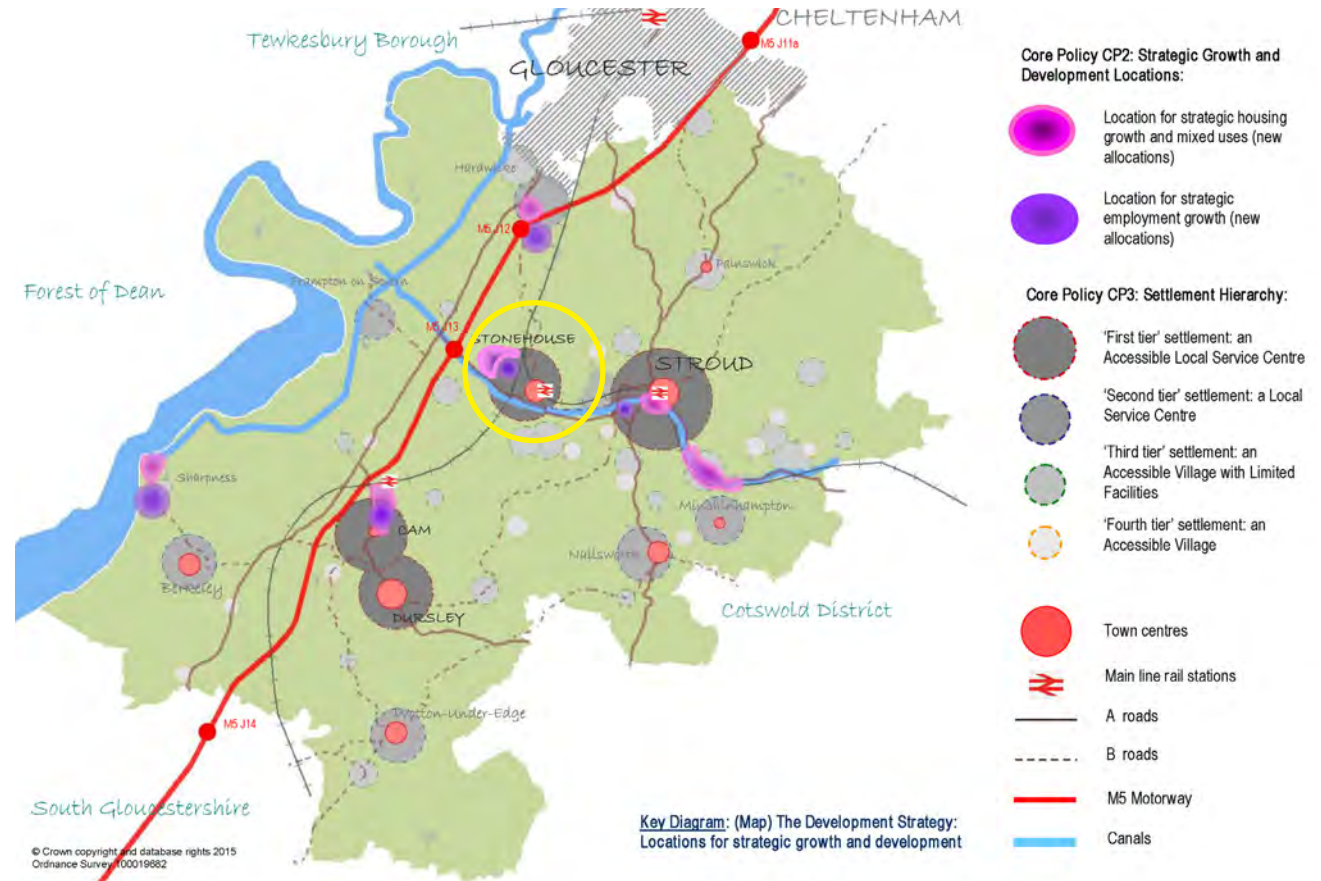
The Gloucestershire Economic Needs Assessment recommends that between 186ha - 211.4ha of B1c/B2/B8 employment land is allocated to meet the future needs of the County.

The Assessment recommends that between 44.4ha - 50.8ha of land for B1c/B2/B8 development should be allocated in the Stroud Local Plan Review, and therefore Stroud will have to allocate more land than proposed in the Draft Plan (November 2019). Furthermore, Gloucester City's B1c/B2/B8 employment need equates to 19.2ha - 19.9ha of employment land. Gloucester City is highly constrained and the Draft City Plan does not propose any allocation of new employment land and is looking to their neighbouring authorities to help address this unmet need. Symmetry Park West and East is well placed to meet this unmet employment need on the edge of Gloucester City and the wider Gloucestershire need.

Local Planning Policy

The land to the south east of Junction 12 is identified as a location for strategic employment growth in the Adopted Stroud Local Plan 2015 and continues to be identified for this use in the Draft Stroud Local Plan Review.

The Core Policy CP2 Diagram in the Adopted Stroud Local Plan 2015 identifies that the land to the south east of Junction 12 of the M5 is designated for strategic employment development, whilst land to the north east of the junction is designated for strategic housing growth and mixed use. This cluster approach for locating strategic housing and employment within close proximity to one another is closely aligned with the aims of the Settlement Hierarchy. The primary aim of Stroud's Settlement Hierarchy is to reduce the need to travel through promoting sustainable communities based on the jobs and facilities available in each settlement.



The Local Plan 2015 – Key Diagram: (Map) The Development Strategy: Locations for strategic growth and development

2. The Strategic Context (cont..)

The primary aims of the Settlement Hierarchy in the Draft Stroud Local Plan Review remains the same as the Adopted Local Plan whereby development is directed to locations that reduce the need to travel and aid the promotion of sustainable communities. The Development Strategy Map in the Draft Plan continues with the cluster approach for strategic housing development to the north east of junction 12 of the M5 and strategic employment development to the south east of the junction.

The identification of the land south east of Junction 12 of the M5 is a logical location for strategic employment growth to meet the clearly identified need of the logistics sector with excellent access to the strategic road network and within close proximity to a large local workforce.

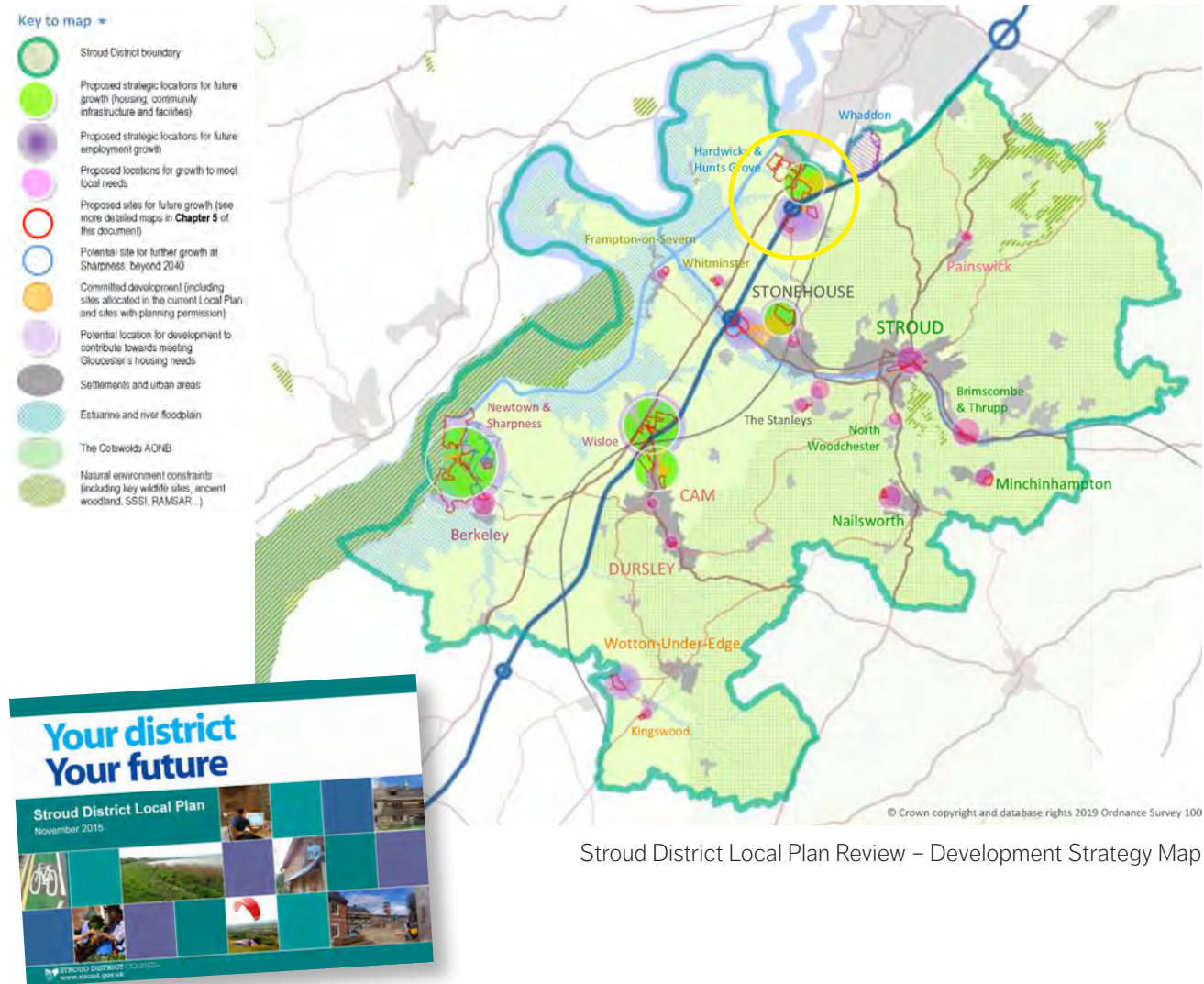
National Planning Policy

National Policy recognises that storage and distribution facilities have very specific site locational requirements, which essentially are large, flat sites able to accommodate large warehouses and easily accessible by road. Such sites are quite rare.

The National Planning Policy Framework (NPPF) at paragraph 82 identifies that policies should recognise and address the specific locational requirements of employment developments including that of storage and distribution which need to be in suitably accessible locations.

The Planning Policy Guidance goes onto state that “Strategic facilities serving national or regional markets are likely to require significant amounts of land, good access to strategic transport networks, sufficient power capacity and access to appropriately skilled local labour.”

The land south east of Junction 12 of the M5, fulfils all of the specific locational criteria for storage and distribution facilities which is recognised in National Planning Policy.



Stroud District Local Plan Review – Development Strategy Map

3. The Vision

To provide high quality modern logistic and warehouse space with exceptional connectivity to the strategic highway network on the south east fringe of Gloucester which will deliver a wider choice of jobs for local people in a sustainably accessible location. The development will meet the increasing demand and requirements of the logistics sector in Gloucestershire and will be built to achieve net zero carbon in construction, and be set within a strong landscape setting.

Logistics - New Jobs - Early Delivery

4. Opportunities and Constraints

Following the Vision Document (January 2020) further detailed technical work has been undertaken to assess the opportunities and constraints that the sites present.

Symmetry Park West

Archaeology

An Archaeology Assessment has been undertaken by the Environmental Dimension Partnership Limited. The Assessment has considered the potential for the site to contain archaeological deposits and the significance of these based on the consultation of the existing archaeological record.

The Assessment confirms that the potential for archaeological finds and features of prehistoric date to be within the site is very low as evidence comprises just two residual flint tools from the wider area.

Although the Assessment has identified the potential to encounter Bronze Age and Iron Age features, the evaluation undertaken to inform the planning application for the Gloucestershire Energy from Waste failed to find any evidence of significant archaeological activity in the area. This is possibly due to the extensive re-shaping of the landscape as a result of the construction of the airfield in the early 20th century.

The Assessment considers that the potential for finds and features of Roman activity is low and early medieval activity is very low to negligible.

The Assessment considers that the potential to encounter remains of the former airfield is very high.

Based on the current archaeological records and the archaeological investigation undertaken when the Gloucestershire Energy from Waste Facility was

being developed there is no evidence to suggest that the site would contain any archaeological deposits of such significance that they might constrain development of the site.

Historic Environment

A Heritage Assessment has been undertaken by the Environmental Dimension Partnership Limited (EDP). The Heritage Assessment and Landscape Visual Assessment have been undertaken concurrently. Tritax Symmetry have worked collaboratively with EDP, which has enabled EDP to consider a range of potential proposals for the site and ensure that the proposed development is informed by the Landscape and Historic context of the area.

As a result of the ongoing collaboration between Tritax Symmetry and EDP the Heritage Assessment has been based on a proposed development comprising warehousing up to 15 metres in height to ridge adjacent to the M5 motorway and 23 metres to ridge for the two larger units, with associated infrastructure.

The site contains no designated heritage assets, but 74 are present within 1km of the site boundary and a further 101 were identified as having the potential for a visual connection with the site up to 5km.

After an initial scoping exercise and intensive site visit, EDP have assessed three of these heritage assets in detail due in part to their proximity to the site. These include:

- The Church of St Peter, Grade II* Listed and Listed Monuments within the Churchyard;
- Haresfield Court Grade II Listed; and
- The Grade II listed Hiltmead Farmhouse

The Church of St Peter and its associated churchyard monuments

The assessment has established that the proposals for the site would have no effect on those key relationships that make the greatest contribution to its setting comprising the tombs within the churchyard, the Mount scheduled monument and the listed vicarage.

Incidental and partial views are currently possible out towards the site from the churchyard, whilst reinforcing its rural context these are not designed and make no contribution to the significance of the church and new planting and landscaping will screen these in due course.



The Grade II* Listed Church of St Peter view to the west

Views of the church spire are widely available across the landscape and do not contribute to its significance.

It is considered that there is a key experience of the church on the approach to it from the south in the direction of Haresfield Court. This historic route and the experience it provides, in terms of framing the church in the context of its surrounding meadows to the south, makes a positive contribution to its significance.

The site is located approximately 1km to the west of the alignment of the path separated by fields, a copse and hedgerows, such that it is unlikely that any significant experience of the proposed buildings will be possible in conjunction with the church or the described experience of it from the south, or indeed when exiting the church to the south. In this respect, it is recommended that landscape planting on the eastern edge of the site will ensure that this remains the case should there be losses or failures in the existing tree stock within the immediate landscape.

On the basis of the Heritage Assessment EDP conclude that there will be no harm to the significance of the Grade II* listed Church of St Peter as a result of the development proposed within the site.

Haresfield Court

The elevation of the building and its orientation provides views over the Severn Valley that has potentially made it sensitive to change with regard to the form of development proposed; no other relationships were established. However, the Heritage Assessment has identified that this view has changed over time and includes many modern features whose presence has not affected the significance of the listed building.

So, whilst it is considered unlikely that the development will be visible due to the existing trees and hedges in the landscape, and with any proposed landscaping within the site, it may be possible to see elements of the proposed development. However, as with the existing modern development in the view, this will not alter the available views from the listed building to such an extent that its significance would be affected and on this basis the proposed development of the site will result in no harm to this Grade II listed building.

Hiltmead Farmhouse

The Heritage Assessment has identified that the site in its current form makes no contribution to the setting of the Grade II listed Hiltmead. However, this designated heritage asset was considered in detail due to its close proximity to the site and in terms of the scale of the buildings proposed.

It is concluded that whilst the proposed development will increase the scale and massing of development to the



Haresfield Court from the west

east of the M5, the setting back of the warehouse units and proposed landscaping will make it highly unlikely that the development will be visible beyond the existing embankment on which the M5 sits and therefore will not form part of the setting of the listed building, nor overshadow it once built out. On this basis it is assessed that the proposed development of the site will result in no harm to this Grade II listed building.

The Heritage Assessment concludes that as the result of careful masterplanning owed to the collaboration between Tritax Symmetry and EDP, the site in terms of the location, and the height, orientation, scale and massing of the proposals, the potential for the identified assets to be affected by the development of the site, within the existing landscape surrounding the site has been reduced.

The Assessment considers that proposed landscaping within the site will aid in future proofing the existing screening in the landscape, some of which appears to be a response to the Gloucestershire Energy from Waste Facility should this be removed or fail over time.

Landscape

The site is confined to the north by the Gloucestershire Energy from Waste Facility, the B4008 to the east, the M5 to the west and agricultural fields to the south. Overall the site is considered to be set within an existing urban fringe context with various other commercial uses in the surrounding area namely Dobbies Garden Centre Complex and St Modwen Park employment site, and the consented Gloucester 12 employment site.

The site's topography is flat and typical of the immediate surrounding area of the 'Rolling Agricultural Plain and

4. Opportunities and Constraints (cont..)

Lowland Plain' and its former use as an airfield. The site is contrasted in the wider landscape to the east where the landform rises up to the Cotswolds AONB escarpment. The site is bounded by the Cotswold AONB escarpment to the east and to the west the flat low lying floodplain of the River Severn.

A Landscape and Visual Appraisal (LVA) of the site has been undertaken by The Environmental Dimension Partnership Ltd. EDP has also prepared an illustrative landscape strategy for the site (shown below)

Published National and Local Landscape Character Assessments have been taken into account when undertaking the LVA, these character assessments provide a good understanding of the landscape context in the area but are not site specific and accordingly EDP have undertaken a site specific assessment.

Landscape Character

On the whole, the site is consistent with the broad characteristics of the wider Landscape Character Area identified in the National and Local Landscape Character Assessments (i.e. the large-scale, regular field pattern, flat topography and open views), but there are many urbanising factors and intervening features that are not identified in the assessments which serve to lessen the inherent sensitivity of the Lowland Plain. These include the motorway corridor, adjacent A-roads, Javelin Park incinerator, Dobbies Garden Centre and other adjacent commercial developments. As such, the landscape surrounding the site is 'urban fringe' in character and contrasts with the more intact rural landscapes elsewhere in the Landscape Character Area.

The LVA has considered the effects of the proposed development on the site and its landscape setting. It

has found that the scale and siting of the proposed development in relation to the site and its context would result in a likely long-term overall adverse effect being no greater than moderate/minor.

Any development on green field land would result in a physical, and urban, intrusion into landscape that is currently open. However, if the Landscape Strategy recommended in the LVA is implemented on the site it is considered that the landscape fabric will be retained and significantly enhanced and would provide a contribution to the character of the local context. In terms of the effect on the 'Lowland Plain' Landscape Character Area, the likely long-term overall effect is considered to be moderate/minor and adverse.

The proposals considered by the LVA would not see any landscaping removed from the site and would allow for the planting of significant new features at the western and southern boundaries, such that the future contribution to the wider landscape fabric would be considered to be beneficial.

Overall, the LVA considers that the characteristics of the site and of the wider landscape do not present an inherent conflict, nor should they prevent the development of a new employment development within the site.

Visual Amenity

The impact on the site's visual amenity has been assessed by considering ten photo viewpoints which EDP considers represent the views of various receptor groups including PROW users, road users and residential dwellings.

In addition, a variety of photomontages (see the following pages) have been prepared to demonstrate what the proposed development would look like from a variety of viewpoints.

When undertaking this exercise, the heights and positioning of the proposed development has been carefully considered.

Modern logistics is based on maximising the efficiency and productivity of land, and therefore the taller the building, the greater its storage capacity. There is a relationship between the size of footprint of a building and the height of a unit generally required by the market - the larger the footprint, the higher the building. To maximise the commercial attractiveness of the site, the assessment has been based on the assumption that two larger units are developed to a height of 23 metres in the centre of the site and four smaller units developed to a height of 15 metres along the north western boundary adjacent to the M5.

In addition careful consideration has been given to the proposed design of the built form to ensure the proposals can be accommodated within the landscape with minimal impact.

The scale of the proposed development, along with sensitive orientation and siting, the proposed landscape buffer to the southern boundary and landscaping along the western boundary, the combination of local topography and vegetation within the wider context, and the interrelationship of all these facets ensures that, with the exception of receptors using the road network of low sensitivity who would see the loss of a view to the wider landscape context, although experiencing an improved character to the immediate context, in no instances would there be anything but moderate/minor visual effects.

In consideration of the use proposed, such effects would be neutral in nature, confirming that the development would represent an acceptable addition to the local landscape, being consistent with its surrounding context, and would not detract from local visual amenity such

4. Opportunities and Constraints (cont..)



Viewpoint 1

View from Haresfield Beacon on the Cotswold Way promoted route - Existing Photoviewpoint



View from Haresfield Beacon on the Cotswold Way promoted route - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from Haresfield Beacon on the Cotswold Way promoted route - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East



Viewpoint 2

View from public footpath (Ref. EHD/5/4) within the grounds of the Church looking north-west - Existing Photoviewpoint



View from public footpath (Ref. EHD/5/4) within the grounds of the Church looking north-west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref. EHD/5/4) within the grounds of the Church looking north-west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East

4. Opportunities and Constraints (cont..)



Viewpoint 3

View from public footpath (Ref EHD/25/5) looking north-west - Existing Photoviewpoint



View from public footpath (Ref EHD/25/5) looking north-west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref EHD/25/5) looking north-west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East



Viewpoint 4

View from public footpath (Ref EHD/7/1) looking south-west - Existing Photoviewpoint

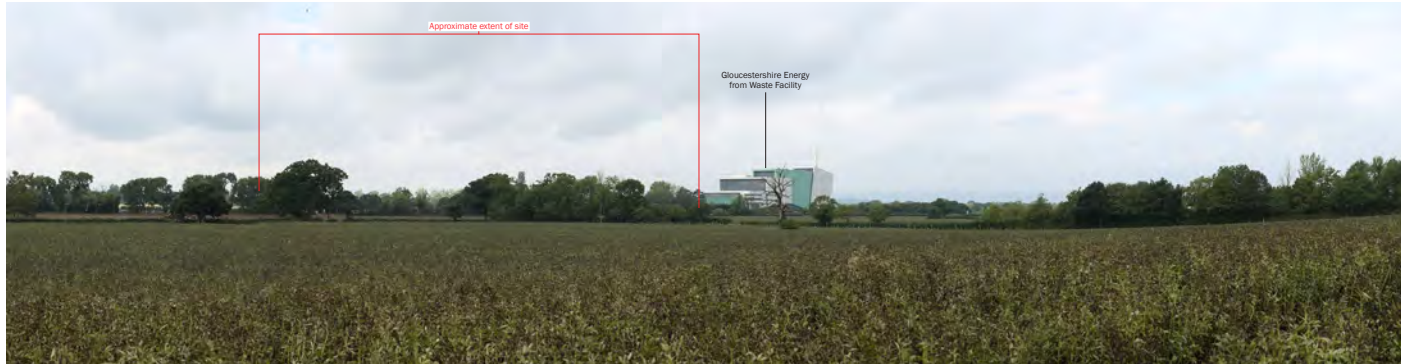


View from public footpath (Ref EHD/7/1) looking south-west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref EHD/7/1) looking south-west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East

4. Opportunities and Constraints (cont..)



Viewpoint 5

View from public footpath (Ref. EHD/5/3) looking west - Existing Photoviewpoint



View from public footpath (Ref. EHD/5/3) looking west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref. EHD/5/3) looking west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East

as the Cotswolds AONB escarpment. The proposed development would not be considered to be out of character within this urban fringe location, and with the exception of a single viewpoint from a localised and elevated vantage point.

The amenity of surrounding residential receptors has also been assessed. Private residents with views of the proposals are likely to be limited to a number of properties within 1km of the site, in which views of new employment units would be seen. However, while there would be a change to views from upper storey and rear facing windows, such a change would not be considered to be out of character within the local context given the industrial/commercial use proposed, nor would the change result in the alteration of main views. Within the wider context, views of the proposed development would be heavily screened or filtered, if seen at all. As a result, overall, there are not considered to be any material adverse effects upon the visual amenity of residential receptors.

Landscape Strategy

The Assessment has informed an illustrative landscape strategy. The strategy includes

- New tree planning throughout the site,
- Save for the access existing trees and hedgerows to be retained where possible and reinforced with management particularly the mature tree cover at the southern boundary to prevent light spill from headlights extending across the fields south of the site.
- Landscaping along the western boundary which would soften ground level views from the M5 of the Gloucestershire Energy from Waste Facility.
- New landscape treatments to the western boundary to reflect the well-treed nature of the surrounding context, particularly in views from lower ground to the west in the context of the elevated Cotswolds escarpment to the east.



Symmetry Park West Landscape Strategy Plan

4. Opportunities and Constraints (cont..)

- Native plant species of local provenance and characteristic of the local landscape character to enhance the landscape and ecological value of the proposed development green infrastructure.

The LVA finds that there are minimal effects upon the AONB, and that these effects are not out of context as seen in longer-distance views from it. Overall it is considered that the proposed development of the site would not conflict with its immediate setting given that it would be perceived as an extension to the existing employment area and therefore, development of the site subject to a comprehensive landscape strategy would be acceptable in landscape terms.

Ecology

An Extended Phase 1 Ecological Survey was carried out on 10 January 2020 by EDP.

The site does not have any ecological statutory or non-statutory designations.

The site comprises two fields, the larger southern field being arable land that has been planted with rye grass and the small northern field supporting species poor semi-improved grassland. The eastern boundary consists of a species poor intact hedgerow with trees that had been box cut. The southern boundary consists of bramble scrub with trees that have been box cut. To the west of the site is a fence line behind which are mature trees and scrub patches, with the M5 motorway beyond. Within the east of the southern field is a large area of bramble scrub containing clearings of tall ruderal. The south east of the site has a hardstanding track which leads further north to an area of bare ground that has been used during the construction of the Gloucestershire Energy from Waste.

There is a pond located 60m north of the site and no other ponds within 250m.

The Ecological Appraisal undertaken by EDP considers the habitats on site are low in their intrinsic value and are unlikely to support either unique or exceptional species populations, and consequently, there are no significant ecological constraints posed by habitats on-site.

The ecological status of the site does not present any constraint to development and given the low intrinsic value of the habitats present, allocation of the whole site (27 hectares) gives a greater opportunity to deliver a meaningful biodiversity gains.

Transport & Infrastructure

A Transport and Infrastructure Study has been undertaken by WSP which assesses the impact that the proposed development would have on the surrounding highway network. The study has investigated the potential for further commercial development to be developed in the area by examining the current highway function and capacity, the highway safety record and the proposed trip generation likely from a large scale warehouse and distribution development. The findings have been set out in a Highway and Infrastructure Report prepared by WSP, and are summarised below.

Highway Function

The Transport and Infrastructure Report demonstrates that access by other commercial developments on the B4008 is well established. The Energy from Waste Facility, Gloucester 12 development and Dobbies garden centre complex are all accessed from the B4008 via a roundabout junction and T-junction respectively.

Furthermore, there are a series of upgrades which have been carried out and are proposed which will significantly improve the surrounding highway network.

These upgrades include the following:

- The Cross Keys roundabout junction, approximately 850 metres north of the M5 has been recently upgraded to provide traffic signal control and additional approach lanes to deliver a significant capacity increase in order to accommodate future residential/employment growth in the area.
- The Stonehouse A419 corridor highway upgrade package is anticipated to result in a re-distribution of local traffic away from the B4008 Gloucester Road corridor (as the A419 and M5 become more attractive route choices for local trips) thus alleviating the congestion issues historically experienced on the southern B4008 approach to the M5 Junction 12 interchange.

Highway Safety

The highway safety characteristics of the surrounding road network were recently assessed as part of the St. Modwen Park and Gloucester 12 planning applications (both of which were considered acceptable by the Local and Strategic Highway Authorities).

To inform the Transport and Infrastructure Study the 'Crashmap' database has been interrogated as part of this highway report to investigate if there have been any significant changes to the highway safety since the Local and Strategic Highway Authorities provided a view on St. Modwen Park and Gloucester 12 developments. The review of this data has demonstrated that no collisions have occurred on the B4008 or at the M5 Junction 12

interchange since the St Modwen Park and Gloucester 12 planning applications have been considered. The report concludes that there continues to be no highway safety issues on the surrounding network.

Sustainable Access

A shared use footway and cycleway is currently in place on both sides of the B4008 which begins at the Energy from Waste/Gloucester 12 roundabout and continues north to the Cross Keys roundabout where it provides access to the residential area of Hardwicke and Gloucester beyond. The proposed development could provide appropriate connections to the existing footway and cycleway which would provide sustainable access for pedestrians and cyclists.

Two bus stops are currently located on the B4008 close to the entrance to the Gloucestershire Energy from Waste Gloucester 12 and within close proximity of the site.

These stops facilitate services of a regular frequency which link the site with residential areas within Quedgeley, Hardwicke, Stonehouse, and King's Langley.

The Stroud District Local Plan proposes to improve the quality of bus service across the District. On this basis, it can be assumed the frequency of services may increase above this baseline position over the coming years with improvements to accommodate 24/7 logistics operations.

The SDLP safeguards land for a railway station at Hunts Grove (Policy EI14). If this public transport interchange is delivered, it is considered that the facility will be ideally located to encourage trips to the site via rail.

Trip Generation & Cumulative Impact

The report has calculated the number of trips which would be generated by the proposed development. The proposed number of trips has been assessed against the most recent junction capacity assessment undertaken by Stroud District Council (2014) and taking into account

Gloucester 12 which was not considered as part of the capacity assessment in 2014.

This assessment considers that the highway network has adequate spare capacity to support development of warehouse and distribution centres on the site without the requirement for highway mitigation.

Site Access

Taking into account the above considerations the report recommends that the site could be accessed from the B4008 by means of a ghost-island priority junction.

The Transport and Infrastructure Study demonstrates that there are no highway constraints that would prevent development being delivered on the site.

Flood Risk/Drainage

A Flood Risk and Drainage Statement has been prepared by RPS.

The Statement considers the site's current flood risk which has been informed by a desk-based assessment of the risk of fluvial and pluvial flooding at the site, and also through engagement with Gloucestershire County Council as the Lead Local Flood Authority (LLFA) and the Environment Agency who were consulted on the site proposals in June 2020.

The Statement sets out recommendations for the drainage strategy which should be developed to support development on the site and ensure that development would not increase the risk of flooding.

Fluvial Flood Risk from rivers, reservoirs, estuaries and the sea

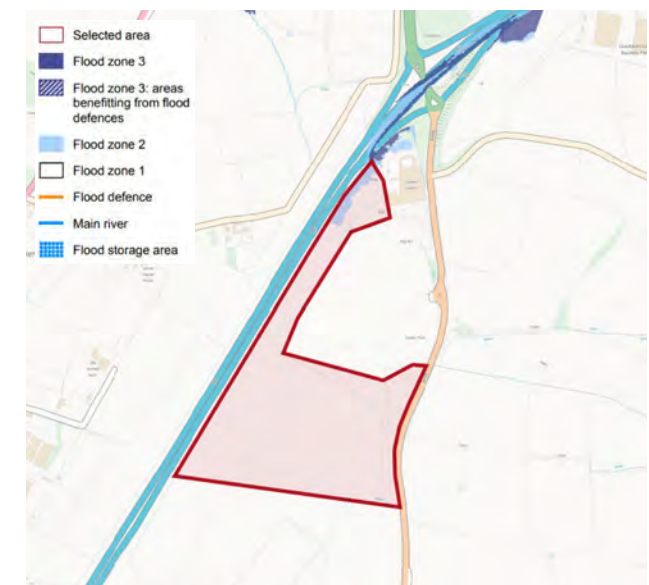
The Statement confirms that the Environment Agency flood map (hosted by gov.uk) demonstrates that the vast majority of the site is located within Flood Zone 1 which is the lowest classification of fluvial flood risk. Land within

Flood Zone 1 is assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

A small proportion of the site in the northern corner is located within Flood Zone 2 and this is associated with a tributary of the Bearepair Brook. Land within Flood Zone 2 is assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% – 0.1%), or between a 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.5% – 0.1%) in any year.

National Planning Policy dictates that commercial development is appropriate within Flood Zone 2, as it is classed as 'less vulnerable'. The Statement recommends that the risk can be further reduced through informed layout and design of the development.

There are drainage ditches located along the southern boundary and to the east of the site, however these watercourses are not considered to pose a fluvial flood risk.



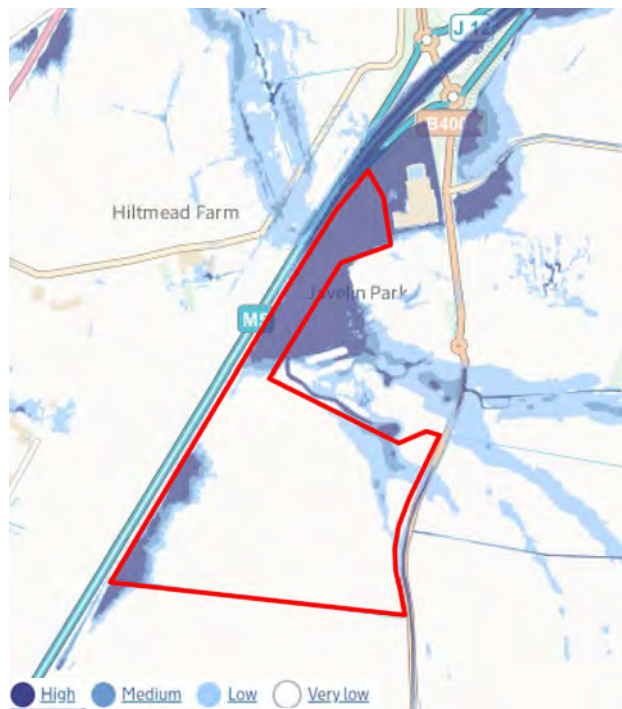
EA Flood Map for Planning

4. Opportunities and Constraints (cont..)

Pluvial Flood Risk from rainfall generated overland flow

The Statement confirms that the Environment Agency flood map (hosted by gov.uk) demonstrates that most of the site is assessed as being at 'very low' risk of surface water flooding.

There is an area of potential 'high' risk surface water flooding in the northern section of the site and this is considered to be associated with the existing drainage network passing beneath the M5 motorway before continuing to join the Gloucester and Sharpness Canal.



EA Flood Map for Surface Water

A smaller area of 'low' to 'high' risk was identified along the western boundary near the south west corner of the site and this is likely to be associated with surface water collecting against the raised embankment of the motorway.

The Strategic Flood Risk Assessment (SFRA), states that these areas tend to be isolated pockets of surface water flooding and the depth of flooding is typically shallow (<0.3m). It is considered that it should be possible to mitigate the risk of surface water flooding through the use of appropriate SUDS techniques. It is recommended that where there is potential for surface water flooding to be deeper then it is recommended that areas are retained as open space along with identified surface water flow routes.

Groundwater

The SFRA illustrates that the site is fully located within an area with less than 25% change of groundwater emergence and therefore it is not considered that groundwater flooding poses a considerable risk to the proposed development of the site.

Drainage Strategy

Foul Water - There are no public foul water sewers within the site boundary, therefore it is recommended that foul water would be conveyed by a gravity sewer network to a new foul pumping station located within the site. A rising main will then convey the foul flows from the site to the nearest suitable connection point within the existing Severn Trent Water sewer network.

Surface Water - There are no public surface water sewers within the site boundary or within vicinity of the site to deal with surface water.

In terms of developing a Sustainable Drainage System (SuDS) to deal with surface water, Building Regulations dictate that soakaways should be utilised as the primary means of surface water disposal. However, if infiltration testing provides an unfavourable infiltration rate across the site or if contaminated ground is present then other methods of sustainable drainage should be considered.

The Phase 1 Preliminary Geo-Environmental Risk Assessment undertaken by RPS in June 2020 shows that the majority of the site consists of mudstone which generally has a poor infiltration rate and therefore it is likely that soakaway drainage will not be suitable on the site for the disposal of surface water.

Consequently, it is recommended that the proposed surface water drainage system will likely comprise of local attenuation and treatment. It is therefore anticipated that surface water will be captured within a gravity sewer system and attenuated prior to discharge with a SuDS feature. It is considered that the most appropriate location for SuDS features within the site would be along the western boundary, in particular in the north western and south western corners as the topography of the site falls toward the western boundary. The surface water from the site should then be discharged into a nearby watercourse or drainage ditch.

The Statement confirms that there are no flood constraints that present a barrier to development of the site. The Statement demonstrates that site can be sustainably drained by a SuDS which would be developed at the detailed design stage.

Agricultural Land

An agricultural land survey has been undertaken on the site by the Land Research Associates. The assessment has

been informed by a detailed site survey which included a soil resource and agricultural quality survey which was undertaken in May 2020.

The soil resource survey identified that there are two main soil types within the site.

The north of the site comprises mainly heavy clay loam or clay topsoils over slowly permeable clay subsoil that shows evidence of seasonal waterlogging to a shallow depth. To the south of the site is a loamy soil over limestone gravel. The soils are permeable and show no signs of seasonal waterlogging.

The north of the site has been assessed as subgrade 3b agricultural land quality as it is limited by wetness. This means the land is likely to be too wet to cultivate in spring most years and arable use of the land is limited to autumn-sown combinable crops.

The south of the site has been assessed as grade 2 agricultural land quality, however the gravelly subsoils mean the soils store slightly sub-optimal water reserves



Agricultural Land Classification Plan

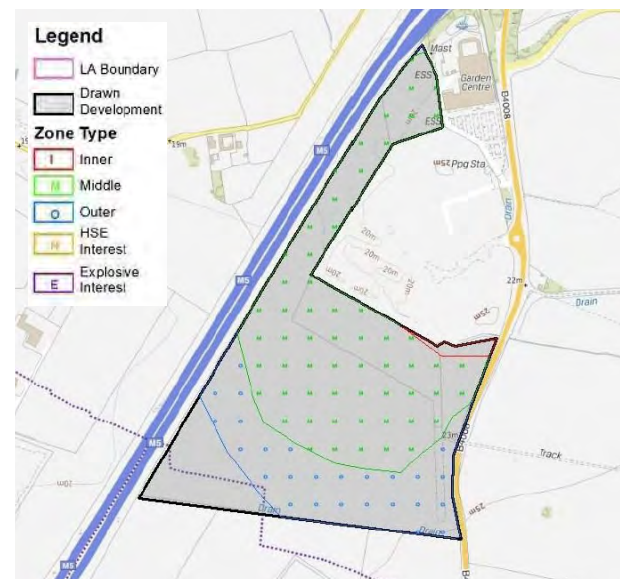
and this is likely to reduce yields of cereal crop in dry summers.

Overall the survey concludes that the agricultural land quality of the site is limited as a result of wetness from the subgrade 3b land and droughtiness from the grade 2 land, and therefore the agricultural land quality is not a constraint to developing the site.

Health & Safety

The site is located adjacent to the Gloucestershire Energy from Waste Plant which is classified as a major hazard site by the Health and Safety Executive (HSE). Consultation with the HSE has been undertaken to determine the constraints to development of the site given its proximity to the Energy from Waste Plant.

A small area to the north of the site is located within the HSE Inner Zone. A large proportion of the site is located within the HSE Middle Zone with a small proportion within the Outer Zone and the remaining parts of the site outside of the consultation area completely. See map below.



Health & Safety Executive Consultation Zone Map

Consultation with the HSE has determined that workplaces within the inner zone are acceptable if they are no greater than two storeys in height and have no more than 100 occupants. The HSE consultation has also confirmed that car parks and minor estate roads are acceptable in the inner zone.

The HSE Zones do present some constraint to the type of development permitted, however these constraints have been taken into account during the illustrative masterplanning stage and no buildings are proposed to be developed in the HSE Inner Zones as per the guidance.

Ground Investigation

A phase 1 preliminary Geo-Environmental risk assessment has been undertaken by RPS.

The historical data has identified that between 1954 and 1971 the site is located in an area annotated as an Airfield. Off-site historical potential sources of contaminants of concern include the former industrial estate, which featured sewage beds and tanks, and the garden centre.

The assessment has identified a limited number of potential sources of contamination and associated pollutant linkages. There is also the potential for the generation of ground gas associated with infilled land on site and made ground/infilled land near the site.

In this respect it is proposed that a Phase 2 Geo-Environmental Site Investigation would be undertaken to accompany a future planning application. The investigation will provide information on the concentrations of contaminants of concern (if present) within the soils and shallow groundwater beneath the site and the generation of ground gases. If the site investigation identifies the presence of potentially significant contamination or ground gases further investigation, monitoring, risk assessment and remediation may be necessary.

4. Opportunities and Constraints (cont..)

Symmetry Park East

Archaeology

An Archaeology Assessment has been undertaken by the Environmental Dimension Partnership Limited. The Assessment has considered the potential for the site to contain archaeological deposits and the significance of these, based on the consultation of the existing archaeological record.

The Assessment confirms that the potential for archaeological finds and features of the earlier prehistoric period is very low as evidence comprises just two residual flint tools from the wider area and surface finds from within the site.

A Bronze Age round barrow has been identified immediately north of the site and therefore the potential to encounter Bronze Age finds and features is assessed as medium. Iron Age activity is well documented in the surrounding area, however evidence suggests this extends northwards of the site and therefore the potential for Iron Age activity in the sites is assessed as low. The Assessments considers that should residual flint tools, or Bronze Age or Iron Age buried archaeological finds and features be present within the site, the significance of these, based on the currently available information is assessed as low or of local importance only.

Based on the current evidence, the potential for Roman activity to be present within the site is assessed as medium, as the focus of this activity appears to the west and the north of the site. The assessment considers that should Roman activity be present within the site either in the form of finds or features, the significance of these, based on the currently available information is assessed as low or of local importance only.

The assessment considers that the potential for Roman activity to be present within the site is assessed as medium, as the focus of this activity appears to the west and the north of the site.

The potential to encounter finds or features of early medieval date is assessed as very low.

The current archaeological evidence suggests that there is a focus of medieval activity both to the immediate north and to the east of the site boundary. This activity appears to have focussed on the Haresfield itself but newly recorded evidence on the St Modwen Park site to the north indicates that the village was more extensive in the medieval period than its modern form. Therefore the potential for encountering finds and features of this date within the site is extremely high and in the north of the site will almost certainly be a continuation of those features recorded within the St Modwen Park, Gloucester Development.

The archaeological and documentary evidence to date suggests that Haresfield was a centre for pottery production during the medieval period, although there are no records of any kilns to date. Should these be present within the site they will be of high archaeological significance. However, as is more likely, the site may contain the continuation of field boundaries, cultivation and enclosures, as identified to the north which, if present, will be of local significance only.

Based on the findings of the Archaeology Assessment there is currently no evidence to suggest that the site would contain any archaeological deposits of such significance that they might constrain the development of the site in the form proposed.

Historic Environment

A Heritage Assessment has been undertaken by the Environmental Dimension Partnership Limited (EDP). The Heritage Assessment and Landscape Visual Assessment have been undertaken concurrently. Tritax Symmetry have worked collaboratively with EDP, which has enabled EDP to consider a range of potential proposals for the site and ensure that the proposed development is informed by the Landscape and Historic context of the area.

As a result of the ongoing collaboration between Tritax Symmetry and EDP the Heritage Assessment has been based on a proposed development comprising warehousing up to 18m in height to ridge with associated infrastructure.

The site contains no designated heritage assets, but 74 are present within 1km of the site boundary and a further 101 were identified as having the potential for a visual connection with the site up to 5km.

After an initial scoping exercise and intensive site visit, EDP have assessed three of these heritage assets in detail due in part to their proximity to the site. These include:

- The Mount Scheduled Monument;
- The Church of St Peter, Grade II* Listed and Listed Monuments within the Churchyard;
- Haresfield Court Grade II Listed;
- Mount Farmhouse Grade II Listed and
- The Grade II Listed Thatched Cottage.

The Mount Scheduled Monument

The assessment recommends that the proposed bund and landscaping on the eastern side of the development

proposed in the Landscape Strategy, will prevent any light spill from headlights using the roads and parking will not extend across the fields and towards the monument maintaining the current experience of it in darker conditions.

Additionally, lighting needed for the function of the site could be specifically designed to focus light downwards, further reducing the potential for light spill into the wider environment. Any increase in noise is not anticipated to exceed those already present from the adjacent M5. On this basis this assessment concludes that the proposed development of the site will have no effect on the significance of the Mount Scheduled Monument.

The Church of St Peter, Grade II* Listed and Listed Monuments within the Churchyard

The assessment has established that the proposed development will have no effect on those key relationships that make the greatest contribution to its setting comprising the tombs within the churchyard, the scheduled monument and the listed vicarage.

Incidental and partial views are currently possible out towards the site from the church yard, whilst reinforcing its rural context these are not designed and make no contribution to the significance of the church and new planting and landscaping will screen these in due course.



The interior of Haresfield Beacon scheduled monument view to the west

Views of the church spire are widely available across the landscape and do not contribute to its significance.

It is considered that there is a key experience of the church on the approach to it from the south in the direction of Haresfield Court. This historic route and the experience it provides, in terms of framing the church in the context of its surrounding meadows to the south, makes a positive contribution to its significance.

The assessment has determined that elements of the proposed development will be apparent within the landscape to the west of the church, limited to the roofline of unit 1 and the upper part of its elevation. As such in the key view of the church the development will be barely perceptible, but this does however represent a change in the setting of the Grade II* listed building which it has been assessed will affect its significance due to the erosion of the rural context to the west of the village within which it is experienced.

The level of harm in terms of the NPPF is assessed at the low end of less than substantial harm as none of the key relationships that contribute to the church's significance in terms of its setting will be affected.

Haresfield Court Grade II Listed

It is the elevation of the building and its orientation to provide views over the Severn Valley that has potentially



The Grade II* Listed Church of St Peter view to the across the meadow towards Haresfield Court

made it sensitive to change with regard to the form of development proposed. In addition to this the site bounds the remains of a former track and an avenue of trees, historically associated with the former lodge to Haresfield Court.

The proposed warehousing may form a very small part of the views across the valley representing a negligible change to the existing landscape in the context of the existing modern landscape adjacent to the M5. This change will have no effect on the significance of the listed building as part of that wide vista and the features associated with historic use of the house and their relationship with each other will remain unaffected, such that the proposed development of the site will have no effect on the significance of the Grade II listed building.

Mount Farmhouse Grade II Listed

Mount Farmhouse is historically linked to the land within which the proposed site is located. There are however no experiential possibilities with the house being entirely screened from the site. It is possible that due to the scale and proximity of the proposed development there is the potential to introduce light spill and noise into a relatively dark environment, changing the experience of the listed building from within its grounds in winter particularly.

This assessment has identified that as the result of careful masterplanning and the proposed placement of landscaping on the eastern side of the development that will potentially include a bund, any light spill from headlights using the roads and parking will not extend across the fields and towards the building, maintaining the current experience in darker conditions. Additionally, lighting needed for the function of the site could be specifically designed to focus light downwards, further reducing the potential for light spill into the wider environment. Any increase in noise is not anticipated to exceed those already present from the adjacent M5. As such these changes can be fully mitigated and will have no effect on the significance of Mount Farmhouse.

4. Opportunities and Constraints (cont..)

However, the change of use of the historically associated farmland from the proposed development of the site will have a small but negative effect on the significance of the farmhouse, assessed at the very low end of less than substantial.

The Grade II Listed Thatched Cottage

Whilst the current form of the site does not form any part of the setting of the Thatched Cottage, an assessment was undertaken of the form of development proposed to understand the potential for change. Due to the set back of the Unit 2 from Stonehouse Lane it will not be possible to experience the proposed development from the location of the Thatched Cottage from the form of the development proposed or that it will receive any negative effects from light or noise within the site.

The Heritage Assessment concludes that as the result of careful masterplanning owed to the collaboration between Tritax Symmetry and EDP, the site in terms of the location, height, orientation, scale and massing of the proposals, the potential for the identified assets to be affected by the development of the site, within the existing landscape surrounding the site has been reduced.

Landscape

The site's topography is flat and typical of the immediate surrounding area of the 'Rolling Agricultural Plain and Lowland Plain' and its former use as an airfield. The site is contrasted in the wider landscape to the east where the landform rises up to Cotswolds AONB escarpment. The site is bounded by the Cotswold AONB escarpment to the east and to the west the flat low lying floodplain of the River Severn.

The site does not lie within a nationally designated landscape but is within the setting of and within view of the Cotswold Area of Outstanding Natural Beauty.

A Landscape and Visual Appraisal (LVA) of the site has been undertaken by The Environmental Dimension Partnership Ltd. EDP has also prepared an illustrative landscape strategy for the site.

Published National and Local Landscape Character Assessments have been taken into account when undertaking the LVA, these character assessments provide a good understanding of the landscape context in the area but are not site specific and accordingly EDP have undertaken a site specific assessment.

Landscape Character

On the whole, the site is consistent with the broad characteristics of the wider Landscape Character Area (i.e. the large-scale, arable farming, flat topography and open views), but there are many urbanising factors and intervening features that are not identified in the above assessment which serve to lessen the inherent sensitivity of the Lowland Plain. These include the motorway corridor, adjacent A-roads, Gloucestershire Energy from Waste, Dobbies Garden Centre and other adjacent commercial developments. As such, the landscape surrounding the site is 'urban fringe' in character and contrasts with the more intact rural landscapes, which can be experienced further to the east.

The LVA considers that effects arising from the proposed development will not result in unacceptable harm to the landscape character of the 'Lowland Plain' Landscape Character Area. The loss of an area of agricultural fields to facilitate the development will create a reduction in the perceived open area between Haresfield and the existing

employment area, but when considering its current context (the B4008 to the north and west, immediate adjacent built form, nearby M5 and limited representation of defined character areas), it was found that the site does not represent an essentially open or rural character and would not result in unacceptable harm on the local landscape character.

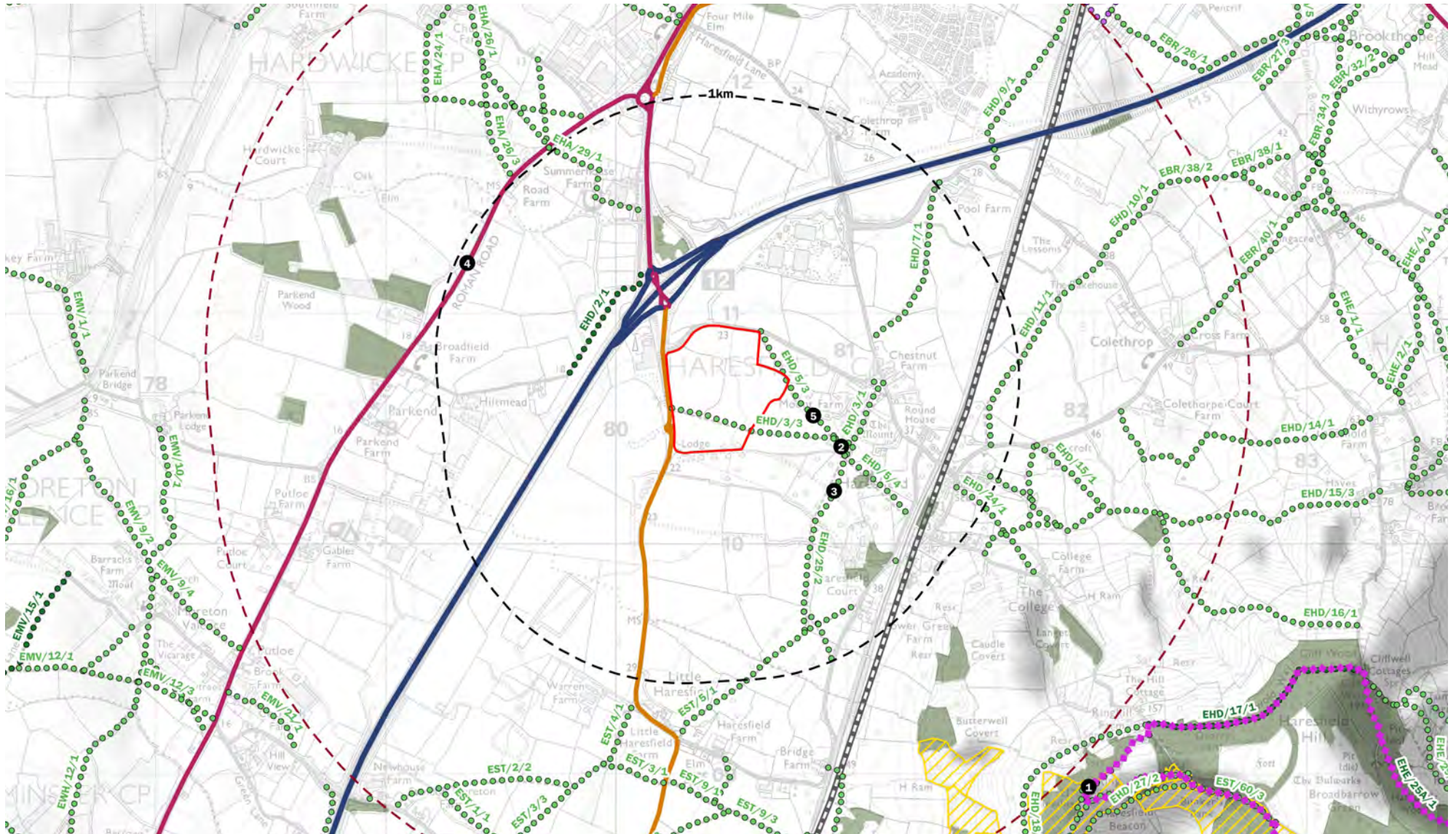
The slight reduction in the physical distance and the occurrence of landscape features between the development edge and Haresfield would not noticeably diminish the separation gap in views from St Peters Church. There would be a loss of openness and increased sense of enclosure; however, if the landscape strategy recommended in the LVA is implemented there would be a significant increase in new landscape features on the site. A proposed tree buffer and tree planting is recommended along the south and eastern edges and is a fundamental component of the landscape mitigation.

Furthermore various other measures recommended in the Landscape Strategy demonstrate that considerable measures have been taken as part of the proposed development to minimise the impact on the landscape on the Lowland Plains Landscape Character Area.

Visual Amenity

The impact on the sites visual amenity has been assessed by considering ten photo viewpoints which EDP considers represent the views of various receptor groups including PROW users, road users and residential dwellings.

In addition, a variety of photomontages (see the following pages) have been prepared to demonstrate what the proposed development would look like from a variety of viewpoints.



Photomontage Viewpoint Plan

4. Opportunities and Constraints (cont..)



Viewpoint 1

View from Haresfield Beacon on the Cotswold Way promoted route - Existing Photoviewpoint



View from Haresfield Beacon on the Cotswold Way promoted route - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from Haresfield Beacon on the Cotswold Way promoted route - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East



Viewpoint 2

View from public footpath (Ref. EHD/5/4) within the grounds of the Church looking north-west - Existing Photoviewpoint



View from public footpath (Ref. EHD/5/4) within the grounds of the Church looking north-west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref. EHD/5/4) within the grounds of the Church looking north-west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East

4. Opportunities and Constraints (cont..)



Viewpoint 3

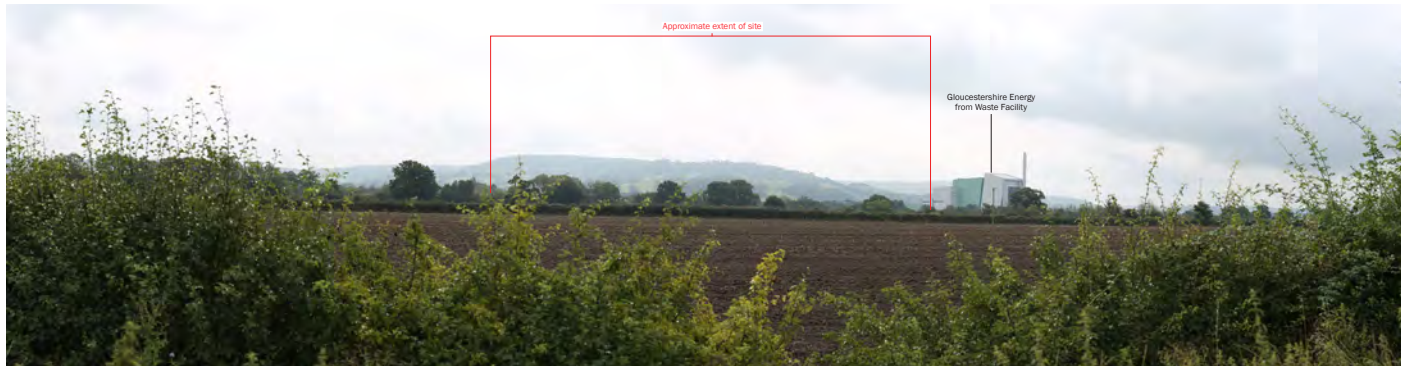
View from public footpath (Ref EHD/25/5) looking north-west - Existing Photoviewpoint



View from public footpath (Ref EHD/25/5) looking north-west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref EHD/25/5) looking north-west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East



Viewpoint 4

View from public footpath (Ref EHD/7/1) looking south-west - Existing Photoviewpoint



View from public footpath (Ref EHD/7/1) looking south-west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref EHD/7/1) looking south-west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East

4. Opportunities and Constraints (cont..)



Viewpoint 5

View from public footpath (Ref. EHD/5/3) looking west - Existing Photoviewpoint



View from public footpath (Ref. EHD/5/3) looking west - Existing Photoviewpoint with Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12



View from public footpath (Ref. EHD/5/3) looking west - Photomontage of Gloucestershire Energy from Waste, St Modwen Park and Gloucester 12 and Symmetry Park West and East

Modern logistics is based on maximising the efficiency and productivity of land, and therefore the taller the building, the greater its storage capacity. There is a relationship between the size of footprint of a building and the height of a unit generally required by the market - the larger the footprint, the higher the building. To maximise the commercial attractiveness of the site, but balancing the greater heritage sensitivity of the Symmetry Park East site, the assessment has been based on development at a ridge height of 18 metres.

In addition, careful consideration has been given to the proposed design of the built form to ensure the proposals can be accommodated within the landscape with minimal impact.

The LVA considers that there is no unacceptable harm predicted for the majority of visual receptors. The closest PRoW routes where adverse effects are predicted, lie within a landscape already substantially impacted upon by commercial development and the major transport network. For two footpath routes that pass through or directly adjacent to the site boundary there would be unavoidable major/moderate effects on completion. Beyond this, there would be some intervisibility experienced by some limited receptor groups in very close proximity to the site.



The recommended substantial tree shelterbelt, landscape bund and buffer planting along the eastern boundary of the site would serve to moderate any effect accordingly. It is considered that the proposals would not detract from local visual amenity such as to the Cotswolds AONB escarpment, and neither would they be considered to be out of character from the single viewpoint location on an elevated vantage point looking across the landscape, which already includes areas of commercial development and urbanisation.

The amenity of surrounding residential receptors has also been assessed. Private residents with views of the proposals are likely to be limited to a number of properties within 1km of the site, in which views of the proposals would not be considered to be out of character given the existing commercial uses in the area.

Landscape Strategy

The Assessment has informed an illustrative landscape strategy (see plans on the following pages).

The strategy includes










- Landscaping to include a bund and buffer planting on the eastern side of the site so that light spill would not extend across the fields towards Haresfield.

- New tree planning throughout the site,
- Existing trees and hedgerows to be retained where possible and reinforced new structured planting with management particularly the mature tree cover at the southern boundary to prevent light spill from headlights extending across the fields south of the site.
- A large area of public open space to be retained in the south of the site and planted with native heavy trees, tree groups, native shrubs and meadow grassland to filter views of the development from the south and west.
- New landscape treatments to the western boundary to reflect the well-treed nature of the surrounding context, particularly in views from lower ground to the west in the context of the elevated Cotswolds escarpment to the east.
- Native plant species of local provenance and characteristic of the local landscape character to enhance the landscape and ecological value of the proposed development green infrastructure.

Overall the LVA finds that the proposed development with associated access and public open space represents a logical addition to an existing employment area, with proposed landscape mitigation and careful consideration of height, scale, orientation, colour and materials of the built form to ensure the scheme is in keeping with the landscape character and would not therefore result in any material landscape or visual effects.

4. Opportunities and Constraints (cont..)



-  Site Boundary
-  Landscape Buffer/Woodland Planting
-  Informal Tree Groups
-  Formal Tree Planting
-  Understorey Scrub Planting
-  Native Hedgerow
-  Wildflower Or Species-rich Grassland
-  Amenity Grassland
-  Attenuation Basin

Symmetry Park East Landscape Strategy Plan Option 1

-  Site Boundary
-  Landscape Buffer/Woodland Planting
-  Informal Tree Groups
-  Formal Tree Planting
-  Understorey Scrub Planting
-  Native Hedgerow
-  Wildflower Or Species-rich Grassland
-  Amenity Grassland
-  Attenuation Basin



Symmetry Park East Landscape Strategy Plan Option 2

4. Opportunities and Constraints (cont..)

Ecology

An Extended Phase 1 Ecological Survey was carried out on 10 January 2020 by EDP.

The site does not have any ecological statutory or non-statutory designations.

The site comprises three large arable fields. The fields are bounded by species poor hedgerows and ditches. To the east of the site is a small block of deciduous woodland. Within the south western corner of the site is another small woodland block along with a residential property and garden. The southern boundary of the site consists of a line of mature horse chestnut trees with new planting to fill the gaps.

There are mature trees scattered within the hedgerows of the site. A pond is located 100m north west of the site but there are no other ponds within 250m of the Site.

The Ecological Appraisal undertaken by EDP considers the habitats on-site are to be of only Site-level (low) intrinsic nature conservation value or less, being limited in distinctiveness, extent, botanical species richness or a combination. The arable land that constitutes the majority of the site is of negligible value. EDP considers that none of these on-site habitats/land uses represent significant ecological constraints that otherwise may preclude development.

The habitats are likely to support some protected and Priority Species, however, intrinsic value of the habitats present will, in EDPs opinion, limit the value of such species populations/assemblages; they are likely to be of only Local-level value or less.

The Phase 1 Survey and Appraisal demonstrates that there are no ecological constraints preventing

development of the site and given the low intrinsic value of the habitats present, the site gives an opportunity to deliver a net biodiversity gain.

Transport & Infrastructure

A Transport and Infrastructure Study has been undertaken by WSP which assesses the impact that the proposed development would have on the surrounding highway network. The study has investigated the potential for further commercial development to be developed in the area by examining the current highway function and capacity, the highway safety record and the proposed trip generation likely from a large scale warehouse and distribution development. The findings have been set out in a Highway and Infrastructure Report prepared by WSP.

Highway Function

The Transport and Infrastructure Report demonstrates that access by other commercial developments on the B4008 is well established. The Energy from Waste Facility, Gloucester 12 development and Dobbies garden centre complex are all accessed from the B4008 via a roundabout junction and T-junction respectively.

Furthermore, there are a series of upgrades which have been carried out and are proposed which will significantly improve the surrounding highway network.

These upgrades include the following:

- The Cross Keys roundabout junction, approximately 850 metres north of the M5 has been recently upgraded to provide traffic signal control and additional approach lanes to deliver a significant capacity increase in order to accommodate future residential/employment growth in the area.

- The Stonehouse A419 corridor highway upgrade package is anticipated to result in a re-distribution of local traffic away from the B4008 Gloucester Road corridor (as the A419 and M5 become more attractive route choices for local trips) thus alleviating the congestion issues historically experienced on the southern B4008 approach to the M5 Junction 12 interchange.

Highway Safety

The highway safety characteristics of the surrounding road network were recently assessed as part of the St. Modwen Park and Gloucester 12 planning applications (both of which were considered acceptable by the Local and Strategic Highway Authorities).

To inform the Transport and Infrastructure Study the 'Crashmap' database has been interrogated as part of this highway report to investigate if there have been any significant changes to the highway safety since the Local and Strategic Highway Authorities provided a view on St. Modwen Park and Gloucester 12 developments. The review of this data has demonstrated that no collisions have occurred on the B4008 or at the M5 Junction 12 interchange since the St Modwen Park and Gloucester 12 planning applications have been considered. The report concludes that there continues to be no highway safety issues on the surrounding network, which it is also located immediately to the south of the M5 Junction 12 interchange.

Sustainable Access

A shared use footway and cycleway is currently in place on both sides of the B4008 which begins at the Energy from Waste/Gloucester 12 roundabout and continues north to the Cross Keys roundabout where it provides access to

the residential area of Hardwicke and Gloucester beyond. The proposed development could provide appropriate connections to the existing footway and cycleway which would provide sustainable access for pedestrians and cyclists.

Two bus stops are currently located on the B4008 close to the entrance to the Gloucestershire Energy from Waste Gloucester 12 and within close proximity of the site.

These stops facilitate services of a regular frequency which link the site with residential areas within Quedgeley, Hardwicke, Stonehouse, and King's Langley.

The Stroud District Local Plan proposes to improve the quality of bus service across the District. On this basis, it can be assumed the frequency of services may increase above this baseline position over the coming years with improvements to accommodate 24/7 logistics operations.

The SDLP safeguards land for a railway station at Hunts Grove (Policy EI14). If this public transport interchange is delivered, it is considered that the facility will be ideally located to encourage trips to the site via rail.

Trip Generation & Cumulative Impact

The report has calculated the number of trips which would be generated by the proposed development. The proposed number of trips has been assessed against the most recent junction capacity assessment undertaken by Stroud District Council (2014) and taking into account Gloucester 12 which was not considered as part of the capacity assessment in 2014.

This assessment considers that the highway network has adequate spare capacity to support development of warehouse and distribution centres on the site without the requirement for highway mitigation.

Site Access

There are two possible options for accessing the Symmetry Park East site which are considered appropriate. The first access option is from the B4008 corridor, by means of a modification to the existing three-arm roundabout junction which provides access to the Energy from Waste Facility and the Gloucester 12 development. The second option would be to serve the site from two access points, one from the B4008 corridor, by means of a modification to the existing three-arm roundabout junction and also by means of a new priority junction onto the Stonehouse link, however due to the number of trips on the B4008 at the B4008 / Stonehouse junction it is likely mitigation would be required to enable this.

The Transport and Infrastructure Study demonstrates that there are no highway constraints that would prevent development being delivered on the site.

Flood Risk/Drainage

A Flood Risk and Drainage Statement has been prepared by RPS.

The Statement considers the sites current flood risk which has been informed by a desk-based assessment of the risk of fluvial and pluvial flooding at the site, and also through engagement with Gloucestershire County Council as the Lead Local Flood Authority (LLFA) and the Environment Agency who were consulted on the site proposals in June 2020.

The Statement sets out recommendations for the drainage strategy which should be developed to support development on the site and ensure that development would not increase the risk of flooding.

Fluvial Flood Risk from rivers, reservoirs, estuaries and the sea

The Statement confirms that the Environment Agency flood map (hosted by gov.uk) demonstrates that the entire site is located within Flood Zone 1 which is the lowest classification of fluvial flood risk. Land within Flood Zone 1 is assessed as having a less than 1 in 1,000 annual probability of river or sea flooding (<0.1%).

The nearest watercourse to the site is a drainage ditch located adjacent to the southern boundary of the site and it is not considered that this poses a considerable fluvial flood risk. Consequently, the site is not considered to be at risk from fluvial flooding.



EA Flood Map for Planning

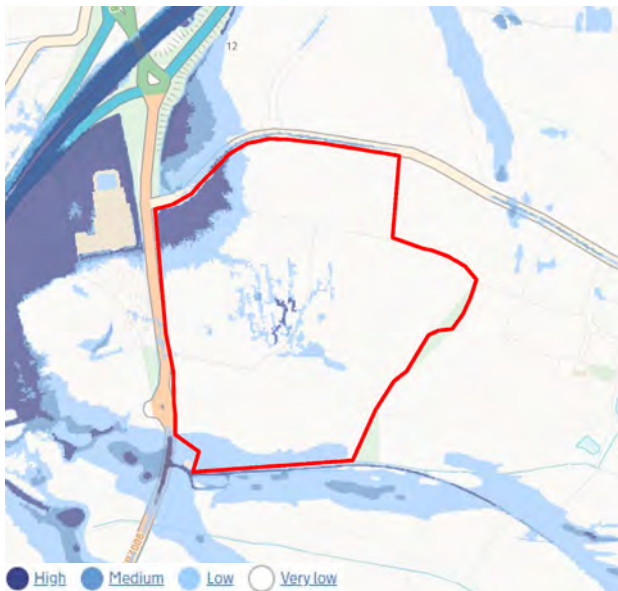
4. Opportunities and Constraints (cont..)

Pluvial Flood Risk from rainfall generated overland flow

The Statement confirms that the Environment Agency flood map (hosted by gov.uk) demonstrates that most of the site is assessed as being at 'very low' risk of surface water flooding.

There is an area with a potential 'high' risk of surface water flooding in the north west corner of the site.

This is most likely due to surface water from the site collecting against the embankments of the B4008 and Stonehouse, as these highways are raised in comparison to the site. The modelling indicates that most of the surface water that contributes to this potential flood risk originates within the site boundary. Surface water from the B4008 and Stonehouse will be intercepted by the



EA Flood Map for Surface Water

highway drainage system. Therefore, the introduction of a surface water drainage system once the site is developed would ensure that surface water originating within the site will be fully managed.

The land adjacent to the southern boundary of the site is at 'low' risk of surface water flooding.

The 'low' risk of surface water flooding along the southern boundary of the site is associated with a surface water flow route that heads in a westerly direction and crosses Gloucester Road.

Groundwater

The SFRA illustrates that the site is fully located within an area with less than 25% change of groundwater emergence and therefore it is not considered that groundwater flooding poses a considerable risk to the proposed development of the site.

Drainage Strategy

Foul Water - Sewer records from Severn Trent Water indicate that a foul rising main transects the northwest corner of the proposed development site. There are also further Severn Trent Water assets located within the vicinity of the site, most notably a combined sewer to the northeast of the site and two pumping stations located to the west.

It is recommended that foul water would be conveyed by a gravity sewer network to a new foul pumping station located within the site. A rising main would then convey the foul flows from the site to the near-est suitable connection point within the existing Severn Trent Water sewer network.

Recent consultation with Severn Trent Water has indicated that there may be a need to undertake hydraulic

modelling to determine whether the Bath Road and RAF Quedgeley pumping stations require upgrading to increase capacity in the area. Further consultation should be undertaken with Severn Trent Water at pre-application stage to determine if any upgrades are required.

Surface Water - In terms of developing SuDS on the site to dispose of surface water, Building Regulations dictate that soakaways should be utilised as the primary means of surface water disposal. However, if infiltration testing provides an unfavourable infiltration rate across the site or if contaminated ground is present then other methods of sustainable drainage should be considered.

The Phase 1 Preliminary Geo-Environmental Risk Assessment undertaken by RPS in June 2020 shows that the site is underlain by Blue Lias Formation and Charmouth Mudstone Formation which generally has a poor infiltration rate and therefore it is likely that soakaway drainage will not be suitable on the site for the disposal of surface water.

Consequently, the proposed surface water drainage system will likely comprise of local attenuation and treatment. It is therefore anticipated that surface water will be captured within a gravity sewer system and attenuated prior to discharge within a SuDS feature. It is considered that the most appropriate location for SuDS features within the site would be in the northwest and southwest corners of the site where topography is at its lowest. The surface water from the site should then be discharged into a nearby watercourse or drainage ditch.

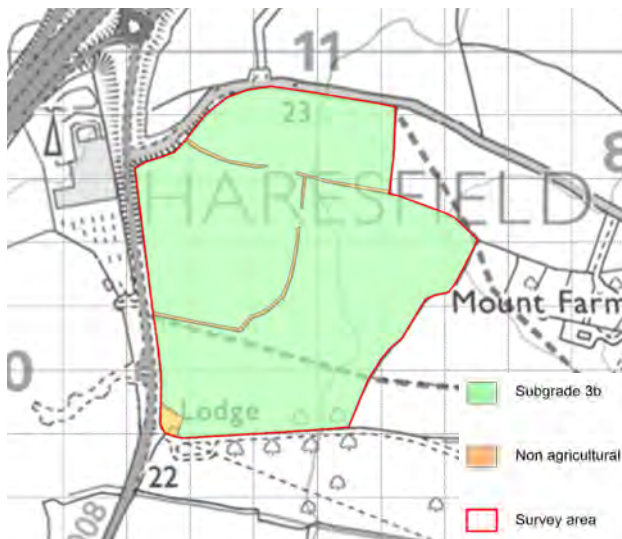
The Statement confirms that there are no flood constraints that present a barrier to development of the site. The Statement demonstrates that site can be sustainably drained by a SuDS which would be developed at the detailed design stage.

Agricultural Land

An agricultural land survey has been undertaken on the site by the Land Research Associates. The assessment has been informed by a detailed site survey which included a soil resource and agricultural quality survey which was undertaken in May 2020.

The soil resource survey identified that the soil across the entire site comprises heavy clay loam or clay topsoils, over a slowly permeable clay that shows evidence of seasonal waterlogging to a shallow depth. These soils are poorly drained with a low capacity to absorb excess winter rainfall.

The entire site has been assessed as subgrade 3b agricultural land quality. The land is limited by wetness and is likely to be too wet to cultivate in spring most years under the local climate and arable use of the land is limited to autumn-sown combinable crops.



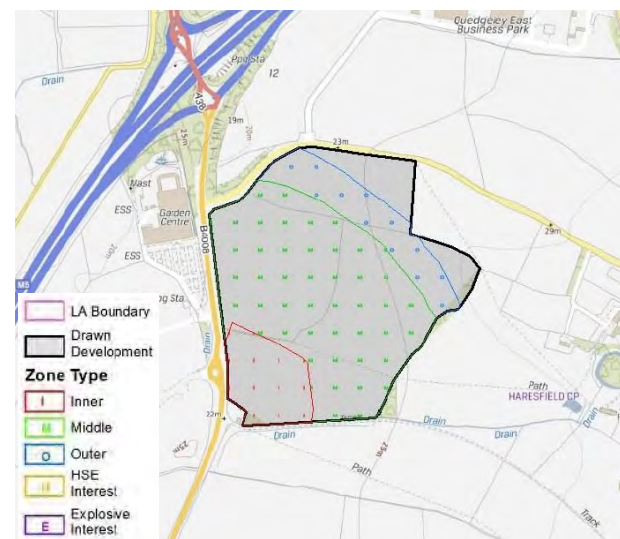
Agricultural Land Classification Plan

Overall the survey concludes that the agricultural land quality of the site is limited as a result of wetness providing subgrade 3b agricultural land quality and therefore, the agricultural land quality is not a constraint to developing the site.

Health & Safety

The site is located to the east of Gloucester Road from the Gloucestershire Energy from Waste Plant which is classified as a major hazard site by the Health and Safety Executive (HSE). Consultation with the HSE has been undertaken to determine the constraints to development of the site given its proximity to the Energy from Waste Plant.

A proportion of the south west of the site is located within the inner zone. A large proportion of the site is located within the Middle Zone with a smaller proportion within the



Health & Safety Executive Consultation Zone Map

Outer Zone and the remaining parts of the site outside of the consultation area completely. See map below.

Consultation with the HSE has determined that workplaces within the inner zone are acceptable if they are no greater than two storeys in height and have no more than 100 occupants. The HSE consultation has also confirmed that car parks and minor estate roads are acceptable in the inner zone.

Ground Investigation

A phase 1 preliminary Geo-Environmental risk assessment has been undertaken by RPS.

The historical maps indicate that the site's use for agriculture has remained unchanged. Off-site historical potential sources of contaminants of concern include the former industrial estate, which featured sewage beds and tanks, the garden centre, and the former RAF site.

The assessment has identified a limited number of potential sources of contamination and associated pollutant linkages. There is also the potential the generation of ground gas associated with infilled land on site and made ground/infilled land near the site.

In this respect it is proposed that a Phase 2 Geo-Environmental Site Investigation would be undertaken to accompany a future planning application. The investigation will provide information on the concentrations of contaminants of concern (if present) within the soils and shallow groundwater beneath the site and the generation of ground gases. If the site investigation identifies the presence of potentially significant contamination or ground gases further investigation, monitoring, risk assessment and remediation may be necessary.

4. Opportunities and Constraints (cont..)

Summary of the Opportunities & Constraints

	Informing the Symmetry Park West Masterplan	Informing the Symmetry Park East Masterplan
Archaeology	There is no evidence to suggest that the site would contain any archaeological deposits of such significance that they might constrain the development of the site.	There is no evidence to suggest that the site would contain any archaeological deposits of such significance that they might constrain the development of the site.
Historic Environment	<p>The masterplan assessed as part of the LVA should be taken forward which results in scale, siting, orientation of the development and design which would reduce the impact on the landscape and heritage.</p> <p>The Landscape Strategy recommended by the LVA should be implemented which includes a strong landscape buffer being developed along the western and southern boundaries of the site.</p>	<p>The masterplan assessed as part of the LVA should be taken forward which results in scale, siting, orientation of the development and design which would reduce the impact on the landscape and heritage.</p> <p>The Landscape Strategy recommended by the LVA should be implemented which includes a strong landscape buffer being developed along the eastern and southern boundaries of the site.</p>
Landscape	<p>The masterplan assessed as part of the LVA should be taken forward which results in scale, siting, orientation of the development and design which would reduce the impact on the landscape.</p> <p>The landscape strategy informed by the LVA should be employed on the site featuring</p> <ul style="list-style-type: none"> • Mature tree cover at the southern boundary to prevent light spill from headlights extending across the fields south of the site, and • Landscaping along the western boundary which would soften ground level views from the M5 of the Gloucestershire Energy from Waste Facility and reflect the local context particular views to the east and AONB escarpment. 	<p>The masterplan assessed as part of the LVA should be taken forward which results in scale, siting, orientation of the development and design which would reduce the impact on the landscape.</p> <p>The landscape strategy informed by the LVA should be employed on the site featuring</p> <ul style="list-style-type: none"> • Landscaping to include a bund and buffer planting on the eastern side of the site so that light spill would not extend across the fields towards Haresfield. • A large area of public open space to be retained in the south of the site and planted with native heavy trees, tree groups, native shrubs and meadow grassland to filter views of the development from the south and west. • New landscape treatments to the western boundary to reflect the well-treed nature of the surrounding context, particularly in views from lower ground to the west in the context of the elevated Cotswolds escarpment to the east
Ecology	The site has a low intrinsic value of habitats and allocation of the site would give an opportunity to deliver meaningful biodiversity gains	The site has low intrinsic value of the habitats, and development of the site gives an opportunity to deliver a net biodiversity gain

	Informing the Symmetry Park West Masterplan	Informing the Symmetry Park East Masterplan
Highways	<p>The surrounding highway network has the capacity to accommodate B8 development on the site.</p> <p>It is considered that the site could be appropriately accessed from the B4008 by means of a ghost-island priority junction.</p> <p>The is located within close proximity of a local work force and is accessible by varying modes of sustainable transport. The development can easily take advantage of the existing pedestrian and cycle routes.</p>	<p>The surrounding highway network has the capacity to accommodate B8 development on the site.</p> <p>It is considered there are two possible access points into the site. The first is from the B4008 corridor by modifying the existing 3 arm roundabout. The second would be a new priority junction onto the stonehouse link. However due to the number of trips on the B4008 at the B4008 / Stonehouse junction it is likely mitigation would be required to enable this.</p> <p>The is located within close proximity of a local work force and is accessible by varying modes of sustainable transport. The development can easily take advantage of the existing pedestrian and cycle routes.</p>
Flood Risk	<p>The flood risk potential of the site should not constrain development.</p> <p>SuDS should be developed to manage surface water on the site. This should comprise of local attenuation and treatment.</p> <p>The most appropriate location for SuDS features within the site would be along the western boundary, in particular in the north western and south western corners as the topography of the site falls toward the western boundary. The surface water from the site should then be discharged into a nearby watercourse or drainage ditch.</p>	<p>The flood risk potential of the site should not constrain development.</p> <p>SuDS should be developed to manage surface water on the site. This should comprise of local attenuation and treatment.</p> <p>The most appropriate location for SuDS features within the site would be in the northwest and southwest corners of the site where topography is at its lowest. The surface water from the site should then be discharged into a nearby watercourse or drainage ditch.</p>
Agriculture	<p>The agricultural land quality of the site is limited as a result of wetness from the subgrade 3b land and droughtiness from the grade 2 land.</p> <p>Development should not be constrained in relation to the need to retain this quality of agricultural land.</p>	<p>The agricultural land quality of the site is limited as a result of wetness providing subgrade 3b agricultural land quality.</p> <p>Development should not be constrained in relation to the need to retain this quality of agricultural land.</p>
Health & Safety	<p>The small area of the site within the inner zone can contain buildings for employment use no greater than two storeys in height and have no more than 100 occupants. Car parks and minor estate roads are acceptable in the inner zone.</p>	<p>The area in the south west of the site within the inner zone can contain buildings for employment use no greater than two storeys in height and have no more than 100 occupants. Car parks and minor estate roads are acceptable in the inner zone.</p>
Ground Investigation	<p>Phase 2 Ground Investigation should be undertaken to inform any future planning application. The Phase 2 would set out further investigation, monitoring, risk assessment and remediation may be necessary.</p>	<p>Phase 2 Ground Investigation should be undertaken to inform any future planning application. The Phase 2 would set out further investigation, monitoring, risk assessment and remediation may be necessary.</p>

5. Introducing the Masterplan

Following the detailed technical work and analysis which has been undertaken, 3 illustrative masterplans have been drawn up for Symmetry Park West and East.

Symmetry Park West

The proposed masterplan comprises two units in the south of the site measuring 23 metres in height. On the western section of the site it is proposed that four units measuring up to 15 metres in height are developed.

The size and height of the proposed warehouses has been determined by the findings of the Landscape Visual Appraisal and Heritage Assessment undertaken by EDP. In this respect the proposals shown on the illustrative masterplan are considered to be acceptable in Landscape and Heritage terms subject to the EDP Landscape Strategy being implemented on site and the design of the warehouse to include roof profiles which are curved with a dark grey external colour and matt finish and for the cladding to be grey with gradated vertically fitted composite panels to break up the facade.

The proposed warehouses have been set away from the site boundaries to enable the inclusion of a strong landscape buffer which will reduce the impact of the development on the surrounding landscape.

The masterplan has been developed to ensure that SuDS features can be accommodated along the western boundary of the site.

The warehouses have been orientated with the narrowest elevation towards the east to reduce the impact of views into the site from Haresfield and the AONB escarpment, and also ensure that car parking can be located within the HSE inner zone which is deemed acceptable by the HSE.

The highway access arrangements proposed on the illustrative masterplan show a ghost island priority junction which is considered the most appropriate and safe way of accessing the site. The sites proximity to the Gloucestershire Energy from Waste Facility enables easy connectivity to sustainable transport options for employees.



Symmetry Park West Illustrative Masterplan

Symmetry Park East

Two illustrative masterplans have been developed for the site.

The main difference between the two masterplans is the access arrangements.

Illustrative Masterplan 1 shows access from the B4008 corridor by modifying the existing 3 arm roundabout.

Illustrative Masterplan 2 shows two site access arrangements, one from the B4008 by modifying the existing 3 arm roundabout (as proposed on illustrative masterplan 1) and one from a new priority junction onto the Stonehouse link road. These access arrangements enable a further service area for HGV's on the eastern edge of the site.

Both illustrative masterplans propose the development of two units measuring 18 metres in height.

The size and height of the proposed warehouses has been determined by the findings of the Landscape Visual Appraisal and Heritage Assessment undertaken by EDP. In this respect the proposals shown on the illustrative masterplan are considered to be acceptable in Landscape and Heritage terms subject to the EDP Landscape Strategy being implemented on site and the design of the warehouse to include roof profiles which are curved with a dark grey external colour and matt finish and for the cladding to be grey with graduated vertically fitted composite panels to break up the facade.

The proposed warehouses have been set back from the eastern and southern boundaries to enable a strong landscape buffer to be developed to ensure that the development would not adversely impact the nearby



Symmetry Park East Illustrative Masterplan 1

5. Introducing the Masterplan (cont..)

heritage assets. This siting of development also ensures that the HSE inner zone which is located in the south west of the site is undeveloped and only contains service areas and car parking which is deemed acceptable by the HSE.

In addition SuDS features can be easily accommodated in the south west of the site as this is free of development.

The warehouses have been orientated with the narrowest elevation towards the east to reduce the impact of views into the site from Haresfield and the AONB escarpment.



Symmetry Park East Illustrative Masterplan 2

Our commitment to net zero carbon in construction

Tritax Symmetry recognise their responsibility to communities and the environment within which they are building. TSL adopt a holistic approach to creating energy efficient buildings, sensitive to the climate, environment and local communities.

Their key focus is centred around two workstreams, which together ensure the delivery of energy efficient, low carbon buildings:

- a. Reducing the amount of energy that a building will require whilst in operation; and
- b. The provision of renewable energy.

Tritax Symmetry are one of the first developers to commit to delivering all new developments to 'net zero carbon' in construction. This is in addition to the other extensive sustainability initiatives detailed below.

In terms of Tritax Symmetry's standard building specification, as a Gold Leaf Member of the UK Green Building Council with a commitment to carbon reduction and in addition to undertaking a BREEAM compliant Life Cycle Assessment on all developments, including optioneering to reduce carbon, Tritax Symmetry's further response to carbon reduction is to consider and implement some or all of the following suite of initiatives in the Specification (refer to particulars below):

- Minimum BREEAM Very Good
- Frame design to accommodate installation of Photo Voltaic panels to the whole useable roof area
- Low U value triple skin factory assembled non-fragile roof lights to warehouse.
- Roof light percentage optimised to maximise daylight relative to solar gain.
- Air permeability at maximum 2 cum/hr/sqm @ 50 Pa positive air pressure
- LED office lighting incorporating daylight control and dimming with presence detection control.
- Low flush WCs.
- Low water use urinals with proximity activation.
- Low water use spray taps with proximity activation.
- Electric car charging points and provision of ducts for further expansion
- Future proofing yard areas for future installation of HGV charging points
- Sub metering of base build electrical main and sub circuits.
- Pulse metering of incoming gas, water and electrical supplies
- On site energy production and renewable energy.



6. Deliverable Proposals



- The sites are available now for early delivery of strategic employment development to meet the needs of Stroud and Gloucestershire
- The sites are strategically positioned with close proximity to Junction 12 of the M5
- The sites are suitable for the development of large-scale strategic warehouse and distribution centres and would meet the needs of the sector which has an average unit size of 266,000 square feet (Savills Data, 2019)
- The sites together have the potential to provide circa 2 million square feet of strategic employment
- The illustrative masterplans have been informed by a portfolio of technical assessments and stakeholder engagement and are acceptable in planning terms. The sites are being delivered by Tritax Symmetry, owned by TBBR a FTSE 250 company with a portfolio value of c.£4.18bn.







RPS | Consulting UK & Ireland
321 Bradford Street
Birmingham,
West Midlands,
B5 6ET

T: +44 (0) 121 622 8520

rpsgroup.com